

UNITED STATES DEPARTMENT OF LABOR

W. N. DOAK, Secretary

BUREAU OF LABOR STATISTICS

ETHELBERT STEWART, Commissioner

ALAMAZOO PUBLIC LIBRARY

AUG 28 1931

MONTHLY  
LABOR REVIEW

VOLUME 33

NUMBER 2



AUGUST, 1931

UNITED STATES  
GOVERNMENT PRINTING OFFICE  
WASHINGTON: 1931

For sale by the Superintendent of Documents, Washington, D. C. - - - - - Price 15 cents per copy  
Subscription price per year, United States, Canada, Mexico, \$1.50; other countries, \$2.25

**CERTIFICATE**

This publication is issued pursuant to the provisions of the sundry civil act (41 Stats. 1430) approved March 4, 1921.



## Contents

	Page
<b>Special articles:</b>	
Effects of technological changes upon employment in the amusement industry .....	1
Comparative costs of dwelling units in 13 cities .....	8
<b>Unemployment and its relief:</b>	
Unemployment in foreign countries .....	16
Germany—Preliminary report of Federal commission to study unemployment .....	20
Great Britain—	
First report of Commission on Unemployment Insurance .....	20
Extension of debt limit of unemployment insurance fund .....	27
Finances of unemployment insurance scheme, by industries .....	27
Switzerland—Plan for unemployed clerical workers .....	29
<b>Industrial and labor conditions:</b>	
International Labor Conference, 1931 .....	31
Discrimination of large employers against handicapped workers .....	32
Comparative conditions in Government and in private employment .....	33
India—An experiment in management of Indian labor .....	35
<b>Industrial accidents and hygiene:</b>	
Physical impairment among Negro factory workers in Cincinnati .....	38
Canada—Mortality rates among wage earners .....	39
Uruguay—Industrial accidents, 1919 to 1928 .....	40
<b>Labor laws and court decisions:</b>	
Eastern interstate conference on labor legislation .....	42
Executor's rights under employers' liability act depend upon rights of employee at death .....	49
Kansas—Railway employee aware of danger held to have assumed risk of injury .....	50
Massachusetts—Court holds "tips" are wages under compensation act .....	51
Wisconsin—Law relating to issuance of injunctions in labor disputes .....	53
<b>Workmen's compensation:</b>	
Compensation for infections .....	58
Recent workmen's compensation reports—	
Connecticut .....	59
Montana .....	60
<b>Insurance and pensions:</b>	
Civil service retirement and disability fund, 1930 .....	61
Canada—Mothers' allowances in Ontario .....	62
Luxemburg—Old-age and invalidity pensions for salaried employees .....	62
<b>Cooperation:</b>	
Business of cooperative oil associations in North Central States in 1930 .....	64
Unusual forms of cooperative societies .....	65
Germany—Development of consumers' cooperative movement, 1930 .....	66
Spain—Fishermen's cooperative associations .....	67
<b>Recreation:</b>	
Community recreation in the United States in 1930 .....	69
<b>Labor agreements, awards, and decisions:</b>	
Agreements—	
Mine workers—Pittsburgh .....	71
Joint agreement of bricklayers', carpenters', and electrical workers' unions .....	71
Decisions—	
Motion-picture-machine operators—Denver .....	72

	Page
<b>Workers' education and training:</b>	
Vocational adjustment of the deafened in several States.....	73
Great Britain—Governmental training and placement of unemployed..	75
<b>Industrial disputes:</b>	
Strikes and lockouts in the United States in June, 1931.....	78
Conciliation work of the Department of Labor in June, 1931.....	82
Report of emergency board for dispute on Louisiana & Arkansas Rail- road.....	86
<b>Labor turnover:</b>	
Labor turnover in American factories, June, 1931.....	88
<b>Housing:</b>	
Building permits in principal cities, June, 1931.....	96
Building permits in the cities of the United States having a popula- tion of 100,000 or over, first half of 1931.....	109
<b>Wages and hours of labor:</b>	
Recent changes in wages and hours of labor.....	112
Compensation for out-of-town work as provided for in collective agree- ments.....	115
Modification of railroad agreements to permit reduction in hours of labor.....	119
Problem of wage assignments.....	120
Earnings and age of a group of full-fashioned hosiery workers.....	121
California—Salaries in various occupations in Los Angeles.....	123
Wages and retail prices in various foreign countries and in the United States.....	126
Australia—Basic wage in various States.....	132
France—Wages of construction workers in Nantes, 1931.....	133
French Indo-China—Wages in 1930.....	133
Germany—Wages in industry, 1931.....	134
Greece—Wages in the mining industry in 1929.....	135
Italy—Recent wage scales established by collective agreement.....	135
Japan—Effect of economic depression on wages and labor conditions..	136
Mozambique—Hours of labor.....	139
Sweden—Hours and earnings in the iron and steel industry, 1929....	140
Switzerland—	
Wages and hours of agricultural labor, 1930.....	141
Wages in certain industries, 1930.....	143
<b>Trend of employment:</b>	
Summary for June, 1931.....	144
Employment in selected manufacturing industries in June, 1931.....	146
Employment in nonmanufacturing industries in June, 1931.....	160
Employment in building construction in June, 1931.....	165
Employment on Class I steam railroads in the United States.....	166
Changes in employment and pay rolls in various States.....	167
<b>Wholesale and retail prices:</b>	
Retail prices of food in June, 1931.....	173
Retail prices of coal in June, 1931.....	180
Retail prices of gas in the United States.....	183
Retail prices of electricity in the United States.....	185
Index numbers of wholesale prices in June, 1931.....	188
<b>Cost of living:</b>	
Changes in cost of living in the United States.....	191
Cost of living in the United States and in foreign countries.....	207
<b>Immigration and emigration:</b>	
Statistics of immigration for May, 1931.....	218
<b>Publications relating to labor:</b>	
Official—United States.....	220
Official—Foreign countries.....	221
Unofficial.....	224

## This Issue in Brief

*The increasing use of "sound" moving pictures* has resulted in a decrease of approximately 50 per cent in the number of employed musicians. On the other hand, the sound pictures have been responsible for a marked increase in the number of motion-picture-machine operators. Another interesting development in the motion-picture field is the so-called "translux" theater, in which the picture is projected from behind the screen, thus removing the need for darkness. As a result ushers are dispensed with, and a turnstile system, operated from the cashier's booth, eliminates the services of the ticket collector at the door. Page 1.

*There are marked differences in the estimated building costs of dwelling houses in different cities*, according to data from building-permit reports as compiled by the Bureau of Labor Statistics. For example, in Los Angeles 51.6 per cent of the 1-family dwellings for which permits were issued during the first half of 1929 cost less than \$3,000, while in Brooklyn only 0.2 per cent of the 1-family dwelling units cost less than that amount. Comparative costs per family of 1-family dwellings, 2-family dwellings, and apartment houses are shown for each of the 13 cities. Page 8.

*The eastern interstate labor-legislation conference*, with approximately 50 representatives from 10 East Central industrial States, met in Harrisburg, Pa., June 18 and 19 at the invitation of Governor Gifford Pinchot, to discuss the differences in the labor laws of these States, with the object of placing them on a uniform basis. The conference considered the following subjects: Workmen's compensation, employment offices, employment of women and children, industrial health, and labor statistics. Recommendations on each of these subjects were submitted to the full conference at the closing session. Page 42.

*Since the passage of the railroad labor act in 1926, only four emergency boards have been appointed to act in labor disputes.* Such boards are appointed only when, in the judgment of the United States Board of Mediation, the dispute threatens to deprive any section of the country of transportation service. The fourth emergency board was appointed by the President on April 16, 1931, to act in the dispute between the Louisiana & Arkansas Railway Co. and its shop-craft employees. The dispute involved a reduction in wage rates and changes in working conditions, put into force by the carrier. The board, in its decision, urged the employer either to restore the standard rate of wages on its lines or to submit the matter to arbitration. Under the law the parties are forbidden to make any change in existing conditions or wage rates, except by mutual consent, for a period of 30 days following the board's decision. Page 86.

*Wisconsin, by an act of 1931, became the first State to adopt a comprehensive labor code* governing the public policy of the State on the subject of collective bargaining and the issuance of injunctions in labor disputes. Page 53.

*Splinter injuries may prove costly, and even result in death.* A bulletin of the New York Department of Labor shows that there

were seven deaths in that State in 1928-29 from this cause, and the total compensation cost of splinter injuries amounted to over \$350,000. Page 58.

*There are about 8,000,000 physically and mentally handicapped young persons in the United States*, according to the findings of the White House Conference on Child Health and Protection. The problem of converting these disabled into social assets is a pressing one. In spite of the large percentage of important establishments barring from employment all handicapped persons, there is an increasing recognition of the need for affording those who have certain impairments the opportunity to become useful members of society. Page 32.

*Physical examination of a group of Negro industrial workers in Cincinnati* showed such a high rate of serious physical impairment among them that it was a matter of wonder to the examining physicians that many of these men could continue at work in tasks requiring from moderate to great physical exertion. Of the entire group of 1,032 individuals, 911 had significant physical defects and more than half of the men examined presented cardiovascular lesions. The study was made by the Heart Council of Greater Cincinnati. Page 38.

*Steady growth in the public recreation movement in this country* took place during 1930, according to the annual report of the National Recreation Association. A total of 980 cities reported the maintenance of recreation facilities and programs and a considerable increase in the number of workers employed as recreation leaders was also reported. The salaries and wages of leaders reported by 736 cities amounted to more than \$8,000,000. Page 69.

*Government salaries have a narrow range, as compared with those of private industry, for work of a given type*, according to the final report of the Personnel Classification Board. For workers in grades customarily receiving up to \$2,000 a year, Government salaries are usually higher, and for those in the better-paid grades, usually lower than those outside. Labor turnover is less in the Government service than outside, but the difference is decreasing. Page 33.

*The British Royal Commission on Unemployment Insurance* has presented an interim report recommending that contributions should be increased, benefits lowered, and the benefit period shortened as immediate measures for reducing the rate at which the debt of the system is increasing. The continuance of transitional benefit, with certain modifications, is recommended, and measures are advocated for preventing some of the so-called abuses, or "anomalies," as the commission prefers to call them, of the system. Page 20.

*"The miracle of speeding up Indian labor has been achieved,"* says the director of the Institute of Plant Industry at Indore, describing the means by which the institute secured steady and conscientious effort from its Indian employees. Short hours of intensive work, fair dealing, good working conditions, a system of promotion as efficiency is gained, and a respect for Indian customs and preferences are the means which proved successful at Indore. Page 35.

# MONTHLY LABOR REVIEW

U. S. BUREAU OF LABOR STATISTICS

VOL. 32, NO. 2

WASHINGTON

AUGUST, 1931

## Effects of Technological Changes upon Employment in the Amusement Industry

THE Bureau of Labor Statistics is now making a study of the effects of technological changes upon employment in the amusement industry. The present article gives certain general facts of the situation as developed in the course of a preliminary inquiry.

The amusement industry is made up of several independent but closely related units, such as the legitimate stage, musical comedy, vaudeville, motion pictures, etc.

No mechanical appliances have been introduced on the legitimate stage or in vaudeville theaters to take the place of the man power used either on the stage proper or back stage. Certain improvements have been made in the more modern theaters, intended to facilitate the operation of the curtains and the lights used on the stage, but these are not automatic, and instead of reducing the number of men used back stage, have actually resulted in an increase. On the whole, however, the legitimate theater, the musical comedy, and the vaudeville theaters now employ the same kind of labor which was needed in those theaters 10 or 20 years ago—stage carpenters, scenic builders, property men, flymen, door men, electricians, and helpers—but the amount of such labor demanded has been seriously affected by the changing demand in the type of entertainment resulting from the rapid development of the motion picture.

### Technological Changes in Moving-Picture Theaters

THE introduction of sound in the motion-picture theater was the most revolutionary development in the recent history of the industry. From the point of view of displacement of human labor, the greatest change was caused not by the "talkie" reproducing the speech of the actors, but by the synchronization of the musical score with the picture. The new sound-picture projecting machine, whether of a "movie-tone" or "disc" type, supplies not only the picture but also the music formerly supplied by living musicians. Thus the introduction of sound in the moving-picture theaters enabled the theater managements to dispense altogether with the services of the musicians used to accompany the silent pictures.

However, in analyzing the effects of the introduction of sound upon the occupation of theater musician, it is necessary to distinguish three groups of theaters: (1) The theater "de luxe," (2) the combination



moving-picture and vaudeville theater, and (3) the theater running motion pictures only.

In the first group, of which the Roxy or the Capitol in New York may be taken as representative, the program is divided into three parts: The concert feature, played by a large orchestra of from 50 to 75 musicians, the vaudeville show in which the whole or part of the orchestra plays an important part, and the feature film accompanied by mechanical music. It is evident that the introduction of sound pictures in the de luxe theaters caused no change in the number of musicians employed in the theater.

The conditions in the combined picture and vaudeville theaters are somewhat similar. In these theaters, also, the orchestra plays an important part in the vaudeville portion of the program, but there is no special concert feature and the size of the orchestra is therefore considerably smaller than in the de luxe theaters. The number of musicians employed in a combined picture and vaudeville theater varies from 7 to 35 or 40 men, depending on the size and the location of the theater. The introduction of sound in these theaters, also, produced no effect on the number of musicians employed there.

In the straight motion-picture houses, however, which formerly employed one to seven musicians to accompany the silent pictures, the introduction of the sound equipment resulted in the elimination of the musicians. These theaters constitute by far the greatest number of moving-picture houses in the country, and this fact accounts for the considerable number of musicians who have lost their jobs since the introduction of sound pictures in 1927.

#### Growth in Number of Theaters Equipped with Sound Apparatus

THE first sound picture, "Don Juan," was produced in Hollywood in August, 1926. In August, 1927, there were only 140 sound-producing machines in operation in the United States. On January 1, 1929, 1,300 theaters were equipped for sound, and on January 1, 1931, 13,128 of a total of 21,993 theaters in the country were so equipped.

#### Growth of Unemployment Among Musicians

UNQUESTIONABLY, the rapid growth in the number of theaters equipped for sound pictures was directly responsible for the growth of the number of unemployed in the ranks of theatrical musicians. The following figures were taken from the report of the treasurer of the American Federation of Musicians submitted to the thirty-sixth annual convention of the federation, held in Chattanooga in June, 1931. All employed musicians are required to pay 2 per cent of their income to the national defense fund of the federation, and during the fiscal year 1928-29, the tax was paid by 19,780 musicians employed in theaters. During 1929-30, only 13,860 theatrical musicians paid the tax, indicating that during that year, 5,920 theatrical musicians had lost their jobs. In 1930-31 only 9,795 theatrical musicians paid the tax. On the basis of these figures, it is evident that during the two years which marked the rapid growth of the sound picture, 9,885 musicians, or about 50 per cent of the total number of musicians employed in the theaters, were displaced.

These figures, for the country as a whole, seem to be corroborated by the figures taken from Local No. 802, the organization of musicians in New York City. In 1928 there were 3,200 musicians employed in theaters in that city. In 1931 only 1,500 musicians were thus employed, showing a loss of 1,700 or nearly 53 per cent of the total number.

#### Increase in Employment of Motion-Picture-Machine Operators

THE introduction of sound pictures, which was thus responsible for the elimination of the musicians from the straight motion-picture theater, resulted on the other hand in an increase of employment among the moving-picture-machine operators. In the majority of theaters operating under an agreement with the motion-picture-machine operators' union, the place of every man, assisted by a boy helper, formerly employed to operate one silent-picture machine is now taken by two licensed men operating a sound-picture machine. The introduction of sound in the moving-picture theaters has thus theoretically doubled the chances for employment among the projectionists. There are no data available to determine the actual increase in the numbers of machine operators employed since the introduction of the sound picture, but the membership of the International Alliance of Theatrical Stage Employees and Moving Picture Machine Operators shows an increase from 24,342 in 1926 to approximately 32,000 in 1931. Its membership is made up of motion-picture-machine operators, theatrical stage employees, and motion-picture-studio mechanics. It is stated by the president of the international that the increase in the total membership between 1926 and 1931 is due entirely to the increase in the number of projectionists, caused by the introduction of sound pictures in the theaters.

At present the motion-picture-machine operators are unquestionably in the most favorable position of all the trades employed in the amusement industry. Even during the present depressed situation in the moving-picture theaters, the Machine Operators' Local No. 306, New York, claims to have no permanently unemployed members. The earnings of the motion-picture-machine operators are also very high, particularly in the city of New York, where they range from \$85 for a straight-time 6-hour day, 6-day week, to \$150 or more per week in the de luxe theaters with several extra midnight shows.

The musicians and the machine operators are the only two crafts in the theater which have been directly affected by the introduction of sound motion pictures. It is impossible to tell from the figures available whether musicians displaced outnumber the extra motion-picture-machine operators employed, but representatives of the five large moving-picture theater circuits claim that the 13,000 theaters which installed sound equipment in the last few years have added more operators than the approximately 10,000 musicians who lost their jobs through the introduction of the sound picture.

Unfortunately, however, the additional men employed as machine operators did not come from the ranks of the displaced musicians, and the situation among the musicians is not improved by the greater demand for motion-picture-machine operators. Although the unions of musicians and operators have an agreement to cooperate in the

case of strikes or other emergencies, there exists no understanding by which the increased demand for labor in the booth of the theater could be filled from the ranks of labor released from the pit.

### Motion Pictures in Relation to Other Branches of Amusement Industry

THE rapid advance of the motion-picture industry, particularly since the introduction of sound pictures, has exerted a tremendous influence on the entire amusement field. Although the changes brought about by this advance can not be described as strictly technological, the results are sufficiently pertinent to be considered in connection with the technological development in the moving-picture industry.

#### Legitimate Theater—Drama and Musical Comedy

That the legitimate theater has been in difficulties for a number of years is no longer a secret in the amusement industry. Even before the beginning of the present depression and prior to the introduction of sound motion pictures the legitimate stage was known to be on the down grade. Its field has been more and more concentrated in the larger cities or rather in the one city of New York, where it still plays an important rôle. To be sure, even there it has retreated from the "Gay White Way" to the side streets, leaving the motion-picture theaters in undisputed possession of Broadway.

In 1917 there were 1,500 theater buildings throughout the country in which a touring legitimate company could play. In 1927, before the arrival of sound pictures, there were less than 500 such buildings, and these included even those theaters which ran motion pictures for five nights of the week and were willing to house a legitimate play on the sixth night. On December 1, 1930, *Film Daily*, published in New York, reported that only 80 dramatic stock companies were operating throughout the country, in contrast with 140 companies in 1929.

It is entirely beyond the scope of the present article to attempt to analyze the causes of the present state of affairs in the legitimate theater. It is important, however, to estimate the extent to which the rapid growth of the motion pictures has contributed to the present plight of the legitimate stage. In his book, "The Theater Through the Stage Doors," the late David Belasco wrote in 1919: "Motion pictures have not crossed nor do they threaten to cross the path of real drama, although as a certain kind of public entertainment, they have come into commercial competition with the theater."

In 1931, after having completed a 13 weeks' tour over the country with Ethel Barrymore, Ray Henderson wrote in the *New York Times*:

The full extent of the victory of the motion picture over the legitimate stage is not sensed so clearly as when one invades the territory below the Mason-Dixon line. While a few actors like Ethel Barrymore and a few plays may still find an occasional stronghold in the drama, the South has all but been abandoned by the legitimate theater. In its place, the pictures have entrenched themselves in custom and patronage. Within 12 months not more than six companies of living actors have traversed the territory in the South. \* \* \* In 1910 there was scarcely a city in the South with a population of 25,000 but had its opera or academy of music, and each saw one, two, or more legitimate traveling



companies a week during a season. Now these theaters have either completely disappeared or have been converted into second or third rate talkies. \* \* \*

In the 13 weeks of the Barrymore tour of 66 cities she appeared in only 28 buildings originally erected as a drama theater. Only 13 of these were not picture houses and these are struggling for their existence by housing such rare troupes as may come their way. Elsewhere, Miss Barrymore played in picture palaces, civic lodges, school auditoriums. This proves, unmistakably, that the legitimate play has now become the intruder instead of leading in the amusement field. The pictures have the field and they supply it with an entertainment liked by the majority of the public.

A review of the shows offered and the methods used by the legitimate theater and by the movies may help partly, at least, to answer the question of how this apparent victory of the motion picture over the legitimate theater has been accomplished. The legitimate theater makes its appeal to the more intellectual group of the community; these people are drawn to the theater by the play or the reputation of the players only, and it makes no difference to them whether the play is housed in one theater or another. As a rule, the admission price to the legitimate theater is comparatively high and tickets to the so-called "successful" plays are not always available either at the time or at the price wanted.

The motion picture enters the field by building a spacious theater within the neighborhood from which it expects to draw its patronage. It appeals to all groups of the community irrespective of age or mental development. Once established in a given community or neighborhood, the motion-picture theater uses all the means in its power to become an integral part of the community; this is the exact opposite to the cosmopolitan appeal of the legitimate theater. The price of admission to a motion-picture theater is very much lower than to even the cheapest legitimate show in town. This, in itself, is a strong appeal to the average person, and the consideration of being able to see from three to five movies for the price of one legitimate show is probably the strongest economic argument in favor of the motion picture. Besides, the picture house, with its luxurious lobbies, uniformed pages and ushers, its courteous managers, ticket takers, cashiers, etc., tends to put the audience in a frame of mind to enjoy the performance. This is in contrast with the drab and impersonally austere atmosphere which prevails in the legitimate theater before the beginning of the show.

#### Vaudeville Theater

The vaudeville theater as an independent entity has fared even worse than the legitimate stage. In 1919 Mr. Casey, of the Vaudeville Managers' Association, stated before the Federal Trade Commission that there were then 907 theaters in the country playing "big time" and "small time" vaudeville. In 1922 the Billboard reported nearly 1,000 vaudeville theaters. At present the Palace Theater in New York is the only "big time" vaudeville theater left in the country. There are a few "small time" or burlesque theaters left and these lead a precarious existence. The answer to the question of what has happened to the vaudeville theaters is comparatively simple: They have all been converted into moving-picture houses, some retaining certain vaudeville acts as a part of their program and others presenting pictures only. The business depression of the past year has greatly accelerated the elimination of vaudeville, even from

those theaters where it had been presented as only a part of the show. It seems to be the opinion of managers and owners of moving-picture theaters that the picture is the thing which draws the crowd. Hence, if expenses are to be cut—which is now warranted by the decreased attendance and by the need for lower admission prices—vaudeville is the first thing to be eliminated from the theater, and with the vaudeville artist also go the musicians and the entire back-stage crew. For the present at least it looks as if vaudeville were doomed. Whether the present situation merely signifies a retrenchment policy due to the prolonged depression, which has only recently begun seriously to affect the moving-picture industry, or whether it will become a permanent policy in the future, only time can tell. In the meantime the vaudeville artists, the musicians, and the stage hands continue to swell the ranks of the unemployed.

#### “Translux” Theaters

The essential difference between the average moving-picture theater and the “translux” theater system lies in the method of projecting the picture onto the screen. In the translux system the picture is projected from behind the screen, thus doing away with the necessity of having the theater darkened during the show. A turnstile system, operated from the cashier’s booth, eliminates the need for the services of the ticket chopper, and the light in the theater dispenses with the need of ushers and pages. The three translux theaters in operation now in New York City are comparatively very small, each with a capacity of about 250. The patrons are requested to find their own seats in these theaters. It is doubtful, however, if the same policy could be pursued in a larger theater. The translux system of theaters may be classified as the “5-and-10” or “cafeteria” version of the moving-picture industry, which will undoubtedly have an appeal to a certain element of the theater-going public. To that extent it will also become a competitive factor in the amusement industry and because of its refusal to make use of ticket takers, ushers, pages, and other help regularly employed in a motion-picture theater, it will undoubtedly cause a further increase in the ranks of the unemployed among the theater workers.

#### Radio and Television

Radio, which brings its entertainment to the home of the consumer, can not be seriously considered as a competitive entity in the amusement field. There may be some truth in the argument that since the introduction of radio a certain element of the population prefers to stay at home and listen to the radio rather than to go to a legitimate show or to a movie. There are no figures, of course, to prove or to disprove these contentions. On the other hand, it may be pointed out that the period between 1926 and 1930, which saw the largest development of the radio, also represented the period of the highest development in the motion-picture industry. But whether in competition with the theater or not, from the point of view of displacement of human labor, the radio may be considered as a compensating factor in the amusement industry. Radio broadcasting provides work for a considerable number of actors and musicians. One broadcasting station in New York has on its pay roll some 110 more or less regularly

employed musicians. Only a few of these are permanently employed by the company; the others are called upon to perform once or twice a week in connection with the special programs for which they were engaged. The hiring of the actors as well as of the musicians is usually done by the company sponsoring the broadcasting program, and the musicians and actors are changed each time a program is changed. It was estimated by the president of the American Federation of Musicians that from 500 to 600 musicians throughout the country earn a living through radio broadcasting. These figures do not include the star artists and musicians used as features in a broadcasting program.

Television as a commercial entertainment is still in a state of embryonic development. In fact, the majority of its sponsors still consider it in the laboratory stage and even the most optimistic of its supporters do not predict its appearance in the commercial field before 1932. With the exception of a very small group of individuals directly engaged in the field of television in either a managerial or scientific capacity, very few people have even the slightest conception of what television means, how it will work, and what its commercial possibilities are, whether it will be delivered to the home over the radio or whether it will be presented in a theater especially constructed for television. With so much doubt about the nature of television and the method of its application, it is impossible even to guess the effects its introduction will have on the amusement industry.

## Comparative Costs of Dwelling Units in 13 Cities

THE Bureau of Labor Statistics presents below the results of an inquiry showing the comparative cost of dwelling units in 13 representative cities by cost groups, as shown by permits issued during the first half of 1929. The data for St. Louis and Washington were published in the December, 1930, Monthly Labor Review, but are included in the following tables. The first six months of 1929 were selected because it was thought that the building of dwellings was on a more normal basis in that period than during any of the succeeding 6-month periods. The data were obtained from the records of permits issued in these 13 cities. The costs as shown include building costs only, no land costs being included.

While the information shows that the cost of different classes of dwellings was much cheaper in some cities than in others, this must not be construed to mean that an identical building can be built more cheaply in one city than in another. It may be that in some cities more smaller dwellings are erected than in other cities.

### One-Family Dwellings

TABLE 1 shows the number and per cent of the one-family dwellings provided for in the 13 selected cities by cost groups.

TABLE 1.—ESTIMATED COST OF ONE-FAMILY DWELLINGS FOR WHICH PERMITS WERE ISSUED IN SPECIFIED CITIES DURING FIRST HALF OF 1929, BY COST GROUPS

*Number of families provided for*

Cost	Brook- lyn	Cam- bridge	Cincin- nati	Denver	Kansas City	Los Angeles	Mil- waukee
Under \$2,000.....	1			13	3	517	1
\$2,000 and under \$3,000.....			3	44	86	957	1
\$3,000 and under \$4,000.....	1	2	27	44	182	618	19
\$4,000 and under \$5,000.....	23	3	95	92	93	260	146
\$5,000 and under \$6,000.....	154	1	102	94	25	127	149
\$6,000 and under \$7,000.....	133		136	58	16	96	76
\$7,000 and under \$8,000.....	74		78	17	17	59	21
\$8,000 and under \$9,000.....	43		45	12	15	30	18
\$9,000 and under \$10,000.....	6		32	6	5	19	8
\$10,000 and under \$11,000.....	12		31	8	6	32	1
\$11,000 and under \$12,000.....		3	4	1		9	
\$12,000 and under \$13,000.....	16	4	12	4	4	23	3
\$13,000 and under \$14,000.....	1		3	1	3	7	
\$14,000 and under \$15,000.....			4	2	1	8	1
\$15,000 and under \$16,000.....	7	1	5	4	3	22	1
\$16,000 and under \$17,000.....	1		2			5	
\$17,000 and under \$18,000.....			1	1	1	2	
\$18,000 and under \$19,000.....			4		2	11	
\$19,000 and under \$20,000.....			1	1		2	
\$20,000 and over.....	19		216	88	41	550	64
Total.....	481	14	601	410	463	2,854	449

<sup>1</sup> 2 at \$20,000, 3 at \$25,000, 1 at \$35,000, 1 at \$45,000, 1 at \$50,000, and 1 at \$55,000.

<sup>2</sup> 5 at \$20,000, 1 at \$24,000, 3 at \$27,000, 1 at \$29,000, 1 at \$32,000, 1 at \$35,000, 2 at \$40,000, 1 at \$60,000, and 1 at \$67,000.

<sup>3</sup> 2 at \$20,000, 3 at \$22,000, 1 at \$26,000, 1 at \$42,000, and 1 at \$45,000.

<sup>4</sup> Cost \$25,000.

<sup>5</sup> 10 at \$20,000, 1 at \$20,750, 3 at \$21,000, 2 at \$22,000, 1 at \$23,000, 1 at \$24,000, 9 at \$25,000, 2 at \$28,000, 1 at \$30,000, 1 at \$32,000, 2 at \$33,000, 1 at \$34,000, 2 at \$35,000, 1 at \$37,000, 1 at \$38,000, 3 at \$40,000, 1 at \$45,000, 1 at \$47,000, 1 at \$50,000, 2 at \$75,000, 1 at \$82,000, 2 at \$100,000, and 1 at \$175,000.

<sup>6</sup> 2 at \$20,000, 1 at \$21,000, and 1 at \$35,000.

TABLE 1.—ESTIMATED COST OF ONE-FAMILY DWELLINGS FOR WHICH PERMITS WERE ISSUED IN SPECIFIED CITIES DURING FIRST HALF OF 1929, BY COST GROUPS—Continued

Number of families provided for—Continued

Cost	New Haven	Philadelphia	Richmond	St. Louis	St. Paul	Washington	Total, 13 cities
Under \$2,000	2	53	24	31		14	659
\$2,000 and under \$3,000	4	59	28	53	6	17	1,258
\$3,000 and under \$4,000	16	1,009	51	348	38	31	2,386
\$4,000 and under \$5,000	12	1,326	62	163	52	42	2,369
\$5,000 and under \$6,000	20	281	45	78	22	294	1,392
\$6,000 and under \$7,000	6	94	24	14	16	134	803
\$7,000 and under \$8,000	5	53	26	10	8	81	449
\$8,000 and under \$9,000	3	15	4	16	4	69	274
\$9,000 and under \$10,000	5	5	3	3	5	34	131
\$10,000 and under \$11,000	1	14	5	7	2	80	202
\$11,000 and under \$12,000	2	1		2	1	8	28
\$12,000 and under \$13,000		5	2	1	1	25	100
\$13,000 and under \$14,000		3	1			2	21
\$14,000 and under \$15,000		3	1			4	24
\$15,000 and under \$16,000		2	1	1		12	59
\$16,000 and under \$17,000		6	1			5	20
\$17,000 and under \$18,000		2				2	9
\$18,000 and under \$19,000	1	8		2	2	4	34
\$19,000 and under \$20,000		3					7
\$20,000 and over	7 4	8 11	9 3	10 3	11 1	12 27	137
Total	81	2,953	281	732	158	885	10,362

Per cent of families provided for

Cost	Brooklyn	Cambridge	Cincinnati	Denver	Kansas City	Los Angeles	Milwaukee
Under \$2,000	0.2			3.2	0.6	18.1	0.2
\$2,000 and under \$3,000			0.5	10.7	18.6	33.5	.2
\$3,000 and under \$4,000	.2	14.3	4.5	10.7	39.3	21.7	4.2
\$4,000 and under \$5,000	4.8	21.4	15.8	22.4	20.1	9.1	32.5
\$5,000 and under \$6,000	32.0	7.1	17.0	22.9	5.4	4.4	33.2
\$6,000 and under \$7,000	27.7		22.6	14.1	3.5	3.4	16.9
\$7,000 and under \$8,000	15.4		13.0	4.1	3.7	2.1	4.7
\$8,000 and under \$9,000	8.9		7.5	2.9	3.2	1.1	4.0
\$9,000 and under \$10,000	1.2		5.3	1.5	1.1	.7	1.8
\$10,000 and under \$11,000	2.5	21.4	5.2	.2	1.3	1.1	.2
\$11,000 and under \$12,000			.7	.2		.3	
\$12,000 and under \$13,000	3.3	28.6	2.0	1.0	.9	.8	.7
\$13,000 and under \$14,000	.2		.5		.6	.2	
\$14,000 and under \$15,000			.7	.5	.2	.3	.2
\$15,000 and under \$16,000	1.5	7.1	.8	1.0	.6	.8	.2
\$16,000 and under \$17,000	.2		.3			.2	
\$17,000 and under \$18,000			.2	.2	.2	.1	
\$18,000 and under \$19,000			.7		.4	.4	
\$19,000 and under \$20,000			.2	.2		.1	
\$20,000 and over	1.9		2.7	2.0	.2	1.8	.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>7</sup> 1 at \$30,000, 1 at \$33,000, and 2 at \$35,000.

<sup>8</sup> 2 at \$20,000, 1 at \$28,000, 1 at \$33,000, 1 at \$34,000, 1 at \$35,000, 1 at \$43,000, 2 at \$45,000, 1 at \$48,000, and 1 at \$75,000.

<sup>9</sup> 1 at \$20,000, 1 at \$23,000, and 1 at \$33,000.

<sup>10</sup> 1 at \$25,000, 1 at \$30,000, and 1 at \$45,000.

<sup>11</sup> Cost \$23,900.

<sup>12</sup> 4 at \$20,000, 1 at \$20,300, 1 at \$22,388, 1 at \$22,500, 1 at \$23,900, 2 at \$24,000, 3 at \$25,000, 1 at \$26,000, 1 at \$29,000, 2 at \$30,000, 1 at \$32,500, 2 at \$35,000, 2 at \$40,000, 1 at \$43,000, 1 at \$48,000, 1 at \$50,000, 1 at \$60,000, and 1 at \$75,600.



TABLE 1.—ESTIMATED COST OF ONE-FAMILY DWELLINGS FOR WHICH PERMITS WERE ISSUED IN SPECIFIED CITIES DURING FIRST HALF OF 1929, BY COST GROUPS—Continued

Per cent of families provided for—Continued

Cost	New Haven	Philadelphia	Richmond	St. Louis	St. Paul	Washington	Total, 13 cities
Under \$2,000.....	2.5	1.8	8.5	4.2	-----	1.6	6.4
\$2,000 and under \$3,000.....	4.9	2.0	10.0	7.2	3.8	1.9	12.1
\$3,000 and under \$4,000.....	19.8	34.2	18.1	47.5	24.1	3.5	23.0
\$4,000 and under \$5,000.....	14.8	44.9	22.1	22.3	32.9	4.7	22.9
\$5,000 and under \$6,000.....	24.7	9.5	16.0	10.7	13.9	33.2	13.4
\$6,000 and under \$7,000.....	7.4	3.2	8.5	1.9	10.1	15.1	7.7
\$7,000 and under \$8,000.....	6.2	1.8	9.3	1.4	5.1	9.2	4.3
\$8,000 and under \$9,000.....	3.7	.5	1.4	2.2	2.5	7.8	2.6
\$9,000 and under \$10,000.....	6.2	.2	1.1	.4	3.2	3.8	1.3
\$10,000 and under \$11,000.....	1.2	.5	1.8	1.0	1.3	9.0	1.9
\$11,000 and under \$12,000.....	2.5	( <sup>13</sup> )	-----	.3	.6	.9	.3
\$12,000 and under \$13,000.....	-----	.2	.7	.1	.6	2.8	1.0
\$13,000 and under \$14,000.....	-----	.1	.4	-----	-----	.2	.2
\$14,000 and under \$15,000.....	-----	.1	.4	-----	-----	.5	.2
\$15,000 and under \$16,000.....	-----	.1	.4	.1	-----	1.4	.6
\$16,000 and under \$17,000.....	-----	-----	.4	-----	-----	.6	.2
\$17,000 and under \$18,000.....	-----	.1	-----	-----	-----	.2	.1
\$18,000 and under \$19,000.....	1.2	.3	-----	.3	1.3	.5	.3
\$19,000 and under \$20,000.....	-----	.1	-----	-----	-----	-----	.1
\$20,000 and over.....	4.9	.4	1.1	.4	.6	3.1	1.3
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cumulative per cent

Cost	Brooklyn	Carnegie	Cincinnati	Denver	Kansas City	Los Angeles	Millwaukee
Under \$2,000.....	0.2	0.0	0.0	3.2	0.6	18.1	0.2
\$2,000 and under \$3,000.....	.2	0.0	.5	13.9	19.2	51.6	.4
\$3,000 and under \$4,000.....	.4	14.3	5.0	24.6	58.5	73.3	4.6
\$4,000 and under \$5,000.....	5.2	35.7	20.8	47.0	78.6	82.4	37.1
\$5,000 and under \$6,000.....	37.2	42.8	37.8	69.9	84.0	86.8	70.3
\$6,000 and under \$7,000.....	64.9	42.8	60.4	84.0	87.5	90.2	87.2
\$7,000 and under \$8,000.....	80.3	42.8	73.4	88.1	91.2	92.3	91.9
\$8,000 and under \$9,000.....	89.2	42.8	80.9	91.0	94.4	93.4	95.9
\$9,000 and under \$10,000.....	90.4	42.8	86.2	92.5	95.5	94.1	97.7
\$10,000 and under \$11,000.....	92.9	64.2	91.4	94.5	96.8	95.2	97.9
\$11,000 and under \$12,000.....	92.9	64.2	92.1	94.7	96.8	95.5	97.9
\$12,000 and under \$13,000.....	96.2	92.8	94.1	95.7	97.7	96.3	98.6
\$13,000 and under \$14,000.....	96.4	92.8	94.6	95.9	98.3	96.5	98.6
\$14,000 and under \$15,000.....	96.4	92.8	95.3	96.4	98.5	96.8	98.8
\$15,000 and under \$16,000.....	97.9	100.0	96.1	97.4	99.1	97.6	99.0
\$16,000 and under \$17,000.....	98.1	100.0	96.4	97.4	99.1	97.8	99.0
\$17,000 and under \$18,000.....	98.1	100.0	96.6	97.6	99.3	97.9	99.0
\$18,000 and under \$19,000.....	98.1	100.0	97.3	97.6	99.7	98.3	99.0
\$19,000 and under \$20,000.....	98.1	100.0	97.5	97.8	99.7	98.4	99.0
\$20,000 and over.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cost	New Haven	Philadelphia	Richmond	St. Louis	St. Paul	Washington	Total, 13 cities
Under \$2,000.....	2.5	1.8	8.5	4.2	0.0	1.6	6.4
\$2,000 and under \$3,000.....	7.4	3.8	18.5	11.4	3.8	3.5	18.5
\$3,000 and under \$4,000.....	27.2	38.0	36.6	58.9	27.9	7.0	41.5
\$4,000 and under \$5,000.....	42.0	82.9	58.7	81.2	60.8	11.7	64.4
\$5,000 and under \$6,000.....	66.7	92.4	74.7	91.9	74.7	44.9	77.8
\$6,000 and under \$7,000.....	74.1	95.6	83.2	93.8	84.8	60.0	85.5
\$7,000 and under \$8,000.....	80.3	97.4	92.5	95.2	89.9	69.2	89.8
\$8,000 and under \$9,000.....	84.0	97.9	93.9	97.4	92.4	77.0	92.4
\$9,000 and under \$10,000.....	90.2	98.1	95.0	97.8	95.6	80.8	93.7
\$10,000 and under \$11,000.....	91.4	98.6	96.8	98.8	96.9	89.8	95.6
\$11,000 and under \$12,000.....	93.9	98.6	-----	99.1	97.5	90.7	95.9
\$12,000 and under \$13,000.....	93.9	98.8	97.5	99.2	98.1	93.5	96.9
\$13,000 and under \$14,000.....	93.9	98.9	97.9	99.2	98.1	93.7	97.1
\$14,000 and under \$15,000.....	93.9	99.0	98.3	99.2	98.1	94.2	97.3
\$15,000 and under \$16,000.....	93.9	99.1	98.7	99.3	98.1	95.6	97.9
\$16,000 and under \$17,000.....	93.9	99.1	99.1	99.3	98.1	96.2	98.1
\$17,000 and under \$18,000.....	93.9	99.2	-----	99.3	98.1	96.4	98.2
\$18,000 and under \$19,000.....	95.1	99.5	-----	99.6	99.4	96.9	98.5
\$19,000 and under \$20,000.....	95.1	99.6	-----	99.6	99.4	96.9	99.9
\$20,000 and over.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>13</sup> Less than one-tenth of 1 per cent.

Table 1 discloses a marked difference in the cost of the 1-family dwellings erected in these cities. For example: In Los Angeles 51.6 per cent of the 1-family dwellings for which permits were issued during the first half of 1929 cost less than \$3,000, while in Brooklyn only 0.2 per cent of the 1-family dwellings cost less than that amount. In Brooklyn only 25 one-family dwellings, or 5.2 per cent of the buildings erected, cost less than \$5,000; in contrast, in Los Angeles 82.4 per cent and in Philadelphia 82.9 per cent cost less than that amount.

It must be borne in mind that the cost figures shown in this table include only the cost of erecting a building. As before stated, no land costs are included, nor is the profit to the builder included. Therefore, these figures can not be taken as the price for which a man is able to purchase a home.

In Brooklyn, Denver, Milwaukee, New Haven, and Washington, the largest group of 1-family dwellings for which permits were issued cost between \$5,000 and \$6,000; in Cincinnati the largest group cost between \$6,000 and \$7,000; in Kansas City and St. Louis, between \$3,000 and \$4,000; in Los Angeles, between \$2,000 and \$3,000; and in Philadelphia, Richmond, and St. Paul, between \$4,000 and \$5,000.

Two-family Dwellings

TABLE 2 shows the number and per cent of families provided for in 2-family dwellings in the 13 representative cities, by cost groups.

TABLE 2.—ESTIMATED COST PER FAMILY OF TWO-FAMILY DWELLINGS<sup>1</sup> FOR WHICH PERMITS WERE ISSUED IN SPECIFIED CITIES DURING FIRST HALF OF 1929, BY COST GROUPS

*Number of families provided for*

Cost per family unit	Brook- lyn	Cam- bridge	Cinci- nati	Denver	Kansas City	Los Angeles	Mil- waukee
Under \$2,000				1		269	6
\$2,000 and under \$3,000	20	2	20		4	314	38
\$3,000 and under \$4,000	82	10	48	24	6	241	214
\$4,000 and under \$5,000	93	14	64	10	6	178	180
\$5,000 and under \$6,000	230	22	20	3	4	72	28
\$6,000 and under \$7,000	74	2	16	2		45	9
\$7,000 and under \$8,000	59		14		1	29	4
\$8,000 and under \$9,000	16		2		2	5	2
\$9,000 and under \$10,000	8					5	5
\$10,000 and over	<sup>2</sup> 33					<sup>3</sup> 1	<sup>4</sup> 6
Total	615	50	184	40	23	1,159	492

Cost per family unit	New Haven	Phila- delphia	Rich- mond	St. Louis	St. Paul	Wash- ington	Total, 13 cities
Under \$2,000		6		10			292
\$2,000 and under \$3,000		10	4	140	4	4	560
\$3,000 and under \$4,000	4	20	8	144	8	2	811
\$4,000 and under \$5,000		12	6	72	2		637
\$5,000 and under \$6,000	6	14	14	12	2		427
\$6,000 and under \$7,000		5		2			155
\$7,000 and under \$8,000		3	2	4			116
\$8,000 and under \$9,000		1					28
\$9,000 and under \$10,000		1		2			21
\$10,000 and over	<sup>5</sup> 1						41
Total	11	72	34	386	16	6	3,088

<sup>1</sup> Includes 1-family and 2-family dwellings with stores.  
<sup>2</sup> 20 at \$10,000, 6 at \$12,000, 1 at \$13,000, 4 at \$15,000, and 2 at \$20,000.  
<sup>3</sup> Cost, \$14,000.  
<sup>4</sup> 4 at \$10,000, 1 at \$11,000, and 1 at \$13,000.  
<sup>5</sup> Cost, \$10,000.

TABLE 2.—ESTIMATED COST PER FAMILY OF TWO-FAMILY DWELLINGS FOR WHICH PERMITS WERE ISSUED IN SPECIFIED CITIES DURING FIRST HALF OF 1929, BY COST GROUPS—Continued

*Per cent of families provided for*

Cost per family unit	Brooklyn	Cambridge	Cincinnati	Denver	Kansas City	Los Angeles	Milwaukee
Under \$2,000.....				2.5		23.2	1.2
\$2,000 and under \$3,000.....	3.3	4.0	10.9		17.4	27.1	7.7
\$3,000 and under \$4,000.....	13.3	20.0	26.1	60.0	26.1	20.8	43.5
\$4,000 and under \$5,000.....	15.1	28.0	34.8	25.0	26.1	15.4	36.6
\$5,000 and under \$6,000.....	37.4	44.0	10.9	7.5	17.4	6.2	5.7
\$6,000 and under \$7,000.....	12.0	4.0	8.7	5.0		3.9	1.8
\$7,000 and under \$8,000.....	9.6		7.6		4.3	2.5	.8
\$8,000 and under \$9,000.....	2.6		1.1		8.7	.4	.4
\$9,000 and under \$10,000.....	1.3					.4	1.0
\$10,000 and over.....	<sup>2</sup> 5.4					<sup>3</sup> .1	<sup>4</sup> 1.2
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cost per family unit	New Haven	Philadelphia	Richmond	St. Louis	St. Paul	Washington	Total, 13 cities
Under \$2,000.....		8.3		2.6			9.5
\$2,000 and under \$3,000.....		13.9	11.8	36.3	25.0	66.7	18.1
\$3,000 and under \$4,000.....	36.4	27.8	23.5	37.3	50.0	33.3	26.3
\$4,000 and under \$5,000.....		16.7	17.6	18.7	12.5		20.6
\$5,000 and under \$6,000.....	54.5	19.4	41.2	3.1	12.5		13.8
\$6,000 and under \$7,000.....		6.9		.5			5.0
\$7,000 and under \$8,000.....		4.2	5.9	1.0			3.8
\$8,000 and under \$9,000.....		1.4					.9
\$9,000 and under \$10,000.....		1.4		.5			.7
\$10,000 and over.....	9.1						1.3
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Cumulative per cent*

Cost per family unit	Brooklyn	Cambridge	Cincinnati	Denver	Kansas City	Los Angeles	Milwaukee
Under \$2,000.....	0.0	0.0	0.0	2.5		23.2	1.2
\$2,000 and under \$3,000.....	3.3	4.0	10.9	2.5	17.4	50.3	8.9
\$3,000 and under \$4,000.....	16.6	24.0	37.0	62.5	43.5	71.1	52.4
\$4,000 and under \$5,000.....	31.7	52.0	71.8	87.5	69.6	86.5	89.0
\$5,000 and under \$6,000.....	69.1	96.0	82.7	95.0	87.0	92.7	94.7
\$6,000 and under \$7,000.....	81.1	100.0	91.4	100.0	87.0	96.6	96.5
\$7,000 and under \$8,000.....	90.7	100.0	99.0	100.0	91.3	99.1	97.3
\$8,000 and under \$9,000.....	93.3	100.0	100.0	100.0	100.0	99.5	97.7
\$9,000 and under \$10,000.....	94.6	100.0	100.0	100.0	100.0	99.9	98.7
\$10,000 and over.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cost per family unit	New Haven	Philadelphia	Richmond	St. Louis	St. Paul	Washington	Total, 13 cities
Under \$2,000.....	0.0	8.3		2.6	0.0	0.0	9.5
\$2,000 and under \$3,000.....	.0	22.2	11.8	38.9	25.0	66.7	27.6
\$3,000 and under \$4,000.....	36.4	50.0	35.3	76.2	75.0	100.0	53.9
\$4,000 and under \$5,000.....	36.4	66.7	52.9	94.9	87.5	100.0	74.5
\$5,000 and under \$6,000.....	90.9	86.1	94.1	98.0	100.0	100.0	88.3
\$6,000 and under \$7,000.....	90.9	93.0		98.5	100.0	100.0	93.3
\$7,000 and under \$8,000.....	90.9	97.2	100.0	99.5	100.0	100.0	97.1
\$8,000 and under \$9,000.....	90.9	98.6	100.0	99.5	100.0	100.0	98.0
\$9,000 and under \$10,000.....	90.9	100.0	100.0	100.0	100.0	100.0	98.7
\$10,000 and over.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>2</sup> 20 at \$10,000, 6 at \$12,000, 1 at \$13,000, 4 at \$15,000, and 2 at \$20,000.

<sup>3</sup> Cost, \$14,000.

<sup>4</sup> 4 at \$10,000, 1 at \$11,000, and 1 at \$13,000.



A 2-family dwelling is one in which one family lives over the other or two families live on the same floor and have a common entrance. The costs as shown in Table 2 are per-family costs, not costs per building.

There was a marked difference in the part that 2-family dwellings played in the housing situations in these cities. In Washington, for instance, only 6 families were provided for in 2-family dwellings during the first half of 1929, while in Los Angeles, 1,159 families were provided for in 2-family dwellings.

In St. Louis 38.9 per cent of the family dwelling units provided for in 2-family dwellings cost less than \$3,000; in Los Angeles 50.3 per cent cost less than that amount; but in Milwaukee only 8.9 per cent, and in Brooklyn only 3.3 per cent cost less than that sum. For the group as a whole, 27.6 per cent of 2-family dwellings cost less than \$3,000 per family.

Apartment Houses

TABLE 3 shows the number and per cent of family housing units provided for in apartment houses in 13 representative cities, by cost groups.

TABLE 3.—ESTIMATED COST PER FAMILY HOUSING UNIT OF APARTMENT HOUSES FOR WHICH PERMITS WERE ISSUED IN SPECIFIED CITIES DURING FIRST HALF OF 1929, BY COST GROUPS

*Number of families provided for*

Cost per family unit	Brooklyn	Cambridge	Cincinnati	Denver	Kansas City	Los Angeles	Milwaukee
Under \$2,000		33	71	163	369	2,044	206
\$2,000 and under \$3,000	519	25	76	212	429	1,480	284
\$3,000 and under \$4,000	1,405	150	136	80	4	711	289
\$4,000 and under \$5,000	1,319	85	97	13	37	129	58
\$5,000 and under \$6,000	531		41	9	104	113	56
\$6,000 and under \$7,000	48		9			31	
\$7,000 and under \$8,000	105					59	3
\$8,000 and under \$9,000	41						5
\$9,000 and under \$10,000	54						
\$10,000 and over	178	114	41				
Total	4,100	407	471	477	943	4,567	901

Cost per family unit	New Haven	Philadelphia	Richmond	St. Louis	St. Paul	Washington	Total, 13 cities
Under \$2,000		56	36	723	47		3,748
\$2,000 and under \$3,000	88	540	18	954	10	210	4,845
\$3,000 and under \$4,000	6	466	24	122	12	368	3,773
\$4,000 and under \$5,000		75	24	53		92	1,982
\$5,000 and under \$6,000		23		42			919
\$6,000 and under \$7,000		143				109	340
\$7,000 and under \$8,000		76				96	339
\$8,000 and under \$9,000		48					94
\$9,000 and under \$10,000							54
\$10,000 and over						2197	430
Total	94	1,427	102	1,894	69	1,072	16,524

<sup>1</sup> Cost, \$12,000 and under \$13,000.

<sup>2</sup> Cost, \$10,000 and under \$11,000.

TABLE 3.—ESTIMATED COST PER FAMILY HOUSING UNIT OF APARTMENT HOUSES FOR WHICH PERMITS WERE ISSUED IN SPECIFIED CITIES DURING FIRST HALF OF 1929, BY COST GROUPS—Continued

*Per cent of families provided for*

Cost per family unit	Brook- lyn	Cam- bridge	Cincin- nati	Den- ver	Kansas City	Los Angeles	Mil- waukee
Under \$2,000		8.1	15.1	34.2	39.1	45.0	22.9
\$2,000 and under \$3,000	12.7	6.1	16.1	44.4	45.5	32.4	31.5
\$3,000 and under \$4,000	34.3	36.9	28.9	16.8	.4	15.6	32.1
\$4,000 and under \$5,000	32.2	20.9	20.6	2.7	3.9	2.8	6.4
\$5,000 and under \$6,000	13.0		8.7	1.9	11.0	2.5	6.2
\$6,000 and under \$7,000	1.2		1.9			.7	
\$7,000 and under \$8,000	2.6					1.3	.3
\$8,000 and under \$9,000	1.0						.6
\$9,000 and under \$10,000	1.3						
\$10,000 and over	1.9	28.0	8.7				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cost per family unit	New Haven	Phila- delphia	Rich- mond	St. Louis	St. Paul	Wash- ington	Total, 13 cities
Under \$2,000		3.9	35.3	38.2	68.1		22.7
\$2,000 and under \$3,000	93.6	37.8	17.6	50.4	14.5	19.6	29.3
\$3,000 and under \$4,000	6.4	32.7	23.5	6.4	17.4	34.3	22.8
\$4,000 and under \$5,000		5.3	23.5	2.8		8.6	12.0
\$5,000 and under \$6,000		1.6		2.2			5.6
\$6,000 and under \$7,000		10.0				10.2	2.1
\$7,000 and under \$8,000		5.3				9.0	2.1
\$8,000 and under \$9,000		3.4					.5
\$9,000 and under \$10,000							.3
\$10,000 and over						18.4	2.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Cumulative per cent*

Cost per family unit	Brook- lyn	Cam- bridge	Cincin- nati	Den- ver	Kansas City	Los Angeles	Mil- waukee
Under \$2,000	0.0	8.1	15.1	34.2	39.1	45.0	22.9
\$2,000 and under \$3,000	12.7	14.2	31.2	78.6	84.6	77.4	54.4
\$3,000 and under \$4,000	47.0	51.1	60.1	95.4	85.0	93.0	86.5
\$4,000 and under \$5,000	79.2	72.0	80.7	98.1	88.9	95.8	92.9
\$5,000 and under \$6,000	92.2	72.0	89.4	100.0	100.0	98.3	99.1
\$6,000 and under \$7,000	93.4	72.0	91.3	100.0	100.0	99.0	99.1
\$7,000 and under \$8,000	96.0	72.0	91.3	100.0	100.0	100.0	99.4
\$8,000 and under \$9,000	97.0	72.0	91.3	100.0	100.0	100.0	100.0
\$9,000 and under \$10,000	98.3	72.0	91.3	100.0	100.0	100.0	100.0
\$10,000 and over	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Cost per family unit	New Haven	Phila- delphia	Rich- mond	St. Louis	St. Paul	Wash- ington	Total, 13 cities
Under \$2,000	0.0	3.9	35.3	38.2	68.1	0.0	22.7
\$2,000 and under \$3,000	93.6	41.7	52.9	88.6	82.6	19.6	52.0
\$3,000 and under \$4,000	100.0	74.4	76.4	95.0	100.0	53.9	74.8
\$4,000 and under \$5,000	100.0	79.7	100.0	97.8	100.0	62.5	86.8
\$5,000 and under \$6,000	100.0	81.3	100.0	100.0	100.0	62.5	92.4
\$6,000 and under \$7,000	100.0	91.3	100.0	100.0	100.0	72.7	94.5
\$7,000 and under \$8,000	100.0	96.6	100.0	100.0	100.0	81.7	96.6
\$8,000 and under \$9,000	100.0	100.0	100.0	100.0	100.0	81.7	97.1
\$9,000 and under \$10,000	100.0	100.0	100.0	100.0	100.0	81.7	97.4
\$10,000 and over	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The costs as shown in Table 3 are per-family unit costs, not costs per building.

Los Angeles, Brooklyn, St. Louis, Philadelphia, and Washington each provided for over a thousand dwelling units in apartment houses during the first half of 1929. In Los Angeles the largest number fell in the cost group below \$2,000 a unit, in Brooklyn and Washington the largest number fell between \$3,000 and \$4,000, and in St. Louis between \$2,000 and \$3,000. Nearly 87 per cent of the family dwelling units in apartment houses for which permits were issued during the first half of 1929 in these 13 cities cost less than \$5,000 per family provided for; in Washington only 62.5 per cent cost less than that amount.

In Washington 197 families were to be housed in apartment houses where the unit cost per family was between \$10,000 and \$11,000; in Brooklyn 78 families were housed in apartment buildings where the per-family cost was over \$12,000. In contrast, no apartment in Kansas City or St. Louis cost more than \$6,000 per family dwelling unit

# UNEMPLOYMENT AND ITS RELIEF

## Unemployment in Foreign Countries

THE following table gives detailed monthly statistics of unemployment in foreign countries, as shown in official reports, from January, 1930, to the latest available date.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES<sup>1</sup>

Date (end of month)	Australia		Austria	Belgium				Canada	
	Trade-unionists unemployed		Compulsory insurance, number unemployed in receipt of benefit	Unemployment insurance societies				Trade-unionists unemployed	
	Number	Per cent		Wholly unemployed		Partially unemployed		Number	Per cent
				Number	Per cent	Number	Per cent		
1930									
January	(2)		273, 197	22, 542	3. 5	25, 782	4. 0	22, 795	10. 8
February	(2)		284, 543	16, 085	2. 6	31, 222	4. 9	24, 175	11. 5
March	63, 144	14. 6	239, 094	14, 030	2. 2	28, 469	4. 5	22, 912	10. 8
April	(2)		192, 477	13, 715	2. 2	36, 605	5. 8	18, 581	9. 0
May	(2)		162, 678	12, 119	1. 9	38, 761	6. 1	20, 424	10. 3
June	80, 595	18. 5	150, 075	12, 226	1. 9	41, 336	6. 5	21, 380	10. 6
July	(2)		153, 188	15, 302	2. 4	48, 580	7. 7	18, 473	9. 2
August	(2)		156, 145	17, 747	2. 8	51, 649	8. 2	<sup>3</sup> 18, 232	9. 3
September	90, 379	20. 5	163, 894	23, 663	3. 8	61, 623	9. 9	<sup>3</sup> 19, 356	9. 4
October	(2)		192, 778	27, 322	4. 3	54, 804	8. 5	<sup>3</sup> 22, 403	10. 8
November	(2)		237, 745	38, 973	6. 1	76, 043	12. 0	<sup>3</sup> 28, 408	13. 8
December	104, 951	23. 4	294, 845	63, 585	9. 3	117, 167	17. 0	<sup>3</sup> 37, 339	17. 0
1931									
January	(2)		331, 239	77, 181	11. 1	112, 734	16. 2	<sup>3</sup> 33, 664	16. 0
February	(2)		334, 041	81, 750	11. 7	121, 906	19. 4	<sup>3</sup> 31, 617	15. 6
March	113, 614	25. 8	304, 084	81, 305	11. 3	125, 972	17. 7	<sup>3</sup> 32, 300	15. 5
April	(2)		246, 845	70, 377	10. 0	110, 139	15. 6	<sup>3</sup> 30, 778	14. 9
May			208, 852					<sup>3</sup> 32, 086	16. 2

<sup>1</sup> Sources: League of Nations—Monthly Bulletin of Statistics; International Labor Office—International Labor Review; Canada—Labor Gazette; Great Britain—Ministry of Labor Gazette; Austria—Statistische Nachrichten; Australia—Quarterly Summary of Australian Statistics; Germany—Reichsarbeitsblatt, Reichs Arbeitsmarkt Anzeiger; Switzerland—Wirt. u. Social. Mitteilungen, La Vie Economique; Poland—Wiedomosci Statystyczne; Norway—Statistiske Meddelelser; Netherlands—Maandschrift; Sweden—Sociala Meddelanden; Denmark—Statistiske Efterretninger; Finland—Bank of Finland Monthly Bulletin; France—Bulletin du Marché du Travail; Hungary—Magyar Statisztikai Szemle; Belgium—Revue du Travail; New Zealand—Monthly Abstract of Statistics; U. S. Department of Commerce—Commerce Reports; and U. S. Consular Reports.

<sup>2</sup> Not reported.

<sup>3</sup> Computed by Bureau of Labor Statistics from official report covering membership of unions reporting and per cent of unemployment.

UNEMPLOYMENT AND ITS RELIEF

17

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Czechoslovakia		Danzig (Free City of)	Denmark		Estonia	Finland	France	Germany
	Trade-union insurance funds—unemployed in receipt of benefit		Number of unemployed registered	Trade-union unemployment funds—unemployed		Number unemployed remaining on live register	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered
	Number	Per cent		Number	Per cent				
1930									
January	39,199	3.6	19,282	55,876	20.3	5,608	12,696	1,484	3,217,608
February	40,550	3.6	21,153	59,363	21.0	4,580	11,545	1,683	3,365,811
March	45,567	4.0	20,376	47,109	15.6	3,575	10,062	1,630	3,040,797
April	42,664	3.7	18,371	33,471	11.8	2,227	7,274	1,203	2,786,912
May	41,098	3.8	16,232	27,966	9.4	2,065	4,666	859	2,634,718
June	37,853	3.4	14,975	24,807	8.7	910	3,553	1,019	2,640,681
July	46,800	4.1	15,330	26,200	9.3	762	4,026	856	2,765,258
August	52,694	4.7	15,687	26,232	9.0	1,039	5,288	964	2,883,000
September	57,542	5.3	16,073	27,700	9.0	1,414	7,157	988	3,004,000
October	61,213	5.5	17,307	32,880	11.4	3,282	10,279	1,663	3,252,000
November	65,904	5.9	20,272	44,200	15.3	5,675	10,740	4,893	3,683,000
December	93,476	8.3	24,429	71,100	24.6	6,163	9,336	11,952	4,384,000
1931									
January	104,580	9.5	27,081	70,961	24.4	5,364	11,706	28,536	4,887,000
February	117,450	10.0	28,192	73,427	25.6	4,070	11,557	40,766	4,972,000
March	119,350	10.0	27,070	67,725	23.6	2,765	11,491	50,815	4,756,000
April	107,238	8.9	24,186	45,698	15.9	2,424	11,584	49,958	4,358,000
May			20,686	37,856	13.1	1,368	7,342	41,339	4,053,000
June								36,237	3,954,000
Germany									
Trade-unionists									
Date (end of month)	Wholly unemployed		Partially unemployed		Number unemployed in receipt of benefit	Compulsory insurance			
	Number	Per cent	Number	Per cent		Wholly unemployed		Temporary stoppages	
1930									
January	1,004,787	22.0	501,950	11.0	2,482,648	1,183,974	9.8	336,474	2.8
February	1,076,441	23.5	593,380	13.0	2,655,723	1,211,262	10.0	371,840	3.1
March	995,972	21.7	576,153	12.6	2,347,102	1,284,231	10.6	409,785	3.4
April	926,831	20.3	553,098	12.1	2,081,068	1,309,014	10.8	451,506	3.8
May	895,542	19.5	552,318	12.0	1,889,240	1,339,595	11.1	516,303	4.2
June	896,465	19.6	578,116	12.6	1,834,662	1,341,818	11.1	569,931	4.7
July	930,777	20.5	631,903	13.9	1,900,961	1,405,981	11.6	664,107	5.5
August	984,384	21.7	670,466	14.8	1,947,811	1,500,990	12.4	618,658	5.1
September	1,011,820	22.5	677,627	15.1	1,965,348	1,579,708	13.1	608,692	5.0
October	1,061,570	23.6	693,379	15.4	2,071,730	1,725,731	13.9	593,223	4.8
November	1,167,930	26.0	721,658	16.1	2,353,980	1,836,280	14.8	532,518	4.3
December	(2)	31.7	(2)	16.9	2,822,598	1,853,575	14.9	646,205	5.3
1931									
January	(2)	34.2	(2)	19.2	3,364,770	2,044,209	16.5	618,633	5.0
February	(2)	34.5	(2)	19.5	3,496,979	2,073,578	16.7	623,844	5.0
March	(2)	33.6	(2)	18.9	3,240,523	2,052,826	16.5	612,821	5.0
April	(2)	31.2	(2)	18.0	2,789,627	2,027,896	16.3	564,884	4.6
May					2,507,732	2,019,533	16.3	558,383	4.5
June						2,037,480	16.4	669,315	5.4

<sup>2</sup> Not reported.

## STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Great Britain	Hungary			Irish Free State		Italy		Latvia
	Number of persons registered with employment exchanges	Trade-unionists unemployed			Compulsory insurance—unemployed		Number of unemployed registered		Number unemployed remaining on live register
		Christian (Budapest)	Social-Democratic		Number	Per cent	Wholly unemployed	Partially unemployed	
			Number	Per cent					
1930									
January	1,491,519	1,161	21,533	14.5	31,592	11.1	466,231	23,185	9,263
February	1,539,265	1,120	21,309	14.8	( <sup>2</sup> )		456,628	26,674	8,825
March	1,677,473	983	21,016	14.6	( <sup>2</sup> )		385,432	28,026	6,494
April	1,698,386	906	20,139	13.7	26,027	9.2	372,236	24,305	3,683
May	1,770,051	875	19,875	13.6	( <sup>2</sup> )		367,183	22,825	1,421
June	1,890,575	829	18,960	13.0	( <sup>2</sup> )		322,291	21,887	779
July	2,011,467	920	19,081	13.2	23,393	8.2	342,061	24,209	607
August	2,039,702	847	21,013	14.5	( <sup>2</sup> )		375,548	24,056	573
September	2,114,955	874	22,252	16.0	( <sup>2</sup> )		394,630	22,734	1,470
October	2,200,413	999	22,914	16.7	20,775	( <sup>2</sup> )	446,496	19,081	6,058
November	2,274,338	975	23,333	17.0	22,990	( <sup>2</sup> )	534,356	22,125	8,608
December	2,392,738	935	24,648	17.9	25,622	( <sup>2</sup> )	642,169	21,788	10,022
1931									
January	2,613,749	953	26,191	19.1	26,167	( <sup>2</sup> )	722,612	27,924	9,207
February	2,627,559	965	27,089	19.8	28,681	( <sup>2</sup> )	765,325	27,110	8,303
March	2,681,030	996	27,092	( <sup>2</sup> )	25,413	( <sup>2</sup> )	707,486	27,545	8,450
April	2,531,674	1,042	27,129		23,970	( <sup>2</sup> )	670,353	28,780	6,390
May	2,596,431						635,183	26,059	1,871
June	2,629,215								
Date (end of month)	Netherlands		New Zealand		Norway		Number unemployed remaining on live register	Poland	
	Unemployment insurance societies—unemployed		Trade-unionists unemployed		Trade-unionists (10 unions) unemployed				
	Number	Per cent	Number	Per cent	Number	Per cent			
1930									
January	56,535	13.9	( <sup>2</sup> )		7,786	19.0	22,549	241,974	
February	50,957	12.5	4,348	8.5	7,851	18.9	22,974	274,708	
March	34,996	8.6	( <sup>2</sup> )		7,503	17.8	22,533	289,469	
April	28,421	6.9	( <sup>2</sup> )		6,701	15.8	19,829	271,225	
May	26,211	6.3	5,884	10.9	5,239	12.2	16,376	224,914	
June	23,678	5.5	( <sup>2</sup> )		4,700	10.8	13,939	204,982	
July	29,075	6.7	( <sup>2</sup> )		4,723	10.8	11,997	193,687	
August	32,755	7.6	7,197	13.5	5,897	13.4	12,923	173,627	
September	35,532	8.2	( <sup>2</sup> )		7,010	15.7	17,053	170,467	
October	41,088	9.6	( <sup>2</sup> )		8,031	18.0	20,363	165,154	
November	46,807	11.8	8,119	15.5	9,396	21.4	24,544	209,912	
December	72,191	16.5	( <sup>2</sup> )		11,265	25.5	27,157	299,797	
1931									
January	103,728	23.4	( <sup>2</sup> )		11,692	26.3	28,596	340,718	
February	99,753	22.2	( <sup>2</sup> )		( <sup>2</sup> )		29,107	358,925	
March	80,525	17.7	5,29,941		( <sup>2</sup> )		29,095	372,536	
April	62,573	13.6	37,598		( <sup>2</sup> )		28,477	351,679	
May	52,830	12.4	36,921				25,206	320,109	

<sup>2</sup> Not reported.<sup>4</sup> Provisional figure.<sup>5</sup> New series of statistics showing unemployed registered by the employment exchanges. Includes not only workers wholly unemployed, but also those intermittently employed.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Poland				Rumania	Saar Territory	Sweden			
	Industrial workers						Number unemployed remaining on live register	Number unemployed registered	Trade-unionists unemployed	
	Extractive and manufacturing industries—wholly unemployed		Manufacturing industries—partially unemployed						Number	Per cent
	Number	Per cent	Number	Per cent						
1930										
January	219,333	24.3	108,812	24.8	12,622	11,307	45,636	14.2		
February	251,627	27.5	120,058	28.4	15,588	11,949	45,460	13.2		
March	265,135	28.7	120,844	28.9	13,045	8,882	42,278	12.5		
April	246,670	27.0	113,594	26.9	13,412	7,522	38,347	11.1		
May	201,116	23.0	104,469	24.2	25,096	7,362	28,112	8.3		
June	182,600	21.6	94,375	22.2	22,960	6,330	28,956	8.1		
July	170,665	20.5	70,597	17.0	23,236	7,095	27,170	7.8		
August	150,650	18.3	74,289	17.1	24,209	7,099	28,539	8.1		
September	146,642	17.8	74,285	16.5	39,110	7,527	34,963	9.8		
October	141,422	17.5	91,854	14.8	36,147	9,013	43,927	12.2		
November	(2)		106,835	23.6	42,689	12,110	57,070	15.3		
December	(2)		95,637	23.1	36,212	15,245	86,042	22.9		
1931										
January	(2)		82,717	23.8	38,804	18,921	69,437	19.8		
February			92,838	27.1	43,270	20,139	66,923	18.4		
March					(2)	18,292	72,944	19.3		
April						18,102	64,534	17.5		
May						14,886				

Date (end of month)	Switzerland				Yugoslavia	
	Unemployment funds					Number of unemployed registered
	Wholly unemployed		Partially unemployed			
	Number	Per cent	Number	Per cent		
1930						
January	10,523	4.4	10,710	4.4	8,508	
February	9,971	4.1	11,445	4.7	9,437	
March	7,882	2.6	12,642	4.2	9,739	
April	5,203	2.1	12,755	5.3	12,052	
May	5,356	2.2	13,129	5.4	8,704	
June	5,368	1.7	17,688	5.7	6,991	
July	4,751	1.9	15,112	6.2	7,236	
August	5,703	2.3	19,441	7.9	6,111	
September	7,792	2.5	26,111	8.3	5,973	
October	7,399	3.0	23,309	9.4	6,609	
November	11,666	4.7	25,793	10.5	7,219	
December	21,400	6.6	33,483	10.4	9,989	
1931						
January	20,551	8.3	30,977	12.5	11,903	
February	20,081	7.9	30,879	12.2	14,424	
March	18,991	5.4	41,880	12.4	12,029	
April	10,389	4.0	27,726	10.6	11,391	
May					12,169	

<sup>2</sup> Not reported.



## Preliminary Report of Federal Commission to Study Unemployment in Germany

AT THE beginning of 1931 the German Government appointed a commission to study numerous proposals for the prevention of unemployment.<sup>1</sup> This commission has made its preliminary report on two proposed measures for easing unemployment, i. e., through shortening of hours of labor and through prohibition of double earnings in one family.<sup>2</sup>

In regard to the first measure, the German Federation of Labor Unions has for some time been proposing a 40-hour work week, without dismissal of workers already employed, and the Prussian Government has proposed the same measure.<sup>3</sup>

The commission points out various difficulties in the application of this measure, on the part of employers as well as workers, not to speak of certain difficulties of a technical nature; for instance, the proposed measure involves overtime, piecework, existing trade agreements, etc.

In view of these difficulties the commission recommends that the Government be empowered to introduce the 40-hour week, first, in certain separate branches of industries and occupations in order to find out by experience whether such a measure is technically and economically advisable and how it influences employment.

In regard to the second measure, the commission finds again that a sweeping or flat prohibition of double earnings is beset with certain pitfalls. If a family having two persons working for wages has a large number of dependents, prohibition of double earning may mean privation for such a family, while a single wage earner may enjoy, outside of wages, some other source of income which may be alone sufficient for his sustenance.

Therefore, the commission recommends that each individual case of double earning should be investigated before a decision is made whether to suppress it or not. Such a policy is recommended especially for the State, local governments, and other public bodies in regard to the establishments under their authority. The commission concludes that double earning, with the exception of cases when it is actually needed, should be done away with through a policy of employment and dismissals rather than through legislative enactments.

---

## First Report of British Commission on Unemployment Insurance

IN December, 1930, a British royal commission was appointed with the following terms of reference:

To inquire into the provisions and working of the unemployment insurance scheme and to make recommendations with regard to:

1. Its future scope, the provisions which it should contain, and the means by which it may be made solvent and self-supporting, and
2. The arrangements which should be made outside the scheme for the unemployed who are capable of and available for work.

<sup>1</sup> See Labor Review for April, 1931, p. 52.

<sup>2</sup> Germany, Gutachterkommission zur Arbeitslosenfrage. Gutachten zur Arbeitslosenfrage. Erster Teil. Berlin, 1931.

<sup>3</sup> See Labor Review for December, 1930, p. 73.



In view of the urgency of the situation it was hoped that the commission might finish the work by the end of May. This proved impossible, but early in June the commission presented a majority report and a minority report, dealing with measures which might be taken at once while the commission devotes further attention to the fundamental changes necessary if the scheme is to be made "solvent and self-supporting."<sup>1</sup> Two members signed the majority report with the reservation that, in their view, the recommendations "designed to relieve the present burden on the national finances might reasonably, in the present circumstances of industry, have been carried further." The report is confined, it is explained, to matters which have been represented to the commission as urgent. These are the increasing debt of the fund from which unemployment benefit is paid, the increasing cost to the government of transitional benefit, and "the suggestion that unemployment benefit is being paid to certain classes of persons in circumstances which the unemployment insurance scheme was never intended to cover."

### Present Extent of Unemployment

THE REPORT first deals briefly with the extent of unemployment since the war, and reviews the history of the insurance scheme. The average percentage of the insured population recorded as unemployed at the end of each month since December, 1920, is 12.2, representing nearly 1,500,000 persons. There have been fluctuations on each side of this average, and since England has felt the effect of the worldwide depression the percentage has been much higher. These fluctuations, however, are not so significant as the average.

The most serious element in the situation is the average level of unemployment of 12.2 per cent. This represents a persistent and obdurate problem, and, in our view, it would be unwise to treat this experience of the last 10 years as transitory or to assume that it overvalues the risk that has to be provided for in the next few years. Moreover, for the purpose of immediate measures, it must be noted that the percentage of unemployment to-day is, in fact, far higher than 12.2 per cent; since December, 1930, it has been 20 per cent or over. \* \* \* The indications are that unemployment will not fall appreciably in the next few months below the present level. What is necessary now is to adjust the finances of the fund to present circumstances, and for the purposes of this report we do not feel justified in anticipating an average live register of less than 2,500,000.

### Recommendations Concerning Regular Insurance

TRACING the history of the plan, the report points out that the scheme was originally on an actuarial basis, but that successive extensions and relaxations have destroyed this character. At present the debt of the fund is over £80,000,000 (\$389,320,000)<sup>2</sup> and increasing by almost £1,000,000 every week. To bring the fund more nearly to a balancing point with a live register of 2,500,000, the commission recommends three changes—a limit upon the period for which regular insurance may be paid, an increase in the rate of contributions, and a decrease in the amount of benefits. At present, the only limit upon the period during which regular benefit may be drawn is found in the rule that an applicant must have paid 30 contributions within the last

<sup>1</sup> Great Britain. Royal Commission on Unemployment Insurance. First report. London, 1931. (Cmd. 3872.)

<sup>2</sup> Found at par = \$4,8665.

two years. The commission proposes to change this, limiting the period for which regular benefits may be paid to 26 weeks within the 12 months following the date of application.

The second recommendation deals with contributions. At present the employer, the worker, and the Government each pay a specified contribution for each worker employed for any part of a week. The commission recommends that for workers aged 18 and over the contribution from the employer should be increased by 1d. (2.03 cents), from the worker by 2d. (4.1 cents), and from the Government by 1½d. (3.04 cents). For those under 18 the increases would be just half the increases for those over that age. This change, it is estimated, would increase the income from contributions by approximately £9,000,000 (\$43,798,500) a year.

As to benefits, the commission recommends the following rates:

RECOMMENDED ORDINARY RATE OF BENEFITS

[Conversions into United States currency on basis of shilling=24.33 cents]

Age of beneficiary	Recommended weekly benefits <sup>1</sup> for—			
	Males		Females	
	English currency	United States currency	English currency	United States currency
21 years and over.....	8s. 15	\$3.65	8s. 13	\$3.16
18 and under 21 years.....	12	2.92	10	2.43
17 and under 18 years.....	7	1.70	6	1.46
16 and under 17 years.....	5	1.22	5	1.22

<sup>1</sup> Additional benefits would be paid for dependents, amounting to 8s. (\$1.95) per week for an adult and 2s. (48.7 cents) per week for a child dependent.

As noted in the table, the commission recommends an additional benefit for an adult dependent amounting to 8s. a week, and for a dependent child amounting to 2s. a week. This would mean a reduction of 2s. (48.7 cents) a week for an adult beneficiary and of 1s. (24.3 cents) per week for an adult dependent, with no change in the rate for a dependent child. It is estimated that this would mean a saving to the fund of £7,600,000 (\$36,985,400) a year.

Recommendations Concerning Transitional Benefit

STRICTLY speaking, there is no room in an insurance scheme for those who have exhausted their regular benefit, but to refuse entirely the so-called transitional benefit would mean forcing a considerable number of claimants to apply to the poor-law authorities for relief. The difficulty with this is that such relief is paid largely from "rates" or local taxes, and the localities with the greatest number of those unemployed for long periods are precisely those in which business has been hardest hit, so that the results of throwing the present recipients of transitional benefit upon local relief might be to "place an insupportable burden upon the rate payers and to make it even more difficult for industry in those areas to regain lost markets and so reemploy some of the workers who are now idle." The commis-

sioners do not think that all of those now receiving transitional benefit would apply, if it were shut off, for poor relief, but they believe that so many would do so that the results would be disastrous. They recommend, therefore, that the existing transitional provisions be continued, subject to certain modifications which will provide more stringent conditions as to qualifications, means, and acceptance of work.

At present, a person is qualified for transitional benefit if he can prove that he has paid 8 contributions within 2 years, or 30 contributions at any time. It is recommended that the latter condition be changed to require proof that 30 contributions have been paid within the 6 years immediately preceding the application.

A so-called "means test" is recommended in the case of single persons living with relatives to whom, having regard to all circumstances, they could reasonably look for support during unemployment, in the case of married men or women living with consorts who are employed, and in the case of those in receipt of certain pensions or other fixed income. These, it is proposed, should be required to prove that it is expedient, considering the whole situation, that transitional benefit should be paid to them, and the determining body should have power to award either the full benefit or such part of it as seems best under the circumstances.

Further, it is suggested that transitional claimants may reasonably be required to take work, even though it is not their customary occupation, if conditions are fair and the occupation is suited to their capacities, and that in the event of their refusing to accept such work, transitional benefit should not be paid.

#### Recommendations Concerning Anomalies in the Present System

A CONSIDERABLE portion of the report is devoted to a consideration of what are often called abuses of the system, but which should more properly, the commission holds, be called anomalies. These occur in connection with (1) intermittent, short-time, and casual workers, (2) married women, and (3) seasonal workers.

*Intermittent, short-time and casual workers.*—The first group includes such intermittent workers as extras regularly employed for one or two days a week in shops, restaurants, and similar places to meet a special rush at the week-end or at some other time. It includes also casual workers like dockers, who may make high but irregular earnings, and short-time workers whose employers so arrange their working-days that under the continuity rule they may claim benefits. The question of refusing benefits in these cases is a difficult one, for it is not desirable to encourage a man to refuse work, even of an intermittent or casual character. Nevertheless, the commissioners feel that some changes may advantageously be made.

It is recommended that intermittent workers shall not be regarded as unemployed in the sense of the insurance scheme during the days when they are not engaged upon their intermittent work, unless they can show that they are normally employed in some other occupation for these days and that they are at the time of the claim unemployed in this second occupation. As a corollary to this, it is recommended that workers in intermittent occupations should have a right to

secure certificates exempting them from paying the unemployment insurance contributions.

The short-time and casual workers present a more complex problem, and concerning them the commissioners make the following recommendations:

We suggest that, subject as now to the waiting period, benefit should be paid in respect of any three or more days of unemployment within a period of six consecutive days, but that the amount of benefit to be paid should be the usual amount due, subject to the following proviso:

That in respect of any period comprising both days of employment and days of unemployment, the amount of benefit payable for the days of unemployment shall be not more than the full amount of benefit which would be payable for the whole period less the earnings received for the period.

*Married women.*—In the case of married women, the root of the difficulty lies in the impossibility of determining the claimant's real attitude toward employment. It is common for women to withdraw from insurable employment upon marriage; on the other hand, many, "especially in those districts and industries where they are customarily employed in large numbers," continue their work. The only way of deciding definitely to which group a given married woman belongs would be to offer her employment, and this, in view of the general situation, is often impossible. The commissioners feel assured, however, that many of the married women now claiming benefit have no real intention of remaining in industry. They recommend, therefore, that a married woman shall not be entitled to benefit unless she can satisfy the authorities that she has not really left insurable employment, and can also convince them that, in view of her past experience and the circumstances of her district, there is a reasonable prospect that she may obtain insurable employment in the district in which she lives.

*Seasonal workers.*—The commissioners feel that it is unreasonable to consider a seasonal worker unemployed, in the sense of the insurance scheme, during that part of the year when no work is done in his trade or occupation. They therefore recommend that such a worker shall be entitled to benefit for unemployment occurring during his busy season, but not for unemployment during the off season unless he can prove to the satisfaction of the authorities that he has in the past worked during the off season in some insurable occupation for a reasonable time, and that, having regard to the industrial circumstances of the district in which he lives, he may reasonably expect to obtain such work during the off season.

#### Effect of Proposed Changes Upon Finances of Scheme

APART from transitional benefit, the present expenditure under the scheme for regular benefit, interest charges, and cost of administration is at the rate of £84,000,000 (\$408,786,000) a year, while the income from contributions is £44,550,000 (\$216,802,575), leaving an annual deficit of £39,450,000 (\$191,983,425). The savings which would arise from the adoption of the recommendations of this report are estimated as follows:

Limiting period of insurance benefit to 26 weeks--	£9, 100, 000	[\$44, 285, 150]
Increase in contributions-----	£9, 000, 000	[\$43, 798, 500]
Reduction in ordinary rate of benefit-----	£7, 600, 000	[\$36, 985, 400]
Reduction in allowance for dependents-----	£1, 100, 000	[\$5, 353, 150]
Special provisions for intermittent, casual, and short-time workers, married women, and seasonal workers-----	£5, 000, 000	[\$24, 332, 500]
Total savings-----	£31, 800, 000	[\$154, 754, 700]

Of these savings, £22,800,000 (\$110,956,200) represents a decrease in outlay and £9,000,000 (\$43,798,500) an increase in income, so that the annual deficit would be reduced to £7,650,000 (\$37,228,725).

The Government now bears the full cost of transitional benefit, which at present is being paid at the rate of £35,000,000 (\$170,327,500) a year. If the recommendations are accepted it will be necessary to add to this £9,100,000 (\$44,285,150), due to the transfer from ordinary to transitional benefit of claimants who had exhausted their regular benefits under the 26-weeks rule. Against this, however, would be set the amount, estimated at £10,100,000 (\$49,151,650), to be saved by the proposed changes, so that the total cost of transitional benefit under the new plan would be £34,000,000 (\$165,461,000).

Combining these figures, it is apparent that under the present plan the total expenditure for regular and transitional benefit, interest, and administration is at the rate of £119,000,000 (\$579,113,500), and that under the proposed plan it would be £95,200,000 (\$463,290,800), a saving of £23,800,000 (\$115,822,700). The Government would continue to bear the whole cost of transitional benefits, and the scheme would still be operated with a deficit, though the amount of the latter would be greatly reduced. More stringent economies, putting the scheme on a really "solvent and self-sustaining" basis, the commissioners are not willing to recommend until they have had time for a more complete study of the situation. Also, they wish time for study of other than economic aspects of the plan. They close with the following statement:

We desire to say that in spite of difficulties and in spite of the criticism that may fairly be made against the present position and against some of the features of the unemployment insurance scheme, it has prevented serious distress in a period of unprecedented unemployment. To put the scheme on right lines for the future is worth some effort and sacrifice. We are convinced that the principle of insurance against industrial unemployment has an important part to play in the adaptation of our industrial structure to changing needs.

### Minority Report

THE SIGNERS of the minority report disagree with the recommendations of the majority except in regard to some of the anomalies, and object to the purpose around which the majority report has been prepared.

We do not accept the position that the main object at the present time is a scheme under which income and expenditure can be made to balance. In our opinion the chief purpose to be kept in view is to maintain the unemployed on a level of subsistence at least no lower than that at which they are to-day. It is they who have already felt the force of economic depression with much greater severity than any other section of the community, and they should be the last to be called upon to bear any further burden.

They disapprove of borrowing and recommend that the additional amounts needed to maintain the system should be secured by taxa-



tion. They recommend that no important changes in the working of the scheme—such as change in contributions, limitation of benefit period, and decrease in rate of benefits—should be made until the commission has studied the whole subject and prepared its final report. They favor the extension of the transitional benefit period, but disapprove of the new conditions proposed for the receipt of such benefit. With regard to intermittent and seasonal workers, they agree to the recommendations of the majority. Casual and short-time workers, however, present a more complex problem and recommendations concerning the treatment of these, they think, should be left for further study. As to the treatment of married-woman claimants, one signer of this report agrees with the recommendations of the majority, while another thinks it undesirable to make such a departure from the principles of the general scheme. Under it, the latter points out, there has never been any discrimination on the grounds of sex or marriage, but each claimant has been treated individually and a decision has been based upon the circumstances of that particular case. This member sees no reason for departure from this practice and believes such a change would be unfortunate.

Married women differ completely one from another, not only in their domestic circumstances, but also in their value in the labor market, and in their whole outlook upon industry; any attempt to treat them as a class, to be governed by uniform rules applicable to no other section of insured persons, could only result in friction and in hardship.

#### Action of the Government Upon the Report

ON JUNE 19 the Government published the text of a new bill, based upon the part of the report dealing with the so-called "anomalies." As summarized by the Manchester Guardian for June 20, it provides a new method of handling the cases concerning which the most complaint has been heard—namely, part-time workers who receive unemployment benefit as a sort of subsidy to wages, seasonal workers, persons who normally work not more than two days a week, and married women who have really left insurable employment upon marriage.

In regard to these cases, the Minister of Labor is to have power to establish administrative regulations, regardless of existing legislation, subject to the approval of a consultative committee consisting of a chairman and eight other members appointed by the minister.

Of the 8 members, 3 are to be appointed by the minister after consultation with the general council of the Trade Unions Congress, 3 after consultation with the National Confederation of Employers' Organizations and 1 after consultation with the treasury.

Before the House of Commons on June 22, the Minister of Labor explained the Government's reasons for not having adopted more of the commission's recommendations:

Proceeding to state the Government's attitude to the interim report of the royal commission, she said in regard to recommendations for the increase of contributions and the decrease of benefits that the result would be to lower the standard of life of the most unfortunate part of the community and to drive them back on the poor law, from which they had been rescued so recently. The recommendations were made expressly as interim and emergency proposals pending further consideration by the commission of the whole problem. The commission,

it was clear, had under consideration fundamental changes in the insurance scheme.

The majority report referred to a "reconstructed scheme" and the question of whether full maintenance was desirable. It would be highly undesirable, she urged, before they received the final report to embark upon far-reaching changes which might be altogether upset. Moreover, the present time of unexampled economic depression, when a large part of the population had exhausted their resources, was inopportune. In these circumstances the Government felt that they could not proceed with the main recommendations of the majority report until they had received the final conclusions of the commission.

---

### Extension of Debt Limit of English Unemployment Insurance Fund

ON JUNE 22 Miss Bondfield, Minister of Labor, introduced in committee of the House of Commons a resolution authorizing the treasury to increase the limit of advances to the unemployment insurance fund by £25,000,000 (\$121,662,500)—from £90,000,000 to £115,000,000 (\$437,985,000 to \$559,647,500)—and to extend the period for the continuance of transitional benefit by six months from October 18.

The existing borrowing powers of the fund, she said, would be exhausted by July 8 or 9. On the basis of the live register of unemployed being 2,500,000, the additional borrowing power would last until January, 1932; on a basis of 2,750,000, until next November; and on a basis of 3,000,000, until next October.

The resolution was discussed at length, but was finally agreed to without a division.

---

### Finances of British Unemployment Insurance Scheme, by Industries

IN THE course of the hearings held by the British Royal Commission on Unemployment Insurance, a number of papers dealing with the financial aspects of the scheme were submitted by the Ministry of Labor, among them a table showing in which industries the benefits drawn by the workers have been greater and in which they have been less than the contributions received in behalf of those industries.<sup>1</sup> The figures are given with a caution that the classification by industry of unemployed persons presents numerous chances for error. Generally speaking, the registered unemployed are classified by their unemployment books in which they are shown as belonging to the industry in which they were employed at the beginning of the insurance year, or if at that time they were not working in an insurable industry, they were classed as belonging to the latest industry of that kind in which they were employed. It follows therefore that a person who has found temporary work at the beginning of the insurance year outside of his own occupation may be classed under a misleading heading. Also, a number of persons can not be said to belong to any particular group, and others who have worked for years in one industry may lose work there and get employment in other industries, but irregularly. Because of these and similar

<sup>1</sup> Great Britain. Royal Commission on Unemployment Insurance. Minutes of evidence—fifth day, January 9, 1931. London, 1931.

difficulties, the division of workers between industries is somewhat arbitrary, and the results must be taken with some reservations.

The following explanatory paragraphs are also given:

The contributions paid by employers and employed persons are not shown separately, but generally speaking it would be approximately correct to assume that the contributions paid by the employers are 53 per cent and the work people 47 per cent of the combined contributions as shown in the table.

The year of the coal dispute, 1926-27, has been omitted. The table shows two years before the act of 1927 came into force and two years after. The average live register of all industries taken together in those years was—

1925-26	1, 214, 026
1927-28	1, 083, 964
1928-29	1, 283, 786
1929-30	1, 283, 020

The table includes all benefit paid, whether ordinary or transitional or extended. The special contribution of £3,985,000 [\$19,393,000] paid by the exchequer for transitional benefit in 1929-30 is not included, for there are no means of ascertaining how much transitional benefit was paid in respect of each industry.

The last section of the table gives the average annual amount received in contributions and paid out in benefits over the four years, by industrial groups, as follows:

AVERAGE ANNUAL RECEIPTS AND PAYMENTS OF BRITISH UNEMPLOYMENT INSURANCE SCHEME,<sup>1</sup> BY GROUPS OF INDUSTRIES

[Conversions into United States currency on basis of £=\$4.8665]

Industry	Contributions from—		Total contributions	Amount paid in benefits and administration
	Employers and workers	Treasury		
Building	\$10,998,290	\$4,516,112	\$15,514,402	\$18,706,826
Public works contracting, etc.	1,995,265	817,572	2,812,837	6,321,584
Shipbuilding and ship repairing	2,262,923	929,502	3,192,424	11,441,142
General engineering and engineers' iron and steel foundry	8,190,320	3,348,152	11,538,472	12,536,104
Motor vehicles, cycles, and aircraft	3,236,223	1,333,421	4,569,644	3,211,890
Furniture making, upholstering	1,537,814	632,645	2,170,459	1,172,827
Chemicals	1,382,086	564,514	1,946,600	1,343,154
Steel melting and iron puddling furnaces, iron and steel rolling mills and forges	2,311,588	944,101	3,255,689	8,214,652
Metal industries not separately classified	2,389,452	983,033	3,372,485	2,890,701
Hotel, boarding house, and club services	3,936,999	1,620,545	5,557,543	4,477,180
Laundries, dyeing, and dry cleaning	1,567,013	647,245	2,214,258	788,373
Commerce, banking, insurance, and finance	3,129,160	1,284,756	4,413,916	1,114,429
Railway service	2,141,260	871,104	3,012,364	1,751,940
Tramway and omnibus service	2,053,663	851,638	2,905,301	875,970
Road transport not separately classified	2,472,182	1,017,099	3,489,281	4,165,724
Shipping service	1,771,406	725,109	2,496,515	4,739,971
Dock, harbor, river, and canal service	1,980,666	807,839	2,788,505	10,579,771
Coal mining	15,008,286	6,131,790	21,140,076	42,100,092
Printing, publishing, and bookbinding	3,406,550	1,401,552	4,808,102	1,946,600
Cotton	7,027,226	2,866,369	9,893,595	10,394,844
Woolen and worsted	2,973,432	1,211,759	4,185,190	5,134,158
Hosiery	1,245,824	510,983	1,756,807	978,167
Textile bleaching, dyeing, printing, etc.	1,391,819	569,381	1,961,200	2,992,898
Tailoring	2,433,250	992,766	3,426,016	2,511,114
Dressmaking and millinery	1,250,691	506,116	1,756,807	739,708
Boots, shoes, slippers, etc.	1,781,139	734,842	2,515,981	2,861,502
Bread, biscuits, cake, etc.	1,839,537	739,708	2,579,245	1,810,338
Drink industries	1,528,081	622,912	2,150,993	1,211,759
Gas, water, and electricity supply	2,477,049	1,007,366	3,484,414	1,927,134
Distributive trades	20,536,630	8,453,111	28,989,741	15,806,392
National Government	1,868,736	754,308	2,623,044	1,703,275
Local government	3,683,941	1,503,749	5,187,689	4,506,379
Professional services	1,601,079	652,111	2,253,190	632,645
All other industries and services	31,831,777	13,066,553	44,898,329	43,715,770
Total	155,241,350	63,619,755	218,861,105	235,305,008

<sup>1</sup> Average of 4 years, 1925-26, 1927-28, 1928-29, and 1929-30.



The table makes it apparent that the industries fall into two groups—13 so-called debtor groups, in which the amount paid in benefits exceeds the total contributions, and 21 creditor groups, in which the contributions exceed the amount paid in benefits. So far as the latter are concerned, it is evident that, during the four years shown, the scheme was carrying itself and would have been accumulating reserves had it not been for the amounts needed by the debtor industries.

The industries in which the scheme was not self-sustaining were building; public works contracting; general engineering with its allied trades; the heavy steel-and-iron trades; shipbuilding and repairing; road transport not separately classified; the shipping service; the dock, river, harbor, and canal service; coal mining; cotton; woolen; the textile bleaching, dyeing, and printing trades; and the boot and shoe industry. Eight of these groups showed a deficit for each of the four years covered. Of the others, building showed a credit balance in 1927-28, cotton in 1925-26 and 1927-28, road transport in 1927-28, woolen in 1927-28, and boots and shoes in 1925-26 and 1927-28. Of the 21 creditor groups, 19 showed credit balances for each of the four years, the local government group showed an exact balance in 1928-29 and a deficit of £2 in 1929-30, while the "all other industries" group showed a debtor balance in 1928-29.

---

### Swiss Plan for Unemployed Clerical Workers

**A**N ACCOUNT of an institution organized in Basel in October, 1930, as a cooperative society to provide temporary clerical work for unemployed persons is given in a report from Albert W. Scott, American vice consul at Basel, Switzerland, dated December 22, 1930.

The new organization is a development of a writing room for the unemployed, established in Basel in 1895, which had been successful in providing clerical work for persons temporarily out of employment, the kind of work furnished being principally writing addresses for circulars and other advertising matter. The headquarters of the new organization, which is called the Schweizerische Adressen- und Werbe-Zentrale, will be in Basel, but there will be branches in all parts of Switzerland. Since the establishment of the original office in 1895, the cantonal government of Basel has furnished a building free of rent, and in 1929 a sum of about \$48,000 was appropriated for the purchase of larger quarters. The cantonal authorities have willingly assisted the organization both financially and in other ways because of the value of its activities in furnishing employment, and consequently in reducing the cost of unemployment relief. As the society is a nonprofit enterprise, dividends will not be declared but 4 per cent will be paid annually on the shares subscribed by business firms, and the subscribers will also receive a reduction in the usual rates charged for the work done by the office.

In addition to the writing of addresses, which is done either on typewriters or by hand, the work done by the office includes the preparation of circulars and other material by duplicating or printing machines. The services of the organization are available to all

persons who are out of work, but preference is given to those who are incapacitated for ordinary employment, through either age or disability, and to those who have dependents. The institution also is frequently able to place in permanent positions those temporarily assisted and keeps business firms supplied with lists of applicants who are able and willing to do temporary clerical work outside the institution. The institution furnishes noon meals at cost to unemployed persons, provides library and reading rooms, and maintains special evening courses in business subjects. The society has established a reputation for the high quality of its work. A feature of the service performed for business firms is the furnishing, for the use of advertisers, of selected lists of addresses which are constantly revised and kept up to date. During 1929, 650 persons were assisted by the society, the wages paid for the year amounting to 302,906 francs (\$58,460). The average number employed daily was 116.

# INDUSTRIAL AND LABOR CONDITIONS

## International Labor Conference, 1931

THE fifteenth session of the International Labor Conference<sup>1</sup> was held in Geneva, May 28 to June 18, with delegates present from 46 of the 55 countries which are members of the International Labor Organization.

The agenda of the conference contained three items: The ages of admission of children to employment in nonindustrial occupations; hours of work in coal mines; and the partial revision of the convention concerning employment of women on night work. The first item on the agenda was the subject of preliminary discussion, with a view to the possibility of adopting a draft convention or recommendations at the 1932 session of the conference. It was decided as a result of the discussions in the conference to place this question on the agenda of the 1932 conference and to consult the various Governments as to whether the minimum age should be fixed at 14. Other points to be considered in connection with the question are light employment outside school hours, domestic work, work in theaters and film studios, and street trading.

The conference adopted a draft convention which would limit the hours of work in coal mines, whether lignite or hard coal, to 7¾ per day "from bank to bank." It is provided by the convention that overtime may be authorized within certain limits. The convention will become effective after ratification by any two of seven specified European coal-producing countries. Revision of this convention with a view to a further reduction of the maximum working-day and of the overtime allowed will be undertaken within three years of the time that it becomes operative. A resolution was adopted, unanimously, advocating consideration at an early session of the question of the employment of workers under 16 and of women in underground work in coal mines.

Two amendments to the Washington (1919) convention regarding the night work of women were adopted by small majorities. These amendments, which related to the exemption of women holding managerial positions from the general prohibition and to the exact period which should be considered as night hours were incorporated in a new draft convention which failed, however, to receive the two-thirds majority vote required by the peace treaty.

Various resolutions were adopted, providing for the most part for the investigation of specific problems. The resolutions related to incomplete delegations, the application of recommendations in the different countries, labor conditions in the Orient, representation of native and colored workers in the conference, accidents to electrical workers, conditions of labor in unorganized industries and nonindustrial occupations, freedom of association, economic agreements in

<sup>1</sup> International Labor Office. Industrial and Labor Information, Geneva, issues of Apr. 20, and June 15 and 22, 1931.

the coal industry, silicosis, conditions in the iron and steel industry, action to remedy unemployment, and several others relating to official procedure.

The director's report dealt largely with the question of unemployment, and the discussion of the report centered in the means of combating the crisis and its social consequences. It was agreed by all the speakers "that the present crisis is not a mere cyclical phenomenon, due to the more or less regular alternation of prosperity and the reverse with which economists have for many years been familiar, but is rather the product of the addition to such a periodical depression of an exceptional dislocation of the economic life of the world." No attempt was made to formulate a policy to deal with the situation, as it was considered that the political, financial, and economic questions involved removed it outside the scope of the International Labor Organization, which is concerned primarily with social conditions. It was agreed, however, that until remedies going to the root of the trouble were adopted the members of the International Labor Organization should continue to press its program for the establishment and coordination of labor exchanges, the promotion of public works, and the institution or extension of unemployment insurance.

---

### Discrimination of Large Employers Against Handicapped Workers

ONE-HALF of the largest employers in the United States do not hire handicapped persons for any kind of work, according to a statement made on June 12, 1931, at the White House Conference on Child Health and Protection.<sup>1</sup> This statement was based on replies to questionnaires sent to 600 of the largest employers in the country. The character of the jobs in the plants can not always be adjusted to the handicapped, these employers declare, and unfavorable provisions in the workmen's compensation acts make the employment of persons with disabilities a financial risk. On the other hand, one-fourth of the employers stated that they did not discriminate at all against such workers.

The White House Conference investigations have shown that "there are approximately 8,000,000 physically and mentally handicapped young persons in the United States." These findings have led directly to the consideration of the problem of converting those handicapped into social assets. In spite of the large percentage of the great establishments barring from employment all handicapped persons, there is an increasing recognition of the need of affording persons who have certain impairments opportunities to utilize their abilities.

The following reports of some employers, taken at random, indicate their objections to hiring abnormal persons:

Steel producers state frankly that when sound workers are available, those with disabilities are not taken. It is pointed out that, in general, the handicapped are likely to be less satisfactory as a result of accompanying nervousness and mental depression. Attention is also called to the strict liability provisions which, it is declared, make the employment of the handicapped impracticable.

---

<sup>1</sup> United States Daily, Washington, D. C., June 13, 1931, pp. 1 and 3.

It was found in the shoe industry that the handicapped group were temperamental and apparently expected particular consideration. Manufacturers of vacuum cleaners called attention to the use of hazardous machinery in their business, which calls for the making of heavy articles. This fact, together with the restrictions of the compensation acts, led them to the policy of not hiring the handicapped.

On the other hand, railroads from time to time employ disabled persons in case they have been crippled during the course of their work. When practicable they are placed on jobs not interfered with by their respective disabilities. It is reported that such workers, as a rule, have met the requirements of their jobs and are more devoted to their duties than normal persons.

One employer in the rubber industry is of the opinion that no doors should be closed against handicapped persons of working age. He contends, however, that employers should not be held liable for accidents resulting directly from workers' disabilities.

Replies from other employers indicate that persons with impairments are either placed in sheltered positions or on jobs in which their physical handicaps do not interfere in any way with their efficiency, otherwise they are entirely debarred from employment.

The White House Conference believes that the "public must come to appreciate the fact that the handicapped child not only has the same inalienable right to an opportunity to develop to the maximum of his capacity, but that it is a special duty of society to provide him with that opportunity."

---

### Comparative Conditions in Government and in Private Employment

**I**N MAY, 1928, Congress passed an act directing the Personnel Classification Board to survey the field services of the Government and to make a report on classification plans and compensation schedules, with recommendations as to methods of administration. In February, 1929, the board presented a preliminary report dealing mainly with conditions in the departmental service. (See *Labor Review*, August, 1929, p. 133.) Its second report,<sup>1</sup> dealing with conditions in the field service of the Federal Government, was presented in February, 1931, together with recommendations as to classification, compensation, and methods of administration. Seventeen findings are presented, of which the first five deal with field conditions.

#### General Conditions in the Field Service

AS A WHOLE, the field service still suffers, the board finds, from the chaotic conditions which existed in the service at Washington before the reclassification movement of the past decade. There is, the report points out, no consistent and equitable system of allocations and pay for positions involving the same work. Persons doing the same work may be receiving widely different salaries, and persons receiving the same salaries may be doing work of varying grades. Titles of positions in the field are in the main unstandardized, and are "inadequate and sometimes misleading for purposes of budgeting,

<sup>1</sup> United States. Personnel Classification Board. Closing report of wage and personnel survey. Washington, 1931.



appropriating, and paying for personal services, recruiting qualified employees, keeping meaningful records, and preparing correct and adequate communications and reports." There is no uniform plan as to promotions and increases of pay for employees who have gained in experience and usefulness. In fact, the situation as presented in these findings seems to be thoroughly confused and unstandardized.

### Conditions in Government and in Private Employment

THE remaining findings deal with wages and working conditions in the Government service as compared with those in private employment, the different service groups being considered separately. Taking up, first, positions in the clerical, administrative, and fiscal service and in the subprofessional service, the board finds that the Federal pay scale for positions paying less than \$2,000 annually is, on the whole, more liberal than the average scale in private employment, but that for those paying more than \$2,000 it is less liberal. However, a considerable number of employers pay rates higher than the Federal scale, even for the lower positions.

Salaries in the Federal departmental service, when compared with those in the commercial world, are concentrated within narrow limits. The upper and lower limits for each grade are established by congressional mandate, and consequently salaries have a fixed and narrow range. On the other hand, the ranges of pay in the commercial world are as wide as thousands of executives, reasoning from their individual viewpoints, choose to make them. An infinite number of employment conditions exist which undoubtedly influence the salaries paid in the respective concerns. A good example of the wide ranges of pay existing among private concerns for positions of the same grade and value may be found in the salary distribution of employees performing duties similar to those of Government grade CAF-1. This group comprises a total of 92,648 workers receiving salaries ranging from \$480 to \$2,600 per annum, whereas the Government range for this grade was \$1,260 to \$1,560 per annum. (Welch Act.)

The evidence submitted in the preliminary report shows that the pay for routine clerical work in the Federal service is somewhat higher than that in private industry. As the elements of judgment and discretion, and finally executive ability, are introduced into the higher classes of employment, the remuneration in the commercial world takes a decided upward trend, and the rate of acceleration is greater than that in the Government salary scheme. In the higher types of employment the salary schedules are so regularly accelerated above Government pay that it is reasonable to conclude that, in general, greater recognition is given to administrative ability in industry than in the Federal service.

In the custodial service the board finds that the Government pay scale is generally somewhat lower than the average pay for similar non-Government positions, whether these are above or below the \$2,000 level.

In the professional and scientific services, as in the clerical group, salaries for positions below a certain level are apt to be better, and those above it worse, in Government than in private employment.

The Government pay scale for positions in the professional and scientific service compares favorably with the average pay for similar non-Government positions below the \$3,800 level, but above the \$3,800 level the Government pay scale is lower and the discrepancy becomes greater as the importance of the work increases.

When, however, the comparison is made between the Government and the larger colleges and universities as employers, it is found that Government scale is apt to be more liberal than the average paid by such institutions, whether the position falls within the lower or upper

pay levels. However, in some of the institutions mentioned, positions of this kind command a considerably higher rate than the Government pays.

The greatest discrepancy, however, appears in positions requiring a high order of executive ability, for which, it was found, the salaries paid by private concerns exceed, by anywhere from 100 per cent to 500 per cent, those paid by the Federal Government for positions of equal responsibility.

Presidents and vice presidents of large banks receive annual salaries ranging from \$25,000 to \$150,000 as compared with \$15,000 received by the Secretary of the Treasury and \$10,000 by the Undersecretary. The principal executives of the leading insurance companies receive salaries five times greater than those received by the Director of the Veterans' Bureau and his assistants.

Federal employees compare favorably, the report finds, with those of private concerns in the matter of stability, "but the Federal personnel is now much less stable than it was during the first decade of this century and the stability is greater in the departmental than in the field service."

The experience of private firms with rating systems as a means of selecting employees for salary increases has not been encouraging, it is stated, and several firms reported that they had discontinued the use of such systems because of the difficulty of educating the supervisory force to use them properly.

In general, hours of work in the Government compare favorably with those in private employment, and leave privileges are apt to be more liberal. Non-Government employers do not generally provide retirement systems, but in some cases systems more liberal than the Federal retirement plan are provided, such as group insurance and cooperative stock-purchasing plans. Civil service requirements for employment in the Federal service are more exacting and thorough than entrance requirements generally for non-Government employment.

---

### An Experiment in the Management of Indian Labor

THE International Labor Review for May, 1931, contains an article on the management of Indian laborers which is of special interest in view of the general complaints about this type of labor in connection with textile and other factory industries. The writer, Albert Howard, is director of the Institute of Plant Industry at Indore, an enterprise which is supported by an annual grant from the Indian Central Cotton Committee and by subscriptions from a number of the States of Central India and Rajputana. As part of its work it carries on an agricultural experiment station, and the matter of securing and keeping laborers presented difficulties.

The institute lies alongside the city of Indore, an important manufacturing and distributing center with a population of over 100,000. Nine large cotton mills find work for 12,000 workers. In addition, there are a number of ginning factories and cotton presses. The institute therefore had to meet a good deal of local competition in building up its labor force. It was clearly useless attempting to recruit workers at rates below those readily obtained at the mills or in the city. Further, it soon became apparent that if the institute was to succeed the director would have to pay attention to the labor problem and devise means by which an efficient and contented body of men, women, and children could be attracted and retained for reasonable periods.

[295]

## Wages and Methods of Payment

AS A FIRST step, what was considered a fair rate of wages was established. Thereafter two points were carefully observed: Wages were paid regularly at stated dates and precautions were taken to make sure that the worker got the whole wage, without deduction or commission of any kind. Regularity of payment is held highly important by the Indian worker. As for the second point, in many of the industrial establishments of India the worker secures his place by a payment to a foreman or recruiting agent, the amount to be deducted from his wages; in some there is a system of fines, these also being deducted, and there are said to be various unrecognized and unauthorized practices by which the amount of the wage which reaches the worker is diminished. The institute has no shops for the sale of food, makes no payments in kind, sees that the worker receives the full amount of his wages, and makes no attempt to influence the manner in which he spends it.

## Hours of Labor

AT FIRST the institute observed the 10-hour day, which is common in India, but it was found that both men and animals suffered during the middle of the day in the hot season—April, May, and June—and the experiment of reducing working hours during these months to 6 a day was tried. Two shifts were worked, one of four hours in the morning and a second of two hours in the afternoon, with a rest interval of 6 hours from 10 a. m. to 4 p. m. To make this possible the work was speeded up, and both laborers and supervising staff were brought to realize that the 6-hour day could be enjoyed only if everybody worked continuously and conscientiously.

The first result observed was a marked improvement in the health and well-being of the men and animals, probably due to the operation of two factors: The health-giving properties of the early morning air and the avoidance of excessive sunlight. With the improvement in general health there was a corresponding reduction in cases requiring medical assistance. To everyone's surprise it was found possible to speed up the work very considerably. The experiment of shortening the hours of labor was then extended to the rest of the year; working hours were reduced from 10 to 7½. \* \* \*

In no case does the working period exceed 7½ hours except for about a week at the sowing time of the monsoon crops. During this period both man and beast do not obtain much more than two hours off duty for food during the hours of daylight. A full 10-hour day at high pressure is then the rule, as all realize that the sowing of cotton and other crops is a race against time. As soon, however, as sowing is over, the workers enjoy an extra day's rest on full pay.

This system of short hours has been in operation for three years, and has, Mr. Howard holds, been successful beyond all expectation. "The miracle of speeding up Indian labor has been achieved and shorter working hours have led not only to contentment but also to an increased output of work." Its success involves, of course, careful planning of the work on the part of the supervising force to avoid any waste of time, and it also means attention to the workers' preferences and customs, where possible.

While it is important to start work with the sun, it is equally important to allow the laborers to reach their homes by sundown, particularly during the rains, when snakes abound. Indian workers like to reach home in daylight—a point of great importance in obtaining their willing cooperation. Finally, it is very interesting to note that the policy of the square deal on the part of the institute towards its

laborers as regards hours is now being answered by a natural desire on the part of the workers to give the institute a square deal. Less supervision is becoming necessary; everybody realizes that a reduction in hours is only possible if real work is done.

### Other Conditions

SIMPLE 1-room cottages are provided, which are fumigated and whitewashed once a year, and a supply of pure drinking water is furnished. Medical attendance is free and so, for those earning under Rs. 30 (\$10.95) a month, is medicine. The workers are examined weekly, so that any precautionary treatment or advice may be given in good time. In this matter the personality of the doctor is important. "The workers deal with an unpopular man in a very effective fashion—they never make use of his services." A provident fund has been established for the benefit of the educated members of the staff, but will not be extended to the ordinary workers unless and until they themselves ask for it, in order to prevent the suspicion which might rise if the management on its own initiative held back part of the workers' pay for such a purpose.

A system of promotions and transfers has been arranged. The different operations have been grouped under four heads, such as cultivation, compost making, improved irrigation methods, and the manufacture of sugar. A worker who learns to perform efficiently all the operations of one group is given a certificate of proficiency, which carries with it an increase of Rs. 1 (36.5 cents) per month in basic pay. When he has gained all four certificates he is eligible for transfer to other centers at higher pay.

In this way the institute holds out hope and places it within the power of any man to increase his starting pay in four years by about 30 per cent. It also enables an ambitious laborer to save enough money in a few years to purchase a holding and to become a cultivator. This is now taking place. Every year a few of the laborers return to their villages with their savings to take up a holding on their own account. Others are deputed for work in the contributing States on increased pay. The vacancies are automatically taken either by younger members of the same family or by volunteers on the waiting list of temporary workers.

### Conclusion

THE author admits that the system he describes is perhaps fully realizable only on a farm working under model conditions. Nevertheless, he feels that there are a certain number of the elements of this experiment which are universally valid in dealing with primitive labor.

From the point of view of the worker it is perhaps most essential that he should feel that he is receiving a square deal. From the point of view of the management the best results are obtained by scrupulous attention to pay, short hours of intensive work, proper housing and medical care, and by interesting the worker in the undertaking through giving his work an educational value.

# INDUSTRIAL ACCIDENTS AND HYGIENE

## Physical Impairment Among Negro Factory Workers in Cincinnati

THE Heart Council of Greater Cincinnati has made several studies of physical impairment among different groups of workers, the most recent being a report based on data derived from physical examinations of 1,032 Negro industrial workers in that city.<sup>1</sup> The men included in the study volunteered for the examination and represented the rank and file of these workers, there being no requirement except that they should be 20 years of age or over. The majority were employed at work requiring little mental effort but requiring from moderately hard to hard physical labor, nearly half of the men working as ordinary laborers. The men were employed in 13 factories, considerably more than half working in foundries and in the manufacture of roofing materials.

The mortality rates of Negroes are, in general, much higher than among whites and, while all the conditions causing these higher death rates are not definitely established, it is indicated by recent studies that environment and ignorance of personal hygiene are the most important causes. The writer states that from available records it appears that the Negroes thrive best in the South and that health conditions were best in the days of slavery, when the majority lived under rural conditions to which they could most readily adapt themselves. After the Civil War the Negro race was left to its own resources and during this period of readjustment suffered an appalling loss of life from disease. During the past two decades the situation among them has improved, although it is still unsatisfactory. Since the World War large numbers have migrated to the North where the colder climate, poor housing, and low incomes, with the resulting limitation of food and clothing, have been factors in the high mortality rate. In Cincinnati in the past 10 years the Negro population has increased from 7 per cent to 11 per cent of the total population, the total number of Negroes in the city now being in excess of 48,000. The high mortality rate among this group has been a matter of concern to the various official and voluntary welfare organizations of the city and as a result of the work of these agencies there has been a downward trend in the mortality rates during the past few years. While there is much information available, therefore, as to sickness rates and causes of illness among these people, until the present comparatively little has been known of the physical condition of those who are apparently well. In addition to the present study by the Heart Council, the Anti-Tuberculosis League is now having X-ray examinations made of the chests of a large number of the same group

<sup>1</sup> The Journal of Industrial Hygiene (Baltimore), May, 1931: "Physical Impairment Among One Thousand Negro Factory Workers, and Cardiovascular Impairment Among One Thousand Negro Factory Workers," by Floyd P. Allen, M. D.



of workers. . . On account of the interest of the council in diseases of the circulatory system it was desired to include a sufficiently large representation of the older workers but, as in a similar study among white machine and hand tool operators, it was found that a majority were under 45 years of age, both studies reflecting in a small way the tendency in industry to eliminate the older men.

The medical history of each worker was taken as a preliminary to the physical examination and it was found, as was to be expected, that the acute infectious diseases led as causes of previous illnesses. Only 139 of the number had been vaccinated within the past five years and 421 were found never to have been successfully vaccinated. More than one-quarter of the group had never visited a dentist and 627 secured dental care only in emergencies. Six men stated that they visited a dentist twice a year. The dental examinations showed that more than three-fourths of the men were in need of dental care, many having infected gums. In numerous cases it was found that crowns were placed over good teeth for the purpose of adornment. Uncorrected visual defects were also numerous; complete correction was observed in only seven cases, and in some instances glasses were worn only for the sake of appearance. Sinus disease was found in about one-fourth of the group and cases of enlarged tonsils were numerous.

The rate for diseases of the heart and blood vessels was very high in this group, 55.6 per cent of the men presenting cardiovascular lesions. The presence of these lesions was definitely associated with overweight, particularly among those under 40 years of age. The rate for the entire group was one and six-tenths times the rate for 2,000 white workers in the same locality. This difference was found to approximate closely the ratio of colored to white deaths in Cincinnati in the 10-year period ending in 1929. A high percentage of these workers did not know that they had any significant heart defect and were also ignorant of the other major physical defects which were found among them.

To sum up, of the total group only one was found who could be considered practically free from defect, 88 had minor defects only, 911 had significant defects, and 996 possessed defects, either minor or significant, which were unknown to them. It was considered by the examiners that all but a few of these workers would benefit by early medical care. It was a matter of wonder to the physicians making the examination that many of these men could continue at work daily at tasks requiring from moderate to great physical exertion. In fact, however, the writer states, it is a matter of knowledge "that many of them break down relatively early in life as a result of serious physical defects. Tuberculosis, syphilis, and the degenerative diseases are still exacting a large toll of life among these people, so great in fact that comparatively few survive to reach old age."

---

### Mortality Rates Among Canadian Wage Earners

THE June issue of the Statistical Bulletin, published by the Metropolitan Life Insurance Co., contains an analysis of the mortality statistics of approximately 1,250,000 Canadian industrial policyholders of the company for the years 1925 to 1930.

[299]

During this period the death rate among the Canadian wage-earners and their dependents has been about 9 per cent higher than that of the industrial policyholders of the company in the United States. The higher death rates are found entirely in the three Provinces of Quebec, New Brunswick, and Nova Scotia, but are especially high in Quebec.

The trend of the Canadian death rate has been downward for most of the preventable diseases in the six years and in 1930 a new low record was set for typhoid fever, scarlet fever, diphtheria, influenza, tuberculosis of the respiratory system, and puerperal conditions. However, the improvement in the rates for diphtheria and tuberculosis has not equaled that which has taken place in the United States, and there is still much to be accomplished in connection with these diseases, particularly in Quebec.

Among the other important diseases the trend has not differed greatly from that observed for wage earners in the United States. In Canada the mortality from cancer has risen steadily and diabetes mortality increased rather sharply in the first half of the 6-year period but was fairly stationary in the last half, while a slightly lower mortality from chronic nephritis was shown in the rates for both countries. The death rate for organic heart disease had not increased in Canada but in the United States the rate has risen appreciably.

The mortality statistics for the Canadian wage earners compare most favorably with those for the United States for deaths from violent causes. The death rates for suicide are much lower in Canada, although the mortality from this cause rose in both countries in 1930. Accidents are also the cause of fewer deaths in Canada, the rate for certain types of accidents such as burns, drownings, falls, and machinery, railroad, and automobile accidents being much below the figures for this country. But the greatest contrast between the two countries is found in the figures for homicides. During the six years, only 39 homicidal deaths occurred among the Canadian wage earners, the death rate ranging from 0.2 to 0.8 per 100,000 insured lives. In the same period there were 7,368 homicides in the United States, with death rates which ranged in the different years from 7.0 to 7.7 per 100,000. Some of this difference is accounted for by the large number of insured Negroes in this country among whom the rate for homicides is high, but making the comparison between white persons only the homicide death rate for Canada is still only approximately one-sixth of that in the United States.

---

### Industrial Accidents in Uruguay, 1919 to 1928

THE General Statistical Office of Uruguay has published statistics<sup>1</sup> of industrial accidents occurring in the Republic during the 14-year period from 1915 to 1928, which are the latest official figures published on this subject. The total number of industrial accidents reported in 1928 was 8,501, which is a decrease of 819 from the number reported for the previous year.

<sup>1</sup> Uruguay. Direccion General de Estadistica. Anuario Estadistico, 1928. Tomo XXXVII, parte 6, Montevideo, 1931.

The following table gives the number of industrial accidents for each year, from 1919 to 1928, by industry:

NUMBER OF INDUSTRIAL ACCIDENTS IN URUGUAY, 1915 TO 1928, BY INDUSTRY

Industry	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Building.....	263	839	871	504	593	443	500	563	778	1,005
Food.....	121	84	161	204	143	66	83	94	90	119
Hides and leather.....	22	27	41	30	48	19	17	36	33	27
Paper and pasteboard.....	20	34	15	4	3	2				15
Alcohol and liquors.....	70	165	104	92	92	27	42	20	39	27
Metallurgy.....	347	597	494	360	339	372	434	462	696	664
Furniture.....	212	116	316	238	219	282	299	375	510	406
Book.....	26	42	38	35	20	19	16	34	13	6
Clothing.....	21	41	39	13	13	10	10	13	9	9
Refrigerating and salting.....	945	779	702	721	704	134	255	321	272	166
Electrical.....	29	38	32	31	37	31	28	31	37	37
Agricultural.....	2	7	9	18	22	7	55	41	23	105
Transport and freight.....	632	813	882	687	793	488	585	616	788	701
Manufacturing.....	3	5	6	23	25	28	49	23	46	11
Textiles.....	6	9	20	37	15	12	22	14	21	29
Chemical.....	16	63	54	25	21	1		3	3	15
Government service.....	615	778	299	129	163	18	36	20	4	19
Not specified.....	1,864	1,697	1,186	1,864	2,448	3,805	4,069	5,446	5,958	5,140
Total.....	5,214	6,134	5,269	5,015	5,698	5,764	6,500	8,112	9,320	8,501

# LABOR LAWS AND COURT DECISIONS

## Eastern Interstate Conference on Labor Legislation

ON June 18 and 19, 1931, a conference of representatives of the labor departments of 10 East Central States was called by Gov. Gifford Pinchot at Harrisburg, Pa., to discuss the differences in the labor laws of the several States and to consider the possibility of putting them on a similar basis. Approximately 50 delegates were present, representing Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, West Virginia, and the United States Department of Labor.

At the opening session on June 18, Dr. A. M. Northrup, secretary of labor and industry of Pennsylvania, presided, and explained the purpose of the conference. Addresses were made by the Honorable Gifford Pinchot, Governor of Pennsylvania, and Ethelbert Stewart, United States Commissioner of Labor Statistics.

The following subjects were briefly discussed at the general session: "Compensation," by Frances Perkins, industrial commissioner, New York; "Employment Offices," by Edwin S. Smith, of Massachusetts; "Employment of Minors," by Clara Beyer, Children's Bureau, United States Department of Labor; "Employment of Women," by Beatrice McConnell, director, bureau of women and children, Pennsylvania; "Industrial Health," by A. S. Gray, M. D., director, bureau of occupational diseases, Connecticut.

At the conclusion of the morning session, sectional meetings were formed and group discussions were held on the following subjects: Compensation, employment offices, women and children, industrial health, and statistics.

The general conference reconvened on Friday afternoon, at which time the reports and recommendations of the various sections or committees were received.

The recommendations of the committee on workmen's compensation, while representing the consensus of the committee, were in several cases adopted only by a divided vote. The committee rejected a motion recommending "full coverage of all employments, including farm labor and domestic service." Complete reports of the five committees, however, were adopted as read by the respective chairmen, with the exception of the report on industrial health, from which report the conference voted to strike out a provision for compulsory examinations for workmen prior to their employment. The meeting also voted to recommend to the governors of the respective States that a continuing committee be appointed, and that a date be determined upon, approximately six months hence, to consider further the topics discussed at this conference and also to consider other topics which were originally proposed for discussion by the conference of governors held in Albany, N. Y., on January 23 and 24, 1931. These topics included wages, living conditions, cost of medical service and hos-

pitalization in the areas represented, arbitration and conciliation, rehabilitation, wage-claim collection, and administration and inspection.

Governor Pinchot, in a letter of July 9, 1931, transmitting to the Bureau of Labor Statistics a copy of the conference recommendations, states that he is heartily in sympathy with the resolution for the appointment of a continuing committee and that while he "would be exceedingly glad to call a second meeting, if that were desired, I hope, nevertheless, that one of the other States will be willing to sponsor the next conference."

The following recommendations were made by the various committees and adopted by the general conference:

### Recommendations of Committees

#### Workmen's Compensation

THE COMMITTEE on workmen's compensation recommended that—

1. Provision be made for coverage of all occupational diseases under the workmen's compensation acts of the several States.

2. The workmen's compensation statutes of the several States confer the fullest possible extraterritorial jurisdiction.

3. The workmen's compensation acts of the several States bring within coverage all hazardous occupations in which one or more persons are employed.

4. The workmen's compensation acts of the several States bring within coverage all occupations in which one or more persons are employed, except farm labor and domestic service.

5. The workmen's compensation acts of the several States provide full medical service, either by statute provision or procedural permission.

6. The workmen's compensation boards or commissions of the several States be equipped with salaried staff physicians for assistance and counsel in the adjudication of compensation claims.

7. The industrial boards or commissions of the several States be empowered to fix, regulate, and control attorneys' or representatives' fees in workmen's compensation proceedings in all cases.

8. Compensation provisions be adopted requiring insurance carriers or self-insurers to pay a substantial amount in all compensable nondependent death cases and that the fund so accumulated be devoted to rehabilitation work, or second-injury payments, or the administrative expenses of the several departments.

9. The schedule loss tables of the Federal longshoremen's and harbor workers' compensation act be construed as the standard measurement for permanent partial disabilities, and that deductions from such schedule awards for temporary total disability be limited to the healing periods provided in the same act.

10. Installments on permanent partial disability awards accruing after death shall not be considered as vested rights of the dependent in addition to death benefits.

11. The general principle that the compensation rights of widows and dependents shall be independent of the rights of the injured workman.

12. The several States adopt the uniform compensation rate at a maximum of not less than \$20, and a minimum of not less than \$10.



13. The general principle be adopted of charging against industry the full and necessary administrative expenses of the boards and commissions charged with the responsibility of enforcing the provisions of the compensation statutes.

14. The industrial boards or compensation commissions of the several States be given sole jurisdiction as to questions of fact and that appeals be permitted only to appellate courts on question of law.

#### Public Employment Services

On the subject of public employment offices the section recommended—

That State legislation governing public employment offices be confined to a general provision making the establishment and operation of a State system of public employment offices a mandatory function of the department of labor, the corresponding, or other appropriate executive department of the State government.

That the function of a public employment service be defined by the administrative authority as follows:

1. To assist employers to secure suitable employees, and persons seeking work to secure suitable employment.

2. To assist in establishing and maintaining a balance between the demand for and the supply of labor in the State.

3. To serve as an authoritative source of information on employment in the State and to this end that each local office study and report periodically as to the causes and extent of unemployment in its area.

4. To assist and cooperate, as a means of improving the service of its own offices, with such organizations as exist or may be created for the purpose of developing vocational guidance, job specifications, or other related functions.

That annual State appropriations for public employment offices be based on the population of the State and that the minimum appropriation be 5 cents per capita of population.

That it be the function of the United States Employment Service to coordinate and promote the various State services but that it refrain from the independent operation of any direct placement offices in the States which maintain employment services, except offices established for ex-service men and agricultural districts.

That the governor of each State represented in this conference appoint at least two representatives to serve on a regional committee on public employment offices to make further study and recommendations in respect to the following:

(a) Requirements for the various positions in the State employment services, together with salary schedules.

(b) Interstate clearance.

(c) Other problems of administration and employment office procedure, omitting statistical terms and procedure, to await the report on public employment office statistics to be issued by the committee on governmental labor statistics of the American Statistical Association.

That the States represented in this conference approve the establishment in their respective States of a demonstration public employment office, financed in part or as a whole out of private funds, as a

means of improving the present functioning of the public employment offices of the State.

#### Private Employment Agencies

In respect to legislation governing private fee-charging employment agencies the section recommended—

1. That the licensing, bonding, and regulation of private fee-charging employment agencies be a function of the State rather than of local governments and that the department of labor or other corresponding or appropriate executive department of the State be responsible for the administration of this function.

2. That legislation be enacted in each State providing that the operation of fee-charging private employment agencies involves such a definite public interest as to justify public regulation of all their acts.

3. That the license fee and bond be adequate to prevent exploitation of applicants for employment.

4. That the governor of each State represented in this conference appoint a special committee to draft a law providing for the State licensing and other regulation of private fee-charging employment agencies.

#### Labor Laws for Women

As to labor laws for women, the following measures were recommended:

*Hours of work.*—Daily, 8; weekly, 48; 6-day week; lunch period, 30 minutes; not more than six continuous hours' work without a rest or lunch period of 30 minutes.

*Night work.*—The elimination of work between 10 p. m. and 6 a. m. in manufacturing and mechanical industries, mercantile establishments, hotels, and restaurants.

*Prohibited occupations.*—No prohibition of occupation on the basis of sex, except where scientific research has proved an occupation to be more hazardous to women than to men.

*Seats.*—Provision of suitable and adequate seats for employed women.

*Wages.*—The committee favored the principle of minimum-wage legislation and expressed the belief that much can be accomplished by experimentation with the recommendatory type of law until such time as mandatory wage legislation may be declared constitutional.

*Home work.*—Application of factory standards to industrial work done in the homes.

#### Labor Laws for Minors

The following protective measures were recommended for employed minors:

*Minimum age of employment at any occupation,* 16 years during school hours, 14 years outside of school hours. Compulsory school-attendance standards to be amended to meet these requirements.

*Employment certificates* for all minors under 18 years of age, including proof of age, promise of employment, designation of occupation and hours of work, and physical examination by an authorized physician. Proof-of-age cards for minors 18 to 21.

*Hours of work.*—Minors, 14 to 16 years—daily 8, weekly 48 (continuation-school hours to be included in total hours); 6-day week;

lunch period of 30 minutes; night work to be prohibited between 6 p. m. and 7 a. m. Minors, 16 to 18 years—daily 8, weekly 48; 6-day week; lunch period of 30 minutes; night work to be prohibited for girls between 7 p. m. and 6 a. m., and for boys between 10 p. m. and 6 a. m.

*Prohibited occupations.*—The committee recognized the field of hazardous occupations for minors as one requiring special study and consideration, and in view of the study of hazardous occupations now planned by a national committee of the United States Children's Bureau, urged that a continuing committee of this group meet for the purpose of considering the findings of their study.

*Wages.*—Mandatory minimum-wage legislation for minors under 18 years of age.

*Street trades.*—The minimum age of employment and the regulation of hours applying to other occupations to apply equally to street trades. Employment certificates to be required as a means of enforcement and provisions for identification to be made by means of a badge. The distributor to be held responsible for distributing newspapers only to children having the required badges.

*Industrialized agriculture.*—The minimum age of employment and the regulations as to hours of work applying to other occupations should apply equally to children employed in industrialized agriculture.

*Compensation.*—Additional compensation for children injured while illegally employed, the additional amount to be a liability of the employer.

*Home work.*—The standards applying to other occupations to apply equally to industrial work done in the home.

*Continuation schools.*—Further consideration should be given to the development of a program for obtaining a closer integration between the early industrial experience of young employed minors and their available background and training, using the continuation schools as the means of securing such coordination.

#### Legislation for Women and Minors

The following recommendations were made as regards legislation for women and minors:

*Education.*—The carrying on, as a fundamental responsibility of the departments of labor and industry, of a continuous and consistent educational campaign to secure the enactment of needed legislation, and to make possible the most effective enforcement of existing legislation.

The establishment of bureaus of women and children within the State departments of labor to carry on scientific investigations of the changing problems arising in industry.

*Enforcement.*—Recognizing that the value of the recommended standards is directly dependent upon the adequacy of the enforcement machinery and technique developed in each of the enforcing departments, the committee recommended the following:

1. That each State set up and enforce minimum standards of experience and training for its inspectorial force in order that this important function may be effectively carried on.

2. That the work of enforcing the woman and child labor laws be, wherever possible, the task of a specialized group of inspectors within the department.

3. That there be a group of technical inspectors especially equipped to handle the various special problems relating to the well-being of woman and child workers.

4. That the number of inspectors in each department should be sufficient so that at least two adequate inspections per year may be made of each establishment coming under the jurisdiction of the department.

*Cost.*—"The committee is fully aware that the realization of its recommendations concerning the administration of labor laws for women and children will require the expenditure of greater funds than have heretofore been available; it believes that the educational program already recommended must be so carried on as to convince the public of the benefits to our communities which will flow from such expenditure."

Several other questions were raised in the committee, concerning which it felt that it was not ready to recommend any action. Two of these questions, however, were regarded as especially meriting further consideration, i. e., the matter of a recommended study by the Federal Women's Bureau concerning the employment of women before and after childbirth, and a proposed study of the question of special provisions regulating the employment of retarded children.

#### Industrial Health

The recommendations of this section were as follows:

*Ventilation, temperature, humidity, lighting, air space.*—Adequate standards for ventilation, temperature, humidity, lighting, and air space, the specific minimums not to be adopted in the law but power to establish specific standards to be lodged in the administrative authorities of each State.<sup>1</sup>

*Drinking water.*—Legal requirement that drinking water not inferior to the community water supply be furnished; that the water be provided through adequately protected angle-jet drinking fountains or through individual drinking cups, and that reasonable access to drinking water be permitted employees at all times.

*Toilet facilities.*—Provision of convenient and adequate toilet facilities for each sex, the power to establish specific standards to be given, in States that have no definite requirements, to the administrative authorities of the State.<sup>1</sup>

*Wash and dressing rooms.*—Requirement of adequate wash and dressing rooms for each sex, power to establish specific standards to be lodged in the administrative authorities of each State.<sup>1</sup>

*Lunch rooms.*—Requirement that eating places other than work-rooms be furnished and that these be used for that purpose; lunch rooms to be required where employees are engaged in processes or exposed to materials harmful to health.

*Seating facilities.*—Provision of suitable seats proportionate to the number of employees.

<sup>1</sup> Committee also recommended that for the determination of these specific standards, the highest standards now found in existing labor laws should be considered, and suggested consultation with the United States Public Health Service, the American Public Health Association, the American Standards Association, the National Safety Council, and other similar organizations.

*Cleaning and physical upkeep of place of employment.*—Maintenance of workrooms in a safe and sanitary condition, with due consideration for the health and safety of the employees.

Placing of equipment so as to permit freedom of action on the part of the worker, aisle spaces to be adequate and unobstructed, material to be piled in an orderly manner, waste material to be properly stored, and exits to be adequate and unobstructed.

*First aid.*—Provision of competent personnel and adequate equipment for administering first aid in all work places.

*General health considerations.*—Requirement that all rooms, buildings, and places where labor is employed shall be so constructed, equipped, and arranged, operated and conducted, in all respects, as to provide reasonable and adequate protection for the life, health, and safety of all persons employed therein.

*Occupational diseases.*—Requirement of reports of all occupational diseases from all physicians diagnosing and/or treating such cases, and by all employers having knowledge of cases of such diseases among their employees.

Provision of protective devices and measures necessary for the prevention of any or all occupational diseases.

#### Statistics

The section of statistics reported as follows:

"The section urges that in any State the functions of the bureau of labor statistics, as such, be recognized as of equal importance with those of any other bureau of the department. The need for adequate appropriation for a bureau of labor statistics is fundamental.

"The section recognizes the desirability of having the collection of labor statistics in the various States on a uniform basis and urges the United States Bureau of Labor Statistics to draft a model form of law for the direction and guidance of the State bureaus.

"The section asks the United States Bureau of Labor Statistics to make a survey in detail of the work now being done and studies being made by each of the State bureaus of labor statistics, ascertaining the scope of such studies and the total personnel and appropriation of each bureau.

"Due to time limitations, the section did not attempt to formulate an outline of minimum requirements for a State bureau of labor statistics. However, it wishes to call attention to the following resolution passed by the Association of Governmental Officials in Industry of the United States and Canada at its annual meeting held recently in Boston, which resolution this section indorses:

"Whereas comprehensive and reliable information with reference to the trends of employment and the earnings of wage earners is essential in order that any measures adopted for the relief of the unemployed, or any plan for the issuance of unemployment insurance, or the setting up of unemployment reserve funds may be based on a full knowledge of conditions and sound judgment: Therefore be it

"Resolved, That the Association of Governmental Officials in Industry of the United States and Canada urge all State bureaus of labor and like agencies which are not already engaged in the collection of pay-roll data from representative manufacturing establishments to undertake such collection periodically and systematically following the so-called standard plan adopted by the United States Bureau of Labor Statistics and by a number of leading industrial States. That the scope of such collection of pay-roll data be extended to include the



building industry, wholesale and retail trade, public utilities, agriculture, office employment, employment in hotels and restaurants, and all other important fields of employment. That wherever possible or expedient the results be presented classified by sex and earnings of employees. That efforts be made also to secure and publish periodically data with reference to employment by governmental agencies—State, county, and municipal—and employment on public works, whether constructed directly by governmental agencies or under contract, in order to determine the extent to which such public works contribute to an increase in the amount of available employment.

“Supplementary to this resolution, the section makes the following recommendations:

“That accident and compensation statistics be compiled on the basis of man-hour exposure and that separate presentations of accident statistics by sex and minor classifications be made wherever practicable.

“That statistics of entrance wage rates of common labor by industries be compiled.

“That statistics of piece rates for standard units by industries be compiled.

“That sample surveys of unemployment in important industrial areas be made in accordance with a plan to be recommended by the United States Bureau of Labor Statistics.

“These in addition to the obvious duties of the State bureaus to compile statistics of wages and hours of labor by industry and occupations, classified by sex and range of wage rates. Special subjects of investigation must remain within the discretion of the various State bureaus and be guided and controlled by the industrial conditions in each State.”



### Executor's Rights Under Employers' Liability Act Depend Upon Rights of Employee at Death

**T**HE right of a representative under the Federal employers' liability act is derivative and depends upon the continuance of a right in the injured employee at the time of his death. (Flynn, *Executor, v. New York, New Haven & Hartford Railroad Co.*, 283 U. S. 53.)

From the facts in the case it appears that suit was filed under the Federal employers' liability act, by the executor for the benefit of Flynn's widow and children, against the New York, New Haven & Hartford Railroad Co., for negligently causing the death of Edward L. Flynn. It was alleged that the injury was suffered on December 4, 1923, and that it caused Flynn's death on September 1, 1928. Suit was filed on May 15, 1929, and it was the contention of the railroad company that "no right of action for wrongful death, occurring more than two years after the accident causing the death, where the decedent had never brought suit on such accident, accrues to the personal representative of his estate." The Supreme Court of Errors of Connecticut rendered a judgment in favor of the railroad company and the executor carried the case to the United States Supreme Court. He argued that the statute of limitations begins to run at the time of death and that it was at that time and not until then that the cause of action accrued to the representative.

In referring to the employers' liability act (act of April 22, 1908, ch. 149, 35 Stat. L. 65, 66; act of April 5, 1910, ch. 143, 36 Stat. L. 291), the counsel for the executor alleged that—

The act does not, in express terms, make the personal representative's right to maintain an action dependent upon the existence of a right of action in the decedent immediately before he dies. It intends that in all cases there shall be but one recovery for the wrongful act, and that the dependent's right shall not be barred unless the deceased had received satisfaction in his lifetime either by settlement and adjustment or by adjudication in the courts.

True, at the time of his death, the decedent had no right of action; but this was not due to an affirmative extinguishment of his right, but to lapse of time, affecting his right of action alone.

The act declares two distinct and independent liabilities resting upon the common foundation of a wrongful injury, and based upon altogether different principles. The cause of action created for the benefit of the dependents of an employee who dies as a result of his injuries is not a representative right, but a separate and distinct right which is vested in certain designated dependents. It includes no damages which the employee might have recovered in an action brought by him during his lifetime. It is for the loss and damage sustained by the relatives dependent upon the decedent.

Mr. Justice Holmes delivered the opinion of the Supreme Court which affirmed the lower courts, saying in part as follows:

The act of 1908 gives a right of action to the employee or, in case of his death, to his personal representative for the benefit of the widow and children, and provides that no action shall be maintained "unless commenced within two years from the day the cause of action accrued." Section 6. Obviously Flynn's right of action was barred, but it is argued that the right on behalf of the widow and children is distinct; that their cause of action could not arise until Flynn's death, and that therefore the two years did not begin to run until September 1, 1928. But the argument comes too late. It is established that the present right, although not strictly representative, is derivative and dependent upon the continuance of a right in the injured employee at the time of his death. (*Michigan Central Railroad Co. v. Vreeland*, 227 U. S. 59, 70.) On this ground an effective release by the employee makes it impossible for his administrator to recover. (*Mellon v. Goodyear*, 277 U. S. 335, 344.) The running of the two years from the time when his cause of action accrued extinguishes it as effectively as a release (*Engel v. Davenport*, 271 U. S. 33, 38), and the same consequence follows. Our conclusion that this action could not be brought is required by the former decisions of this court.

### Railway Employee Aware of Danger Held to have Assumed Risk of Injury

A FIREMAN putting his head out of the cab window, with full knowledge of the negligence and the consequent danger arising when the engineer opened wide the throttle, causing a large quantity of cinders to come out of the smokestack, and thereafter suffering an injury when a cinder lodged in his eye, was held by the Supreme Court of Kansas to have assumed the risk under the Federal employers' liability act. (*Blevins v. Union Pacific Railroad Co.*, 299 Pac. 593.)

The facts of the case show that Blevins was engaged in interstate commerce as a fireman in the Union Pacific Railroad Co.'s yards in Kansas City. The engineer, after effecting a coupling to several cattle cars, opened the throttle to its full capacity, causing a severe exhaust, which threw out of the smokestack a large volume of hot cinders. Immediately prior to this Blevins had coaled the engine with fine coal and had taken his position in the cab when he saw the engineer open the throttle to its full capacity. It was Blevins' duty

to look ahead to see if there were any other engines coming. To accomplish this he put his head outside the cab window and the injury to his eye resulted. Suit was filed by the employee under the Federal employers' liability act and the railroad company claimed as a defense that Blevins had assumed the risk. Evidence was presented to show that Blevins knew that an engine threw sparks or cinders out of the smokestack, that these were increased when fine coal was used, that an exhaust would force a large volume into the air, and that they were likely to fall in his eyes while his head was outside the cab window.

The District Court of Wyandotte County, Kans., rendered a judgment in favor of the employee and the company appealed to the Supreme Court of Kansas. In applying the doctrine of assumption of risk under the Federal employers' liability act the court said:

The courts appear to have made a general division of negligent acts creating a danger not assumed by the employee, and negligent acts assumed by an employee in the course of his employment.

The negligent acts of employer or coemployee that are sudden and of which the employee has no notice or knowledge, creating a danger which can not be foreseen, are not assumed.

Where the employee has full knowledge of the negligence and appreciates the danger arising therefrom, he assumes the risk, if he continues in the employment.

The court cited several cases supporting this view and continued the opinion reversing the judgment of the district court, by saying in part as follows:

The sole question in the case, as now presented, is whether the negligence established by the evidence is of such character that knowledge thereof charges the employee with an appreciation of the danger arising therefrom. Knowledge of the negligence is admitted. In fact, the plaintiff is the only person who observed it. He also admitted that he knew the consequences that would follow from the pulling of the throttle to its full capacity.

The plaintiff was an experienced fireman, and had been working on this particular job for about four months. We must assume that he was a man of ordinary intelligence and would therefore be expected to know and appreciate the things that are obvious to the ordinary apprehension. His own statements clearly indicate that he comprehended the nature and degree of the danger arising from the opening of the throttle, and that he voluntarily put his head out of the cab window knowing that he was likely to get a cinder in his eye. He assumed the risk, and must abide the consequence.

---

### Massachusetts Court Holds "Tips" are Wages Under Compensation Act

**T**HE Massachusetts Supreme Court on June 1, 1931, affirmed a decree of the industrial accident board holding that "tips" received by a waitress constituted part of her "earnings" within the meaning of the "average weekly wages" provision of the compensation law (Ethel Power's case, 176 N. E. 621).

Ethel Power was employed as a waitress in a restaurant and received injuries while in the course of her employment. Before a single member of the industrial board the findings were made that according to the contract of employment the employee was to receive \$8 per week and whatever tips should be given her by the patrons of the restaurant. The tips averaged \$12 a week.

The full board affirmed and adopted the findings of the single member, but also ruled that the tips received were part of the average

weekly wages, which therefore amounted to \$20. Upon appeal by the employer to the superior court it was held that \$8 constituted the average weekly wage. The decree of this court caused the employee to seek a ruling by the State supreme court as to whether the tips so received might be considered part of her average weekly wages.

By definition under the Massachusetts workmen's compensation law (Gen. Laws, 1921, ch. 152, sec. 1(1)), "average weekly wages" are "the earnings of the injured employee during the 12 calendar months immediately preceding the date of injury." As to whether tips constituted part of the "average weekly wages" the supreme court said that the question was a new one before that court, and further that there were only a few American decisions "pertinent to this point." Several cases under the English act were cited in which it was held that the "earnings" included "tips." This interpretation of the English statute had been given long before the passage of the Massachusetts act. The American decisions referred to by the court arose in New York, and involved tips received by a taxicab driver and by a Pullman porter, and it was held in those cases that the tips received with the knowledge of the employer were to be included in ascertaining the average weekly wages, as the basis of compensation. The court also referred to a ruling of the Massachusetts Industrial Accident Board in 1914, in Hatchman's case, in which the board so interpreted the act "that tips were to be included in ascertaining the average weekly wages or earnings." In the absence of an adjudication by the State supreme court, this interpretation has been followed since 1914.

Mr. Chief Justice Rugg, in delivering the opinion of the court, said:

It seems plain that from the standpoint of the employee the tips in the case at bar were in the nature of wages or earnings. The stipend paid to her by the employer was the smaller part of the actual income received by her as a consequence of her labor for him.

The situation was fully understood and freely assented to by the employer. There was no deception. No divided duty was thereby created on the part of the employee. Her loyalty to the employer was not alloyed by the courtesy and efficiency rendered to patrons, which were the basis of their gratuities to her. As to each customer of the employer the tip to the employee was a gift and not founded on an obligation, but the aggregate thus received was dependable although fluctuating according to the amount of patronage coming to the employer.

Service may be rendered upon a reasonable expectation of reward without forming the basis of a debt. The tips were in the nature of part payment for the service received by the patrons at the place of business of the employer. Payments made to his employee by his patrons with the approval of the employer under the protection of his place of business and for his benefit, bear a close analogy to wages paid by him.

There was nothing illegal in the retention of tips by the employee in these circumstances. If the employer had established a rule of his restaurant forbidding tips, the direct wage expense to him probably would have been increased to make up in substance for the loss in revenue to the employees and that doubtless would have been reflected in an increase in the prices charged to patrons. The employer, in effect, saved in direct outgo for wages the amount received by the employee in tips.

During the course of the opinion the court referred to several jurisdictions in which statutes have been enacted relative to tips, and observed that—

The idea of tipping is distasteful to some people who would prefer to pay in increased charges enough to enable the appropriate wage to be paid directly to the employee by the employer. There is a feeling that tips are not in harmony

with the spirit of American institutions and that they tend to put the recipient in a dependent or servile position and to undermine independence of character.

The court, continuing, said that there is in certain employments in the State a tipping custom existing which must be recognized since—

It has in those employments a vital effect upon the terms and conditions of labor and the relations of employer and employee. It is a custom by which the employer in the case at bar reaped a financial benefit in the lower payments made by him each week to secure the services of the employee.

Although some difficulty may arise, the court said, in fixing the insurance rate in a case in which the pay roll of the employer discloses all of the earnings of the employee, and in one in which it does not, still the principle can not be affected. The employee in the latter case is bound "to make full disclosure for the purpose of enabling just insurance rates to be fixed."

In concluding the opinion reversing the decree of the lower court, the supreme court said:

We are of opinion that the finding of the board to the effect that the tips constituted a part of the average weekly wage can not be pronounced unwarranted in law. It hardly needs to be added that this decision is confined strictly to the facts here disclosed.

The result is that the decree is reversed and a decree is to be entered in favor of the employee on the basis of average weekly earnings of \$20.

---

### Wisconsin Law Relating to Issuance of Injunctions in Labor Disputes

THE 1931 session of the Wisconsin Legislature enacted into law (Acts of 1931, ch. 376) a comprehensive statute relating to litigation arising out of labor disputes and limiting the jurisdiction of courts in such cases.

Wisconsin by virtue of this act becomes the first State to enact a complete and comprehensive code governing the public policy of the State toward collective bargaining and the use of the injunction in labor disputes.

Among the matters provided for in the act are: The right of labor to collective bargaining, the prohibition of discriminatory labor contracts, legalizing certain conduct in labor disputes, immunity of members of associations or organizations for responsibility of the acts of individuals, the use of injunctions and the right of appeal from same, the enumeration of the rights of individuals in contempt cases, and, finally, penalties for the violation of any provision contained in the act. The provisions of the act are as follows:

SECTION 268.18. *Public policy as to collective bargaining.*—The public policy of this State is declared as follows:

Negotiation of terms and conditions of labor should result from voluntary agreement between employer and employees. Governmental authority has permitted and encouraged employers to organize in the corporate and other forms of capital control. In dealing with such employers, the individual unorganized worker is helpless to exercise actual liberty of contract and to protect his freedom of labor, and thereby to obtain acceptable terms and conditions of employment. Therefore it is necessary that the individual workman have full freedom of association, self-organization, and designation of representatives of his own choosing, to negotiate the terms and conditions of his employment, and that he shall



be free from the interference, restraint or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection.

SEC. 268.19. *Contracts*.—Every undertaking or promise made after the taking effect of this section, whether written or oral, express or implied, between any employee or prospective employee and his employer, prospective employer or any other individual, firm, company, association, or corporation, whereby

(1) Either party thereto undertakes or promises to join or to remain a member of some specific labor organization or organizations or to join or remain a member of some specific employer organization or any employer organization or organizations; or

(2) Either party thereto undertakes or promises not to join or not to remain a member of some specific labor organization or any labor organization or organizations, or of some specific employer organization or any employer organization or organizations; or

(3) Either party thereto undertakes or promises that he will withdraw from an employment relation in the event that he joins or remains a member of some specific labor organization or any labor organization or organizations, or of some specific employer organization or any employer organization or organizations;

Is hereby declared to be contrary to public policy and shall not afford any basis for the granting of legal or equitable relief by any court against a party to such undertaking or promise, or against any other persons who may advise, urge or induce, without fraud, violence, or threat thereof, either party thereto to act in disregard of such undertaking or promise. This section in its entirety is supplemental to and of subsection (1) of section 103.46 of the statutes.

SEC. 268.20. *Lawful conduct in labor disputes*.—(1) The following acts whether performed singly or in concert, shall be legal:

(a) Ceasing or refusing to perform any work or to remain in any relation of employment regardless of any promise, undertaking, contract or agreement in violation of the public policy declared in section 268.19;

(b) Becoming or remaining a member of any labor organization or of any employer organization, regardless of any such undertaking or promise as is described in section 268.19;

(c) Paying or giving to, any person any strike or unemployment benefits or insurance or other moneys or things of value;

(d) By all lawful means aiding any person who is being proceeded against in, or is prosecuting any action or suit in any court of the United States or of any State;

(e) Giving publicity to and obtaining or communicating information regarding the existence of, or the facts involved in, any dispute, whether by advertising, speaking, patrolling any public street or any place where any person or persons may lawfully be, without intimidation or coercion, or by any other method not involving fraud, violence, breach of the peace, or threat thereof;

(f) Ceasing to patronize or to employ any person or persons, but nothing herein shall be construed to legalize a secondary boycott;

(g) Assembling peaceably to do or to organize to do any of the acts heretofore specified or to promote lawful interests;

(h) Advising or notifying any person or persons of an intention to do any of the acts heretofore specified;

(i) Agreeing with other persons to do or not to do any of the acts heretofore specified;

(j) Advising, urging, or inducing without fraud, violence, or threat thereof, others to do the acts heretofore specified, regardless of any such undertaking or promise as is described in section 268.19; and

(k) Doing in concert any or all of the acts heretofore specified shall not constitute an unlawful combination or conspiracy.

(l) Peaceful picketing or patrolling, whether engaged in singly or in numbers, shall be legal.

(2) No court, nor any judge or judges thereof, shall have jurisdiction to issue any restraining order or temporary or permanent injunction which, in specific or general terms, prohibits any person or persons from doing whether singly or in concert, any of the foregoing acts.

SEC. 268.21. *Responsibility for unlawful acts*.—No officer or member of any association or organization, and no association or organization participating or interested in a labor dispute (as these terms are defined in section 268.29) shall be

held responsible or liable in any civil action at law or suit in equity, or in any criminal prosecution, for the unlawful acts of individual officers, members, or agents, except upon proof by a preponderance of the evidence and without the aid of any presumptions of law or fact, both of (a) the doing of such acts by persons who are officers, members or agents of any such association or organization, and (b) actual participation in, or actual authorization of, such acts, or ratification of such acts after actual knowledge thereof by such association or organization.

SEC. 268.22. *Public policy as to labor litigation.*—In the interpretation and application of sections 268.23 to 268.26, the public policy of this State is declared to be:

Equity procedure that permits a complaining party to obtain sweeping injunctive relief that is not preceded by or conditioned upon notice to and hearing of the responding party or parties, or that issues after hearing based upon written affidavits alone and not wholly or in part upon examination, confrontation and cross-examination of witnesses in open court, is peculiarly subject to abuse in labor litigation for the reasons that

(1) The status quo can not be maintained but is necessarily altered by the injunction;

(2) Determination of issues of veracity and of probability of fact from affidavits of the opposing parties that are contradictory and, under the circumstances, untrustworthy rather than from oral examination in open court is subject to grave error;

(3) Error in issuing the injunctive relief is usually irreparable to the opposing party; and

(4) Delay incident to the normal course of appellate practice frequently makes ultimate correction of error in law or in fact unavailing in the particular case.

SEC. 268.23. *Injunctions: Conditions of issuance; restraining orders.*—(1) No court nor any judge or judges thereof shall have jurisdiction to issue a temporary or permanent injunction in any case involving or growing out of a labor dispute, as defined in section 268.29, except after hearing the testimony of witnesses in open court (with opportunity for cross-examination) in support of the allegations of a complaint made under oath, and testimony in opposition thereto, if offered, and except after findings of all the following facts by the court or judge or judges thereof;

(a) That unlawful acts have been threatened or committed and will be executed or continued unless restrained;

(b) That substantial and irreparable injury to complainant's property will follow unless the relief requested is granted;

(c) That as to each item of relief granted greater injury will be inflicted upon complainant by the denial thereof than will be inflicted upon defendants by the granting thereof;

(d) That the relief to be granted does not violate the provisions of section 268.20;

(e) That complainant has no adequate remedy at law; and

(f) That the public officers charged with the duty to protect complainant's property have failed or are unable to furnish adequate protection.

(2) Such hearing shall be held after due and personal notice thereof has been given, in such manner as the court shall direct, to all known persons against whom relief is sought, and also to those public officers charged with the duty to protect complainant's property: *Provided, however,* That if a complainant shall also allege that unless a temporary restraining order shall be issued before such hearing may be had, a substantial and irreparable injury to complainant's property will be unavoidable, such a temporary restraining order may be granted upon the expiration of such reasonable notice of application therefor as the court may direct by order to show cause, but in no case less than 48 hours.

(3) Such order to show cause shall be served upon such party or parties as are sought to be restrained and as shall be specified in said order, and then only upon testimony under oath, or in the discretion of the court, upon affidavits, sufficient, if sustained, to justify the court in issuing a temporary injunction upon a hearing as herein provided for.

(4) Such a temporary restraining order shall be effective for no longer than five days, and at the expiration of said five days shall become void and not subject to renewal or extension: *Provided, however,* That if the hearing for a temporary injunction shall have been begun before the expiration of the said five days the restraining order may in the court's discretion be continued until a decision is reached upon the issuance of the temporary injunction.

(5) No temporary restraining order or temporary injunction shall be issued except on condition that complainant shall first file an undertaking with adequate security sufficient to recompense those enjoined for any loss, expense, or damage caused by the improvident or erroneous issuance of such order or injunction, including all reasonable costs (together with a reasonable attorney's fee) and expense against the order or against the granting of any injunctive relief sought in the same proceeding and subsequently denied by the court.

(6) The undertaking herein mentioned shall be understood to signify an agreement entered into by the complainant and the surety upon which a decree may be rendered in the same suit or proceeding against said complainant and surety, the said complainant and surety submitting themselves to the jurisdiction of the court for that purpose. But nothing herein contained shall deprive any party having a claim or cause of action under or upon such undertaking from electing to pursue his ordinary remedy by suit at law or in equity.

SEC. 268.24. *Clean hands doctrine.*—No restraining order or injunctive relief shall be granted to any complainant who has failed to comply with any legal obligation which is involved in the labor dispute in question, or who has failed to make every reasonable effort to settle such dispute either by negotiation or with the aid of any available machinery of governmental mediation or voluntary arbitration, but nothing herein contained shall be deemed to require the court to await the action of any such tribunal if irreparable injury is threatened.

SEC. 268.25. *Injunctions: Contents.*—Except as provided in section 268.23, no restraining order or temporary or permanent injunction shall be granted in a case involving or growing out of a labor dispute, except on the basis of findings of fact made and filed by the court in the record of the case prior to the issuance of such restraining order or injunction; and every restraining order or injunction granted in a case involving or growing out of a labor dispute shall include only a prohibition of such specific act or acts as may be expressly complained of in the bill of complaint or petition filed in such case and expressly included in said findings of fact made and filed by the court as provided herein; and shall be binding only upon the parties to the suit, their agents, servants, employees, and attorneys, or those in active concert and participation with them, and who shall by personal service or otherwise have received actual notice of the same.

SEC. 268.26. *Injunctions: Appeals.*—Whenever any court or judge or judges thereof shall issue or deny any temporary injunction in a case involving or growing out of a labor dispute, the court shall, upon the request of any party to the proceedings, and on his filing the usual bond for costs, forthwith certify the entire record of the case, including a transcript of the evidence taken, to the appropriate appellate court for its review. Upon the filing of such record in the appropriate appellate court the appeal shall be heard with the greatest possible expedition, giving the proceeding precedence over all other matters except older matters of the same character.

SEC. 268.27 *Contempt cases.*—In all cases where a person shall be charged with civil or criminal contempt for violation of a restraining order or injunction issued by a court or judge or judges thereof, the accused shall enjoy:

(1) The rights as to admission to bail that are accorded to persons accused of crime.

(2) The right to be notified of the accusation and a reasonable time to make a defense, provided the alleged contempt is not committed in the immediate view or presence of the court.

(3) Upon demand, the right to a speedy and public trial by an impartial jury of the county wherein the contempt shall have been committed, provided that this requirement shall not be construed to apply to contempts committed in the presence of the court or so near thereto as to interfere directly with the administration of justice or to apply to the misbehavior, misconduct, or disobedience of any officer of the court in respect to the writs, orders, or process of the court. All contempt proceedings, whether civil or criminal, brought for the alleged violation of any such restraining order or injunction, are, and hereby are declared to be independent, original, special proceedings, and shall require a unanimous finding of the jury.

(4) The right to file with the court a demand for the retirement of the judge sitting in the proceeding, upon an affidavit of prejudice being filed as is now provided by law in other cases. Upon the filing of any such affidavit, the judge shall thereupon proceed no further, but another judge shall be designated as is now provided for in other cases. The affidavit shall be filed prior to the hearing in the contempt proceeding.

SEC. 268.28. *Punishment for contempt.*—Punishment for a contempt, specified in section 268.27, may be by fine, not exceeding \$25, or by imprisonment not exceeding 10 days, in the jail of the county where the court is sitting, or both, in the discretion of the court. Where a person is committed to jail for the non-payment of such a fine he must be discharged at the expiration of 15 days; but where he is also committed for a definite time, the 15 days must be computed from the expiration of the definite time.

SEC. 268.29. *Definitions.*—(1) A case shall be held to involve or to grow out of a labor dispute when the case involves persons who are engaged in a single industry, trade, craft, or occupation; or who are employees of one employer; or who are members of the same or an affiliated organization of employers or employees; whether such dispute is (1) between one or more employers or associations of employers and one or more employees or associations of employees; (2) between one or more employers or associations of employers and one or more employees or associations of employers; or (3) between one or more employees or associations of employees and one or more employees or associations of employees; or when the case involves any conflicting or competing interests in a "labor dispute" (as defined in subsec. (3) of "persons participating or interested" therein as defined in subsec. (2)).

(2) A person or association shall be held to be a person participating or interested in a labor dispute if relief is sought against him or it and if he or it is engaged in the industry, trade, craft, or occupation in which such dispute occurs, or is a member, officer, or agent of any association of employers or employees engaged in such industry, trade, craft, or occupation.

(3) The term "labor dispute" includes any controversy concerning terms or conditions of employment, or concerning the association or representation of persons in negotiating, fixing, maintaining, changing, or seeking to arrange terms or conditions of employment, or concerning employment relations, or any other controversy arising out of the respective interests of employer and employee, regardless of whether or not the disputants stand in the proximate relation of employer and employee.

# WORKMEN'S COMPENSATION

## Compensation for Infections

### New York

THE potential dangers of seemingly insignificant wounds are plainly pointed out in a recent bulletin prepared by the bureau of industrial hygiene of the New York State Department of Labor, entitled "Splinters, a cause of injuries."

The average person considers a splinter injury as of very minor importance. While this is true in many cases, there is no certainty that it may not result in the loss of a hand or an arm, or even cause death. The puncture or wound produced by a splinter can not be properly treated with antiseptics by the layman, and consequently there is great tendency to infection. This is shown by the fact that 82 per cent of compensated injuries from splinters in the State of New York are infected, while only 13 per cent of injuries from all causes become infected.

The problem is serious because such injuries are very common. In the New York City district alone about 35 splinter injuries are reported daily, making a total of 10,500 for a working year. A full 44 per cent of these involve infection, and 36 per cent show loss of time. During the fiscal year ending June 30, 1929, seven deaths occurred from splinter injuries in New York State, and the compensation cost amounted to more than \$350,000.

Records of compensated splinter injuries for the two years ending June 30, 1929, are shown in the following table:

TABLE 1.—COMPENSATED SPLINTER INJURIES IN STATE OF NEW YORK, JULY 1, 1927, TO JUNE 30, 1929

Splinters	1927-28					1928-29			
	Number of cases closed	Infected cases		Noninfected cases		Number of cases closed	Fatalities	Number of weeks lost	Amount of compensation
		Per cent of total	Cost per case	Per cent of total	Cost per case				
Wood.....	1,140	80	\$231	20	\$47	1,207	6	17,669	\$263,144
Metal.....	426	85	251	14	4	527	1	5,539	89,786
Total.....	1,566					1,734	7	23,208	352,930

The columns for 1927-28 show that 95 per cent of the cost in wood-splinter injuries and 99.7 per cent of the cost in metal-splinter injuries was for infected cases.

Part of the bulletin is devoted to an analysis of outstanding cases, and to prevention of splinter accidents.



## Wisconsin

BULLETIN No. 32 of Wisconsin Labor Statistics, published by the Industrial Commission of Wisconsin February 10, 1931, also deals with infections, but from all causes, and contains detailed statistics on the subject.

That infections increase the medical cost is plainly shown by a comparison of infected and noninfected cases with similar disability periods, reproduced from the bulletin.

TABLE 2.—COST PER CASE IN INFECTED AND NONINFECTED INJURIES IN WISCONSIN

Length of disability	Average cost per case	
	Noninfected cases	Infected cases
1 to 2 weeks.....	\$18.28	\$19.86
2 to 3 weeks.....	24.92	29.29
3 to 4 weeks.....	33.97	45.38
4 to 5 weeks.....	43.93	60.60
5 to 6 weeks.....	56.98	90.28

It is shown that 8 per cent of all compensated injuries in the State in 1929 involved infection. Splinters are not mentioned specifically, but the figures prove that 32.9 per cent of the 22,630 compensation cases settled in 1929 were injuries to hands and fingers, and that 17.4 per cent of these were infected cases. The hand and finger injuries, of course, also include amputations, bruises, cuts, fractures, etc.

The existence of infection in compensated-injury cases in Wisconsin during 1928 and 1929, by degree of disability, is shown in the following table:

TABLE 3.—PROPORTION OF INFECTION IN COMPENSATED INJURIES IN WISCONSIN, 1928 AND 1929

Degree of disability	1928			1929		
	Number of cases closed	Number of cases infected	Per cent of cases infected	Number of cases closed	Number of cases infected	Per cent of cases infected
Fatal.....	229	0	0	241	1	0.4
Permanent total disability.....	3	0	0	3	0	0.0
Permanent partial disability.....	1,947	26	1.3	2,237	74	3.3
Temporary disability.....	19,639	1,712	8.7	20,143	1,732	8.6
Total.....	21,818	1,738	8.0	22,630	1,807	8.0

## Recent Workmen's Compensation Reports

## Connecticut

THE tenth report of the Board of Compensation Commissioners of Connecticut, covering the 2-year period from November 1, 1928, to November 1, 1930, summarizes briefly the experience under the workmen's compensation act of the State. Detailed statistics are not

available, as the commissioners have no facilities for collecting and publishing them.

Reports were received of 56,123 accidents during the two years, while the number reported during the previous biennium was 64,343, a reduction of 8,220 accidents. This decrease, it is stated, probably means that fewer workers were employed during 1929 and 1930, so that there was less exposure to hazards, and also that in many cases reports were made only of accidents causing disability for more than the waiting period of seven days or involving specific payments, although the law provides that reports shall be made of all accidents resulting in disability of one day or more. While accidents as a whole show a decrease, an increase appears in fatal accidents, which totaled 238 during the two years, as compared with 225 for the previous 2-year period.

Direct-compensation payments to injured workers or their dependents during the period covered by the report amounted to \$3,902,962.60 for insurance companies and \$666,741.82 for self-insurers, while payments for surgical, medical, and hospital services amounted to \$2,783,512.53 for insurance companies and \$699,437.83 for self-insurers, making a total of \$8,052,654.78, as compared with \$7,306,732.90 for the previous 2-year period.

#### Montana

THE fifteenth annual report of the Industrial Accident Board of Montana covers the administration of the workmen's compensation act and the activities of the bureau of safety and the bureau of civilian rehabilitation for the fiscal year ending June 30, 1930.

Information relating to the number of accidents, classified by degree of disability, with amount of compensation and medical benefits paid under each of the three insurance plans permitted in the State, is summarized in the following table:

EXPERIENCE UNDER WORKMEN'S COMPENSATION ACT OF MONTANA, JULY 1, 1929, TO JUNE 30, 1930

Item	Self-insurers	Insurance companies	State fund	All plans
Number of employers.....	53	1,691	1,847	3,591
Number of employees.....	23,291	16,268	19,648	59,207
Number of accidents resulting in—				
Death.....	56	13	25	94
Permanent total disability.....	2	0	1	3
Permanent partial disability.....	58	19	36	113
Temporary disability over 14 days.....	1,412	609	1,093	3,114
Temporary disability less than 14 days.....	1,311	2,061	2,199	5,571
Total.....	2,839	2,702	3,354	8,895
Amount disbursed for—				
Funeral expense.....	\$6,786.00	\$1,050.00	\$6,200.00	\$14,036.00
Medical expense.....	9,004.60	59,514.26	94,687.48	163,206.34
Fatal accidents.....	147,465.92	28,971.80	87,797.15	264,234.87
Permanent total disability accidents.....	2,932.00	816.00	31,083.37	34,831.37
Permanent partial disability accidents.....	39,911.73	10,634.74	85,435.14	135,981.61
Temporary disability accidents.....	344,260.24	81,592.14	135,708.84	561,561.22
Total.....	550,360.49	182,578.94	440,911.98	1,173,851.41
Amount of lump-sum payments:				
Fatal cases.....	51,712.26	4,829.41	9,454.92	65,996.59
Nonfatal cases.....	82,730.46	28,532.97	35,566.83	146,830.26

# INSURANCE AND PENSIONS

## Civil Service Retirement and Disability Fund, 1930

THE annual report of the United States Bureau of Pensions for the year ending June 30, 1930, contains some data relating to the annuitants under the Federal retirement act and to the condition of the fund set up under its terms. At the end of the fiscal year 1929-30 there were 17,768 annuitants on the retirement roll, of whom 16,314 were male and 1,454 were female retirants. Grouped according to cause of retirement, 12,504 had left the service under the age provisions, 3,994 on account of disability, and 1,270 were cases of involuntary separation. The following statement shows the annuitants grouped according to the amount of annuity received, and also the amount of the average annuity.

	Number of annuitants
Under \$100.....	12
\$100 and under \$200.....	127
\$200 and under \$300.....	437
\$300 and under \$400.....	842
\$400 and under \$500.....	1, 643
\$500 and under \$600.....	1, 678
\$600 and under \$700.....	1, 735
\$700 and under \$800.....	2, 074
\$800 and under \$900.....	2, 672
\$900 and under \$999.96.....	1, 919
\$999.96 (maximum annuity).....	4, 629
Total.....	17, 768
Average annual annuity.....	\$759. 40

The annual value of the retirement roll at that date, found by multiplying the number of annuitants by the average annual rate, was \$13,492,984.

A statement of the receipts and expenditures of the fund for each of the 10 years since its formation shows the increase in the operations of the system. For the fiscal year 1920-21, the receipts from employees' contributions amounted to \$12,513,637, and the income from interest, profits, and miscellaneous items to \$72,753; in 1929-30, employees' contributions amounted to \$29,027,662, income from interest, profits, and miscellaneous items to \$5,899,257, and the amount paid in by the Federal Government, which had made its first contribution in 1928-29, was \$20,500,000. In 1920-21, disbursements on account of annuities were \$2,590,569, while in 1929-30 they were \$13,107,732. The balance in the fund at the close of the fiscal year 1920-21 was \$9,672,842, and on June 30, 1930, it was \$156,795,476.

### Mothers' Allowances in Ontario, Canada

THE tenth annual report of the Ontario Mothers' Allowance Commission, which has recently been issued, states that during the year 1929-30 there was a steady increase in its work. On October 31, 1930, the commission had under its care 5,626 families in which were 16,908 children, an increase of 924 over the number of children listed at the same date of the preceding year. The amount paid during the year to beneficiaries was \$2,394,088, against \$2,306,083 during 1928-29, an increase of \$88,005. The cost of administration was \$84,117, or 3.54 per cent of the amount expended.

The report calls attention to one of the problems which confront the commission in the case of thrifty families who have made some provision for the situation caused by the father's death. Under the law a mother's allowance can not be paid to an applicant who has over \$500 in liquid assets, but if a man has carried life insurance his widow is apt to have something over this limit. To meet this situation a plan has been worked out by which such insurance may be changed into a fixed asset, to be gradually retired by monthly payments to the family. These payments are then supplemented by an allowance under the act, so that the family has the assurance of a steady income over a term of years, its duration varying in accordance with the ages of the children.

This scheme is working out very well indeed, not only assuring a steady income while the children are young, but also in assuring men who see the value of carrying a fair amount of insurance that by so doing their families in the event of the death of the father are not debarred from participating in the benefits of an act provided for such a contingency, but on the other hand are assured that the family income is larger while the children are young, as a result of their making provision by carrying insurance.

---

### Old-Age and Invalidity Pensions for Salaried Employees in Luxemburg

A LAW was enacted in Luxemburg, dated January 29, 1931, which provides for the extension of the State system of old-age and invalidity insurance to salaried workers who were not provided for in the general law of 1925.<sup>1</sup>

Employees, in all types of private enterprise, who are under 55 years of age, are subject to compulsory insurance. The annual remuneration on which the pension is based includes beside the salary any additional payment or bonuses which the employee receives by reason of his principal occupation. If the annual remuneration, including such supplementary payments, is below 7,200 francs (\$200.16),<sup>2</sup> however, this amount will be considered the annual remuneration for the purpose of fixing the contributions.

The total contribution to the pension fund amounts to 10 per cent of the total annual remuneration of the insured person, 5 per cent being paid by the employer and 5 per cent by the employee. If the total annual earnings are less than 7,200 francs, however, the employee pays 5 per cent of his real earnings while the employer is

<sup>1</sup> Grand-Duchy of Luxemburg. Memorial, Mar. 21, 1931, containing pension law of Jan. 29, 1931

<sup>2</sup> Conversions into United States currency on basis of franc=2.78 cents.

required to pay 5 per cent of 7,200 francs plus the difference between the employee's contribution and 5 per cent of 7,200 francs. In other words, the total contribution must be at least 10 per cent of 7,200 francs.

The law provides for a pension beginning at age 66, a disability allowance in case of permanent invalidity or of temporary invalidity lasting more than three months, widows' and orphans' pensions, special death allowances, special payments to insured women, and preventive or curative medical treatment. No insured person is entitled to any of these benefits unless the contributions have been paid for 60 months.

The old-age and invalidity pensions consist of a uniform basic pension of 3,600 francs (\$100.08) increased by 14 per cent of the total contribution paid into the account of the insured and an additional payment for family charges, an allowance being paid for each child under 18 years of age who is in the legal charge of the pensioner. These allowances amount to 1,200 francs (\$33.36) per year for each child. An additional payment is made by the State to pensioners whose annual income, including the pension, does not exceed 15,000 francs (\$417). This supplementary payment amounts to 500 francs (\$13.90) for pensions not exceeding 5,000 francs (\$139) and 250 francs (\$6.95) for pensions between 5,000 and 8,000 francs. In no case may the total pension exceed the average of the five highest annual salary payments nor five-sixths of the highest annual earnings (including supplementary payments). The pension of the surviving husband or wife amounts to six-tenths of the pension which the insured person was receiving at the time of death, and the orphans' pension amounts to two-tenths of this sum, but if both parents are dead, to twice this amount. The total pensions of the survivors may not exceed the amount of the original pension.



## COOPERATION

### Business of Cooperative Oil Associations in North Central States in 1930

THE year 1930, according to the Cooperative Oil News (Minneapolis) for April, 1931, was "the most successful year in the amount of patronage dividends returned that the cooperative oil movement has ever experienced." The same publication is authority for the statement that "The cooperatives of Minnesota last year handled 6 per cent of the gasoline and 13 per cent of the kerosene sold in the State. In the localities where the cooperatives are located they enjoy, on the average, 32 per cent of the gasoline and 51 per cent of the kerosene business. The cooperatives handled 24,000,000 gallons of gasoline and over 6,000,000 gallons of kerosene and distillate."

The following table, compiled from figures given in the report, shows the sales and net gains on the 1930 business:

SALES AND NET GAINS OF 43 COOPERATIVE OIL ASSOCIATIONS IN 1930

State	Number of associations reporting	Paid-in share capital	Sales	Net gain on 1930 sales
Iowa.....	3	\$37,486	\$365,007	\$55,647
Minnesota.....	35	302,166	2,762,148	451,669
North Dakota.....	1	8,460	68,353	9,636
South Dakota.....	3	36,755	477,938	68,130
Wisconsin.....	1	7,420	77,821	13,074
Total.....	43	392,287	3,751,267	598,156

The 43 associations shown above were distributed, according to annual sales, as follows:

Less than \$25,000.....	Number 1
\$25,000 and under \$50,000.....	12
\$50,000 and under \$100,000.....	19
\$100,000 and under \$200,000.....	8
\$200,000 and over.....	3
Total.....	43

Figured on the basis of capital, the profits ranged from 43 to 319 per cent, and averaged 152 per cent. Figured on the basis of sales, they ranged from 8.1 to 24.3 per cent, averaging 15.9 per cent.

## Unusual Forms of Cooperative Societies

**A**N INTERESTING account of some unusual types of consumers' cooperative societies is given in the April, 1931, issue of *Cooperation* (New York). Although these societies deviate considerably from the accepted cooperative principles, "all are emphatic in thinking that their own organizations are the soundest and most truly cooperative and that others are something less than 100 per cent adherents to the democratic ideal."

A group of societies in the anthracite coal region of eastern Pennsylvania is described as follows:

They open their stores only after 5 o'clock in the afternoon or perhaps noon on Saturdays or holidays. Signs prominently displayed over the door forbid any but members to enter; trade is exclusively within the membership. No wages are paid; the storekeepers work in the mines during the day and sell merchandise in the evening. There is no manager; only a management committee of the board. Every member must take his turn at keeping store, and each serves in that capacity for one week only. No cash is handled in the store itself; all sales are on the member's book, and every two weeks he must come to the treasurer and settle up for his purchases. Members out of work may get credit up to 75 per cent of their paid-in capital. Every member must trade at the cooperative exclusively and anyone caught trading at another store may be expelled from the organization. Monthly dues must be paid by all members; these dues are as high as \$3 in some stores, \$2 in others, still smaller amounts in others.

In one society, applicants for membership are voted upon at the general membership meeting by secret ballot with black and white balls, and as many as three black balls will bar the applicant from membership.

The initial payment for a share of stock varies in these societies from \$25 to as high as \$55. However, instead of following the cooperative practice of keeping the shares always at par, in these organizations the value of the share varies with the net worth of the business. As a result, in one society the shares are reported to be valued at \$588, and in several others at about \$200. The article points out that this practice "discourages the enlistment of new members and a few of the leaders begin to realize it." One society in New Jersey, which followed this practice at first, discontinued the practice in order to expand. It still sells only to members, but its membership has increased to more than 600.

A few of these societies pay dividends on stock instead of on purchases, but this practice is frowned upon by most of the others, "most of which refuse to pay even a low interest on capital."

The article concludes as follows:

Democratic these organizations certainly are, for they are looked upon by their members even more as social clubs than as business firms, and the back room of each store is crowded to capacity every evening and all day Sunday. Many of them are extremely successful financially, as a cooperative should be which has no wages to pay, which has a regular income of large monthly dues from each member, and which can enforce trading loyalty. According to the standards of business efficiency of most of the larger societies of other nationality groups in this country, these are extremely primitive and unbusinesslike.

On January 18 the first general conference of Italian cooperatives took place in Union City, N. J., with representatives in attendance from Massachusetts, Connecticut, New York, New Jersey, and Pennsylvania. If this is followed up by other similar conferences, as delegates promise, these sharp differences in form of organization will gradually be eliminated and all will come round to following one standard which will doubtless closely approximate that of Rochdale.

### Development of Consumers' Cooperative Movement in Germany, 1930

THE 1931 yearbook of the Central Union of German Consumers' Societies gives detailed statistics regarding the development of consumers' cooperation in that country.<sup>1</sup>

The table following shows the number of societies of each type in certain specified years. As it shows, the credit societies and the housing societies have made consistent gains in numbers. The number of consumers' societies has decreased, but this has been due to the amalgamations between societies.

TABLE 1.—NUMBER OF COOPERATIVE SOCIETIES REGISTERED ON JANUARY 1 OF SPECIFIED YEARS

Type of society	Number of societies, Jan. 1—			
	1914	1919	1924	1930
Credit societies.....	19,203	20,199	21,602	21,947
Societies dealing in raw materials:				
Industrial societies.....	436	1,353	2,121	1,701
Agricultural societies.....	2,429	2,935	4,701	4,144
Societies for purchase of merchandise.....	317	648	1,344	1,061
Establishment societies:				
Industrial.....	348	339	341	242
Agricultural.....	1,909	2,404	7,134	7,366
Societies for purchase of machinery and tools.....	17	13	19	41
Warehousing societies:				
Industrial.....	123	128	135	96
Agricultural.....	512	637	974	1,311
Raw materials and warehousing societies:				
Industrial.....	154	233	276	68
Agricultural.....	24	40	45	44
Workers' productive societies:				
Industrial.....	428	1,106	1,060	793
Agricultural.....	4,001	4,094	4,117	5,357
Stock breeding and grazing societies.....	486	588	952	999
Consumers' societies.....	2,340	2,313	2,408	2,080
Housing societies.....	1,346	1,485	3,795	4,358
Other building societies.....	128	135	228	336
Other types of societies.....	378	406	1,074	909
Total.....	34,579	39,056	52,326	52,853

Table 2 shows the membership and sales of the consumers' societies affiliated to the Central Union of Consumers' Societies and of the Cooperative Wholesale Society (G. E. G.) in 1929 and 1930.

TABLE 2.—MEMBERSHIP AND SALES OF GERMAN CONSUMERS' SOCIETIES AND COOPERATIVE WHOLESALE SOCIETY, 1930

[Conversions into United States currency on basis of mark=23.8 cents]

Society and year	Number of societies	Number of members	Amount of business		Number of persons employed
			German currency	United States currency	
Consumers' societies affiliated to Central Union:			<i>Marks</i>		
1929.....	988	2,859,516	1,176,294,809	\$279,958,165	55,597
1930.....	974	2,940,308	1,240,327,868	295,198,033	57,463
Cooperative Wholesale Society:					
1929.....		<sup>a</sup> 885	501,378,122	119,327,993	( <sup>b</sup> )
1930.....		<sup>a</sup> 909	495,257,404	117,871,262	7,165

<sup>a</sup> Affiliated societies.

<sup>b</sup> No data.

<sup>1</sup> Zentralverband Deutscher Konsumvereine. Jahrbuch, 1931. Erster Teil. Hamburg, 1931.

### Fishermen's Cooperative Associations in Spain

THE "pósitos" of the Spanish fishermen have attained a remarkable development. These are cooperative associations which, organized primarily to prevent the exploitation of the fishermen by the private dealers and to secure favorable prices for the catch, have developed into organizations which touch the lives of the members at almost every point.

An account of these societies is given in *Cooperative Information*.<sup>1</sup>

According to that account a great development has taken place in this phase of cooperative effort since 1918. In that year there were 30 such societies. By 1922 the number had risen to 57 and these had in membership some 12,000 fishermen. In 1929 there were 170 such associations, with a membership of 37,750. As there are some 150,000 fishermen in Spain, it is seen that more than one-fourth of the total belong to the pósitos.

The associations have a combined capital of 1,926,159 pesetas<sup>2</sup> (\$283,145) and own 116 buildings, worth 2,747,551 pesetas (\$403,890) and other property valued at 294,445 pesetas (\$43,283). This does not include the value of the 53 vessels collectively owned, which is placed at 377,261 pesetas (55,457).

The societies have recently organized a national body, the Confederacion Nacional de Pósitos Maritimos. A number of different sections have been organized in this body to deal with the various activities of the affiliated societies—the purchase of household and fishing supplies, the marketing of the catch, the credit and savings funds, mutual aid, accident insurance, employment, unemployment insurance, education, etc.

During the period 1924–1929 the marketing sections sold fish to the value of 35,317,372 pesetas (\$5,191,654) on which the net profit amounted to 1,835,198 pesetas (\$269,774).

Among the most interesting activities are the mutual aid and insurance. The mutual aid section had 24,078 members in 1929. These pay sick and death benefits and provide medical care and medical attendance. During the 5-year period, 1924–1929, the benefits paid amounted to 1,020,326 pesetas (\$149,988). The insurance sections pay benefits for the death of fishermen who die in shipwrecks. Each member fisherman is assessed 0.05 peseta (0.7 cent) for each death. During 1924–1929 the sum of 24,625 pesetas (\$3,620) was paid for 204 cases of shipwreck. The unemployment insurance sections pay benefits for time lost from fishing because of weather or unfavorable conditions.

Some of the societies have funds from which small loans are granted to members, at 3 per cent interest, on the security of the borrower's vessels, nets, and gear. Other societies have employment agencies which endeavor to find work for the members.

Several pósitos have constructed clubhouses where the fishermen may spend their spare time while ashore, the object being "to provide the fishermen with facilities for educational improvement, while at the same time offering means of rest and recreation." These clubs, or "homes," it is said, are springing up all along the coast.

<sup>1</sup> International Labor Office. *Cooperative Information*, Geneva, No. 2 (115), 1931.

<sup>2</sup> Conversions into United States currency on basis of average exchange rate for 1929=14.7 cents.

Other activities of these societies include the joint purchase of household supplies, fishing tackle and supplies; the holding of courses to train the members in questions relating to the fishing trade; and the children's sections which give general and vocational courses, train the children along artistic lines, and instill cooperative principles.

As an "example of how and to what extent institutions of this kind can transform the conditions of life and work," the *pósito* of the fishermen of the port of La Silva is described, as follows;

An extremely well-organized cooperative society has made it possible to distribute articles of household consumption to all the inhabitants of the locality. A mutual aid system for granting medical attendance and drugs has been established, and there is insurance against invalidity, old age, and death. The "*pósito*" has its own building, shops, school, etc., and it is proposing to buy the local theater, café, and center of recreation, so that before long this association of modest fishermen, who formerly lived in wretched circumstances, exploited by a whole network of middlemen, will have in its hands the whole life of the locality. The surpluses obtained by its various sections will be used for social institutions and the improvement of the various forms of pension, as also for promoting the education of members and the public in general.

In 1919 a Government agency was set up, the Marine Social Institute, charged with the duty of promoting the formation of the *pósitos* and of assisting them in their various activities. It is empowered also to make grants and loans to the societies and to the various sections. To this institute is due much of the credit for the development of the *pósitos*.



# RECREATION

## Community Recreation in the United States in 1930

THERE was a steady growth in the public recreation movement during 1930, according to the annual report<sup>1</sup> of the National Recreation Association for that year. The number of cities reporting recreation facilities and programs increased from 945 in 1929 to 980 in 1930, and the number of workers employed as leaders of community recreation activities reported by 828 cities was 24,949, or 2,029 more than were reported for the previous year. Nearly half of the reported recreation leaders were men, this being the first time that the number of men had approximated the number of women employed for recreation service. Increasing emphasis is being placed upon the training of employed recreation workers, 170 cities reporting training classes in which a total of 11,534 workers were enrolled, while in 160 cities 6,495 volunteer workers received instruction. Full-time year-round workers, as reported by 282 cities, numbered 2,660. The salaries and wages of leaders, as reported by 736 cities, amounted to \$8,135,656.20 and the total expenditures for recreation purposes for all the cities and communities was approximately \$38,520,000.

A total of 13,354 separate play areas and centers under leadership was reported, of which 791 were opened in 1930 for the first time. The recreation facilities provided, for the cities furnishing information, include 7,677 outdoor playgrounds, 2,066 indoor recreation centers, and 642 recreation buildings, part of these facilities being provided for colored residents. The total yearly or seasonal attendance of participants and spectators at outdoor playgrounds as reported by 573 cities was 206,816,987, while the attendance at indoor recreation centers in 146 cities was 14,018,147. These figures do not include the millions of persons using the athletic fields, bathing beaches and swimming pools, golf courses, summer camps, and other recreation areas.

The present report brings out the increasing importance of organized league activities. Thus, there were 9,488 leagues, including 73,917 teams engaged in playing baseball, basket ball, bowling, football, soccer, tennis, field hockey, and other games. These teams included 1,603,427 players, who played altogether considerably more than a million games. In addition to sports and games, the special activities carried out by the recreation departments cover practically all artistic and social fields and the report for this year indicates that music and the drama are receiving increasing recognition as important factors in the community recreation program.

The administration of the recreation program in the majority of cities is carried out by various municipal commissions, boards, or departments, and in a number of cities municipal and private authorities unite in the management of recreation activities and facilities,

<sup>1</sup> Recreation (New York), June, 1931, pp. 114-127.

while a comparatively small number are maintained by private agencies alone. The source of support of the recreational activities, in addition to receipts from the operation of these facilities, was the municipal funds in the majority of cases. More than 85 per cent of the money spent for which the source was reported was derived from municipal, county, or other public bodies, about 11 per cent came from fees and charges, and only a little more than 4 per cent was secured from private sources. In 52 cities land was donated by the city during the year for recreation use, the estimated value of 48 of these donated areas being equal to more than \$1,550,000.

# LABOR AGREEMENTS, AWARDS, AND DECISIONS

---

## Agreements

### Mine Workers—Pittsburgh

**T**HE Pittsburgh Terminal Coal Corporation and District No. 5 of the United Mine Workers of America entered into an agreement effective from June 23, 1931, to June 30, 1932.

The agreement, affecting 2,465 mine workers in six mines of the Pittsburgh Terminal Coal Corporation, provides for full recognition of the United Mine Workers of America, recognizes the right of the employees to elect by ballot one of their number to act in the capacity of checkweighman at each of the mines, and establishes the check-off of union dues and assessments. It reestablishes the basic 8-hour day with recognition of the right of the coal company to work transportation and tippie men nine hours, with pay for the extra hour, in case of emergency.

The pick rate is increased from 55 cents to 60 cents per ton, based on a net ton of 2,000 pounds. A rate of \$4.50 per day is established for inside motormen, drivers, cagers and snappers, of \$4.25 for trackmen and masons, with a minimum of \$4 per day for other inside day labor, and a uniform payment at the mines for yardage and dead work.

The agreement provides also for periodic discussions at 90-day intervals between representatives of the United Mine Workers of America and the Pittsburgh Terminal Coal Corporation, as follows:

As this wage agreement is made by and between the United Mine Workers of America and the Pittsburgh Terminal Coal Corporation in a spirit of constructive cooperation for the purpose of stabilizing the mining industry of Pennsylvania, it is agreed that the representatives of the Pittsburgh Terminal Coal Corporation and the United Mine Workers of America shall meet 90 days from the date of the beginning of this agreement and each 90 days thereafter, for the purpose of considering possible changes in the wage scale.

---

### Joint Agreement of Bricklayers', Carpenters', and Electrical Workers' Unions

A TRI-PARTY agreement bringing together three international unions in the building industry was entered into on May 7, 1931, by the Bricklayers, Masons, and Plasterers' International Union of America, the United Brotherhood of Carpenters and Joiners of America, and the International Brotherhood of Electrical Workers. The agreement covers the conditions under which stoppage of work may occur and points to employment of members of the allied organizations as the prime object of this agreement.

The agreement in full is as follows:

First: We agree to a general alliance whereby through cooperation a condition will be established calling for the employment on any operation of those workmen

who are in good standing in the Bricklayers, Masons, and Plasterers' International Union of America, the United Brotherhood of Carpenters and Joiners of America, and the International Brotherhood of Electrical Workers. It shall be understood that any grievance against any operation that may require cooperative action shall be referred to the international presidents for action under the following conditions:

Second: That in all movements no subordinate union of either international union shall be permitted to take any local action whatsoever until the question requiring joint action shall have first been submitted to and determined upon by the presidents of the Bricklayers, Masons, and Plasterers' International Union of America, the United Brotherhood of Carpenters and Joiners of America, and the International Brotherhood of Electrical Workers.

Third: No movement of any character shall be countenanced in cases where such would be in violation of existing agreements that have been submitted to and duly approved by the presidents of the international unions as is required by the constitutional laws thereof.

---

## Decisions

### Motion-Picture-Machine Operators—Denver

ON JUNE 13, 1931, the manager of two motion-picture theaters filed the following notice with the Industrial Commission of Colorado, and also posted copy of such notice for the information of his employees:

Notice is hereby given that effective on or before 30 days from date we will employ only one operator on each shift in the booth of this theater, instead of employing two operators as in the past. Please take notice and govern yourselves accordingly.

The union filed a protest against the change in working conditions as proposed by the employer.

At the hearing on June 22, 1931, the employer contended that one man was sufficient in the booth and it was unnecessary to employ two operators to do the kind of work required. He also said he had no contract or arrangement of any kind to keep two men employed in the booths. The union contended that two operators were necessary in each booth if the kind of work required was to be done in an efficient and satisfactory manner. The union stated that a contract had been made between the managers' association and the union which required two operators in booths, such contract to remain in force until September 1, 1931. The employees stated that they had a verbal agreement or understanding with the manager of the two theaters concerned, that he would operate these two theaters on the same terms as the managers' association was operating its theaters, and keep two operators in each booth.

On June 23, 1931, the Industrial Commission of Colorado rendered the following opinion and decision:

It is the opinion of the commission that the preponderance of the evidence at this hearing confirms the statement of the union that there was a verbal agreement or understanding between the above-named manager and the union that two men should be employed in each booth until September 1, 1931. It seems to us it would be a mistake at this time when there are so many men out of employment in this city to reduce the number of men now employed.

Now, therefore, it is the decision of this commission that said employer shall not make the change suggested by him but shall continue his operations under the present conditions and keep two operators in each booth, in accordance with the verbal agreement or understanding that appears to have been made between said employer and said union.

# WORKERS' EDUCATION AND TRAINING

## Vocational Adjustment of the Deafened in Several States

**B**RIEF reports on the vocational rehabilitation of deafened persons in California, Nebraska, New York, and Rhode Island are published in the Rehabilitation Review of February, 1931.

The California State Bureau of Vocational Rehabilitation has trained the deafened and adjusted the deafened without training to the following occupations: Accountant, auto-body and fender worker, beauty operator, bookkeeper, bookkeeping-machine operator, candy maker, chocolate dipper, cleaner and dry spotter, comptometer operator, embroidery-machine operator, engraver, laboratory technician, linotype operator, machinist, mechanical dentist, photoretoucher, plasterer, poultry raiser, power-machine operator, pressman, printer, show-card writer, sign painter, typist, upholsterer, and watchmaker and jeweler.

Training for these lines of work was given, for the most part, in technical or commercial schools. A few persons, however, were rehabilitated through training on the job. Among the occupations for which they were so trained were printer, upholsterer, and auto-body and fender worker.

The ages of these handicapped people adjusted to employment ranged from 16 to 52.

Mr. J. R. Jewell of Nebraska says, "We consider lip reading to be very helpful in the rehabilitation of most cases and absolutely essential to persons who go into lines of work where they are required to meet the public or otherwise enter into much conversation." He also emphasizes the need for a large number of competent teachers, and urges that the universities in the United States introduce lip-reading courses for adults as well as courses to train instructors in this art.

Of 34 deafened persons, 25 were given courses in lip reading. Of the 34 cases, 23 were closed as rehabilitated, these persons having definitely demonstrated their wage-earning ability. Of the 23 persons rehabilitated, 20 were in the group which had taken lip-reading instruction. The average earnings of the 23 persons was about \$1,184.35 per annum, or approximately \$22.75 per week.

At a recent meeting held in New York the following occupations were considered suitable, from a group viewpoint, to the deafened: Auto air-brush painting, baking, cleaning, dyeing and pressing, jewelry manufacture, multigraphing, nickel plating, paperhanging and decorating, pastry cooking, power-machine operating, salad making, show-card writing, tile setting, and upholstery.

According to a Rhode Island report, a group of persons who had lost their hearing were instructed in lip reading with such success as



to warrant, usually, the return of these pupils to their former occupations.<sup>1</sup>

To illustrate how those engaged in the rehabilitation of the deafened analyze possible jobs for their clients, the author presents some comments of a member of the New York League for the Hard of Hearing:

In baking a great deal would depend upon how deaf the worker is. The majority of employers feel that it is hazardous to have deaf people where there are fires.

Cleaning, dyeing, and pressing are not suitable lines of work for those who have middle ear (catarrhal) deafness, as the fumes may aggravate this affliction. Persons who have perceptive or nerve deafness may adjust themselves to such work.

Jewelry manufacture, tile setting, and show card writing are very good work. Multigraphing is all right except in some cases of nerve deafness when the worker may be affected by the noise of the machinery. Nickel plating is good work. Upholstery is good but placement is exceedingly difficult. Auto air-brush painting is good in nerve deafness cases and in total obstructive deafness where there is no hearing to lose.

Paper hanging and decorating offer an opportunity for those who have lost their hearing, provided they have no labyrinthian trouble which would occasion a loss of equilibrium and increase the hazards of ladders and scaffolds.

Persons with obstructive or catarrhal deafness can be utilized for power-machine operating, but such an occupation is not good for those with nerve deafness. While the deafened are capable of becoming pastry cooks and salad girls, their placement in such positions is exceedingly difficult.

The writer also calls attention to the opposition of some persons, who have worked many years with the deafened, to the compilation of lists of occupations in which those so handicapped might hope to compete satisfactorily with workers having normal hearing. "The possibility of satisfactory adjustment to occupation is one of individual characteristics. In the light of such individual characteristics a group of occupations might be developed and elimination take place as certain occupations were found to contain conditions unsatisfactory or not best adapted to the particular person with due consideration to his type and extent of deafness. In setting forth then what the various States have accomplished it must be emphasized that the choice of job was arrived at only after careful deliberation and consideration of the individual for whom the employment was being planned."

Despite the incompleteness of this survey it gives some important indications concerning this group of handicapped persons, namely: That the diagnosis of a deafened case is only a preliminary to a plan to lessen the disability; that those who would aid a deafened person must approach the problem with understanding and sympathy in order to get at his real personality; that lip reading opens up to a large extent that world from which the person has been debarred by deafness; that in almost any work he can make greater progress by mastering lip reading; and that the selection of the occupation for which he is to be trained must be in harmony with his natural characteristics, interest, and ambition if the handicap is to be reduced to a minimum.

<sup>1</sup> For article on training and placement of the deaf in Minnesota, 1929-30, see *Labor Review*, Washington, May, 1931, pp. 77-80.

## Governmental Training and Placement of Unemployed in England

THE annual report of the British Ministry of Labor for 1930<sup>1</sup> contains a survey of the work done during the year in training, transferring, and placing such of the unemployed as could be taken care of by the Government's organized plans. The regular work of the employment exchanges was pushed vigorously, and in spite of the increase in unemployment the number placed through them rose to the highest point it has yet reached. The following figures show the number of vacancies reported to the exchanges and the number of workers placed in employment since 1921.

### VACANCIES REPORTED TO AND FILLED BY BRITISH EMPLOYMENT EXCHANGES

Year	Vacancies reported	Vacancies filled	Year	Vacancies reported	Vacancies filled
1922	839,633	697,036	1927	1,436,052	1,252,707
1923	1,056,970	893,713	1928	1,510,511	1,327,306
1924	1,345,394	1,143,742	1929	1,781,272	1,556,271
1925	1,480,820	1,279,292	1930	1,931,480	1,732,144
1926	1,246,967	1,082,917			

The figures of placing for 1930 show a total increase of 175,873 over those for 1929, which were themselves higher than for any previous year. It will be remembered that, except in the case of certain classes of relief-work vacancies, the exchanges have no means, other than satisfying their clients, of inducing employers to make use of them. The steady annual increase in the number of vacancies filled since 1922 (excepting only 1926, when progress was checked by industrial disputes) goes to show that employers are each year realizing more clearly that it is worth their while to obtain the labor they require through the employment exchange service.

### Training for Overseas Migration

THIS line of work received a setback owing to the increasing unwillingness of the dominions to receive migrants, no matter how well trained. In 1929 the Australian Government decided to suspend assisted migration of young men, so in 1930 none were trained for Australia. In the fall of 1929 the Canadian Government had made a request for 3,000 trained men to sail during 1930. Industrial and other difficulties developed in Canada, and its Government finally decided it would have to cut down the number of immigrants permitted, so that admission to training was stopped before the 3,000 had been taken on, and 186 of those who had completed their training had to be refused sailing papers.

The work of the overseas training centers is thus summarized:

Applied for training	6,341
Interviewed by Dominion representatives	4,561
Accepted by dominion representatives	1,820
Rejected by dominion representatives	2,741
Entered training centers	1,592
Satisfactorily completed training	1,138
Failed to embark	24
Sailed for Canada	928
Completed training but not permitted to sail	186

<sup>1</sup> Great Britain. Ministry of Labor. Report for year 1930. London, 1931. (Cmd. 3859.)

### Training Centers for Employment in England

THESE centers are maintained for the purpose of training unemployed men in specific trades in which there seems a prospect of placing them. Originally only unskilled men were eligible for admission, but later, skilled miners were admitted since it seemed probable that the contraction in the number employed in that trade would be permanent and that even skilled men might have no chance of reabsorption in it. During 1929 a similar exception was made, for the same reason, in the case of skilled workers in the cotton-textile industry. The benefits of the plan as a means of transferring labor from places and trades where there is a surplus to others where there is a lack are evident. Another advantage, not so immediately evident, is the opportunity it presents for dealing with young men who, having reached the end of blind-alley occupations, would be obliged to take their chance as unskilled laborers were it not for the training offered in these centers. The number admitted for training during 1930 was 8,608.

### Transfer Instructional Centers

WHEN the attempt was made to transfer from the depressed districts to other areas men who had been long unemployed it was found that they were often both physically and mentally unfit for normal employment, and instructional centers were instituted at which they might be retrained for work and built up physically. At present there are 10 of these, offering accommodations for 1,880 men at a time. Since the training course averages about 10 weeks the centers can deal with approximately 9,000 men in the course of a year. About 25 per cent of those admitted, it has been found, give up their training or prove unsuitable and have to be discharged.

### Industrial Transference

THE schemes for this work suffered as a result of the increased depression, which cut down opportunities for employment in the more prosperous regions as well as in the conspicuously depressed areas. Nevertheless, it was found possible to transfer some 30,000 men from the areas of greatest unemployment and place them either on State-aided schemes or in private employment.

### Home Training Centers for Women

THESE are maintained by the central committee on women's training and employment, and form the major part of its activities.

During the year 37 nonresidential centers were in operation, in which accommodation was provided for the training of about 4,000 women and girls in the course of a year. At December 27th the numbers in training at nonresidential home centers were as follows: Under 16 years, 113; 16 to 18, 500; 18 to 21, 242; 21 and over, 147; total, 1,002.

The instruction given in these centers is mainly in cookery, housework, laundry work, and needlework. Courses last for three months, and reports from employers indicate that the workers who complete the training are found satisfactory. Not all who are admitted carry through the course, and of those who do a certain proportion fail to become proficient in so short a time. Inquiries made within two months of the termination of training showed that about 80 per cent of those placed in employment were settling down satisfactorily.

During 1930 a residential training center was established with accommodations for 40 trainees at a time. This form of training has several advantages.

The trainees can obtain more practice in the routine work of a house than is possible in a nonresidential institution, and, moreover, they become accustomed to living away from home and learn to accommodate themselves to new conditions. Consequently, they suffer less from homesickness when they enter their first place.

The percentage placed is very high, as, except in isolated cases where illness or some other cause makes the taking up of employment impossible, all the trainees go straight from the center to situations. The numbers who remain in their posts are also satisfactory. Out of a total of 226 who entered training during the year only 19 returned home of their own accord before the completion of training, including 3 who returned to work in their previous occupations.

This work proved so successful that it was decided to extend it; a new residential center with accommodations for 60 was opened during the early part of 1931 and some of the overseas training centers were taken over for this use.

Several new lines of work were tried out during the year. Courses were instituted for training cooks and waitresses for hotel positions, and the results were so encouraging that plans for enlarging the work were under consideration. Other special courses were initiated for women of from 35 to 45 whose industrial efficiency had been impaired by long unemployment, and the results seemed to the committee to justify further experimental courses along this line.

Including the courses of the residential and nonresidential centers and the special training for cooks and waitresses, 5,548 women and girls were admitted to training during 1930, 485 left or were dismissed during their course, 3,942 either completed the course or entered domestic service before its completion, 3,524 finished the course and were placed in domestic service, 58 found other work, 212 were not placed because of illness or for other reasons, and 1,121 were in training at the end of the year.

#### Individual Vocational Training Scheme

THIS scheme, intended to train individual women for selected occupations, which had been in abeyance since 1926, was revived during the year. Under it, grants are made to approved candidates to enable them to take courses in recognized training institutions, the occupations being limited to shorthand and typewriting, comptometer-operating, nursery nursing, cookery, institutional housekeeping, and midwifery.

Candidates for this training must be registered unemployed women, aged 18 years and over, who have no prospect of reabsorption in their own occupation, whose individual needs are not met by the home training classes and who can not obtain fresh employment without training, which they are not in a position to obtain without assistance. In the depressed mining areas women who have not previously been employed but who are otherwise similarly placed and who, because of the diminution of the family income resulting from the unemployment of the male members, are forced to take up work, are also eligible.

The numbers dealt with under this scheme are small, but the committees feel that the plan has proved its usefulness, "the comparative elasticity of the conditions making it possible to adapt the grant to the circumstances of each particular applicant." During the year 216 grants were approved, and on December 31, 94 women were in training.

# INDUSTRIAL DISPUTES

## Strikes and Lockouts in the United States in June, 1931

**D**ATA regarding industrial disputes in the United States for June, 1931, with comparable data for preceding months are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

Table 1 shows the number of disputes beginning in 1927, 1928, 1929, and 1930, number of workers involved and man-days lost for these years and for each of the months, January, 1929, to June, 1931, inclusive, as well as the number of disputes in effect at the end of each month and the number of workers involved. The economic loss (in man-days) involved is computed by multiplying the number of workers affected in each dispute by the length of the dispute measured in working-days as normally worked by the industry or trade in question.

**TABLE 1.**—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY, 1929, TO JUNE, 1931, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927, 1928, 1929, AND 1930

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost during month or year
	Beginning in month or year	In effect at end of month	Beginning in month or year	In effect at end of month	
1927: Total	734		349,434		37,799,334
1928: Total	629		357,145		31,556,947
1929: Total	903		230,463		9,975,213
1930: Total	653		158,114		2,730,368
<i>1929</i>					
January	48	36	14,783	39,569	951,914
February	54	35	22,858	40,306	926,679
March	77	37	14,031	40,516	1,074,468
April	117	53	32,989	52,445	1,429,437
May	115	73	13,668	64,853	1,727,694
June	73	57	19,989	58,152	1,627,565
July	80	53	36,152	15,589	1,062,428
August	78	43	25,616	6,714	358,148
September	98	49	20,233	8,132	244,864
October	69	31	16,315	6,135	272,018
November	61	32	10,443	6,067	204,457
December	33	21	3,386	2,343	95,541
<i>1930</i>					
January	45	21	9,240	5,316	184,730
February	52	40	37,480	6,683	438,570
March	49	38	15,017	5,957	201,127
April	64	41	6,379	5,840	189,828
May	66	29	9,329	4,386	185,448
June	59	34	14,011	8,311	144,117
July	78	30	14,308	4,815	141,647
August	51	33	15,902	7,131	142,738
September	72	44	16,337	13,778	208,184
October	47	26	10,858	10,007	335,316
November	44	39	4,390	7,759	273,608
December	26	7	4,863	5,144	194,455
<i>1931</i>					
January	56	20	10,147	2,927	181,031
February	52	34	19,984	12,512	228,329
March	45	27	26,121	28,139	422,545
April	60	39	26,442	22,604	769,720
May <sup>1</sup>	104	59	29,561	19,294	429,752
June <sup>1</sup>	98	105	22,687	28,840	691,486

<sup>1</sup> Preliminary figures subject to change.



## Occurrence of Industrial Disputes, by Industries

TABLE 2 gives, by industry, the number of strikes beginning in April, May, and June, 1931, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN APRIL, MAY, AND JUNE, 1931

Industry	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	April	May	June	April	May	June
Auto, carriage, and wagon workers	1			100		
Bakers		4			122	
Barbers		1	1		1,200	360
Brewery and soft-drink workers		1			20	
Brick and tile workers	4			240		
Building trades	16	31	13	5,431	5,576	1,640
Chauffeurs and teamsters	2	1	4	1,400	150	1,123
Clothing	11	10	12	1,019	367	1,245
Food workers	2	1		1,275	125	
Furniture	1	1	1	35	13	40
Glass workers		1			85	
Iron and steel		2	1		1,600	30
Laundry workers	1			500		
Leather	1	4		60	2,728	
Light, heat, power, and water			1			150
Longshoremen and freight handlers	1			400		
Metal trades	2	5		68	304	
Miners	6	26	52	14,700	6,508	17,015
Motion-picture operators, actors, and theatrical workers			2			20
Printing and publishing		1	1		12	10
Stationary engineers and firemen	1			12		
Stone	2		1	260		8
Municipal workers		1	1		3,300	16
Textiles	8	8	6	842	6,156	954
Tobacco		4			735	
Other occupations	1	2	2	100	560	76
Total	60	104	98	26,442	29,561	22,687

## Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in June, 1931, classified by number of workers and by industries.

TABLE 3.—NUMBER OF DISPUTES BEGINNING IN JUNE, 1931, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIES

Industry	Number of disputes beginning in June, 1931, involving—				
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 and under 5,000 workers
Barbers			1		
Building trades	4	3	6		
Chauffeurs and teamsters	2		1		1
Clothing	3	5	4		
Furniture		1			
Iron and steel		1			
Light, heat, power, and water			1		
Miners		11	33	6	2
Motion-picture operators, actors, and theatrical workers	2				
Printing and publishing	1				
Stone	1				
Municipal workers	1				
Textiles	4		1	1	
Other occupations		2			
Total	18	23	47	7	3

In Table 4 are shown the number of industrial disputes ending in June, 1931, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN JUNE, 1931, BY INDUSTRIES AND CLASSIFIED DURATION

Industry	Classified duration of strikes ending in June, 1931					
	One-half month or less	Over one-half and less than 1 month	1 month and less than 2 months	2 months and less than 3 months	3 months and less than 4 months	5 months and less than 6 months
Bakers.....			1			
Barbers.....	1					
Brewery and soft drink workers.....	1					
Building trades.....	5	4	3	1	2	
Chauffeurs and teamsters.....	3					
Clothing.....	3	3	1			
Leather.....	1	1		1		
Metal trades.....		1				
Miners.....	6	5				
Motion-picture operators, actors, and theatrical workers.....		1				
Printing and publishing.....	1					
Stone.....	1					
Textiles.....	3	1				1
Other occupations.....	1					
Total.....	26	16	5	2	2	1

#### Principal Strikes and Lockouts Beginning in June, 1931

*Bituminous-coal miners.*—Numerous strikes or suspensions have taken place in northern West Virginia, western Pennsylvania, and eastern Ohio. The strikes in West Virginia and some of those in Pennsylvania, began in May because of alleged wage reductions; these were followed by other suspensions during June in Pennsylvania and Ohio, with some additional strikes in West Virginia. The disturbance, which has attracted a good deal of notice in the press, has developed progressively and is largely the outgrowth of the depressed condition of the industry, unsatisfactory wages and distressing conditions resulting from the large number of unemployed miners which exists not only in these but in other States as well. The demands include higher wages and the right of the miners to have a checkweighman at each mine, also union recognition and improved working conditions.

The agitation for organizing the miners has been carried on by the United Mine Workers of America and by a rival organization, the National Miners' Union. The disturbance continues actively in Pennsylvania and Ohio, and to a less degree in West Virginia where the United Mine Workers are reported to have effected, during the last week in May or early in June, a partial settlement through agreements in the Scotts' Run field near Morgantown whereby the men will have their own checkweighman. The contract, it is said, includes (1) A wage scale of 30 cents a ton for loading machine coal and 38 cents a ton for loading pick coal; (2) inside day wage of \$3.60 for 8-hour day; (3) outside day wage of \$3.20 basis for 8-hour day; (4) checkweighman on every tippel, member of union; (5) pit committee to present grievances of miners to operators, etc. Most of the men then on strike in that field are said to have resumed work under this agreement, and from union sources comes the report that by June 20 twenty-six companies in northern West Virginia had signed con-

tracts with the union and their mines had resumed operations on a union basis, giving employment to several thousand union miners.

At Galloway, W. Va., some 750 miners employed by the Simpson Creek Collieries Co., of Cleveland, Ohio, struck on June 18 because the company refused to sign an agreement with the United Mine Workers of America. It is understood that the two mines of the company have been idle since that date.

Among the more important operations affected in Pennsylvania have been those of the Pittsburgh Terminal Coal Corporation, where a "walkout" ordered by the National Miners Union began on June 1. An agreement was reached with the company by the United Mine Workers, applicable to its nominal force of 2,400 miners, and on or about June 24 operations were resumed with union miners for the first time, it is said, since 1927. The agreement provides for an 8-hour day and wage increases. It is effective from June 23, 1931, to June 30, 1932, and recognizes the right of the employees to elect by ballot one of their number to act in the capacity of checkweighman at each of the mines. The agreement for the most part, establishes a rate of \$4.50 per day for skilled inside day labor and increases the rate for inside common labor from \$3.50 to a minimum of \$4 per day, etc. This agreement with what is said to be the second largest coal company in the Pittsburgh district was hailed with satisfaction by the union, as it is the first important agreement effected between the union and a company of this district since the 1927 strike.

Reports are widely diverse as to the total number of miners actually on strike in the numerous small mines of the several States. Many of the mines have either been closed down or operating on part time because of slack demand. In addition it is said that many men are out of the operating mines because of fear from the radical element which has figured in rioting and bloodshed.

President Hoover's telegram of June 29 to the president of the United Mine Workers of America is reproduced here in full:

WHITE HOUSE,  
Washington, June 29, 1931.

MR. JOHN L. LEWIS,  
*President, United Mine Workers of America,  
Indianapolis, Ind.*

Your telegram conveying the request of the executive council of the United Mine Workers that a conference of coal operators and miners be convened by the Government was received during my absence from Washington.

The many intricate economic problems and competitive conditions existing in a majority of the bituminous-coal mining districts of our country are of general knowledge, and it is realized that the difficulties of the industry have been the subject of exhaustive investigation and study by Federal and State agencies and commissions, undertaken with the object of aiding those connected with, and interested in, this basic industry.

The administration is desirous of lending every possible assistance to any constructive program put forward by operators and miners.

Accordingly, I have referred the communications received from your council and others to the Secretaries of Commerce and of Labor, and have asked them to advise me as to the present attitude of those directly concerned in the industry as to the manner in which the Government might contribute helpfully in any movement designed to advance the well-being of operators and mine workers, as well as all others interested in the bituminous coal situation.

HERBERT HOOVER.

A conference of bituminous-coal operators called by the Secretary of Commerce and held on July 9, was attended by 15 representatives

of the operators, by the Secretaries of Commerce and Labor, and by a representative of the United States Bureau of Mines. This conference was without apparent result and ended on the date named without any further meeting being called.

In a statement released by the Department of Commerce relative to the conference it was stated that "many of the operators attending held the view that little could be accomplished of advantage to the public, the industry or the workers engaged in it by the summoning of a national coal conference at this time. No final decisions were arrived at in regard to this matter."

A few days after this conference with the operators a conference was held by the Secretaries of Commerce and Labor with the representatives of the miners, and on July 22 they sent inquiries to 125 operators to ascertain their attitude relative to a general conference with the miners' representatives.

*Taxicab drivers, Pittsburgh.*—Some 1,000 taxicab drivers employed by the Parmalee Transportation Co. are reported to have struck on June 13 because of grievances involving wages, working conditions, and the discharge of union men. This strike is still in progress.

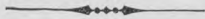
*Bituminous-coal miners, Illinois.*—A strike of some 2,270 miners is reported to have begun on June 15 at Benton in the Orient mines Nos. 1 and 2 of the Chicago, Wilmington & Franklin Coal Co., as the result of a dispute over the division of time for men operating loading machines. No report of the ending of this strike has been received.

*Textile workers, Rhode Island.*—Because of a 10 per cent wage reduction affecting 200 weavers, 600 employees of the Royal Weaving Co., manufacturers of silk and cotton goods, at Pawtucket, struck on June 25. The mill was closed, throwing 1,300 other employees out of work.

#### Principal Strikes and Lockouts Continuing Into June, 1931

*Hosiery workers, Philadelphia.*—The strike which began on February 16, still continues in part.

*Silk workers, Pennsylvania.*—The strike of some 3,000 workers in Allentown beginning as of May 1 is still in progress.



### Conciliation Work of the Department of Labor in June, 1931

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 56 labor disputes during June, 1931. These disputes affected a known total of 30,548 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 the 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 workers directly and indirectly involved.

On July 1, 1931, there were 49 strikes before the department for settlement and in addition 30 controversies which had not reached the strike stage. The total number of cases pending was 79.

## LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF JUNE, 1931

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
Post-office building, Chambersburg, Pa.	Controversy	Carpenters.....	Alleged failure to pay prevailing rate.	Pending.....	1931 June 4			
Riverseam Coal Co., West Virginia	Strike.....	Coal miners.....	Working conditions.....	do.....	June 2		300	
Chicago Macaroni Co., Chicago, Ill.	do.....	All employees.....	4 wage cuts in 12 months.....	Adjusted. Amount of last wage cut restored.	June 4	June 8	150	
Structural-iron workers, Pittsburgh, Pa.	do.....	Iron workers.....	Renewal of agreement.....	Adjusted. Granted 5-day in place of 5½-day week; \$1.50 per hour.	June 1	June 27	200	
Coal miners, Pittsburgh, Pa., area	do.....	Coal miners.....	No checkweighman on tippie, etc.	Pending. A few adjustments granting union conditions.	June 3		15,000	
Carpenters, Elmira, N. Y.	do.....	Carpenters.....	Asked signed agreement with contractors.	Adjusted. Agreement signed granting \$9.50 per day.	May 15	June 4	200	
Sunday Creek Coal District of Ohio	do.....	Coal miners.....	Wage cuts; objection to miners joining union.	Pending.....	May 15		2,000	
Donnelly & Sons, Boston, Mass.	do.....	Sign painters, etc.	Working conditions; other crafts in sympathy.	do.....	May 25		26	
Bowen Construction Co., San Luis Obispo, Calif.	Controversy	Carpenters.....	Alleged failure to pay prevailing rate.	Adjusted. Agreed to pay \$8 per day.	May 7	June 11	20	
Pacific Highway, Everett, Wash.	do.....	Road builders.....	Hours, wages, working conditions.	Adjusted. Better conditions; 8-hour day granted.	May 29	June 13	143	
Boat builders, Seattle, Wash.	do.....	Various crafts.....	Payment of union scales.....	Adjusted. Wage schedules agreed upon.	June 5	June 26	40	
Post-office building, Frederick, Okla.	Strike.....	Carpenters, laborers.....	Alleged failure to pay prevailing rate.	Adjusted. Wage rates increased.	June 1	June 8	20	
Ashcraft Automatic Arc Co., Hollywood, Calif.	Controversy	Machinists.....	Wage cuts; hours increased from 8 to 9.	Adjusted. No wage cuts; 8-hour day continued.	June 4	June 5	14	
D. & I. Dress Co., New York City	Strike.....	Dressmakers.....	Wage cuts on piecework.....	Pending.....	June 4		30	7
Berg & Aronoff, New York City	do.....	Millinery workers.....	Rate cut of 10 to 20 per cent on piecework.	do.....	June 1		33	
Floyd Bennett Field, Brooklyn, N. Y.	do.....	Building trades.....	Refusal of ironworkers to work with nonunion men.	Adjusted. Terms not reported....	June 7	June 11	300	
Silverman & Turner, New York City.	do.....	Pants makers.....	Proposed wage cuts of 20 to 25 per cent.	Pending.....	June 6		350	400
Stewart Silk Co., Easton, Pa.	do.....	Weavers, warpers, etc.	Speed-up system which reduced wages.	Adjusted. Speed-up system abolished.	June 9	June 12	300	
Typographical workers, Charleston, W. Va.	Controversy	Typographical workers.....	Proposed wage cut of \$8 per week.	Adjusted. Wages cut to \$5 for day work; \$7 for night work.	June 10	June 15	15	
High-school building, Spokane, Wash.	do.....	Carpenters, laborers.....	Wage cut; refusal to pay overtime for Saturday.	Unable to adjust.....	May 10	June 9	156	50
A Century of Progress Exposition, Chicago, Ill.	do.....	Building trades.....	Jurisdictional disputes among building crafts.	Adjusted. Committee appointed to fix jurisdiction.	Jan. 1	June 1	1,000	

[343]

INDUSTRIAL DISPUTES

83



## LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF JUNE, 1931—Continued

84

MONTHLY LABOR REVIEW

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
Parmalee Transportation Co., Pittsburgh, Pa.	Strike.....	Taxicab drivers....	Wage scale; working conditions...	Pending.....	1931 June 13	1931	1,000	-----
Edison School and Fire Department headquarters, Erie, Pa.	.....do.....	Building trades....	Employment of nonunion men....	Adjusted. All union men employed except ironworkers.	June 15	June 19	15	25
Marx Bros. Dairy Co., West Chicago, Ill.	.....do.....	Drivers.....	Wage cut from \$50 per week to \$36.	Pending.....	Apr. 24	-----	4	3
Post-office building, Camden, N. J.	Controversy	Mechanics, laborers.	Alleged failure to pay prevailing rate.	.....do.....	June 10	-----	150	150
National Mattress & Furniture Co., Pittsburgh, Pa.	Strike.....	Upholsterers.....	Wage reductions.....	.....do.....	June 9	-----	40	-----
Empire Granite Co. and Mercer Granite Co., Elberton, Ga.	Lockout....	Granite cutters....	Wage cut of \$1 in violation of agreement.	Unable to adjust.	June 15	June 30	9	-----
Consolidated Granite Co., Columbia, S. C.	.....do.....	.....do.....	Wage cut in violation of agreement.	Pending.....	June 12	-----	13	6
Painters, Wilmington, Del.	Controversy	Painters.....	Wage cut of 10 per cent.....	Adjusted. Painters agreed to rebate 5 per cent until September 1.	June 16	July 7	150	-----
Sunday Creek Coal Co., Glouster, Ohio.	Strike.....	Coal miners.....	Discharge of mine committee....	Adjusted. Returned on company's terms; no concessions.	June 4	June 12	140	-----
Pittsburgh Cut Stone Contractors' Association, Pittsburgh.	Lockout....	Stonecutters.....	(1).....	Pending.....	June 12	-----	-----	-----
Post-office building, Trenton, N. J.	Controversy	Building trades....	Asked that union mechanics be employed.	Adjusted. Settled previous to commissioner's arrival.	June 17	June 23	10	-----
44 clothing stores, New York City	Strike.....	Bushelmen.....	Wage cut from \$48 to \$38 for 44-hour week.	Pending.....	June 18	-----	150	-----
Antonoff Novelty Slipper Co., New York City.	Lockout....	Shoe workers.....	Wage cut of 10 per cent.....	Adjusted. Wage cut accepted.	May 17	June 1	12	-----
Wolf, Klein & Sons, New York City.	Strike.....	Clothing workers....	Sending work out of town; violation of agreement.	Pending.....	June 18	-----	150	-----
Baseball park, Indianapolis, Ind.	.....do.....	Carpenters.....	For union wage scale and conditions.	Adjusted. Union men employed.	June 17	June 13	60	200
Picture Theater Owners' Association, Pittsburgh, Pa.	Controversy	Projectionists....	Proposed reduction of force in violation of agreement.	Pending.....	June 22	-----	54	-----
Bricklayers, Madison, Ind.	.....do.....	Bricklayers.....	Working conditions and employment of local labor.	.....do.....	June 20	-----	15	50
Bankers Lithographing Co., Pittsburgh, Pa.	Strike.....	Lithographers.....	Wage cut of 10 per cent.....	.....do.....	June 1	-----	10	100
George Washington Memorial Bridge, Fort Lee, N. J.	.....do.....	Iron workers, carpenters.	Asked prevailing wage and employment of local men.	Adjusted. Men employed at union rates.	June 5	June 23	250	200
Quincy Products Co., Brooklyn, N. Y.	.....do.....	Shoe workers.....	Protest wage cuts on piecework...	Adjusted. Wage cuts withdrawn.	June 15	July 24	60	14

[344]

Barracks buildings, Fort Benning, Ga.	Controversy	Building trades....	Alleged failure to pay prevailing wage.	Pending.....	May 15				
Pilgrim State Hospital, Brentwood, Long Island, N. Y.	do.....	Carpenters, laborers.	Jurisdictional dispute.....	Adjusted. Laborers to build scaffolds; carpenters, the forms.	June 8	June 16	34		
State office building, Columbus, Ohio.	Strike.....	Carpenters, ironworkers.	Jurisdictional dispute on window frames.	Adjusted. Placement of frames held in abeyance for a time.	June 25	July 1	70	330	
Tilton Co., New York City.....	do.....	Clothing workers....	Working conditions.....	Pending.....	June 24				
Transfer men and expressmen, Pittsburgh, Pa.	do.....	Drivers.....	Wage cut of 10 per cent.....	do.....	June 25				
Painters, Elmira, N. Y.....	do.....	Painters.....	Ask \$9.50 per day; contractors offer \$9.	do.....	June 1				
Putnam Construction Co., Ashville to Gallitzin, Pa.	do.....	Road laborers.....	Wages and working conditions....	Adjusted. Agreed to pay laborers 30 cents per hour.	June 25	June 27	125		
St. Mary's Academy, Monroe, Mich.	do.....	Bricklayers.....	Wages cut from \$1.50 to \$1.25 per hour.	Pending.....	do.....		60	2,300	
George Levernz Co., Army post, Fort Wayne, (Detroit), Mich.	Controversy	do.....	Alleged failure to pay prevailing wage.	Adjusted. Started new men at \$1.50 per hour.	June 23	June 25	12	2,300	
Post-office building, Detroit, Mich.	do.....	Building trades.....	do.....	Pending.....	June 18		100	100	
Sailors & Soldiers' Orphan Home, Knightstown, Ind.	do.....	Laborers.....	Employment of local labor at union rates.	do.....	June 15		10	15	
Morgan & Miller, New York City.	Strike.....	Fur workers.....	Demand for wage increase.....	Adjusted. Operators increased from \$38 to \$45 per week.	June 22	June 29	6		
B. & S. Coal Co., Sagamore, Pa....	do.....	Coal miners.....	Asked checkweighman at tippie and union recognition.	Pending.....	June 26		750		
Helfenstein Fur Shop, New York City.	do.....	Fur workers.....	Wages and hours.....	Adjusted. Operators allowed increase from \$40 to \$42 per week.	June 25	June 26	19		
Sanet f Dress Co., New York City....	do.....	Garment workers.....	Discharge of shop foreman.....	Adjusted. Submitted to arbitration.	May 21	June 10	15	8	
Community Traction Co., Toledo, Ohio.	Controversy	Street-car employes.	Working conditions.....	Adjusted. Compromise agreement reached.	June 1	July 1	500		
Total.....							24,290	6,258	

1 Not reported.

[345]

## Report of Emergency Board for Dispute on Louisiana & Arkansas Railroad

**T**HE emergency board appointed by the President of the United States on April 16, 1931, to investigate a dispute between the Louisiana & Arkansas Railway Co. and certain of its employees represented by Railway Employees' Department of the American Federation of Labor, Federated Shop Crafts, reported its findings to the President on May 5, 1931. The board consisted of Charles Kerr (chairman), Homer B. Dibell, and Chester H. Rowell.

A summary of the report, recently made public, is as follows:

1. There was nothing in the financial situation of the carrier, nor other conditions affecting it, which justified its action of February 9, 1931, in reducing the rate of wages of its shop crafts below the standard prevailing over the country; and the evidence tends to show that when conditions become fairly prosperous the carrier which acquired the two roads will find that its acquisition of them will be exceedingly profitable.

2. The action of the carrier of February 9, 1931, in putting into force new rules and changes in working conditions, wholly without notice such as is required by the act, was positively illegal under section 6.

3. The refusal of the carrier to submit to arbitration under the railway labor act upon the announced and only asserted ground that there was nothing to arbitrate was not justified. If there was an occasion for a change in the rules, and there may have been, there was clearly an arbitrable controversy, and their promulgation without notice to the men or their representatives was in direct violation of the act.

4. That the policy announced in the statement of the President of November 21, 1929, after conferences with employers and employees, to the effect that there should be no wage reductions made by employers and no efforts by the men to increase the standard wages, was observed faithfully by other carriers, with a few negligible exceptions, to which we attach no importance. The men observed the spirit of the statement and went beyond it in not pressing the reserved right to continue negotiations then pending.

5. The carrier should restore the standard rate of wages and rules governing working conditions prevailing on its line in September, 1930, when it first proposed changing them. This would leave the carrier and the men as they were when the carrier announced its purpose to reduce wages and change the working rules. The conclusion we reach is based upon the proposition that there was never an occasion for reducing wages, though the right to do so in the manner provided by law is conceded by all, and the further proposition that the change in rules and working conditions without notice was positively illegal under section 6. Rules arbitrarily imposed by the carrier without negotiation with the men or their representatives have no element of contract and are not in harmony with the thought of Congress expressed in section 2 imposing the duty "to make and maintain agreements concerning rates of pay, rules, and working conditions."

6. That if the carrier refuses to restore former conditions it should submit to arbitration. The men have expressed their willingness to arbitrate notwithstanding the illegal change of rules.

7. That if the carrier refuses to do one or the other, that is, to restore conditions as they were in September, 1930, or to arbitrate, we can not urge upon the craftsmen the duty of agreeing to the conditions, partly illegal, imposed by the action of February 9, 1931. This would be equivalent to saying that one who obeys a particular law is at a disadvantage with respect to one who disregards it.

8. We feel that the carrier should not disturb the wage structure which other carriers, no better situated, are maintaining; and that it should seriously consider whether it can justify itself to itself in maintaining rules and working conditions fixed in a way declared by Congress to be illegal.

9. If the opportunity is offered the carrier to mediate or arbitrate the controversy it should accept it; and if not presented it should seek it.

The controversy which led to the appointment of the emergency board began with a communication submitted by the carrier in this case to the shop-craft organizations, on September 15, 1930, giving

notice of its desire "to abrogate and revise the present schedule covering rates of pay and working conditions of the shop-craft employees." The shopmen were willing to discuss changes in rules but not a reduction of pay schedules. The employees, on October 4, requested the services of the United States Board of Mediation. The board assigned members O. B. Colquitt and Edwin P. Morrow to straighten out the matter, but the railroad officials refused to consider any settlement except on their own terms.

On February 9, 1931, the carrier put into effect, by posting in the shops and by notifying the men, the proposed changes in wages, a new schedule of rules embodying the changes proposed at the meeting of October 1, and also a number of additional changes, some of them very important, of which there had been no previous notice. All these changes were effective immediately. Thereupon strike ballots were distributed and the men voted, by 179 to 29, for a strike to take place April 15.

The Board of Mediation requested the employees to defer the effective date of the strike from April 15 to April 18, 1931, and recommended to the President the creation of an emergency board, which was done by Executive proclamation of April 16, 1931. Following the report of the board both parties are forbidden to change existing conditions, except by mutual agreement, for a period of 30 days.

This is the fourth emergency board appointed under the railroad labor act of 1926.

# LABOR TURNOVER

---

## Labor Turnover in American Factories, June, 1931

THE Bureau of Labor Statistics presents herewith labor turnover indexes for manufacturing as a whole and for 10 separate manufacturing industries. In working turnover rates the bureau uses the weighted arithmetic mean. The indexes for manufacturing as a whole are compiled from reports made by representative establishments in 75 industries employing approximately 1,250,000 people. In the 10 industries for which separate indexes are presented reports were received from representative plants employing approximately 25 per cent of the employees as shown for such industries by the Census of Manufactures of 1927. In the automobile industry schedules were received from plants employing over 225,000 people; firms reporting for boots and shoes employed 100,000 people; those reporting for cotton manufacturing employed approximately 125,000 people; those reporting for brick employed about 15,000 people; those reporting for foundry and machine shops employed nearly 175,000 people; those reporting for furniture employed about 40,000 people; iron and steel, over 225,000 people; sawmills, approximately 65,000 people; slaughtering and meat packing, nearly 85,000 people; and men's clothing, nearly 35,000.

In addition to the quit, discharge, lay-off, total separation, and accession rates, the bureau presents the net turnover rate. The net turnover rate means the rate of replacement. It is the number of jobs that are vacated and filled per 100 employees. In a plant that is increasing its force the net turnover rate is the same as the separation rate, because, while more people are hired than are separated from their jobs, the number hired above those leaving is due to expansion and can not be justly charged to turnover. On the other hand, in a plant that is reducing its number of employees the net turnover rate is the same as the accession rate, for, while more people are separated from the pay-roll than are hired, the excess of separations over accessions is due to a reduction of force and therefore can not be logically charged as a turnover expense.

Table 1 shows for all industries the total separation rate subdivided into the quit, discharge, and lay-off rates together with the accession and net turnover rates presented both on a monthly and an equivalent annual basis.



TABLE 1.—AVERAGE LABOR TURNOVER RATES IN SELECTED FACTORIES IN 75 INDUSTRIES

A.—Monthly Rates

Month	Separation rates								Accession rate		Net turn-over rate	
	Quit		Lay-off		Discharge		Total		1930	1931	1930	1931
	1930	1931	1930	1931	1930	1931	1930	1931				
January	1.85	0.74	2.70	1.95	0.54	0.19	5.09	2.88	3.95	2.97	3.95	2.88
February	1.60	.74	2.50	1.75	.62	.20	4.72	2.69	3.94	2.82	3.94	2.69
March	1.94	.94	2.83	1.75	.60	.26	5.37	2.95	4.15	3.67	4.15	2.95
April	2.11	1.14	2.57	1.96	.53	.31	5.21	3.41	3.55	3.06	3.55	3.06
May	2.01	1.12	2.68	2.43	.48	.28	5.17	3.83	3.28	2.79	3.28	2.79
June	1.85	1.02	3.00	3.84	.46	.23	5.31	5.09	2.92	2.41	2.92	2.41
July	1.35	-----	4.17	-----	.32	-----	5.84	-----	2.51	-----	2.51	-----
August	1.40	-----	3.99	-----	.36	-----	5.75	-----	2.71	-----	2.71	-----
September	1.50	-----	3.14	-----	.36	-----	5.00	-----	3.27	-----	3.27	-----
October	1.29	-----	2.88	-----	.32	-----	4.49	-----	2.56	-----	2.56	-----
November	.90	-----	2.77	-----	.24	-----	3.91	-----	2.05	-----	2.05	-----
December	.84	-----	2.74	-----	.21	-----	3.79	-----	2.13	-----	2.13	-----
<b>Average</b>	<b>1.55</b>	-----	<b>3.00</b>	-----	<b>.42</b>	-----	<b>4.97</b>	-----	<b>3.08</b>	-----	<b>3.08</b>	-----

B.—Equivalent Annual Rates

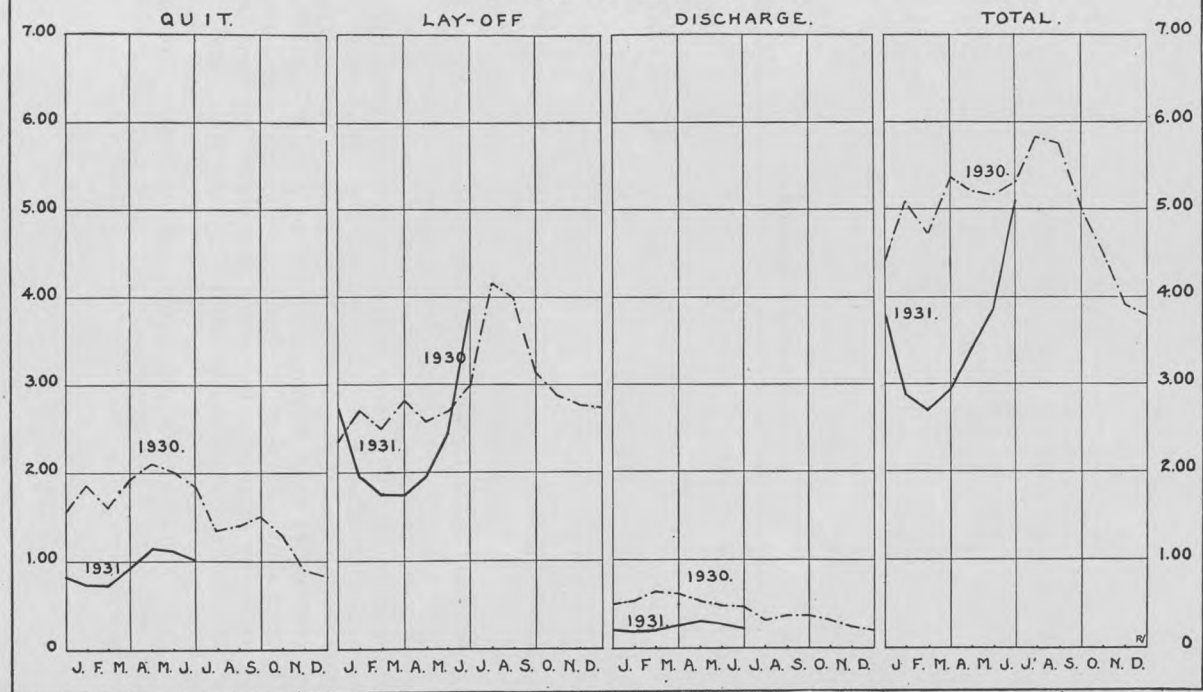
January	21.8	8.7	31.8	23.0	6.4	2.2	60.0	33.9	46.5	35.0	46.5	33.9
February	20.9	9.6	32.6	22.8	8.0	2.6	61.5	35.0	51.4	36.8	51.4	35.0
March	22.8	11.1	33.3	20.6	7.1	3.1	63.2	34.8	48.8	43.2	48.8	34.8
April	25.7	13.9	31.3	23.9	6.5	3.8	63.5	41.6	43.2	37.2	43.2	37.2
May	23.7	13.2	31.5	28.6	5.6	3.3	60.8	45.1	38.6	32.8	38.6	32.8
June	22.5	12.4	36.5	46.7	5.6	2.8	64.6	61.9	35.5	29.3	35.5	29.3
July	15.9	-----	49.1	-----	3.8	-----	68.8	-----	29.5	-----	29.5	-----
August	16.5	-----	47.0	-----	4.2	-----	67.7	-----	31.9	-----	31.9	-----
September	18.3	-----	38.2	-----	4.4	-----	60.9	-----	39.8	-----	39.8	-----
October	15.2	-----	33.9	-----	3.8	-----	52.9	-----	30.1	-----	30.1	-----
November	11.0	-----	33.7	-----	2.9	-----	47.6	-----	24.9	-----	24.9	-----
December	9.9	-----	32.2	-----	2.5	-----	44.6	-----	25.1	-----	25.1	-----
<b>Average</b>	<b>18.7</b>	-----	<b>35.9</b>	-----	<b>5.1</b>	-----	<b>59.7</b>	-----	<b>37.1</b>	-----	<b>37.1</b>	-----

Comparing rates for June, 1931, with those for May, 1931, there was a decrease in the quit, discharge, and accession rates. The lay-off rate, however, was much higher for June than for May. Comparing June, 1931, rates with those for June, 1930, decreases were shown for all classes of rates except the lay-off rate which was higher during the current month than for June, 1930. The charts on pages 90 and 91 show in graphic form the data presented in Table 1.

Table 2 shows the quit, discharge, lay-off, accession, and net turn-over rates for automobiles, boots and shoes, cotton, foundry and machine shops, furniture, iron and steel, sawmills, and slaughtering and meat packing for the year 1930 and for the first 6 months of the year 1931, and for brick and men's clothing for the months of April, May, and June, 1931, presented both on a monthly and an equivalent annual basis.

### INDEXES OF AVERAGE MONTHLY LABOR TURNOVER RATES, 1930 & 1931.

#### SEPARATION RATES.



[350]

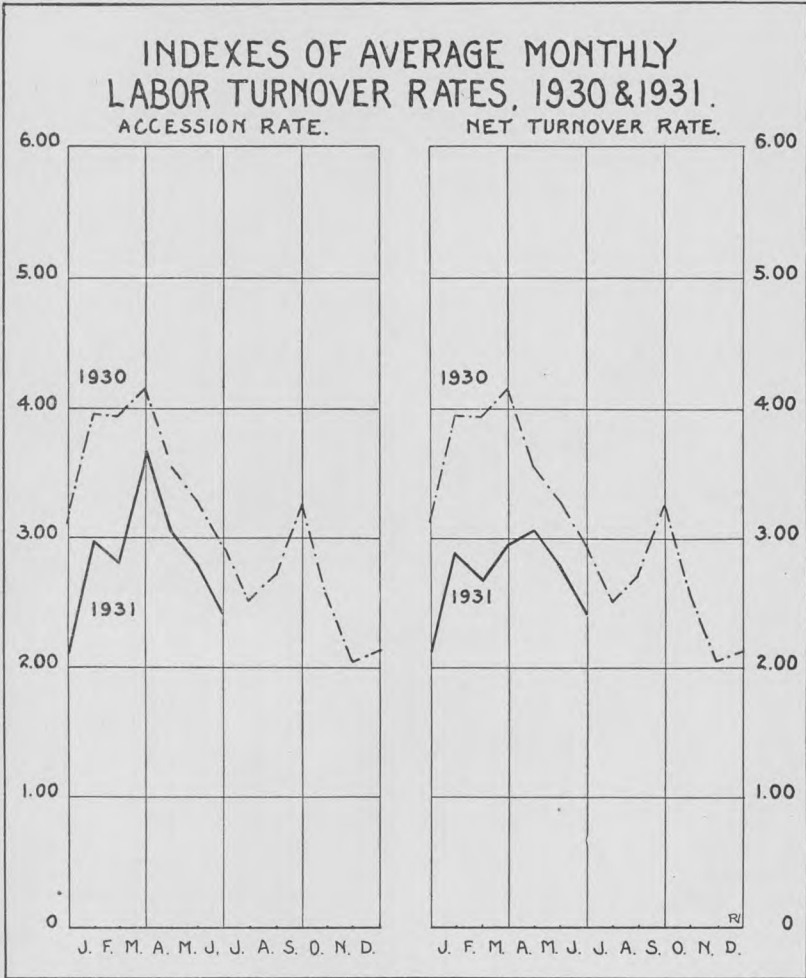


TABLE 2.—AVERAGE LABOR TURNOVER RATES IN SPECIFIED INDUSTRIES

## A.—Monthly Rates

Industry and month	Separation rates								Accession rate		Net turn-over rate	
	Quit		Discharge		Lay-off		Total		1930	1931	1930	1931
	1930	1931	1930	1931	1930	1931	1930	1931				
<b>Automobiles:</b>												
January	2.76	0.54	0.92	0.18	5.81	2.63	9.49	3.35	13.50	2.92	9.49	2.92
February	1.16	.74	.38	.21	2.31	1.71	3.85	2.66	4.74	4.12	3.85	2.66
March	1.81	1.09	.56	.39	2.04	1.71	4.41	3.19	6.92	7.76	4.41	3.19
April	2.21	1.46	.50	.44	1.97	1.86	4.68	3.76	7.45	5.21	4.68	3.76
May	2.20	1.40	.50	.39	5.59	3.07	8.29	4.86	3.98	3.41	3.98	3.41
June	1.59	.90	.39	.21	5.90	10.57	7.88	11.68	2.34	2.91	2.34	2.91
July	1.14	-----	.24	-----	9.48	-----	10.86	-----	2.78	-----	2.78	-----
August	1.23	-----	.38	-----	7.66	-----	9.27	-----	3.69	-----	3.69	-----
September	1.29	-----	.33	-----	7.42	-----	9.04	-----	3.83	-----	3.83	-----
October	1.19	-----	.25	-----	5.39	-----	6.83	-----	4.02	-----	4.02	-----
November	.81	-----	.16	-----	3.80	-----	4.77	-----	5.95	-----	4.77	-----
December	.88	-----	.17	-----	3.69	-----	4.74	-----	3.43	-----	3.43	-----
Average	1.52	-----	.40	-----	5.09	-----	7.01	-----	5.22	-----	5.22	-----
<b>Boots and shoes:</b>												
January	1.97	1.23	.78	.37	1.27	1.88	4.02	3.48	5.97	4.48	4.02	3.48
February	1.93	1.27	.70	.31	1.37	1.23	4.00	2.81	3.09	5.88	3.09	2.81
March	2.00	1.58	.65	.50	1.34	1.16	3.99	3.24	3.18	4.92	3.18	3.24
April	2.48	1.97	.68	.42	2.13	1.53	5.29	3.92	2.76	4.34	2.76	3.92
May	2.06	1.57	.53	.49	2.47	2.37	5.06	4.43	3.19	4.95	3.19	4.43
June	1.94	1.61	.47	.40	1.82	1.85	4.23	3.86	3.78	5.18	3.78	3.86
July	2.04	-----	.57	-----	1.76	-----	4.37	-----	4.74	-----	4.37	-----
August	2.19	-----	.73	-----	2.84	-----	5.76	-----	4.08	-----	4.08	-----
September	2.01	-----	.51	-----	2.78	-----	5.30	-----	2.99	-----	2.99	-----
October	1.71	-----	.47	-----	2.73	-----	4.91	-----	2.05	-----	2.05	-----
November	1.00	-----	.27	-----	4.38	-----	5.65	-----	2.41	-----	2.41	-----
December	1.03	-----	.24	-----	3.88	-----	5.15	-----	3.66	-----	3.66	-----
Average	1.86	-----	.55	-----	2.40	-----	4.81	-----	3.49	-----	3.30	-----
<b>Brick:</b>												
April	-----	.86	-----	.61	-----	4.01	-----	5.48	-----	8.68	-----	5.48
May	-----	1.77	-----	.66	-----	8.65	-----	11.08	-----	7.89	-----	7.89
June	-----	.80	-----	.44	-----	5.45	-----	6.69	-----	6.67	-----	6.67
<b>Cotton manufacturing:</b>												
January	2.07	1.00	.65	.40	2.16	2.60	4.88	4.00	4.50	3.57	4.50	3.57
February	1.93	1.00	.60	.34	1.92	1.87	4.50	3.21	3.33	3.91	3.33	3.21
March	2.27	1.36	.69	.36	2.20	2.00	5.16	3.72	4.17	4.47	4.17	3.72
April	2.40	1.64	.68	.43	2.23	2.52	5.31	4.59	4.27	4.69	4.27	4.59
May	2.36	1.53	.55	.37	2.07	2.30	4.98	4.20	3.95	3.51	3.95	3.51
June	2.06	1.25	.58	.46	2.17	2.24	4.81	3.95	3.25	3.66	3.25	3.66
July	1.91	-----	.55	-----	3.34	-----	5.80	-----	2.47	-----	2.47	-----
August	1.58	-----	.46	-----	3.58	-----	5.62	-----	2.72	-----	2.72	-----
September	1.88	-----	.46	-----	2.44	-----	4.78	-----	4.58	-----	4.58	-----
October	1.41	-----	.48	-----	2.09	-----	3.98	-----	4.34	-----	3.98	-----
November	1.22	-----	.35	-----	2.18	-----	3.75	-----	2.93	-----	2.93	-----
December	.58	-----	.24	-----	1.92	-----	2.74	-----	1.46	-----	1.46	-----
Average	1.81	-----	.52	-----	2.36	-----	4.69	-----	3.50	-----	3.47	-----
<b>Foundries and machine shops:</b>												
January	-----	.52	-----	.22	-----	2.32	-----	3.06	-----	2.93	-----	2.93
February	1.36	.55	.80	.22	2.03	2.10	4.19	2.87	4.39	2.96	4.19	2.87
March	1.88	.90	.88	.25	3.24	2.72	6.00	3.87	4.63	3.38	4.63	3.38
April	1.88	.96	.80	.36	2.87	3.29	5.55	4.61	3.95	3.08	3.95	3.08
May	1.87	.77	.79	.25	4.12	4.91	6.78	5.93	3.76	2.44	3.76	2.44
June	1.29	.69	.54	.25	4.52	4.44	6.35	5.38	3.05	1.95	3.05	1.95
July	1.11	-----	.43	-----	4.58	-----	6.12	-----	2.26	-----	2.26	-----
August	1.01	-----	.45	-----	4.08	-----	5.54	-----	2.56	-----	2.56	-----
September	1.07	-----	.44	-----	3.82	-----	5.33	-----	2.45	-----	2.45	-----
October	.85	-----	.47	-----	4.01	-----	5.33	-----	2.27	-----	2.27	-----
November	.66	-----	.22	-----	2.87	-----	3.75	-----	1.85	-----	1.85	-----
December	.55	-----	.26	-----	3.10	-----	3.91	-----	2.05	-----	2.05	-----
Average	1.23	-----	.55	-----	3.57	-----	5.35	-----	3.02	-----	3.02	-----

TABLE 2.—AVERAGE LABOR TURNOVER RATES IN SPECIFIED INDUSTRIES—Continued

## A.—Monthly Rates—Continued

Industry and month	Separation rates								Accession rate		Net turn-over rate	
	Quit		Discharge		Lay-off		Total		1930	1931	1930	1931
	1930	1931	1930	1931	1930	1931	1930	1931				
<b>Furniture:</b>												
January		0.55		0.25		4.84		5.64		5.24		5.24
February		.57		.34		3.86		4.77		5.51		4.77
March		.80		.37		4.52		5.69		4.78		4.78
April	1.73	.95	0.64	.51	4.38	3.31	6.75	4.77	3.34	4.66	3.34	4.66
May	1.26	1.05	.52	.25	4.39	5.72	6.17	7.02	2.87	3.81	2.87	3.81
June	1.44	1.06	.41	.43	4.33	4.83	6.18	6.32	3.82	4.89	3.82	4.89
July	1.21		.40		4.50		5.04		5.09		5.09	
August	1.18		.41		3.45		5.04		5.34		5.04	
September	1.09		.46		3.30		4.85		7.07		4.85	
October	1.03		.45		3.61		5.09		3.72		3.72	
November	.99		.29		5.92		7.20		2.48		2.48	
December	.68		.35		6.66		7.69		2.35		2.35	
Average	1.18		.44		4.50		6.12		4.01		4.01	
<b>Iron and steel:</b>												
January	1.81	.71	.45	.09	1.24	1.36	3.50	2.16	5.52	2.52	3.50	2.16
February	1.91	.72	.34	.15	1.15	1.03	3.40	1.90	5.09	2.24	3.40	1.90
March	1.91	.71	.45	.12	1.22	1.38	3.58	2.21	4.06	2.03	3.58	2.03
April	2.26	.89	.42	.15	1.32	1.90	4.00	2.94	3.88	1.69	3.88	1.69
May	2.13	.87	.40	.15	1.71	2.16	4.24	3.18	3.25	1.57	3.25	1.57
June	1.87	.86	.49	.11	2.25	2.65	4.61	3.62	2.56	1.20	2.56	1.20
July	1.54		.24		2.29		4.07		2.27		2.27	
August	1.61		.26		2.05		3.92		1.91		1.91	
September	1.45		.22		2.16		3.83		2.32		2.32	
October	1.13		.20		2.25		3.58		1.74		1.74	
November	1.11		.13		1.95		3.19		1.31		1.31	
December	.82		.10		2.23		3.15		1.40		1.40	
Average	1.63		.31		1.82		3.76		2.94		2.94	
<b>Men's clothing:</b>												
April		1.40		.12		2.20		3.72		3.22		3.22
May		1.39		.15		1.46		3.00		3.10		3.00
June		1.32		.23		.56		2.11		4.05		2.11
<b>Sawmills:</b>												
January	3.80	.97	1.18	.43	4.52	8.02	9.50	9.42	9.39	9.99	9.39	9.42
February	3.39	1.22	1.37	.50	3.99	4.56	8.75	6.28	9.11	7.44	8.75	6.28
March	3.89	1.74	1.47	.51	3.54	4.56	8.90	6.81	7.91	7.07	7.91	6.81
April	4.28	1.79	.92	.46	4.97	7.17	10.17	9.42	9.66	7.21	9.66	7.21
May	3.51	1.73	1.35	.50	8.10	6.43	12.96	8.66	10.09	7.97	10.09	7.97
June	2.93	1.13	.96	.33	5.35	8.70	9.24	10.16	5.85	6.41	5.85	6.41
July	2.68		1.07		6.98		10.73		6.17		6.17	
August	3.01		.93		6.09		10.03		6.71		6.71	
September	2.99		.95		7.64		11.58		6.93		6.93	
October	2.26		.72		6.58		9.56		8.32		8.32	
November	1.93		.83		7.23		9.99		4.96		4.96	
December	1.39		.93		7.42		9.74		4.51		4.51	
Average	3.01		1.06		6.03		10.10		7.47		7.47	
<b>Slaughtering and meat packing:</b>												
January	2.32	1.29	.91	.61	6.68	4.40	9.91	6.30	10.02	9.50	9.91	6.30
February	2.37	1.56	.96	.68	7.70	6.48	11.03	8.72	7.39	5.02	7.39	5.02
March	2.49	1.41	.86	.37	7.51	6.88	10.86	8.66	5.23	5.19	5.23	5.19
April	2.91	1.42	.75	.47	4.47	5.02	8.13	6.91	8.47	6.31	8.13	6.31
May	2.84	1.35	.79	.43	4.14	4.13	7.77	5.91	9.01	6.92	7.77	5.91
June	2.72	1.36	.88	.52	4.59	3.90	8.19	5.78	10.34	6.08	8.19	5.78
July	2.08		.79		5.34		8.21		6.92		6.92	
August	2.09		.72		5.14		7.95		6.34		6.34	
September	2.26		.65		3.79		6.70		7.33		6.70	
October	1.70		.73		4.67		7.10		7.62		7.10	
November	1.12		.56		4.80		6.48		7.30		6.48	
December	1.69		.57		5.59		7.85		6.24		6.24	
Average	2.22		.76		5.37		8.35		7.68		7.68	



TABLE 2.—AVERAGE LABOR TURNOVER RATES IN SPECIFIED INDUSTRIES—Continued

## B.—Equivalent Annual Rates

Industry and month	Separation rates								Accession rate		Net turnover rate	
	Quit		Discharge		Lay-off		Total		1930	1931	1930	1931
	1930	1931	1930	1931	1930	1931	1930	1931				
<b>Automobiles:</b>												
January	32.5	6.4	10.8	2.1	68.4	31.0	111.7	39.5	158.9	34.4	111.7	34.4
February	15.1	9.6	5.0	2.7	30.1	22.3	50.2	34.6	61.8	53.7	50.2	34.6
March	21.3	12.8	6.6	4.6	24.0	20.1	51.9	37.5	81.4	91.3	51.9	37.5
April	26.9	17.8	6.1	5.4	24.0	22.6	57.0	45.8	90.7	63.4	57.0	45.8
May	25.9	16.5	5.9	4.6	65.8	36.1	97.6	57.2	46.8	40.1	46.8	40.1
June	19.4	11.0	4.7	2.6	71.8	128.6	95.9	142.2	28.5	35.4	28.5	35.4
July	23.4	-----	2.8	-----	111.6	-----	127.8	-----	32.7	-----	32.7	-----
August	14.5	-----	4.5	-----	90.2	-----	109.2	-----	43.4	-----	43.4	-----
September	15.7	-----	4.0	-----	90.3	-----	110.0	-----	46.6	-----	46.6	-----
October	14.0	-----	2.9	-----	63.4	-----	80.3	-----	47.3	-----	47.3	-----
November	9.9	-----	1.9	-----	46.2	-----	58.0	-----	72.4	-----	58.0	-----
December	10.4	-----	2.0	-----	43.4	-----	55.8	-----	40.4	-----	40.4	-----
Average	18.3	-----	4.8	-----	60.8	-----	83.8	-----	62.6	-----	62.6	-----
<b>Boots and shoes:</b>												
January	23.2	14.5	9.2	4.4	14.9	22.1	47.3	41.0	70.3	52.7	47.3	41.0
February	25.2	16.6	9.1	4.0	17.9	16.0	52.2	36.6	40.3	76.7	40.3	36.6
March	23.5	18.6	7.7	5.9	15.8	13.7	47.0	38.2	37.4	57.9	37.4	38.2
April	30.2	24.0	8.3	5.1	25.9	18.6	64.4	47.7	33.6	52.8	33.6	47.7
May	24.2	18.5	6.2	5.8	29.1	27.9	59.5	52.2	37.5	58.3	37.5	52.2
June	23.6	19.6	5.7	4.9	22.1	22.5	51.4	47.0	46.0	63.0	46.0	47.0
July	24.0	-----	6.7	-----	20.7	-----	51.4	-----	55.8	-----	51.4	-----
August	25.8	-----	8.6	-----	33.4	-----	67.8	-----	48.0	-----	48.0	-----
September	24.5	-----	6.2	-----	33.8	-----	64.5	-----	36.4	-----	36.4	-----
October	20.1	-----	5.5	-----	32.1	-----	57.7	-----	24.1	-----	24.1	-----
November	12.2	-----	3.3	-----	53.3	-----	68.8	-----	29.3	-----	29.3	-----
December	12.1	-----	2.8	-----	45.7	-----	60.6	-----	43.1	-----	43.1	-----
Average	22.4	-----	6.6	-----	28.7	-----	57.7	-----	41.8	-----	41.8	-----
<b>Brick:</b>												
April	-----	10.5	-----	7.4	-----	48.8	-----	66.7	-----	105.6	-----	66.7
May	-----	20.8	-----	7.8	-----	101.8	-----	130.4	-----	92.9	-----	92.9
June	-----	9.7	-----	5.4	-----	66.3	-----	81.4	-----	81.2	-----	81.2
<b>Cotton manufacturing:</b>												
January	24.4	11.8	7.7	4.7	25.4	30.6	57.5	47.1	53.0	42.0	53.0	42.0
February	25.8	13.0	7.8	4.4	25.0	24.4	58.6	41.8	43.4	51.0	43.4	41.8
March	26.7	16.0	8.1	4.2	25.9	23.5	60.7	43.7	49.1	52.6	49.1	43.7
April	29.2	20.0	8.3	5.2	27.1	30.7	64.6	55.9	52.0	57.1	52.0	55.9
May	27.8	18.0	6.5	4.4	24.4	27.1	58.7	49.5	46.5	41.3	46.5	41.3
June	25.1	15.2	7.1	5.6	26.4	27.3	58.6	48.1	39.6	44.5	39.6	44.5
July	22.5	-----	6.5	-----	39.3	-----	68.3	-----	29.1	-----	29.1	-----
August	18.6	-----	5.4	-----	42.1	-----	66.1	-----	32.0	-----	32.0	-----
September	22.9	-----	5.6	-----	29.7	-----	58.2	-----	55.7	-----	55.7	-----
October	16.6	-----	5.6	-----	24.6	-----	46.8	-----	51.1	-----	46.8	-----
November	14.8	-----	4.3	-----	26.5	-----	45.6	-----	35.7	-----	35.7	-----
December	6.8	-----	2.8	-----	22.6	-----	32.2	-----	17.2	-----	17.2	-----
Average	21.8	-----	6.3	-----	28.3	-----	56.3	-----	42.0	-----	41.7	-----
<b>Foundries and machine shops:</b>												
January	-----	6.1	-----	2.6	-----	27.3	-----	36.0	-----	34.5	-----	34.5
February	17.7	7.2	10.4	2.9	26.5	27.4	54.6	37.5	57.2	38.6	54.6	37.5
March	22.1	10.6	10.4	2.9	38.1	32.0	70.6	45.5	54.5	39.8	54.5	39.8
April	22.9	11.7	9.7	4.4	34.9	40.0	67.5	56.1	48.1	37.5	48.1	37.5
May	22.0	9.1	9.3	2.9	48.5	57.8	79.8	69.8	44.3	28.7	44.3	28.7
June	15.7	8.4	6.6	3.0	55.0	54.0	77.3	65.4	37.1	23.7	37.1	23.7
July	13.1	-----	5.1	-----	53.9	-----	72.1	-----	26.6	-----	26.6	-----
August	11.9	-----	5.3	-----	48.0	-----	65.2	-----	30.1	-----	30.1	-----
September	13.0	-----	5.4	-----	46.5	-----	64.9	-----	29.8	-----	29.8	-----
October	10.0	-----	5.5	-----	47.2	-----	62.7	-----	26.7	-----	26.7	-----
November	8.0	-----	2.7	-----	34.9	-----	45.6	-----	22.5	-----	22.5	-----
December	6.5	-----	3.1	-----	36.5	-----	46.1	-----	24.1	-----	24.1	-----
Average	14.8	-----	6.7	-----	42.7	-----	64.2	-----	36.5	-----	36.5	-----

TABLE 2.—AVERAGE LABOR TURNOVER RATES IN SPECIFIED INDUSTRIES—Continued

**B.—Equivalent Annual Rates—Continued**

Industry and month	Separation rates								Accession rate		Net turn-over rate	
	Quit		Discharge		Lay-off		Total		1930	1931	1930	1931
	1930	1931	1930	1931	1930	1931	1930	1931				
<b>Furniture:</b>												
January		6.5		2.9		57.0		66.4		61.7		61.7
February		7.4		4.4		50.3		62.1		71.9		62.1
March		9.4		4.4		53.2		67.0		56.3		56.3
April	21.1	11.6	7.8	6.2	53.3	40.3	82.2	58.1	40.6	56.7	40.6	56.7
May	14.8	12.4	6.1	2.9	51.6	67.3	72.5	82.6	33.8	44.8	33.8	44.8
June	17.5	12.9	5.0	5.2	52.7	58.8	75.2	76.9	46.5	59.5	46.5	59.5
July	14.2		4.7		53.0		71.9		59.9		59.9	
August	13.9		4.8		40.6		59.3		62.9		59.3	
September	13.3		5.6		40.2		59.1		86.0		59.1	
October	12.1		5.3		42.5		59.9		43.8		43.8	
November	12.0		3.5		72.0		87.5		30.2		30.2	
December	8.0		4.1		78.4		90.5		27.7		27.7	
Average	14.1		5.2		53.8		73.1		47.9		47.9	
<b>Iron and steel:</b>												
January	21.3	8.4	5.3	1.1	14.6	16.0	41.2	25.5	65.0	29.7	41.2	25.5
February	24.9	9.4	4.4	2.0	15.0	13.4	44.3	24.8	66.4	29.2	44.3	24.8
March	22.5	8.4	5.3	1.4	14.4	16.2	42.2	26.0	47.8	23.9	42.2	23.9
April	27.5	10.8	5.1	1.8	16.1	23.1	48.7	35.7	47.2	20.6	47.2	20.6
May	25.1	10.2	4.7	1.8	20.1	25.4	49.9	37.4	38.3	18.5	38.3	18.5
June	22.8	10.5	6.0	1.3	27.4	32.3	56.2	44.1	31.2	14.6	31.2	14.6
July	18.1		2.8		27.0		47.9		26.7		26.7	
August	18.9		3.1		24.1		46.1		22.5		22.5	
September	17.6		2.7		26.3		46.6		28.2		28.2	
October	13.3		2.4		26.5		42.2		20.5		20.5	
November	13.5		1.6		23.7		38.8		15.9		15.9	
December	9.7		1.2		26.2		37.1		16.5		16.5	
Average	19.6		3.7		21.8		45.1		35.5		35.5	
<b>Men's clothing:</b>												
April		17.0		1.5		26.8		45.3		39.2		39.2
May		16.4		1.8		17.2		35.4		36.5		35.4
June		16.1		2.8		6.8		25.7		49.3		25.7
<b>Sawmills:</b>												
January	44.7	11.4	13.9	5.1	53.2	94.4	111.8	110.9	110.5	117.6	110.5	110.9
February	44.2	15.9	17.9	6.5	52.0	59.5	114.1	81.9	118.8	97.0	114.1	81.9
March	45.8	20.5	17.3	6.0	41.7	53.7	104.8	80.2	93.1	83.2	93.1	80.2
April	52.1	21.8	11.2	5.6	60.5	87.3	123.8	114.7	117.6	87.7	117.6	87.7
May	41.3	20.4	15.9	5.9	95.3	75.7	152.5	102.0	118.8	93.8	118.8	93.8
June	35.7	13.8	11.7	4.0	65.1	105.9	112.5	123.7	71.2	78.0	71.2	78.0
July	31.5		12.6		82.2		126.3		72.6		72.6	
August	35.4		10.9		71.7		118.0		79.0		79.0	
September	36.4		11.6		93.0		141.0		84.3		84.3	
October	26.6		8.5		77.4		112.5		97.9		97.9	
November	23.5		10.1		88.0		121.6		60.4		60.4	
December	16.4		10.9		87.3		114.6		53.1		53.1	
Average	36.1		12.7		72.3		121.1		89.8		89.8	
<b>Slaughtering and meat packing:</b>												
January	27.3	15.2	10.7	7.2	78.6	51.8	116.6	74.2	117.9	111.8	116.6	74.2
February	30.9	20.3	12.5	8.9	100.4	84.5	143.8	113.7	96.4	65.5	96.4	65.5
March	29.3	16.6	10.1	4.4	88.4	81.0	127.8	102.0	61.6	61.1	61.6	61.1
April	35.4	17.3	9.1	5.7	54.4	61.1	98.9	84.1	103.1	76.8	98.9	76.8
May	33.4	15.9	9.3	5.1	48.7	48.6	91.4	69.6	106.0	81.4	91.4	69.6
June	33.1	16.6	10.7	6.3	55.9	47.5	99.7	70.4	125.8	74.0	99.7	70.4
July	24.5		9.3		62.9		96.7		81.4		81.4	
August	24.6		8.5		60.5		93.6		74.6		74.6	
September	27.5		7.9		46.1		81.5		89.2		81.5	
October	20.0		8.6		55.0		83.6		89.7		83.6	
November	13.6		6.8		58.4		78.8		88.8		78.8	
December	19.9		6.7		65.8		92.4		73.4		73.4	
Average	26.6		9.2		64.6		100.4		92.3		92.3	

# HOUSING

## Building Permits in Principal Cities, June, 1931

**B**UILDING permits have been received by the Bureau of Labor Statistics from 344 identical cities having a population of 25,000 or over for the months of May and June, 1931, and from 297 cities for the months of June, 1930, and June, 1931.

The cost figures as shown in the following tables apply to the cost of the buildings as estimated by the prospective builder on applying for his permit to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are shown. The States of Illinois, Massachusetts, New York, New Jersey, and Pennsylvania, through their departments of labor, are cooperating with the United States Bureau of Labor Statistics in the collection of these data.

Table 1 shows the estimated cost of new residential buildings, of new nonresidential buildings, and of total building operations in 344 identical cities of the United States, by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS IN 344 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN MAY AND JUNE, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
New England.....	\$3,524,350	\$3,224,170	680	609	\$4,903,904	\$3,811,659	\$10,539,960	\$9,704,884
Middle Atlantic.....	21,909,744	19,742,586	4,892	4,306	25,975,351	13,001,752	53,961,799	38,378,536
East North Central....	6,547,248	5,008,000	1,311	988	13,503,128	8,037,158	23,132,944	16,395,041
West North Central....	2,651,600	2,214,023	673	592	6,429,261	4,600,844	10,329,236	7,891,757
South Atlantic.....	6,242,760	2,965,500	1,131	651	3,007,435	4,393,937	11,286,321	9,611,153
South Central.....	2,238,350	2,720,865	768	736	2,842,396	4,250,703	5,978,691	8,077,741
Mountain and Pacific..	6,348,067	5,641,027	1,901	1,660	6,893,247	7,237,793	15,240,708	15,385,018
Total.....	49,462,119	41,516,171	11,356	9,542	63,554,722	45,333,846	130,469,659	105,444,130
Per cent of change.....	-----	-16.1	-----	-16.0	-----	-28.7	-----	-19.2

The estimated cost of total building operations in the 344 cities from which reports were received for the month of June, 1931, was \$105,444,130 or 19.2 per cent less than the estimated cost of building projects for which permits were issued in these cities during May, 1931. There was a decrease of 16.1 per cent in the estimated cost of residential buildings and a decrease of 28.7 per cent in the estimated cost of nonresidential buildings, comparing June permits with May permits. The new dwelling houses for which permits were issued during 1931 were planned to house 9,542 families. This is 16 per cent less than the number of family dwelling units provided in the buildings for which permits were issued in May.

Decreases in the estimated cost of new residential buildings were shown in all of the geographic divisions except the South Central.

In the South Central States there was an increase of 21.6 per cent in the prospective expenditures for this class of building. The decreases in new residential buildings ranged from 8.5 per cent in New England States to 52.5 per cent in the South Atlantic States. Increases in the indicated expenditures for new nonresidential buildings were shown in three geographic divisions and decreases in the remaining four divisions. The increases ranged from 5 per cent in the Mountain and Pacific States to 49.6 in the South Central States. The decreases ranged from 22.3 per cent in the New England States to 49.9 per cent in the Middle Atlantic States.

Two geographic divisions, the South Central and the Mountain and Pacific, showed increases in total construction. The other five geographic divisions showed decreases in the estimated cost of building projects comparing June permits with May permits. The decreases ranged from 7.9 per cent in the New England States to 29.1 per cent in the East North Central States.

Decreases in family dwelling units provided were shown in each of the seven geographic divisions. The decreases in family dwelling units provided ranged from 4.2 per cent in the South Central States to 42.4 per cent in the South Atlantic States.

Table 2 shows the estimated cost of additions, alterations, and repairs as shown by permits issued, together with the per cent of increase or decrease in June, 1931, as compared with May, 1931, in 344 identical cities of the United States by geographic divisions.

TABLE 2.—ESTIMATED COST OF ADDITIONS, ALTERATIONS, AND REPAIRS IN 344 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN MAY AND JUNE, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	Estimated cost		Per cent of change, June compared with May
	May, 1931	June, 1931	
New England.....	\$2,111,706	\$2,669,055	+26.4
Middle Atlantic.....	6,076,704	5,634,198	-7.3
East North Central.....	3,082,568	3,349,883	+8.7
West North Central.....	1,248,375	1,076,890	-13.7
South Atlantic.....	2,036,126	2,251,716	+10.6
South Central.....	897,945	1,106,173	+12.3
Mountain and Pacific.....	1,999,394	2,506,198	+25.3
Total.....	17,452,818	18,594,113	+6.5

Comparing permits issued in June, 1931, with those issued in May, 1931, in these 344 cities there was an increase of 6.5 per cent in the indicated expenditures for additions, alterations, and repairs. Five of the seven geographic divisions registered increases in this class of building. The increases ranged from 8.7 per cent in the East North Central States to 26.4 per cent in the New England States. The only two geographic divisions showing decreases in the estimated cost of additions, alterations, and repairs were the Middle Atlantic and the West North Central.

Table 3 shows the index number of families provided for and the index numbers of indicated expenditures for new residential buildings, for new nonresidential buildings, for additions, alterations, and repairs, and for total building operations. These indexes are worked on the chain system with the monthly average of 1929 equaling 100.

TABLE 3.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE ESTIMATED COST OF BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES OF THE UNITED STATES, JANUARY, 1930, TO JUNE, 1931, INCLUSIVE

[Monthly average 1929=100]

Month	Families provided for	Estimated cost of—			
		New residential buildings	New non-residential buildings	Additions, alterations, and repairs	Total building operations
1930					
January.....	34.2	29.4	64.3	55.1	46.1
February.....	43.0	34.7	51.8	57.5	44.1
March.....	57.1	47.2	87.1	77.5	66.4
April.....	62.0	51.0	100.1	81.8	73.8
May.....	59.6	48.5	90.7	84.5	69.3
June.....	54.4	45.1	82.5	74.6	63.3
July.....	49.9	44.1	86.7	77.4	64.8
August.....	48.7	43.4	67.2	58.6	54.4
September.....	51.3	44.4	73.8	64.2	58.2
October.....	58.3	44.9	53.5	58.1	49.7
November.....	52.9	42.5	54.4	37.8	46.3
December.....	45.0	37.6	64.3	53.5	50.1
1931					
January.....	39.1	30.8	43.4	55.5	38.9
February.....	40.3	30.3	43.8	48.6	37.9
March.....	53.4	40.7	76.4	58.0	57.1
April.....	64.6	48.6	73.9	65.2	60.6
May.....	51.7	39.8	58.5	53.0	48.8
June.....	43.4	33.4	41.7	56.5	39.4

The index numbers of new residential buildings, of new nonresidential buildings, of total building operations, and of families provided for were all lower than for either May, 1931, or for June, 1930. The index number for additions, alterations, and repairs, while lower than for June, 1930, was higher than for May, 1931. The chart on page 99 shows in graphic form the trend of the estimated costs of new residential buildings, of new nonresidential buildings, and of total building operations.

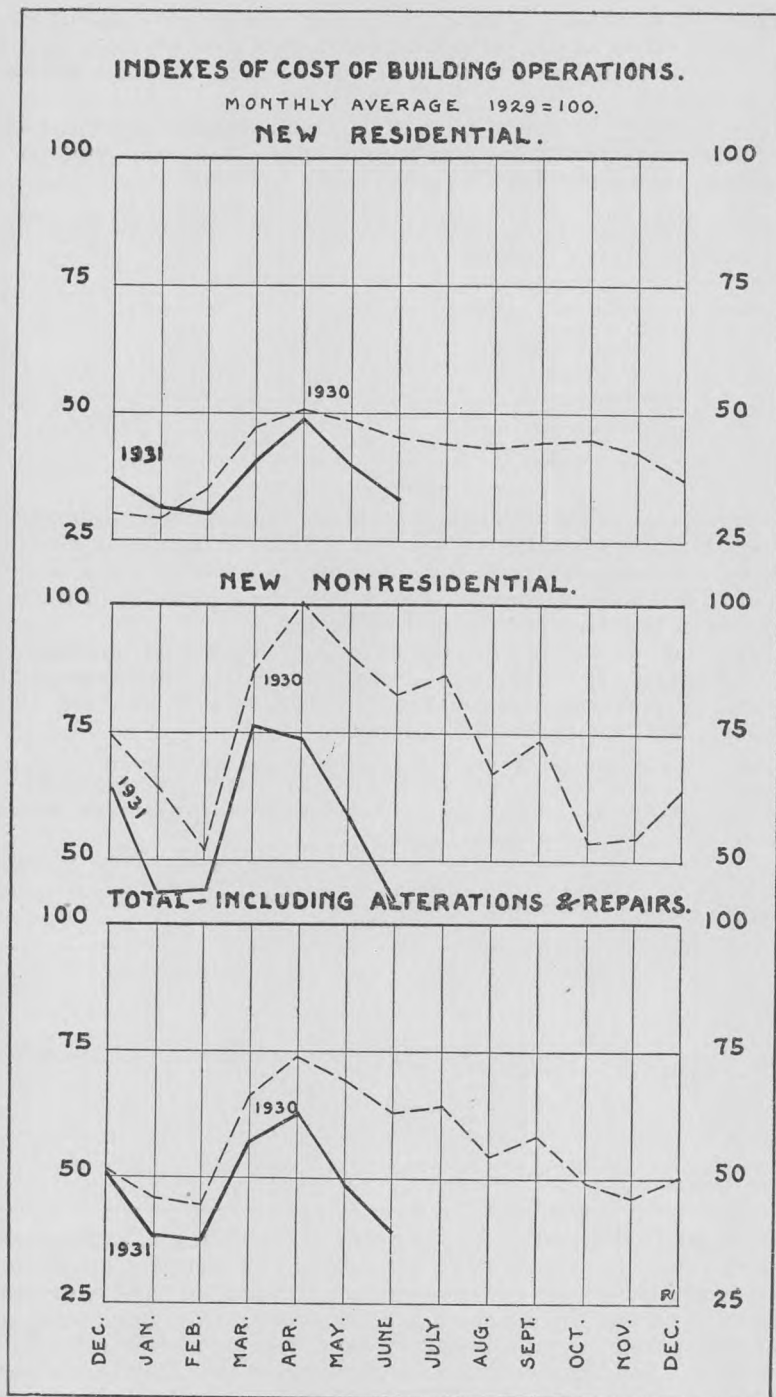
Table 4 shows the dollar value of contracts let for public buildings by the different agencies of the United States Government during the months of May, 1931, and June, 1931, by geographic divisions.

TABLE 4.—CONTRACTS LET FOR PUBLIC BUILDINGS BY DIFFERENT AGENCIES OF THE UNITED STATES GOVERNMENT DURING MAY AND JUNE, 1931. BY GEOGRAPHIC DIVISIONS

Geographic division	May, 1931	June, 1931
New England.....	\$254,712	\$1,201,064
Middle Atlantic.....	2,360,803	867,109
East North Central.....	778,422	1,211,009
West North Central.....	3,074,500	165,963
South Atlantic.....	766,017	4,196,442
South Central.....	529,973	1,241,636
Mountain and Pacific.....	2,403,626	2,712,194
Total.....	10,168,053	11,595,417

New contracts were let for United States Government buildings to cost \$11,595,417 during the month of June. These contracts were let by the following Federal agencies: The United States Capitol Architect; the Office of the Quartermaster General, War Department; Bureau of Yards and Docks, Navy Department; Supervising Architect, Treasury Department; and the United States Veterans' Bureau.





[359]

Whenever a contract is let by the United States Government for a building in cities having a population of 25,000 or over the cost of such building is included in the costs as shown in the cities enumerated in Table 8.

Table 5 shows the dollar value of contracts awarded by the different State governments for public buildings during the months of May, 1931, and June, 1931, by geographic divisions.

TABLE 5.—CONTRACTS AWARDED FOR PUBLIC BUILDINGS BY THE DIFFERENT STATE GOVERNMENTS DURING MAY AND JUNE, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	May, 1931	June, 1931
New England.....	\$190, 103	\$76, 492
Middle Atlantic.....	2, 386, 498	2, 056, 025
East North Central.....	221, 624	828, 000
West North Central.....	344, 560	914, 390
South Atlantic.....	223, 100	961, 568
South Central.....	7, 497	47, 787
Mountain and Pacific.....	753, 114	230, 634
Total.....	4, 126, 496	5, 114, 986

Contracts let by the different State governments during June, 1931, for new building operations total \$5,114,986. Whenever a contract is let by a State government for a building in cities having a population of 25,000 or over, the cost of such building is included in the cost as shown in the cities enumerated in Table 8.

Table 6 shows the estimated cost of new residential buildings, of new nonresidential buildings, and of total building operations in 297 identical cities having a population of 25,000 or over for June, 1930, and June, 1931, by geographic divisions.

TABLE 6.—ESTIMATED COST OF NEW BUILDINGS IN 297 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN JUNE, 1930 AND 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		June, 1930	June, 1931	June, 1930	June, 1931
	June, 1930	June, 1931	June, 1930	June, 1931				
New England.....	\$3, 782, 370	\$3, 187, 370	611	601	\$7, 419, 450	\$3, 799, 914	\$13, 676, 207	\$9, 632, 359
Middle Atlantic.....	21, 171, 800	19, 659, 986	4, 417	4, 283	29, 986, 049	12, 893, 227	60, 453, 456	38, 115, 066
East North Central.....	12, 430, 330	4, 484, 700	1, 761	887	17, 834, 661	7, 561, 228	34, 180, 273	15, 184, 626
West North Central.....	2, 253, 361	2, 193, 773	596	587	8, 447, 954	4, 595, 304	12, 750, 844	7, 862, 412
South Atlantic.....	3, 246, 061	2, 912, 600	732	637	4, 280, 794	4, 360, 617	9, 537, 789	9, 481, 098
South Central.....	3, 721, 252	2, 607, 840	1, 251	696	5, 036, 906	4, 112, 279	10, 143, 760	7, 735, 251
Mountain and Pacific.....	7, 364, 511	5, 272, 577	2, 083	1, 564	7, 255, 870	6, 015, 166	17, 985, 639	13, 745, 880
Total.....	53, 969, 685	40, 318, 846	11, 451	9, 255	80, 261, 684	43, 337, 735	158, 727, 968	101, 756, 692
Per cent of change.....		-25.3		-19.2		-46.0		-35.9

There was a decrease of 25.3 per cent in the indicated expenditures for new residential buildings; a decrease of 46.0 per cent in the indicated expenditures for new nonresidential buildings, and a decrease of 35.9 per cent in the indicated expenditures for total building operations, comparing permits issued in June, 1931, with those issued in June, 1930. Family dwelling units provided in new buildings showed a decrease of 19.2 per cent in June, 1931, as compared with June, 1930, in these 297 cities.

Estimated expenditures for new residential buildings showed a decrease in all geographic divisions. The South Atlantic was the only geographic division showing an increase in the estimated cost of new nonresidential buildings. Each of the other six divisions showed decreases in this class of building. All seven geographic divisions registered decreases in total construction comparing June, 1931, with June, 1930. The number of family units provided also decreased in each of the seven geographic divisions comparing permits issued in June, 1931, with those issued in June, 1930.

Table 7 shows the estimated cost of additions, alterations, and repairs as shown by permits issued together with the per cent of increase or decrease in June, 1931, as compared with June, 1930.

TABLE 7.—ESTIMATED COST OF ADDITIONS, ALTERATIONS, AND REPAIRS IN 297 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN JUNE, 1930, AND JUNE, 1931, BY GEOGRAPHIC DIVISIONS

Geographic division	Estimated cost		Per cent of change, June, 1931, compared with June, 1930
	June, 1930	June, 1931	
New England.....	\$2,474,387	\$2,645,075	+6.9
Middle Atlantic.....	9,295,607	5,561,853	-40.2
East North Central.....	3,915,282	3,138,698	-19.8
West North Central.....	2,049,529	1,073,335	-47.6
South Atlantic.....	2,010,934	2,207,881	+9.8
South Central.....	1,385,602	1,015,132	-26.7
Mountain and Pacific.....	3,365,258	2,458,137	-27.0
Total.....	24,496,599	18,100,111	-26.1

Projected expenditures for additions, alterations, and repairs in these 297 cities decreased 26.1 per cent in June, 1931, as compared with June, 1930. Increases in the estimated costs of repairs, etc., were registered in the New England States and the South Atlantic States. Decreases were shown in the other five geographic divisions.

Table 8 shows the estimated cost of new residential buildings, of new nonresidential buildings, and of total building operations, together with the number of families provided for in new buildings, in 344 identical cities for May, 1931, and June, 1931.

Reports were received from 50 cities in the New England States, 70 cities in the Middle Atlantic States, 93 cities in the East North Central States, 25 cities in the West North Central States, 37 cities in the South Atlantic States, 35 cities in the South Central States, and 34 cities in the Mountain and Pacific States.

Permits were issued for the following important building projects during the month of June: In New Haven, Conn., a permit was issued for a building for Yale University which costs \$1,000,000; Mount Vernon, N. Y., for two school buildings to cost \$932,000; in the Borough of the Bronx, for apartment houses to cost over \$2,000,000; in Brooklyn, N. Y., for apartment houses to cost nearly \$3,500,000; in Manhattan, for two churches to cost over \$1,000,000; in Quincy, Ill., for a school building to cost over \$1,000,000; and in St. Paul, Minn., for a courthouse to cost over \$2,700,000. Contracts were let by Federal agencies for the following important projects during June: A contract was let for the completion of the Senate Office Building in Washington, D. C., to cost nearly \$600,000; for a conservatory in the United States Botanic Garden to cost over \$600,000; for extension

and remodeling of the post office in Houston, Tex., to cost over \$500,000; for a United States veterans' hospital at Albuquerque, N. Mex., to cost over \$1,000,000; for a new post office and Federal courthouse in Salt Lake City to cost over \$850,000; and for the naval base in Hawaii to cost over \$2,000,000.

No reports were received from Bristol, Conn.; Taunton, Mass.; Anderson, Ind.; Massillon and Zanesville, Ohio; University City, Mo.; Pensacola, Fla.; Columbia, S. C.; Lynchburg, Va.; Fort Smith, Ark.; Muskogee, Okla.; Corpus Christi and Laredo, Tex.; Riverside and Santa Monica, Calif.; and Butte, Mont.

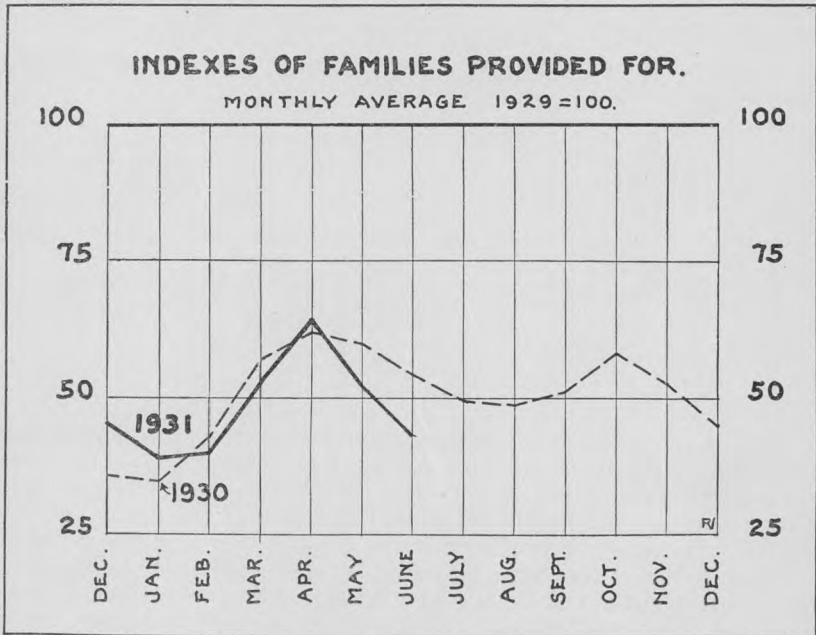


TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931

*New England States*

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
<b>Connecticut:</b>								
Bridgeport.....	\$191,800	\$223,900	46	55	\$7,800	\$44,578	\$227,960	\$292,858
Greenwich.....	70,000	167,000	8	13	163,100	51,700	252,200	289,200
Hartford.....	46,700	54,400	9	11	308,445	358,648	458,824	993,566
Meriden.....	18,700	4,800	4	1	5,115	1,938	34,144	22,417
New Britain.....	16,000	0	2	0	267,924	12,900	301,411	35,679
New Haven.....	65,700	65,000	12	11	132,325	1,013,775	261,860	1,190,437
Norwalk.....	93,400	87,000	18	15	14,475	8,875	118,100	210,167
Stamford.....	90,500	81,000	17	13	28,350	9,950	155,475	108,430
Torrington.....	23,000	21,000	6	5	6,055	4,435	32,965	28,215
Waterbury.....	23,200	34,200	6	11	13,650	4,600	49,400	52,525

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931—Continued

## New England States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
Maine:								
Bangor.....	\$33,600	\$32,000	11	8	\$7,275	\$23,135	\$51,775	\$55,360
Lewiston.....	9,000	19,400	2	6	1,300	19,200	14,300	40,200
Portland.....	32,500	47,750	8	9	18,005	426,005	66,262	503,086
Massachusetts:								
Beverly.....	30,000	15,800	6	3	4,635	5,310	41,985	34,810
Boston 1.....	555,100	553,100	132	129	2,386,180	1,104,305	3,689,755	2,124,833
Brookline.....	31,000	29,400	7	7	20,525	7,145	65,410	51,385
Brookline.....	157,500	24,300	10	3	64,260	9,150	229,260	53,601
Cambridge.....	100,000	85,500	2	12	251,650	12,380	447,035	233,433
Chelsea.....	4,000	7,100	1	2	0	35,500	21,365	54,340
Chicopee.....	15,500	8,000	5	3	3,650	186,789	26,150	197,514
Everett.....	12,400	14,000	4	4	44,650	5,700	70,450	58,700
Fitchburg.....	0	3,200	0	1	11,300	1,750	34,250	9,342
Fitchburg.....	7,250	10,500	2	3	5,400	3,065	16,390	14,965
Haverhill.....	2,900	6,500	2	4	3,085	5,765	12,165	27,247
Holyoke.....	40,000	22,000	6	2	186,350	1,100	249,175	36,050
Lawrence.....	4,500	14,000	1	3	21,410	8,700	153,660	39,645
Lowell.....	39,200	22,100	6	5	8,800	77,935	56,615	122,690
Lynn.....	85,300	34,300	17	7	11,075	27,095	118,670	143,865
Malden.....	42,600	36,800	9	7	7,870	8,842	65,895	63,992
Medford.....	340,400	127,500	89	24	413,230	16,715	759,870	155,775
New Bedford.....	26,500	13,000	4	3	10,900	7,900	50,800	38,250
Newton.....	239,000	290,700	24	32	23,300	16,885	297,295	361,885
Pittsfield.....	90,850	98,100	18	19	30,875	13,220	142,240	329,535
Quincy.....	55,400	89,500	11	32	39,930	12,635	160,810	144,432
Revere.....	22,900	2,500	7	1	12,050	10,060	43,150	18,735
Salem.....	33,000	36,000	3	6	46,900	9,900	91,095	95,500
Somerville.....	10,500	22,000	3	6	23,170	20,005	50,005	57,825
Springfield.....	58,200	74,370	14	16	80,875	18,550	227,500	105,645
Waltham.....	59,200	50,800	8	8	5,700	3,675	69,925	63,365
Watertown.....	38,000	182,000	8	13	11,900	12,500	54,755	203,200
Worcester.....	180,000	204,450	25	32	27,855	22,595	242,050	257,414
New Hampshire:								
Concord.....	41,500	0	8	0	5,200	2,000	49,200	9,500
Manchester.....	44,350	10,500	15	6	6,245	71,030	97,633	132,164
Rhode Island:								
Central Falls.....	0	19,700	0	6	1,300	3,400	3,160	39,985
Cranston.....	116,100	72,100	24	15	12,175	7,625	137,540	81,450
East Providence.....	77,400	20,800	15	4	12,385	3,935	110,143	42,623
Newport.....	4,500	16,500	1	4	16,150	4,850	38,415	33,050
Pawtucket.....	75,800	27,000	14	6	13,140	6,550	108,820	42,030
Providence.....	159,400	143,100	27	23	96,285	62,600	463,563	386,555
Woonsocket.....	0	0	0	0	9,630	4,759	19,285	17,414
Total.....	3,524,350	3,224,170	680	609	4,903,904	3,811,659	10,539,960	9,704,884
Per cent of change.....		-8.5		-10.4		-22.3		-7.9

## Middle Atlantic States

New Jersey:								
Atlantic City.....	\$24,000	\$4,750	3	2	\$2,000	\$31,900	\$71,319	\$80,127
Bayonne.....	16,000	0	6	0	8,850	9,400	31,100	16,815
Belleville.....	37,000	29,500	10	9	4,800	9,575	46,155	50,875
Bloomfield.....	146,000	75,000	31	16	6,000	4,000	154,000	85,500
Camden.....	0	4,800	0	1	35,500	9,275	51,920	28,790
Clifton.....	38,500	123,600	9	28	10,680	26,000	54,600	162,400
East Orange.....	19,700	9,000	3	4	94,980	14,500	129,838	52,427
Elizabeth.....	32,000	47,000	9	4	21,000	55,000	53,000	102,000
Garfield.....	8,200	0	2	0	2,100	1,450	12,755	12,925
Hoboken.....	0	0	0	0	227,410	0	242,074	9,643
Irvington.....	67,500	33,400	16	6	27,540	132,645	108,740	168,725
Jersey City.....	58,500	55,000	13	11	55,611	185,155	217,646	276,505
Kearny.....	48,000	14,000	14	3	353,645	1,875	404,910	20,770
Montclair.....	133,200	49,950	14	6	0	24,700	133,200	77,350
Newark.....	163,600	175,600	40	34	123,375	302,875	450,349	629,311
New Brunswick.....	21,533	6,000	2	1	6,500	7,050	40,443	100,551

<sup>1</sup> Applications filed.



TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931—Continued

## Middle Atlantic States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
New Jersey—Contd.								
Orange.....	0	\$5,670	0	1	0	\$48,597	\$122,041	\$68,357
Passaic.....	0	7,500	0	1	\$83,700	5,400	102,025	34,730
Paterson.....	\$20,800	9,000	6	2	40,220	196,245	133,173	261,324
Perth Amboy.....	39,000	5,770	8	1	2,675	1,550	55,275	15,568
Plainfield.....	92,400	66,400	9	9	9,625	4,050	166,023	89,409
Trenton.....	12,100	61,500	2	12	38,810	18,425	78,260	101,195
Union City.....	0	42,000	0	24	21,348	1,250	43,513	62,135
West New York.....	0	0	0	0	0	0	3,165	6,885
New York:								
Albany.....	185,490	141,000	19	16	176,600	224,206	394,156	447,464
Amsterdam.....	8,600	26,000	2	2	2,675	15,000	15,275	41,700
Auburn.....	0	16,500	0	3	3,005	3,125	10,205	23,680
Binghamton.....	11,300	50,550	2	14	7,971	11,191	55,351	130,347
Buffalo.....	361,300	477,900	118	156	492,450	451,226	968,106	1,028,329
Elmira.....	11,000	8,500	2	2	4,655	418,380	28,000	444,400
Jamestown.....	3,500	11,900	1	3	2,175	4,035	20,885	22,910
Kingston.....	38,000	11,500	6	3	2,950	39,260	71,750	58,265
Lockport.....	7,800	17,500	2	4	1,975	31,565	11,775	55,300
Mount Vernon.....	218,500	201,000	18	20	40,950	953,650	269,860	1,192,450
Newburgh.....	19,000	6,000	4	1	126,100	653,650	151,400	663,550
New Rochelle.....	596,500	226,500	89	12	14,710	1,950	980,628	259,215
New York—								
The Bronx <sup>1</sup> .....	3,530,600	3,166,950	859	729	1,181,100	1,593,200	5,153,305	5,142,795
Brooklyn <sup>1</sup> .....	6,618,350	4,288,325	1,672	1,132	905,630	1,281,230	8,370,619	6,577,030
Manhattan <sup>1</sup> .....	870,000	1,650,000	179	96	10,060,880	1,857,450	12,032,305	4,819,846
Queens <sup>1</sup> .....	5,536,250	5,502,850	1,184	1,376	2,785,981	1,684,412	8,863,080	7,623,050
Richmond <sup>1</sup> .....	504,915	648,550	132	169	1,052,387	25,670	1,705,202	745,422
Niagara Falls.....	55,300	54,200	13	12	18,410	47,025	111,708	133,282
Poughkeepsie.....	48,500	41,800	7	7	243,750	250	318,150	57,400
Rochester.....	141,200	82,200	22	15	413,769	427,498	652,039	703,556
Schenectady.....	60,475	39,000	12	8	43,105	24,750	172,533	90,200
Syracuse.....	140,000	134,300	27	25	925,855	22,725	1,102,268	194,185
Troy.....	116,600	71,150	12	14	70,600	35,100	199,873	114,450
Utica.....	56,000	18,000	11	4	3,015	5,975	71,090	50,500
Watertown.....	2,000	20,500	1	3	1,880	3,300	27,101	30,864
White Plains.....	231,432	276,000	25	19	2,007,700	9,800	2,279,143	295,500
Yonkers.....	446,400	387,850	54	43	233,175	51,850	752,625	503,540
Pennsylvania:								
Allentown.....	26,000	75,000	1	14	13,950	25,075	58,925	107,375
Altoona.....	37,046	17,875	7	5	12,273	5,380	61,799	35,017
Bethlehem.....	68,700	5,000	9	1	16,775	11,490	118,575	21,415
Butler.....	600	0	1	0	3,200	1,200	6,600	1,200
Chester.....	0	2,500	0	1	5,850	5,550	17,350	10,225
Easton.....	0	13,500	0	1	4,959	9,370	9,779	28,310
Erie.....	116,250	80,300	21	16	244,679	14,450	451,011	116,330
Harrisburg.....	41,000	11,000	5	1	8,150	10,550	90,450	53,000
Hazleton.....	7,258	24,416	2	5	69,464	8,270	97,591	54,764
Johnstown.....	20,500	0	4	0	6,210	9,925	32,390	28,325
Lancaster.....	7,000	15,500	2	3	28,400	47,110	104,525	100,715
McKeesport.....	61,300	51,000	14	5	3,673	115,125	96,691	183,617
Nanticoke.....	20,700	28,000	4	7	0	0	31,595	48,000
New Castle.....	20,300	6,000	4	1	5,770	3,275	35,320	17,155
Norristown.....	11,495	29,000	3	5	11,213	70,241	52,403	107,799
Philadelphia.....	338,575	532,200	68	80	1,204,870	1,163,250	1,903,240	2,055,185
Pittsburgh.....	251,200	342,500	61	69	450,585	285,435	1,005,160	939,042
Reading.....	47,000	7,600	4	3	1,614,506	65,935	1,702,051	96,370
Scranton.....	10,575	25,100	3	8	215,035	16,870	274,435	79,265
Wilkes-Barre.....	6,200	4,800	4	2	6,988	138,795	38,322	169,876
Wilkesburg.....	14,500	24,000	3	5	3,440	4,950	29,900	47,100
Williamsport.....	6,500	10,730	2	5	6,024	5,384	29,697	25,219
York.....	0	34,600	0	6	9,505	35,752	19,944	89,805
Total.....	21,909,744	19,742,586	4,892	4,306	25,975,351	13,001,752	53,961,799	38,378,536
Per cent of change.....		-9.9		-12.0		-49.9		-28.9

<sup>1</sup>Applications filed.

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931—Continued

## East North Central States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
<b>Illinois:</b>								
Alton	\$24,873	\$29,300	3	2	\$5,800	\$33,460	\$42,648	\$77,171
Aurora	6,450	16,425	2	4	238,735	1,850	257,460	35,758
Belleville	29,400	51,600	9	11	3,050	500	34,900	62,000
Berwyn	23,000	6,000	3	1	7,299	2,975	36,359	13,475
Bloomington	37,000	5,000	5	1	71,000	2,000	109,000	10,000
Chicago	772,250	442,700	119	74	686,870	846,550	2,030,570	1,773,820
Cicero	17,500	14,800	3	2	650	25,985	26,662	44,360
Danville	8,600	7,600	2	2	850	2,050	14,900	74,385
Decatur	51,700	26,200	5	5	7,800	3,775	82,550	33,625
East St. Louis	25,934	18,800	13	7	83,290	173,060	130,242	215,775
Elgin	25,600	15,600	5	3	4,835	2,200	41,542	37,869
Evansston	61,000	49,000	5	4	4,300	18,000	148,000	207,500
Granite City	2,600	0	1	0	6,900	350	9,500	350
Joliet	33,500	8,000	3	1	800	265,919	44,300	290,160
Maywood	17,200	0	3	0	5,179	825	26,979	4,505
Moline	17,500	19,400	4	4	1,604	3,215	22,111	49,496
Oak Park	86,000	10,000	8	1	21,460	3,715	125,950	32,465
Peoria	121,950	118,100	26	26	26,300	5,650	334,250	140,550
Quincy	10,750	9,000	5	2	1,050	1,209,630	19,520	1,220,855
Rockford	34,200	31,500	8	8	8,625	2,050	52,695	63,425
Rock Island	17,500	15,000	6	4	2,436	982	44,228	29,180
Springfield	60,300	91,782	13	26	10,915	528,385	110,212	636,586
Waukegan	23,000	119,000	6	7	940	23,950	38,640	149,050
<b>Indiana:</b>								
East Chicago	0	0	0	0	49,568	20,515	55,568	29,296
Elkhart	4,000	4,000	1	2	1,125	955	19,555	17,159
Evansville	28,575	23,250	8	7	15,807	38,300	58,415	86,637
Fort Wayne	84,230	69,050	19	15	15,539	179,198	138,743	269,940
Gary	27,300	7,000	10	3	3,460	2,475	63,020	13,240
Hammond	32,250	17,030	6	4	3,135	51,513	57,317	73,603
Indianapolis	124,100	178,200	24	40	504,929	256,766	706,038	489,659
Kokomo	0	0	0	0	1,600	1,300	9,111	6,560
Lafayette	3,600	17,000	1	9	0	245,760	6,450	267,560
Marion	0	9,500	0	5	595	3,750	3,390	34,182
Michigan City	800	0	1	0	15,995	1,355	18,025	77,405
Mishawaka	700	0	1	0	1,615	600	6,865	4,415
Muncie	6,900	24,000	4	9	6,930	2,320	22,596	42,105
Richmond	17,500	6,950	4	3	450	250	32,350	7,200
South Bend	45,150	18,800	8	6	37,415	13,270	102,770	46,145
Terre Haute	9,700	0	4	0	4,505	8,880	21,790	18,995
<b>Michigan:</b>								
Ann Arbor	84,700	79,200	13	9	2,481	65,500	108,384	167,435
Battle Creek	6,250	2,500	2	1	16,000	20,595	27,300	34,230
Bay City	20,900	25,500	6	7	6,060	316,700	70,848	353,735
Dearborn	102,800	69,600	21	16	11,085	2,050	122,320	77,660
Detroit	1,452,150	1,039,365	303	201	587,428	522,658	2,366,894	2,047,471
Flint	87,344	46,393	19	12	48,780	20,706	168,418	106,184
Grand Rapids	46,000	40,900	13	11	32,500	78,525	111,875	154,480
Hamtramck	0	0	0	0	400	725	7,630	17,735
Highland Park	0	0	0	0	1,700	823	17,450	4,745
Jackson	4,800	0	1	0	5,815	81,165	27,552	86,443
Kalamazoo	28,700	19,100	5	6	60,205	101,572	101,665	132,167
Lansing	26,250	11,000	8	3	533,405	11,660	564,980	35,450
Muskegon	10,500	12,600	4	5	251,880	1,700	268,985	20,150
Pontiac	2,400	0	1	0	8,360	29,875	21,105	33,725
Port Huron	1,225	3,000	2	2	0	700	1,225	3,950
Saginaw	27,200	4,700	9	2	38,692	8,470	82,269	26,899
Wyandotte	31,250	4,500	5	1	6,545	7,245	46,265	19,395
<b>Ohio:</b>								
Akron	43,650	46,950	8	11	77,625	123,601	218,350	235,781
Ashtabula	5,000	6,200	1	2	4,955	31,270	12,875	42,237
Canton	16,700	18,000	5	5	110,015	4,535	136,035	41,375
Cincinnati	727,940	691,245	128	119	6,191,385	823,855	7,051,270	1,598,565
Cleveland	255,000	159,500	48	28	290,450	992,300	823,725	1,423,475
<b>Cleveland</b>								
Heights	128,000	103,500	28	26	3,155	3,315	142,605	112,415
Columbus	280,400	97,900	47	18	77,900	68,150	393,550	197,100
Dayton	149,700	47,900	37	11	1,032,840	126,951	1,223,902	226,717
East Cleveland	0	0	0	0	687,097	90	688,011	1,895

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931—Continued

## East North Central States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
Ohio—Continued.								
Elyria.....	0	\$3,500	0	1	\$3,580	\$11,550	\$5,615	\$17,650
Hamilton.....	\$3,000	8,800	1	2	201,665	7,075	213,425	21,709
Lakewood.....	129,500	48,000	30	6	3,240	52,495	137,740	102,605
Lima.....	0	0	0	0	1,805	4,300	6,265	9,775
Lorain.....	3,800	13,000	2	4	12,000	1,665	22,195	17,665
Mansfield.....	77,100	45,500	14	4	15,310	1,875	102,958	49,203
Marion.....	0	0	0	0	655	1,360	1,605	1,585
Middletown.....	0	0	0	0	1,550	2,450	10,665	6,385
Newark.....	0	0	0	0	11,375	1,125	16,375	1,425
Norwood.....	33,000	4,000	6	1	2,150	700	37,700	14,710
Portsmouth.....	0	300	0	1	5,800	1,995	9,000	4,188
Springfield.....	22,500	57,500	4	5	7,605	3,210	48,920	69,890
Steubenville.....	16,000	0	4	0	1,325	40,225	25,675	43,450
Toledo.....	108,600	75,800	26	16	177,943	123,910	328,892	255,819
Warren.....	23,180	7,860	6	2	2,320	4,790	35,210	17,345
Youngstown.....	59,850	34,900	10	5	162,944	5,850	239,109	229,893
Wisconsin:								
Appleton.....	68,200	71,300	11	14	93,572	32,865	193,417	106,215
Eau Claire.....	15,527	10,700	9	5	13,400	35,600	44,797	61,500
Fond du Lac.....	14,100	16,600	3	4	142,011	990	158,346	27,565
Green Bay.....	68,800	44,500	18	13	2,555	39,900	87,940	93,775
Kenosha.....	5,200	15,400	1	3	5,425	89,695	19,917	110,186
Madison.....	50,000	89,000	10	16	17,224	5,595	88,654	123,698
Milwaukee.....	289,780	378,300	59	75	487,285	113,533	1,010,258	918,435
Oshkosh.....	24,140	2,400	4	2	13,371	10,507	46,271	21,274
Racine.....	0	18,600	0	3	61,855	2,225	86,045	77,474
Sheboygan.....	20,300	34,200	4	6	11,805	3,872	52,323	59,387
Superior.....	11,500	5,000	3	2	83,065	3,645	101,976	14,415
West Allis.....	71,700	13,700	24	4	9,870	4,995	92,955	29,855
Total.....	6,547,248	5,008,000	1,311	988	13,503,128	8,037,158	23,132,944	16,395,041
Per cent of change.....		-23.5		-24.6		-40.5		-29.1

## West North Central States

Iowa:								
Burlington.....	\$5,700	\$3,000	4	1	\$1,400	\$8,750	\$10,425	\$35,250
Cedar Rapids.....	39,770	60,600	15	19	24,923	148,412	97,586	221,627
Council Bluffs.....	12,000	14,000	6	5	102,150	1,900	117,450	17,700
Davenport.....	46,920	43,600	13	10	3,377	51,150	72,814	111,037
Des Moines.....	80,470	106,900	20	53	63,457	181,690	155,092	354,890
Dubuque.....	14,577	11,400	4	3	16,624	2,505	42,003	22,556
Ottumwa.....	50,000	28,400	10	8	105,200	7,425	260,150	39,925
Sioux City.....	67,600	26,500	17	8	29,005	8,785	120,655	115,135
Waterloo.....	49,400	22,900	15	11	14,468	3,400	68,743	38,105
Kansas:								
Hutchinson.....	18,700	23,500	5	6	4,605	11,585	28,555	45,750
Kansas City.....	33,000	11,950	15	7	18,605	3,820	62,300	21,980
Topeka.....	61,600	39,000	11	10	27,770	16,385	98,000	68,570
Wichita.....	126,625	85,050	37	21	19,404	256,240	168,357	359,202
Minnesota:								
Duluth.....	49,550	35,750	13	8	13,190	10,245	99,333	71,902
Minneapolis.....	491,975	356,170	118	94	355,025	150,590	1,009,185	627,195
St. Paul.....	273,300	193,740	47	35	1,857,331	3,004,056	2,233,483	3,197,796
Missouri:								
Joplin.....	0	6,000	0	3	1,650	1,500	5,100	13,246
Kansas City.....	153,000	152,500	40	36	2,909,150	430,100	3,384,150	1,034,500
St. Joseph.....	9,850	6,300	4	4	152,025	1,955	168,830	26,740
St. Louis.....	648,250	630,500	174	147	536,885	222,010	1,401,748	968,830
Springfield.....	37,000	17,300	14	7	2,650	3,150	50,250	29,100
Nebraska:								
Lincoln.....	39,400	75,650	10	18	14,720	46,855	85,555	135,960
Omaha.....	123,600	146,700	26	43	131,910	20,721	320,130	195,916
North Dakota:								
Fargo.....	40,800	20,250	10	5	8,250	5,540	72,092	29,345
South Dakota:								
Sioux Falls.....	178,513	96,363	45	30	15,487	2,075	197,250	109,500
Total.....	2,651,600	2,214,023	673	592	6,429,261	4,600,844	10,329,236	7,891,757
Per cent of change.....		-16.5		-12.0		-28.4		-23.6

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931—Continued

## South Atlantic States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
Delaware:								
Wilmington.....	\$310,900	\$66,700	61	12	\$15,982	\$36,138	\$368,472	\$141,339
District of Columbia:								
Washington.....	4,265,000	1,184,050	677	217	843,673	3,426,667	5,362,738	5,135,164
Florida:								
Jacksonville.....	28,250	32,700	14	15	14,420	22,505	109,955	131,365
Miami.....	33,050	36,505	15	18	49,800	31,310	207,765	197,657
Orlando.....	1,800	500	3	1	425	1,750	18,450	23,340
St. Petersburg.....	31,400	74,100	4	6	5,200	13,600	71,700	107,900
Tampa.....	500	5,800	1	5	50,475	9,005	84,511	39,565
Georgia:								
Atlanta.....	72,600	97,650	31	44	186,203	54,738	334,780	221,454
Augusta.....	28,250	10,050	11	6	6,698	2,476	42,148	21,165
Columbus.....	10,950	13,050	5	4	1,640	450	19,955	25,415
Macon.....	19,400	16,150	4	7	1,000	1,625	52,509	22,516
Savannah.....	16,000	26,600	6	8	1,215	1,475	58,515	48,525
Maryland:								
Baltimore.....	812,000	625,000	173	122	1,252,200	492,300	2,739,300	2,019,900
Cumberland.....	4,000	5,000	1	2	1,555	750	6,830	8,560
Hagerstown.....	3,500	23,800	1	7	50,565	2,550	55,315	36,350
North Carolina:								
Asheville.....	1,000	1,300	1	1	165	1,375	38,012	6,955
Charlotte.....	0	109,000	0	23	11,500	33,200	142,706	151,065
Durham.....	7,300	18,400	4	8	4,800	5,400	15,400	43,500
Greensboro.....	33,000	10,000	6	2	10,278	7,775	100,017	32,054
High Point.....	8,500	21,000	4	5	10,015	9,115	19,940	31,815
Raleigh.....	1,400	17,650	3	5	1,805	1,575	14,907	23,575
Wilmington.....	0	2,000	0	1	1,800	28,300	17,100	62,300
Winston-Salem.....	13,815	61,500	9	3	175,290	9,800	228,000	126,065
South Carolina:								
Charleston.....	21,000	9,850	6	5	100	13,350	28,465	26,775
Greenville.....	20,200	32,500	5	10	34,625	85	61,585	36,215
Spartanburg.....	700	13,750	1	3	5,100	160	8,205	15,150
Virginia:								
Newport News.....	8,400	1,800	4	2	1,838	42,721	20,476	58,704
Norfolk.....	104,800	151,768	21	35	24,795	9,700	160,645	196,652
Petersburg.....	7,000	6,000	3	3	7,000	0	19,930	9,025
Portsmouth.....	9,545	2,000	2	1	790	24,320	24,385	11,920
Richmond.....	85,400	127,227	24	30	44,243	24,650	168,080	252,003
Roanoke.....	197,100	44,700	8	6	74,495	6,630	277,945	56,563
West Virginia:								
Charleston.....	26,500	97,200	10	26	3,275	2,100	196,675	99,300
Clarksburg.....	23,000	5,900	2	3	1,060	13,612	30,325	64,492
Huntington.....	11,900	0	5	0	6,870	64,800	23,520	69,000
Parkersburg.....	11,600	0	3	0	64,029	20,720	82,239	36,175
Wheeling.....	13,000	14,300	3	5	43,411	1,170	74,811	20,435
Total.....	6,242,760	2,965,500	1,131	651	3,007,435	4,393,937	11,286,321	9,611,153
Per cent of change.....		-52.5		-42.4		+46.1		-14.8

## South Central States

Alabama:								
Birmingham.....	\$45,195	\$11,600	11	7	\$203,647	\$25,976	\$296,997	\$95,672
Mobile.....	11,400	20,800	6	9	16,200	5,346	40,060	40,750
Montgomery.....	58,600	93,900	26	38	9,750	21,600	83,780	129,535
Arkansas:								
Little Rock.....	35,250	16,445	9	8	17,865	3,566	69,627	35,656
Kentucky:								
Ashland.....	0	0	0	0	1,400	640	4,025	1,090
Covington.....	8,000	8,500	2	2	166,345	15,190	186,840	36,880
Louisville.....	103,500	88,500	15	13	24,350	56,300	161,495	215,675
Newport.....	8,200	0	2	0	1,050	1,750	13,250	2,750
Paducah.....	9,150	3,300	4	5	6,255	1,800	16,080	6,536
Louisiana:								
Baton Rouge.....	20,211	23,491	9	6	6,947	3,720	40,681	39,369
Monroe.....	11,500	4,000	4	1	1,600	3,820	17,800	8,045
New Orleans.....	60,900	172,425	26	46	54,210	8,525	192,973	236,062
Shreveport.....	22,000	17,125	15	15	3,877	307,068	66,936	513,695

TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931—Continued

*South Central States—Continued*

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction, including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
Oklahoma:								
Enid.....	\$16,000	\$18,000	16	6	0	\$7,960	\$16,000	\$37,775
Oklahoma City.....	233,700	727,300	68	60	\$126,416	647,165	404,516	1,406,665
Oklmulgee.....	0	0	0	0	646	0	1,046	0
Tulsa.....	79,875	131,615	27	25	276,310	704,597	377,496	858,637
Tennessee:								
Chattanooga.....	51,050	25,001	16	9	51,725	3,447	159,002	80,771
Johnson City.....	800	7,700	1	3	1,150	4,950	3,450	13,225
Knoxville.....	19,620	41,760	9	9	14,544	11,112	39,312	79,752
Memphis.....	74,230	49,400	33	22	159,250	70,590	355,220	224,120
Nashville.....	43,300	90,500	20	16	45,525	185,285	123,195	300,738
Texas:								
Amarillo.....	64,300	58,225	19	20	225,600	82,268	293,375	149,283
Austin.....	128,150	93,865	83	48	10,095	23,122	154,430	148,100
Beaumont.....	40,720	19,850	15	11	282,085	6,270	345,571	42,217
Dallas.....	156,190	134,950	74	74	100,215	62,290	337,382	329,405
El Paso.....	59,258	48,630	14	17	2,265	13,555	96,942	73,882
Fort Worth.....	168,104	80,710	39	36	716,648	188,994	938,236	309,194
Galveston.....	61,247	40,000	13	19	84,745	818,633	158,682	878,449
Houston.....	554,200	595,600	130	154	149,950	902,130	733,593	1,539,139
Port Arthur.....	3,638	6,000	2	3	36,501	4,099	49,948	30,504
San Angelo.....	3,250	6,800	3	3	2,750	85	5,925	15,490
San Antonio.....	68,725	69,540	49	44	17,780	27,550	107,145	130,797
Waco.....	18,087	15,333	8	7	27,200	30,400	80,907	58,600
Wichita Falls.....	0	0	0	0	0	900	6,774	9,272
Total.....	2,238,350	2,720,865	768	736	2,842,396	4,250,703	5,978,691	8,077,741
Per cent of change.....		+21.6		-4.2		+49.6		+35.1

*Mountain and Pacific States*

Arizona:								
Phoenix.....	\$44,805	\$109,200	15	36	\$48,360	\$3,200	\$114,705	\$122,095
Tucson.....	55,550	109,550	20	24	56,670	8,466	127,322	309,780
California:								
Alameda.....	26,400	12,600	5	3	17,530	151,710	50,382	182,687
Alhambra.....	75,850	76,250	25	24	3,900	5,575	84,875	90,875
Bakersfield.....	37,900	2,500	9	1	2,175	46,265	59,555	53,850
Berkeley.....	163,000	78,000	49	17	23,697	18,353	209,451	137,378
Fresno.....	51,150	45,375	12	11	5,345	6,250	75,442	88,011
Glendale.....	183,800	209,200	39	49	26,385	35,315	219,885	250,050
Long Beach.....	236,200	230,600	91	90	155,280	35,280	431,245	321,565
Los Angeles.....	1,869,901	1,634,932	635	621	600,175	2,194,649	3,323,487	4,523,575
Oakland.....	197,971	271,650	56	68	693,118	296,443	969,411	633,350
Pasadena.....	130,450	94,085	13	24	77,072	227,907	307,335	645,486
Sacramento.....	190,910	169,200	37	35	331,460	40,870	574,952	288,340
San Bernardino.....	45,200	29,200	11	9	2,690	8,700	56,750	37,900
San Diego.....	234,155	242,570	80	61	415,432	101,780	684,662	429,199
San Francisco.....	1,046,716	1,055,125	300	251	1,752,485	1,021,686	2,949,345	2,334,600
San Jose.....	32,300	51,210	8	12	3,010	15,780	61,485	95,815
Santa Ana.....	6,500	0	2	0	12,995	0	31,459	0
Stockton.....	108,994	37,000	28	7	165,470	33,861	285,699	85,036
Vallejo.....	10,800	11,500	2	3	2,200	750	17,675	17,610
Colorado:								
Colorado Springs.....	6,700	8,000	3	3	6,920	3,445	17,670	18,895
Denver.....	384,150	221,500	96	57	381,900	46,200	888,100	372,700
Pueblo.....	22,000	3,675	10	4	25,387	79,663	64,040	103,943
Montana:								
Great Falls.....	34,200	35,600	8	13	10,570	13,335	53,145	58,100
New Mexico:								
Albuquerque.....	55,500	41,000	17	11	54,275	1,125,260	115,169	1,182,970
Oregon:								
Portland.....	273,650	289,700	58	43	68,290	160,975	439,985	563,405
Salem.....	14,900	10,000	3	2	1,625	1,512	23,391	23,493
Utah:								
Ogden.....	10,300	17,600	5	9	53,150	1,170	74,680	20,220
Salt Lake City.....	274,240	101,400	95	29	64,736	1,368,176	365,846	1,512,488



TABLE 8.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, MAY AND JUNE, 1931—Continued

*Mountain and Pacific States—Continued*

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total constructions including alterations and repair, (estimated cost)	
	Estimated cost		Families provided for in new dwellings		May, 1931	June, 1931	May, 1931	June, 1931
	May, 1931	June, 1931	May, 1931	June, 1931				
Washington:								
Bellingham.....	\$14,800	\$5,000	5	3	\$1,385	\$17,755	\$20,965	\$26,485
Everett.....	7,600	6,500	4	1	1,405	770	17,560	15,445
Seattle.....	361,000	314,055	113	108	1,705,935	137,687	2,266,790	617,307
Spokane.....	93,975	72,950	27	17	3,725	10,255	132,735	131,155
Tacoma.....	46,500	44,000	20	14	58,445	18,750	125,510	91,210
Total.....	6,348,067	5,641,027	1,901	1,660	6,893,247	7,237,793	15,240,708	15,385,018
Per cent of change.....	-----	-11.1	-----	-12.7	-----	+5.0	-----	+0.9
<i>Hawaii</i>								
Honolulu.....	\$146,543	\$198,411	96	103	\$45,597	\$225,101	\$218,818	\$448,940
Per cent of change.....	-----	+35.4	-----	+7.3	-----	+393.7	-----	+105.2

### Building Permits in the Cities of the United States Having a Population of 100,000 or Over, First Half of 1931

#### Summary

THE Bureau of Labor Statistics has been publishing data semi-annually concerning building permits issued in the cities of the United States having a population of 100,000 or over since 1922. Reports were received for both the first half of 1930 and the first half of 1931 from 92 of the 93 cities which fell in this population group according to the 1930 census figures.

The costs as shown in the table below are as stated by the builder on applying for his permit to build. They include the cost of the building only; no land costs are included. Buildings within the corporate limits of the cities enumerated only are shown.

During the first half of 1931 permits were issued in these 92 cities for building operations to cost \$621,658,988, which is 17 per cent less than the estimated cost of the building operations for which permits were issued during the first six months of 1930. New residential buildings decreased 9.8 per cent and new nonresidential buildings 20.8 per cent, comparing permits issued during the first half of 1931 with those issued in the first half of 1930. Dwelling houses for which permits were issued during the first half of 1931 were planned to provide for 53,709 families—a reduction of less than one-tenth of 1 per cent compared with the families provided for during the first half of 1930.

Although most of these 92 cities showed decreases in the estimated cost of total building operations there were notable exceptions. In New York there was an increase of over \$30,000,000 in the estimated cost of building operations for which permits were issued during the first six months of 1931 as compared with those issued during the first six months of 1930. Other cities showing large increases were Boston, New Orleans, Oklahoma City, St. Louis, St. Paul, Salt Lake City, Syracuse, and Yonkers.

Detailed building permit figures for cities of the United States having a population of 100,000 or over will appear in the September, 1931, number of the Monthly Labor Review.

The table shows the estimated cost of new residential buildings, new nonresidential buildings, and total building operations in 92 cities of the United States having a population of 100,000 or over.

ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, AND TOTAL BUILDING OPERATIONS IN 92 CITIES OF THE UNITED STATES HAVING A POPULATION OF 100,000 OR OVER, FOR THE FIRST HALF OF 1930, COMPARED WITH THE FIRST HALF OF 1931

City	New residential buildings				New nonresidential buildings		Total construction, including alterations and repairs	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	First half of 1930	First half of 1931	First half of 1930	First half of 1931	First half of 1930	First half of 1931	First half of 1930	First half of 1931
Akron	\$4,419,730	\$293,075	280	62	\$1,343,190	\$335,369	\$6,279,578	\$1,154,663
Albany	1,047,000	867,290	106	109	879,272	568,526	2,831,927	1,850,717
Atlanta	1,085,580	603,885	403	262	3,212,510	446,430	5,003,966	1,726,571
Baltimore	4,609,800	6,556,000	986	1,612	7,983,600	4,761,200	16,653,200	15,049,700
Birmingham	273,332	123,555	112	54	876,599	909,380	1,514,478	1,423,269
Boston	3,454,700	4,009,460	778	963	5,790,537	11,112,760	13,874,901	17,583,794
Bridgeport	660,000	1,016,700	147	258	468,415	405,726	1,398,340	1,679,871
Buffalo	1,774,725	2,186,000	563	680	3,789,510	3,094,029	6,249,615	5,856,980
Cambridge	1,268,143	709,650	96	125	849,539	368,599	2,947,940	1,658,822
Camden	266,900	74,800	68	30	905,750	584,951	1,412,725	760,241
Canton	332,400	78,750	69	16	622,317	245,915	1,076,037	467,066
Chattanooga	738,820	205,265	145	69	791,879	129,072	1,894,376	583,552
Chicago	12,666,600	4,367,850	1,546	697	25,873,150	30,122,165	41,953,917	37,651,195
Cincinnati	9,129,242	3,894,890	806	730	11,972,605	8,484,660	21,891,264	13,830,685
Cleveland	4,061,300	1,397,700	798	257	7,037,775	2,838,900	13,952,225	7,774,300
Columbus	1,702,100	1,212,500	295	228	959,100	853,250	3,053,560	2,352,400
Dallas	1,409,925	1,214,710	559	585	1,765,965	651,977	4,130,071	2,524,491
Dayton	363,197	481,612	83	117	2,490,251	1,280,977	3,333,157	1,997,144
Denver	1,291,650	2,497,500	286	686	1,572,750	1,002,090	3,843,500	4,124,090
Des Moines	455,350	640,270	86	169	2,006,432	1,236,377	2,601,184	2,036,176
Detroit	14,532,916	7,708,430	2,505	1,528	9,036,237	6,753,917	27,486,168	16,587,346
Duluth	115,155	150,286	35	38	81,295	60,900	616,900	443,374
Elizabeth	522,000	433,000	154	119	933,400	157,100	1,482,400	590,100
El Paso	853,308	423,633	267	132	722,902	117,820	1,818,669	684,379
Erie	375,100	445,750	86	90	796,551	497,359	1,845,442	1,236,813
Evansville	381,650	246,175	104	63	289,347	378,780	947,209	710,610
Fall River	78,650	8,400	21	3	341,631	195,564	596,126	267,206
Flint	1,139,430	383,890	269	77	766,719	638,034	2,248,444	1,219,236
Fort Wayne	970,330	433,530	201	92	559,582	978,076	1,778,669	1,601,395
Fort Worth	1,117,413	964,028	318	302	3,009,941	2,045,768	4,585,122	3,270,974
Gary	311,200	109,300	80	28	167,095	607,305	658,840	817,715
Grand Rapids	568,150	210,950	151	59	692,550	223,975	1,686,650	665,315
Hartford	477,500	212,300	34	45	2,714,125	729,698	3,905,080	1,857,829
Houston	5,106,630	4,701,226	1,216	1,135	3,505,875	2,100,605	8,788,267	6,992,074
Indianapolis	1,655,890	1,183,725	363	216	2,208,681	2,413,579	4,538,214	4,061,803
Jacksonville	276,000	236,750	109	85	483,940	132,575	1,209,670	725,200
Jersey City	549,000	269,900	152	69	5,619,267	511,061	6,372,539	1,231,171
Kansas City (Kans.)	280,950	139,600	104	70	439,300	267,848	772,230	447,948
Knoxville (Mo.)	3,252,000	965,500	644	231	3,867,800	4,401,150	8,140,850	6,296,400
Long Beach	557,009	152,960	178	53	2,211,262	154,979	1,899,383	330,551
Los Angeles	3,430,950	1,589,275	1,167	600	1,280,805	637,125	6,075,120	2,494,615
Louisville	17,062,226	10,609,623	5,812	3,626	16,737,419	8,232,815	39,712,901	23,096,177
Lowell	1,331,300	701,500	263	104	3,140,140	1,647,545	4,921,065	2,724,155
Lynn	78,950	100,150	20	24	40,400	116,745	377,584	324,295
Memphis	256,500	267,000	52	56	1,732,427	388,035	2,322,852	874,391
Miami	2,601,730	394,680	640	160	2,948,890	708,035	6,556,017	1,737,116
Milwaukee	332,570	290,205	65	58	3,873,010	543,050	1,137,828	1,098,229
Minneapolis	3,460,575	2,535,050	894	535	8,062,764	2,701,435	13,092,107	7,110,216
Nashville	2,671,155	2,500,935	723	629	1,956,065	3,666,795	6,366,855	6,987,355
Newark	887,925	1,900,350	188	134	2,929,380	919,575	3,804,079	1,565,579
New Bedford	969,200	84,700	182	234	4,133,532	838,147	6,656,497	3,194,540
New Haven	78,500	68,000	12	11	315,615	175,100	528,860	319,000
New Orleans	790,800	935,700	149	81	2,506,573	1,351,665	3,666,097	2,593,586
New Orleans	436,980	536,904	122	182	1,064,275	2,841,964	2,089,775	3,840,848

ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, AND TOTAL BUILDING OPERATIONS IN 92 CITIES OF THE UNITED STATES HAVING A POPULATION OF 100,000 OR OVER, FOR THE FIRST HALF OF 1930, COMPARED WITH THE FIRST HALF OF 1931—Continued

City	New residential buildings				New nonresidential buildings		Total construction, including alterations and repairs	
	Estimated cost		Families provided for in new dwellings		Estimated cost		Estimated cost	
	First half of 1930	First half of 1931	First half of 1930	First half of 1931	First half of 1930	First half of 1931	First half of 1930	First half of 1931
New York:								
The Bronx.....	\$9,806,000	\$23,560,402	2,274	5,667	\$13,442,069	\$15,876,750	\$27,556,189	\$41,589,702
Brooklyn.....	12,636,600	27,988,675	2,779	7,121	13,654,375	5,104,157	31,548,060	40,090,137
Manhattan.....	21,213,000	11,133,000	3,521	1,582	59,609,200	71,900,087	99,046,368	98,440,896
Queens.....	21,250,310	36,095,700	4,749	8,405	16,899,331	9,494,155	41,006,467	49,113,836
Richmond.....	1,761,000	2,164,000	352	627	1,358,197	2,283,175	3,818,150	4,936,681
Norfolk.....	537,936	491,868	140	129	527,527	104,636	1,201,072	822,129
Oakland.....	2,732,000	1,789,584	807	507	1,949,752	2,913,458	5,518,463	5,145,470
Oklahoma City.....	4,110,925	2,722,850	1,106	643	5,174,662	9,357,761	9,928,855	12,370,226
Omaha.....	463,550	718,050	104	175	2,607,000	1,179,936	3,586,844	2,329,634
Paterson.....	302,200	165,975	68	38	439,568	377,775	1,159,457	879,994
Peoria.....	1,004,600	664,950	232	156	683,150	55,092	1,992,015	993,477
Philadelphia.....	5,731,350	2,747,425	1,196	562	24,169,490	10,284,440	34,569,340	15,065,440
Pittsburgh.....	3,944,350	1,834,785	837	378	3,288,825	4,224,352	9,962,874	7,560,490
Portland (Oreg.).....	1,983,235	1,720,600	464	363	2,180,815	1,060,385	5,391,185	3,500,410
Providence.....	1,993,400	892,500	278	141	2,645,975	677,860	6,001,845	2,434,183
Reading.....	417,800	881,800	70	19	745,555	1,811,732	1,475,544	2,254,809
Richmond (Va.).....	707,050	810,877	157	131	1,468,011	344,553	2,652,128	1,482,214
Rochester.....	946,955	761,900	149	81	1,043,818	1,944,048	2,932,173	3,207,022
St. Louis.....	2,961,390	3,143,187	786	837	4,662,615	7,586,067	9,278,695	11,693,679
St. Paul.....	1,187,520	1,299,600	205	201	5,051,362	6,687,947	7,081,730	8,620,648
Salt Lake City.....	1,014,600	862,990	302	267	614,990	1,575,798	1,856,760	2,609,252
San Antonio.....	1,539,145	574,960	607	375	3,031,388	645,965	4,984,730	1,424,164
San Diego.....	1,654,600	1,335,652	480	374	860,839	1,777,426	2,868,613	3,581,971
San Francisco.....	5,146,510	5,635,846	1,152	1,446	5,687,531	6,003,024	12,393,561	12,873,619
Scranton.....	313,990	81,625	31	27	792,615	288,303	1,344,616	658,401
Seattle.....	7,568,585	2,391,210	1,522	768	6,930,940	3,125,776	16,426,605	6,684,966
Somerville.....	86,000	126,500	27	32	196,940	401,675	442,594	647,300
Spokane.....	652,675	487,450	176	127	352,344	605,945	1,334,148	1,382,004
Springfield (Mass.).....	586,700	353,970	138	73	1,119,063	897,272	2,106,543	1,518,237
Syracuse.....	1,347,500	716,100	242	137	804,800	2,700,428	2,577,410	4,614,846
Tacoma.....	744,000	280,000	230	113	1,689,790	973,680	2,637,880	1,444,700
Tampa.....	82,630	113,425	48	39	633,447	146,930	896,630	408,917
Toledo.....	905,380	535,800	247	118	4,825,680	830,832	6,182,419	1,646,733
Trenton.....	131,800	197,400	28	21	1,313,508	448,852	1,754,538	873,110
Tulsa.....	2,203,565	1,159,255	503	276	1,918,585	1,291,015	4,331,970	2,712,311
Utica.....	301,450	182,500	40	37	176,040	156,018	665,030	527,756
Washington.....	9,472,250	13,891,655	1,090	2,205	16,988,523	7,090,023	30,522,416	24,421,984
Wichita.....	1,991,240	637,380	444	207	1,322,995	439,199	3,602,304	1,213,831
Wilmington.....	952,700	661,350	186	131	2,051,012	672,281	3,436,122	1,844,681
Worcester.....	827,125	740,900	154	121	1,634,651	111,045	3,183,465	1,172,842
Yonkers.....	2,106,750	3,227,740	233	396	637,840	2,172,385	3,168,315	5,700,680
Youngstown.....	385,030	233,850	89	48	1,210,639	397,009	1,809,399	1,032,418
Total.....	253,925,712	229,150,483	53,735	53,709	383,255,398	303,385,724	749,013,782	621,658,988
Per cent of change.....		-9.8		(1)		-20.8		-17.0

1 A decrease of less than one-tenth of 1 per cent.

# WAGES AND HOURS OF LABOR

## Recent Changes in Wages and Hours of Labor

**I**NFORMATION received by the bureau regarding wage changes is presented below in two distinct groups: Part 1 relates to manufacturing establishments that report monthly figures regarding volume of employment, while part 2 presents data obtained from new trade agreements and other miscellaneous sources. Although the effort is made, it is not always possible to avoid duplication of data as between parts 1 and 2.

### Part 1. Wage-Rate Changes in Manufacturing Industries

Five establishments in five industries reported wage-rate increases during the month ending June 15. These increases, averaging 12.3 per cent, affected 182 employees or 5 per cent of all employees in the establishments concerned.

Two hundred and ten establishments in 45 industries reported wage-rate decreases during the same period. These decreases, averaging 10.8 per cent, affected 25,645 employees or 67 per cent of all employees in the establishments concerned. Twenty wage-rate decreases were reported by establishments in the food group, 34 were reported in the textile group, 39 in the iron and steel group, and 27 in the lumber group. Nineteen establishments in the fertilizer industry reported decreases in rates of wages averaging 14.9 per cent and affecting 462 employees or 7 per cent of the employees in the establishments reporting to the bureau in this industry. Wage-rate decreases reported by eight establishments in the paper and pulp industry averaged 9.8 per cent and affected 4,880 employees or 6 per cent of the employees in the total number of establishments reporting in that industry.

WAGE CHANGES OCCURRING BETWEEN MAY 15 AND JUNE 15, 1931

Industry	Establishments		Per cent of increase or decrease in wage rate		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
<i>Increases</i>							
Baking.....	729	1	20.0	20.0	4	12	(1)
Hosiery and knit goods.....	346	1	10.1	10.1	46	2	(1)
Printing, newspapers.....	449	1	2.3	2.3	24	39	(1)
Automobiles.....	213	1	16.0	16.0	100	8	(1)
Beverages.....	273	1	5.0	5.0	8	73	(1)
Total.....		5	2.3-20.0	12.3	182	5	
<i>Decreases</i>							
Slaughtering and meat packing....	211	2	10.0	10.0	63	97	(1)
Confectionery.....	332	5	10.0-20.0	11.0	235	18	
Flour.....	407	10	5.0-10.0	9.0	303	85	2
Baking.....	729	2	5.0-10.0	6.6	103	40	(1)
Sugar refining, cane.....	13	1	10.0	10.0	27	12	(1)
Cotton goods.....	565	14	10.0-18.0	10.5	1,843	34	1
Hosiery and knit goods.....	346	7	7.0-10.0	8.7	606	29	1
Silk goods.....	258	1	20.0	20.0	120	100	(1)
Woolen and worsted goods.....	201	3	8.0-13.0	8.4	385	68	1
Dyeing and finishing textiles.....	129	1	10.0	10.0	521	81	2
Clothing, men's.....	336	6	3.0-20.0	8.4	460	51	1
Shirts and collars.....	102	2	10.0	10.0	119	86	1
Iron and steel.....	194	2	1.0-10.0	4.5	398	62	(1)
Cast-iron pipe.....	45	1	10.0	10.0	345	100	4
Structural ironwork.....	174	6	10.0-20.0	11.2	721	84	3
Foundry and machine-shop products.....	1,070	22	5.0-20.0	8.9	2,955	90	2
Hardware.....	97	2	10.0	10.0	138	100	1
Machine tools.....	151	3	10.0-20.0	10.9	164	44	1
Steam fittings and steam and hot-water heating apparatus.....	107	3	10.0	10.0	151	12	1
Lumber, sawmills.....	691	13	5.0-25.0	13.1	2,009	94	7
Lumber, millwork.....	344	5	10.0-25.0	19.6	1,721	100	7
Furniture.....	449	9	8.0-25.0	10.8	423	60	1
Boots and shoes.....	290	4	1.0-10.0	8.3	713	62	1
Paper and pulp.....	383	8	5.0-15.0	9.8	4,880	97	6
Paper boxes.....	313	3	10.0-29.0	14.9	144	86	1
Printing, book and job.....	605	8	7.0-20.0	10.0	247	60	(1)
Printing, newspapers.....	449	4	5.0-10.0	8.4	462	77	1
Fertilizers.....	205	19	10.0-20.0	14.9	462	76	7
Cement.....	110	4	5.0-20.0	13.5	605	99	3
Brick, tile, and terra cotta.....	736	6	2.8-20.0	7.9	416	99	1
Pottery.....	118	6	5.0-10.0	9.9	766	83	4
Glass.....	191	2	4.8-10.0	6.4	80	25	(1)
Stamped and enameled ware.....	83	2	10.0	10.0	35	44	(1)
Brass, bronze, and copper products.....	162	1	15.0	15.0	76	100	(1)
Cigars and cigarettes.....	182	2	10.0	10.0	325	78	1
Automobiles.....	213	2	8.0-10.0	9.6	880	94	(1)
Car building and repairing, electric-railroad.....	444	2	10.0	10.0	34	100	(1)
Agricultural implements.....	85	3	10.0	10.0	295	100	3
Electrical machinery apparatus, and supplies.....	212	3	9.2-15.0	10.3	960	100	1
Shipbuilding.....	89	1	6.0	6.0	34	100	(1)
Aircraft.....	40	1	12.7	12.7	10	4	(1)
Jewelry.....	158	2	10.0	10.0	188	49	1
Paint and varnish.....	302	3	10.0	10.0	101	53	1
Rubber goods, other than boots, shoes, tires, and inner tubes.....	80	3	10.0-20.0	16.0	40	22	(1)
Typewriters and supplies.....	17	1	10.0	10.0	82	14	1
Total.....		210	1.0-29.0	10.8	25,645	67	

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



## Part 2.—Wage Changes Reported by Trade-Unions Since April, 1931

WAGE changes reported by trade-unions and, in a few instances, from other sources, as shown in the table following cover 14,912 workers, of which 1,886 reported the adoption of the 5-day week as a permanent feature and 3,500 for a period of three months.

Only three increases in wages were reported, two of which took place in the printing trades and one, an increase of 5 cents per ton for pick mining, in a few mines in Pennsylvania. In the building trades decreases ranged from 2½ to 50 cents per hour. Pocketbook workers in New York City accepted a reduction ranging from \$3.24 to \$3.65 per week.

## RECENT UNION WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, APRIL TO JULY, 1931

Industry, occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
<b>Building trades:</b>					
<b>Bricklayers and masons—</b>					
Fall River, Mass.....	May 1	<i>Per hour</i> \$1.25	<i>Per hour</i> \$1.25	44	40
Houston, Tex., and vicinity.....	do	1.75	1.62½	40	40
<b>Carpenters—</b>					
Cedar Rapids, Iowa.....	Apr. 1	1.07½	1.00	44	44
Fall River, Mass.....	do	1.00	1.00	44	40
Houston, Tex., and vicinity.....	May 18	1.25	1.12½	44	44
Madison, Wis.....	May 1	1.20	1.12½	44	44
San Antonio, Tex.....	May 2	1.12½	.87½	44	44
Westerly, R. I.....	June 2	1.00	.92	44	44
<b>Cement finishers—</b>					
Cedar Rapids, Iowa.....	Apr. 1	1.12½	1.05	48	48
Fall River, Mass.....	May 1	1.25	1.25	44	40
Houston, Tex.....	May 21	1.50	1.37½	40	40
<b>Electricians—</b>					
Madison, Wis.....	May 1	1.45	1.35	40	40
Pueblo, Colo.....	July 17	1.25	1.25	44	40
<b>Laborers—</b>					
Greenwich, Conn.....	May 25	.81¼	.75	44	44
Madison, Wis.....	May 1	.95	.90	40	40
Springfield, Ill., and vicinity.....	Apr. 1	.55	.55	44	40
<b>Lathers—</b>					
Beaumont, Galveston, Houston, and Port Arthur, Tex.....	May 28	1.62½-1.75	1.50-1.62½	40	40
Lake Charles, La.....	do	1.62½-1.75	1.50-1.62½	40	40
Madison, Wis.....	May 1	1.62½	1.50	40	40
<b>Painters—</b>					
Fall River, Mass.....	Apr. 21	.90	.75	44	44
Madison, Wis.....	May 1	1.15	1.12½	40	40
<b>Plasterers—</b>					
Chattanooga, Cleveland, and Dayton, Tenn.....	June 1	1.50	1.00	40	44
Dalton, Ga.....	do	1.50	1.00	40	44
Detroit, Mich.....	May 1	1.62½	1.37½	44	40
Ellwood City, Pa.....	do	1.50	1.25	40	40
Fall River, Mass.....	do	1.25	1.25	44	40
Fort Dodge, Iowa, and vicinity.....	Apr. 1	1.37½	1.12½	44	44
Houston, Tex., and vicinity.....	do	1.75	1.50	40	40
Jackson, Mich., and vicinity.....	May 18	1.50	1.25	40	40
Lynchburg, Va.....	May 1	1.00	.75	49½	49½
Madison, Wis.....	do	1.50	1.37½	40	40
Wheeling, W. Va., and vicinity.....	do	1.50	1.25	44	40
Youngstown, Ohio.....	do	1.25-1.62½	1.12½-1.50	40	40
<b>Plumbers—</b>					
Beaumont, Tex.....	Apr. 25	1.50	1.12½	44	44
Fall River, Mass.....	May 1	1.00	1.00	44	40
Madison, Wis.....	do	1.40	1.35	40	40
<b>Sheet-metal workers—</b>					
Cedar Rapids, Iowa.....	Apr. 1	1.04	1.00	44	44
Madison, Wis.....	May 1	1.25	1.17½	40	40
<b>Steam fitters—</b>					
Fall River, Mass.....	do	1.00	1.00	44	40
Helpers.....	do	.75	.75	44	40
Madison, Wis.....	do	1.37½	1.32½	40	40

<sup>1</sup> Temporary change.

[374]

RECENT UNION WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY,  
APRIL TO JULY, 1931—Continued

Industry, occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Clothing trades: Overall workers, Kansas City, Mo.-----	May 19	<i>Per week</i> \$35.00	<i>Per week</i> \$35.00	44	40
Leather workers: Pocketbook workers, New York, N. Y.—					
First class.....	June 20	2 48.30	44.65	44	44
Second class.....	do-----	2 43.20	39.96	44	44
Miners:		<i>Per day</i>	<i>Per day</i>		
Colorado Springs, Colo.-----	June 10	\$6.52	\$5.00	(3)	(5)
Pennsylvania (5 mines).....	June 23	3.50-4.00	4.00-4.50	48	48
Pick miners.....	do-----	4.55	4.60	48	48
Uniontown, Pa.-----	May 8	(5)	(6)	(5)	(5)
Printing trades: Compositors—		<i>Per week</i>	<i>Per week</i>		
Chicago, Ill.-----	June 1	\$57.00	\$57.00	44	40
Litchfield, Ill., and vicinity.....	do-----	35.00-40.00	36.00-41.00	44	44
Paducah, Ky.-----	May 1	40.00	43.00	48	48
Municipal employees: Portland, Oreg.—					
State Industrial Accident Commission, Office workers.....	June 1	(5)	(7)	44	44
San Francisco, Calif., Board of Public Works.....	July 1	(5)	(5)	44	40

<sup>2</sup> Minimum.<sup>3</sup> Unlimited.<sup>4</sup> Per ton.<sup>5</sup> Not reported.<sup>6</sup> 7½ per cent reduction.<sup>7</sup> 12½ per cent reduction.**Compensation for Out-of-town Work as Provided for in Collective Agreements**

**A**LARGE number of collective agreements provide extra compensation for members sent away from their homes, or usual headquarters, to work. This compensation varies between the locals of the same trade as well as between the different trades.

The majority of the building-trades agreements provide that when an employer sends members of the union on an out-of-town job he shall pay transportation to and from the job and furnish board and lodging while at work on the job. A number of these agreements stipulate the weekly allowance for board and lodging, others provide that the employer shall pay the actual cost of board and lodging. Where men return each night to their homes it is usually provided that daily transportation shall be furnished, although in some cases the employer pays daily transportation in excess of two car fares. A few agreements provide that the employer shall pay for transportation, board, and lodging on all jobs of two weeks' duration or less, but on jobs of more than two weeks' duration the employees shall pay for their own board and lodging.

Employers who advance transportation to members on out-of-town jobs are protected by agreement provisions holding the union responsible for such advanced transportation if the member or members fail to report on the job. In such cases the union reimburses the employer and collects the amount from the member or members.

A large number of agreements provide that time spent in traveling to an out-of-town job during working hours shall be paid for at the

regular rate of wages. Night travel time is not paid for by the employer if he furnishes a Pullman berth for the employee.

More than 600 of the trade agreements received by the Bureau of Labor Statistics in 1929 and 1930 provide extra compensation for members on out-of-town work.

The following are examples of the provisions regarding out-of-town work as they appear in the various trade agreements:

*Asbestos workers.*—Members shall receive board on jobs requiring same, and shall receive transportation and expenses. Board to be not less than \$17.50 per week. Night travel paid at single rate unless berth is furnished, when no travel time will be paid. Day travel during working hours paid at single rate.

Board and all transportation expenses actually expended shall be paid by employer. Men may work Saturday afternoon for regular rate of wages except where the Building Trade Council prohibits Saturday afternoon work.

*Bricklayers, masons, and plasterers.*—Members doing out-of-town work shall receive all expenses for transportation, board, and lodging.

On out-of-town job member shall receive transportation both ways if he remains until job is completed. Any member accepting transportation and not going to work shall be fined to the amount of transportation and such amount be paid to the employer advancing the transportation.

*Carpenters and joiners.*—Any member sent out of town shall demand and receive cost of transportation to and from town, according to the following rule: If 10 miles or less, once a day; over 10 miles and less than 50 miles, once a week; over 50 miles, to be agreed upon by parties concerned.

Member required to leave the city to work if returning daily shall have all transportation in excess of two fares paid. If he does not return daily he shall have board, lodging, and transportation paid.

*Cement finishers.*—Employer shall pay transportation, travel time, and \$21 per week for board and lodging to members working out of town.

On out-of-town job employer shall pay transportation, travel time during working hours, and \$1.50 per day for expenses.

*Electrical workers.*—Transportation, board and lodging, and time consumed in travel not to exceed 8 hours in any 24 hours to be paid by the employer. Board and lodging not to exceed \$11 per week.

All men sent out of the city on a job shall be allowed transportation, traveling time, sleeper, and board by the employer. No traveling to be done Saturday or Sunday or on any of the holidays designated unless first ordered by the employer, in which case double time is to be paid. No pay to be allowed for travel at night except on emergency, breakdown, or repair calls, in which case double time is to be allowed.

*Elevator constructors.*—When members are sent outside the jurisdictional radius covered by this agreement they will be paid straight time rates for all traveling time during the regular working hours. If the trip extends beyond the regular working hours single time will be allowed for actual traveling time up to 5 hours.

On out-of-town work all board, transportation, and travel time shall be paid by the employer.

*Hoisting and operating engineers.*—The employer shall pay transportation to all out-of-town jobs and return transportation if member stays until job is finished or leaves through no fault of his own.

When an engineer is sent out of town to work he shall receive 8 hours per day straight time, board, and transportation both ways.

*Glaziers.*—When men are sent out of the city to work, all expenses such as railroad fare, board, and loss of time while traveling must be paid by the employer. (By traveling time is meant, men shall receive 8 hours' pay in 24 hours traveling.)

On out-of-town work all travel after working hours shall be paid at single time unless sleeper is furnished. Expenses shall be allowed at the rate of \$3.50 per day.

*Hodcarriers, building and common laborers.*—Members working out of town shall receive \$1 per day above the regular scale and round-trip transportation, when they do not return home daily.

Members sent out of town to work will receive transportation both ways and \$10 extra per week for board.

*Lathers.*—When necessary to board outside city, member shall be paid \$1 per day extra and be furnished transportation to and from the job once. If required to return to city each day where the traveling time exceeds one hour member will be allowed a time allowance based on straight time pay and all car fare to and from such job.

On out-of-town job more than 15 miles distant employer shall pay transportation both ways once a week. If man quits the job return transportation will not be allowed.

*Painters, decorators, and paperhangers.*—Journeymen sent out of the city where it is necessary to board away from home shall receive full board and transportation in addition to their regular pay. If required to travel in the daytime to reach the job they shall receive the regular scale of wages for 8 hours each day going and returning. If traveling by night employer must furnish sleeping-car berth and meals en route.

If members are directed to remain on out-of-town job from the beginning to the end employer shall pay for board 7 days per week and transportation. If higher wage or shorter hours on out-of-town work such shall apply to members of this local.

*Operative plasterers.*—On out-of-town work transportation and travel time to be paid by employer.

Members sent out of town to work must receive \$1 per day extra and transportation both ways.

*Plumbers and gas fitters.*—Member working outside the city limits shall receive traveling expenses to and from job for as many trips as he is directed by his employer to make. If directed to board where work is located he shall be paid each week a sum equal to prevailing rate for board for mechanics in that locality. All time properly employed in traveling during regular working hours shall be paid for on single time. If workman leaves his work before it is completed, and without the consent of his employer, it shall be on his own time and at his own expense.

The master plumbers shall furnish all transportation on all jobs and board when conditions require the same.

*Sheet-metal workers.*—Men sent outside the city limits, the employer shall furnish transportation, board, and lodging.

On out-of-town work employer shall pay all railroad fare, traveling time to and from the job, and all hotel bills. Member shall not be paid less than the wage scale of this agreement.

*Sign painters.*—Sign painters and their assistants working on the road shall receive the daily wage scale adopted by the local union having jurisdiction over the locality in which they are working, but not less than the wage scale provided for in this agreement. They shall receive not less than \$4.50 per day hotel expenses, until they return to their home town. They must comply with the working rules and laws of the locality in which they are working but the 5-day week shall prevail on all such road work.

Members doing road work shall receive straight time at standard scale for 5½-day week. They shall receive for hotel expenses \$3.50 per day for 7 days a week.

*Slate, tile, and composition roofers.*—Where men are required to work away from home all necessary expenses and transportation will be paid by the contractor.

When working out of town and unable to go back and forth each day members shall work 9 hours per day at straight time except Saturdays, 4½ hours. Employer shall pay all board, railway fare, and travel time in full.

*Steam fitters.*—On all work outside the city members shall receive their board and transportation to and from work. For time consumed in traveling during Sundays and week days, members shall receive straight time, and only 8 hours allowed in any one 24-hour day for traveling time. Any employer having work outside the city shall send at least one member, who shall not receive less than standard rate of wages—higher rate if city to which sent pays a higher rate.

Member working out of town must have traveling expenses and board paid by employer. Regular wages paid for traveling during working hours. Travel at night sleeping-car accommodations paid for by employer.

*Structural-iron workers.*—Satisfactory arrangements are to be made as to transportation and traveling time on out-of-town work. Any member failing to report for work after transportation has been paid, the amount paid shall be refunded to employer by the union. Member must work at least one week before being entitled to fare and travel time one way unless work is completed in less time.

Members shipping out shall have transportation paid, and shall be paid full day's pay, for travel time up to 8 hours. If travel time takes more than 3 hours

after 10 p. m. berth must be provided by employer. Any member accepting transportation and not reporting shall be fined amount of fare plus \$10; fare to be refunded to employer and fine to go to union.

At the option of employer member shall board at place of work and be paid a sum equal to room and board at prevailing rate for building mechanics, or 37½ cents per hour for time actually worked in addition to regular wage as full compensation for board and room. If member leaves the job before completion he shall be paid transportation one way only.

*Terrazzo and mosaic workers.*—Employers shall pay transportation, travel time, and an allowance of \$12 per week for expenses to members sent out of town to work.

*Glass sign workers.*—When sending glass blowers out of city to work in other plants, if it is agreed upon between the parties that the position is to be permanent, his transportation will be paid to the city he is being sent to and travel time paid at the regular rate of 8 hours straight time per day, but in event the employee is sent out of town for a period not to exceed one week all of the employee's expenses are to be paid.

*Hotel and restaurant employees.*—All out-of-town jobs to include transportation.

Members sent out of town to work shall be paid \$4 per day and railroad fare.

*Longshoremen.*—On outside work transportation will be furnished members, with pay from time of leaving until return to wharf. If stevedore furnishes cook and provisions for gangs he is to be paid prevailing rate for meals.

Members working in stream, their time will be counted from time of leaving pier until their return to pier. Members to supply one meal during day or night, subsequent meals to be furnished by the employer, or an allowance to be made to members of 85 cents per meal for such subsequent meals.

*Boilermakers and iron-ship builders.*—Men sent out of the city shall receive first-class board and lodging, traveling time, and transportation to and from the job. If employee has worked any part of the day and travels following night he shall receive an additional 8 hours' pay. If sleeping accommodations are not provided when traveling the overtime rate shall be paid.

*Machinists.*—Members sent out of the city will receive transportation, board, and lodging, and will be paid single time rate of pay while traveling, including Sundays and holidays. If men do any actual work on Sundays or holidays on which they travel they will be paid double time for working time.

*Railway clerks.*—Employees temporarily required to perform service away from headquarters shall be allowed necessary traveling expenses while away from home, and shall be paid while working according to rules for regular assignment with not less than 8 hours per day. While waiting or traveling outside the regular work period they will be paid at one-half time rate, except that no time will be allowed between 10 p. m. and 7 a. m. where lodging is furnished. Travel during working hours paid at straight-time rate.

*Railroad shopmen.*—Employees will be paid from time ordered to leave home until return for actual time working, waiting time, and traveling time but never less than 8 hours each calendar day. When meals and lodging are not provided by the railroad actual necessary expenses will be allowed.

*Train dispatchers.*—Each train dispatcher will be assigned to established headquarters, and when required to leave such headquarters shall be paid actual necessary expenses in addition to his regular salary while away.

*Sculptors and carvers.*—When not practical to commute to out-of-town job employer shall pay board (\$15 per week) and traveling expenses to and from the job once each week.

*Teamsters and chauffeurs.*—When traveling on train or boat all expenses shall be paid by the employer, including overtime up to 10 p. m. If compelled to remain away from home over night, employer shall pay lodging at rate of \$1.50 per man per night unless customer will provide suitable lodging. Meals will be paid for at 50 cents per man.

Members compelled to remain away from their homes over night on account of their employment, the employer shall pay hotel expenses such as board and lodging.

*Upholstery workers.*—Members shall receive the minimum rate of \$3.75 per day for hotel accommodations while working out of town. All time spent in traveling before 8 a. m. and after 4.30 p. m. shall be paid at time and one-half rate, except when members travel at night, when they shall be furnished with meals and sleeping accommodations and their pay shall stop at 9 p. m.



## Modification of Railroad Agreements to Permit Reduction in Hours of Labor

**R**AILROADS in their agreements with the federated shop crafts, railway and steamship clerks, maintenance-of-way employees, railroad trainmen, railroad signalmen, and miscellaneous employees frequently provide for a reduction in the number of hours to be worked per week during times of depression or when it becomes necessary to reduce expenses.

Practically all of the railroads having agreements with the federated shop crafts providing for a reduction in the number of hours worked per week have placed their shop employees on a 5-day week.

The Southern Railway Co., when it became necessary to make substantial reductions in the expenses of its mechanical department, advised the representatives of the federated shop crafts of its willingness to reduce the number of hours worked per week rather than to reduce the number of men employed.

Due to the fact that the agreement provided for a reduction in the number of men employed and did not provide for a reduction in the number of hours to be worked per week, the federated shop crafts took a vote of the membership to ascertain whether or not they would be willing temporarily to change the provisions of their agreement and take a reduction in the number of hours worked per week rather than have an additional number of men furloughed and thereby increase the large number of unemployed. The vote was almost unanimously in favor of agreeing temporarily to a 5-day week. As a result of the vote the shopmen on the Southern Railway were placed on a 5-day week, beginning July 1, 1931.

The Baltimore & Ohio Railroad's agreement with the railway and steamship clerks contains the following rule:

Nothing within this agreement shall be construed to permit the reduction of days for employees covered by this agreement below 6 days per week, except that this number may be reduced, in a week in which holidays occur, by the number of such holidays.

When it became necessary for the railroad to reduce expenses in order to avoid the necessity of strict application of this rule, the following agreement was made with the clerks' committee:

1. Rule 18 of the clerks' agreement will be temporarily waived, so far as the general office forces, Baltimore, Md., reporting to the senior vice president, including accounting claim, treasury, valuation and relief departments, are concerned, from the effective date until June 30, 1931, and instead of these particular employees being guaranteed 6 days of 8 hours each, they will be guaranteed 5 days work of 8 hours each.

2. These employees will be allowed 5½ days' pay for the 5 days' work performed during this temporary arrangement.

3. During this period, no employees in the accounting department, general offices, Baltimore, Md., will be furloughed, thereby assuring all the employees of steady employment of 5 days per week with 5½ days' pay.

4. Should any vacancies arise in any of the offices affected by this agreement, it will not be necessary to take on other employees to fill them, but the vacancies will be bulletined down the line, and the bottom position may be abolished.

5. Should it be desired to continue this arrangement after June 30, 1931, it will be a matter of further negotiation prior to that date.

### Problem of Wage Assignments

**A**N ARTICLE in the May, 1931, issue of *Personnel*, by Errett Gates, who is in charge of the casualty department of Armour & Co., discusses the effect upon both employers and employees of the great extension, during recent years, of installment and credit house buying. The problems opened up by the exploitation of this new field of merchandising relate chiefly to the large cities and industrial centers and do not affect rural districts and small towns, where credit is built upon a different basis.

Personal credit no longer exists for wage earners in large communities and the modern wage-assignment system has developed as the result of the effort of a certain class of business men to exploit the workingmen. The purchase of articles on credit, which frequently involves the assignment of wages, is confined largely to luxuries which in most cases the wage earner would not feel impelled to buy if it were not for the high-pressure salesmanship used and the lure of the small down payment and weekly installment.

In general, the article points out, the merchants who are thus exploiting the working classes are of the more adventurous type, who are willing to take chances but expect to protect themselves by excessive charges and wage assignments. The legal principle of a "chose in action" is deeply established in American and English law. These merchants have seized upon this ancient legal device as a means of security for credit, which was not necessary in the rural or small town communities. The credit houses secure not only the wage assignment, but they hold as security the capacity of the wage earner. "Assignment of wages is based on the employment contract, the length of which is uncertain owing to the possibility of discharge or sickness, which may terminate the employment and therefore the wage assignment at any time. Under the wage-assignment system, the credit selling is based on the expectation, therefore, that a certain percentage of the buyers will default on their contracts and prices are accordingly increased so that even with the failure of a certain percentage of contracts a large profit will still be made.

The author states that, in addition to the fact that excessive prices are charged for articles sold by the credit houses, and also that workers are influenced to purchase articles which they can not afford and for which they often have little use, the credit houses are often guilty of fraud in sending wage-assignment notices, whether or not they have bona fide wage assignments.

In view of the various abuses which have grown up under the wage-assignment system, the Armour Co. has sought to protect itself and its employees by entering into a contract with employees that they will not assign wages without the consent of the company. The company inaugurated this policy in September, 1928, and a notice was sent out to all the credit houses with which the company had done business in the preceding two years. This action precipitated a large number of lawsuits, the first few of which were won by the company on technicalities. The credit companies finally united to bring a test case, which was won by the credit companies in the two lower courts and has now been carried by Armour & Co. to the Supreme Court.

The costliness of wage assignments is shown by the fact, cited by the writer, that in the past 13 years Armour & Co. has handled about 39,000 such assignments; these have cost the firm much time and trouble in making the adjustments. A wife can not make an assignment of her husband's wages. Under the common law a man is obliged to furnish his wife with the necessaries of life, although the amount he should pay for such things is determined by his financial standing. A credit house can sue a husband for debt, but if he can show, for example, that his earnings are inadequate to furnish his wife with articles of luxury, such as a fur coat or other things which may be regarded as nonessentials, the court will not require him to pay. There must be a judgment in court before a garnishment demand is legal or effective, but credit houses have abused the use of garnishment demands and thousands of demands are said to have been served without the required judgment in court. Other problems which have to be solved and adjusted by the employer for his employees are wage assignments signed in blank and wage assignments made by minors. In the latter case, as minors can not make a contract, such assignments are invalid and in the former case, if it can be proved that the credit company filled in the name of the employer after the assignment was made, the wage assignment will not hold. These and other questions involving either sharp practice on the part of the credit companies or the question of an employee's legal rights are constantly coming up for the company to settle or adjust.

---

### Earnings and Age of a Group of Full-Fashioned Hosiery Workers

**I**N A general study covering the changing economic status of the full-fashioned hosiery worker the industrial research department of the University of Pennsylvania has recently published some statistics of earnings and age for a group of full-fashioned hosiery workers.<sup>1</sup> The information obtained covers workers within the unionized branch of the industry in the United States and the statistics offered are as of 1929.

#### Full-Time Earnings

It is stated that the earnings of full-fashioned hosiery workers were relatively high in 1929, a year when the industry was expanding rapidly, and that earnings figures for 1930 and 1931 would undoubtedly show a reduction.

Among a total of 9,850 workers in six occupations, employed in union shops in 1929, records were secured for almost half (4,506), and of these 3,174 were found to have had full-time employment. Average annual earnings of this group of full-time union workers in the full-fashioned hosiery industry are shown in Table 1 for each of six major occupational groups.

---

<sup>1</sup> Taylor, George W.: *The Full-Fashioned Hosiery Worker*. Philadelphia, University of Pennsylvania Press, 1931.

TABLE 1.—AVERAGE ANNUAL EARNINGS OF FULL-TIME UNION WORKERS IN THE FULL-FASHIONED HOSIERY INDUSTRY, 1929

Occupation	Number of workers	Annual earnings	
		Arithmetic average	Median
Leggers.....	1, 173	\$3, 237	\$3, 217
Footers.....	384	3, 965	3, 948
Toppers.....	647	1, 361	1, 346
Loopers.....	382	1, 308	1, 289
Seamers.....	359	1, 274	1, 239
Boarders:			
Male.....	82	1, 665	1, 731
Female.....	147	1, 071	1, 075
Total.....	3, 174	-----	-----

From Table 1 it is apparent that full-time footers, with average earnings of \$3,965, and leggers, with average earnings of \$3,237, earned considerably more than did workers in the other four occupations, namely, toppers, loopers, seamers, and boarders. The report under review states that almost all the leggers and footers were men and that with the exception of a few boys employed as toppers, the positions for toppers, loopers, and seamers were held by women and girls. It is further brought out that both men and women are commonly employed as boarders and that boarding is the least stabilized of occupations in the industry owing to the practice in hosiery mills of keeping a large stock of hosiery on hand "in the gray" (undyed), that may be dyed quickly upon the purchaser's demand. Not only is employment unstable among boarders but the wage rates vary widely and average earnings of women are generally lower than those of men.

#### Age and Earnings

THE AGES of 3,473 employees were obtained and it was found that somewhat under half this number were less than 25 years old, while almost 70 per cent were under 30 years of age. The distribution of the sample by age groups follows:

TABLE 2.—AGE OF HOSIERY WORKERS

Age group	Number of workers	Per cent of total
Under 18 years.....	88	2.5
18 and under 20 years.....	313	9.0
20 and under 25 years.....	1, 226	35.3
25 and under 30 years.....	799	23.0
30 and under 35 years.....	455	13.1
35 and under 40 years.....	286	8.2
40 and under 45 years.....	151	4.4
45 and under 50 years.....	70	2.0
50 and under 60 years.....	66	1.9
60 years and over.....	19	.6
Total.....	3, 473	100.0

Classifying the footers and leggers by age and full-time earnings, it was found that median earnings of both groups of workers increased

with age up to the age class 40 and under 45 and declined thereafter. Table 3 shows the results of this compilation for footers only:

TABLE 3.—PER CENT OF FULL-TIME FOOTERS EARNING SPECIFIED INCOMES, BY AGE GROUPS, 1929

Annual earnings	Per cent, of specified age, in classified earnings group							Total
	20 and under 25 years	25 and under 30 years	30 and under 35 years	35 and under 40 years	40 and under 45 years	45 and under 50 years	50 and under 60 years	
Under \$2,000	7.7		4.5			4.8		2.2
\$2,000 and under \$2,500		1.4	1.1					.6
\$2,500 and under \$3,000	11.5	5.5						2.2
\$3,000 and under \$3,500	46.2	26.0	9.0	3.4	6.4	4.8	38.9	16.1
\$3,500 and under \$4,000	15.4	37.0	36.0	32.8	32.3	47.6	27.8	33.9
\$4,000 and under \$4,500	11.5	17.8	33.7	43.1	32.3	28.6	16.7	28.5
\$4,500 and under \$5,000	7.7	11.0	13.5	19.0	29.0	9.5	16.6	14.9
\$5,000 and over		1.3	2.2	1.7		4.7		1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of footers	26	73	89	58	31	21	18	316
Median earnings	\$3,354	\$3,759	\$3,999	\$4,170	\$4,200	\$3,950	\$3,750	\$3,928

In Table 3 it is seen that with the exception of the age class 45 and under 50, there is no case where a footer aged 35 or over had full-time earnings of less than \$3,000. However, in the lower age groups, that is 30 and under 35 and 20 and under 25, a substantial percentage of the footers fall in the earnings group under \$2,000.

### Salaries in Various Occupations in Los Angeles

IN A report of a survey of teachers' salaries in the Los Angeles city elementary and high school districts, submitted by the board of education of that city in March, 1931, data were presented on the financial compensation not only of teachers but also of various other occupations. Some of the findings of this investigation are given in the following tabulations.

Table 1 shows the minimum and maximum salary schedules for various positions in the public-school system of Los Angeles, 1929-30:

TABLE 1.—MINIMUM AND MAXIMUM SALARIES FOR SPECIFIED GROUPS IN LOS ANGELES PUBLIC SCHOOLS, 1929-30

Rank or position	Salary		Rank or position	Salary	
	Minimum	Maximum		Minimum	Maximum
Kindergartens:			Junior high schools—Continued.		
Directors, S. S.	\$1,300	\$1,550	Vice principals	\$3,650	\$3,650
Assistants	1,050	1,250	Teachers	1,800	3,040
Elementary schools:			Senior high schools:		
Principals, 6 to 10 rooms	2,600	2,850	Principals	4,200	5,400
11 to 17 rooms	3,000	3,300	Vice principals	3,650	4,300
18 to 26 rooms	3,300	3,700	Heads of departments	3,050	3,500
Teachers	1,400	2,440	Teachers	1,800	3,040
Special schools, principals	2,600	3,000	Elementary and high schools:		
Junior high schools:			Supervisors of subjects	3,700	3,700
Principals	4,650	4,650	Assistant supervisors	3,200	3,200



In order to compare the Los Angeles teachers' salaries with those of other important municipalities, the boards of education of the following cities were requested to send information on this subject for the Los Angeles survey report: Baltimore, Boston, Buffalo, Chicago, Cincinnati, Cleveland, Detroit, Milwaukee, Newark, New York, Philadelphia, Pittsburgh, St. Louis, San Francisco, and Washington, D. C. The returns from this inquiry, combined with the figures for Los Angeles, are summarized in Table 2:

TABLE 2.—SUMMARY OF PRINCIPALS' AND TEACHERS' SALARY SCHEDULES IN 16 CITIES OF OVER 400,000 POPULATION (1920 CENSUS), 1929-30

Rank	Minimum			Maximum		
	Number of cities reporting	Average	Median	Number of cities reporting	Average	Median
Kindergarten teachers.....	16	\$1,329	\$1,350	16	\$2,613	\$2,420
Elementary schools:						
Supervising principals.....	16	3,013	3,000	16	4,715	4,500
Teaching principals.....	7	2,780	2,600	8	3,383	2,900
Assistant or vice principals.....	12	2,105	1,958	13	3,140	2,820
Teachers.....	16	1,341	1,350	16	2,644	2,420
Atypical classes, teachers.....	16	1,455	1,455	16	2,763	2,700
Junior high schools:						
Principals.....	15	4,058	4,000	15	5,216	5,000
Assistant or vice principals.....	11	2,727	2,700	11	3,758	3,700
Teachers.....	15	1,612	1,600	15	2,997	2,850
Senior high schools:						
Principals.....	16	4,654	4,500	16	5,949	5,738
Assistant or vice principals.....	15	3,030	3,200	15	4,162	4,200
Heads of departments.....	12	2,613	2,425	13	3,946	3,800
Teachers.....	16	1,742	1,764	16	3,417	3,250

In Table 3 the maximum annual salaries of a considerable number of Los Angeles municipal employees other than teachers are recorded:

TABLE 3.—MAXIMUM SALARIES FOR VARIOUS MUNICIPAL POSITIONS IN LOS ANGELES, 1929-30

Position	Annual salary	Position	Annual salary
Police department:		Engineering bureau—Continued.	
Chief of police.....	\$6,000	Draftsman.....	\$2,400
Chief of detectives.....	3,900	Surveyor.....	2,880
Captain of police.....	3,600	Instrument man.....	2,100
Captain of detectives.....	3,600	Assessor.....	5,400
Lieutenant.....	3,000	Attorney.....	10,000
Sergeant.....	2,700	Controller.....	7,200
Patrolman.....	2,400	Councilman.....	4,800
Motor police.....	2,700	Mayor.....	10,000
Fire department:		Superintendent of building.....	3,600
Chief engineer.....	7,200	Civil service examiner.....	4,200
Deputy chief.....	5,400	City clerk.....	7,200
Master mechanic.....	3,600	Director of efficiency.....	6,000
Battalion chief.....	3,600	Harbor manager.....	12,000
Captain.....	3,000	Health officer.....	7,200
Private.....	2,400	Librarian.....	8,000
Auto fireman.....	2,580	Park superintendent.....	4,800
Engineering bureau:		Public defender.....	3,600
City engineer.....	10,000	Prosecutor.....	6,000
Inspector of public works.....	5,100	Public works board.....	6,000
Division head.....	5,100	Receiving hospital surgeon.....	4,800
Assistant engineer.....	3,120	Treasurer.....	7,200

Salaries for specified occupations in private establishments in Los Angeles, employing more than 500 persons in 1929, are given in Table 4:

TABLE 4.—SALARIES PAID IN CERTAIN CLASSES OF POSITIONS IN PRIVATE CONCERNS IN LOS ANGELES HAVING OVER 500 EMPLOYEES, 1929

Position	Number of positions	Annual salary <sup>1</sup>		
		Median	Average	Modal
Draftsman, architectural (and architect).....	40	\$3, 917	\$3, 461	\$4, 056
Attorney.....	17	3, 750	4, 126	3, 456
Physician, institutional.....	6	3, 450	3, 564	-----
Civil engineer.....	56	3, 075	3, 192	2, 460
Purchasing agent.....	56	3, 033	3, 556	3, 156
Charity visitor.....	3	2, 940	2, 572	-----
Shovel operator.....	17	2, 930	2, 714	2, 940
Draftsman, structural (and engineer).....	148	2, 920	2, 921	2, 340
Bricklayer.....	18	2, 796	2, 659	2, 820
Appraiser, property.....	14	2, 780	3, 140	2, 700
Inspector, building.....	11	2, 550	2, 583	2, 580
Photographer.....	2	2, 400	2, 628	-----
Plasterer.....	29	2, 394	2, 543	2, 940
Statistician.....	26	2, 360	2, 634	2, 100
Painter.....	152	2, 327	2, 297	2, 340
Carpenter.....	565	2, 326	2, 299	2, 340
Draftsman, electrical (and engineer).....	67	2, 316	2, 336	2, 460
Plumber.....	6	2, 280	2, 280	2, 280
Sheet-metal worker.....	18	2, 280	2, 273	2, 580
Deputy sheriff (peace officer and private detective).....	17	2, 250	2, 100	2, 700
Blacksmith.....	38	2, 235	2, 318	2, 340
Stenographer (male secretary).....	20	2, 220	2, 246	1, 860
Technician, laboratory.....	2	2, 220	2, 220	-----
Clerk (supervising and specialized).....	1, 081	2, 177	2, 375	2, 100
Chemist.....	4	2, 160	2, 070	-----
Draftsman, mechanical.....	83	2, 157	2, 231	2, 100
Draftsman, bridge (and engineer).....	15	2, 153	2, 212	2, 100
Cabinetmaker.....	69	2, 151	2, 185	1, 980
Boilermaker.....	131	2, 149	2, 152	1, 980
Machinist.....	125	2, 139	2, 172	2, 100
Steamfitter.....	56	2, 109	2, 115	2, 100
Instrument man (transit).....	93	2, 106	2, 170	2, 100
Electrician.....	280	2, 101	2, 143	2, 100
Accountant.....	575	2, 099	2, 268	2, 100
Steam engineer.....	244	2, 094	2, 087	2, 340
Draftsman, civil engineering.....	257	2, 073	2, 083	2, 100
Baker.....	37	2, 057	2, 005	2, 100
Stenographic secretary.....	178	2, 044	2, 131	-----
Typewriter repairman.....	15	1, 950	1, 974	-----
Nurse, visiting health.....	14	1, 944	1, 843	1, 980
Steam fireman.....	137	1, 936	1, 903	1, 980
Cashier (teller).....	670	1, 869	1, 904	1, 620
Storekeeper.....	174	1, 863	1, 904	1, 620
Labor foreman.....	349	1, 836	1, 972	1, 500
Tractor driver.....	67	1, 835	1, 726	1, 980
Auto repairman.....	395	1, 831	1, 846	1, 860
Butcher.....	58	1, 787	1, 736	1, 860
Truck driver.....	908	1, 759	1, 788	1, 620
Cook (chef).....	107	1, 753	1, 835	1, 740
Shovel fireman.....	6	1, 740	1, 712	1, 176
Nurse, graduate.....	14	1, 710	1, 714	1, 740
Bookkeeper.....	1, 195	1, 707	1, 707	1, 740
Roller operator.....	6	1, 650	1, 700	1, 620
Gardener.....	30	1, 640	1, 616	-----
Bridge-construction man.....	83	1, 620	1, 620	1, 620
Librarian and library assistant.....	9	1, 620	1, 768	-----
Powder man.....	33	1, 605	1, 716	1, 560
Chauffeur.....	178	1, 593	1, 607	1, 500
Watchman.....	348	1, 593	1, 611	1, 860
Rod and chain man.....	160	1, 560	1, 571	1, 500
Dictating-machine operator.....	17	1, 523	1, 520	1, 500
Stenographer (general).....	892	1, 511	1, 484	1, 620
Road-construction foreman.....	100	1, 467	1, 448	-----
Bookkeeping-machine operator.....	382	1, 401	1, 439	1, 380
Telephone operator.....	262	1, 377	1, 395	1, 380
Clerk (general).....	2, 889	1, 363	1, 370	1, 500
Maintenance man (buildings).....	85	1, 350	1, 474	1, 260
Calculating-machine operator.....	403	1, 247	1, 280	1, 500
Typist.....	545	1, 229	1, 219	1, 260
Elevator operator.....	209	1, 224	1, 252	1, 260
Multigraph, addressing machine, etc., operator.....	85	1, 221	1, 238	1, 260
Laborer.....	4, 482	1, 106	1, 180	1, 500

<sup>1</sup> The monthly rate has been multiplied by 12. No allowance has been made for irregular or seasonal employment.

## Wages and Retail Prices in Various Foreign Countries and in the United States

THE International Labor Review for May, 1931, published by the International Labor Office, contains data on wages and prices in various foreign countries and the United States in January, 1931, or on the nearest date for which figures were available.

### Wages

TABLE 1, based on these data, shows money wages in specified industries and occupations in 71 towns in 18 countries. The International Labor Office points out that the figures are not always comparable, as for some localities they represent wage rates and for others actual earnings; and, again, wage rates were supplied for some classes of workers and actual earnings for others. Also, some hourly wages were calculated by the International Labor Office from figures relating to daily or weekly wages and the number of hours worked per day or per week.

TABLE 1.—RATES OF WAGES PER HOUR IN SPECIFIED OCCUPATIONS AND COUNTRIES IN JANUARY, 1931, OR NEAREST AVAILABLE DATE

[Conversions into United States currency on basis of shilling=14.07 cents; Belgian franc=2.78 cents; Scandinavian krone=26.8 cents; Estonian crown=26.8 cents; French franc=3.92 cents; mark=23.8 cents; £=\$4.8665, shilling=24.33 cents, and penny=2.03 cents; lira=5.26 cents; lat=19.3 cents; florin=40.2 cents; zloty=11.22 cents; escudo=4.49 cents; peseta=10.4 cents]

Country and city	Building							Furniture making		
	Bricklayers and masons	Carpenters and joiners	Plumbers	Painters (general)	Structural-iron workers	Concrete workers	Laborers (general)	Cabinet workers	Upholsterers	French polishers
Austria:										
Graz.....	\$0.21	\$0.20	\$0.17	\$0.23	-----	\$0.16	\$0.14	\$0.19	\$0.19	-----
Linz.....	.20	.21	.18	.20	\$0.15	-----	.15	.21	.21	-----
Vienna.....	.24	.23	.18	.27	.22	.22	.18	.20	.20	-----
Belgium:										
Brussels.....	.19	.19	.22	.18	-----	.19	.15	.20	-----	-----
Canada:										
Halifax.....	1.25	.73	.90	.73	.75	.45	.45	-----	-----	-----
Montreal.....	1.20	.85	.90	.85	1.00	.40	.40	.65	.90	\$0.70
Ottawa.....	1.25	.90	1.05	.70	1.00	.45	.45	-----	-----	-----
Toronto.....	1.35	1.10	1.25	.85	1.00	.50	.50	-----	-----	-----
Vancouver.....	1.35	1.00	1.25	.90	1.25	.56	.50	-----	-----	-----
Winnipeg.....	1.45	1.10	1.25	.95	1.00	.50	.50	.73	.80	.65
Denmark:										
Copenhagen.....	.64	.54	.47	.51	-----	-----	.48	.41	.43	-----
Estonia:										
Tallinn.....	.09	.11	.11	.11	-----	-----	.08	.12	.15	.13
Tartu.....	.09	.09	-----	-----	-----	-----	.07	.10	-----	-----
France:										
Bordeaux.....	.17	.16	.18	.19	.15	.17	.14	.18	.17	.15
Lille.....	.18	.19	.19	.18	-----	-----	.14	.21	.24	.24
Lyon.....	.27	.28	.27	.26	-----	.29	.23	-----	-----	-----
Marseilles.....	.21	.20	.19	.18	.19	.20	.16	.21	.20	.21
Nancy.....	.20	.19	.20	.19	.20	.20	.15	.21	.20	.19
Paris.....	.25	.25	.25	.25	.25	.25	.22	.26	-----	-----
Germany:										
Berlin.....	.37	.37	.40	.35	-----	.37	.30	-----	.33	-----
Breslau.....	.30	.30	.30	.28	-----	.30	.25	-----	.24	-----
Cologne.....	.32	.33	.37	.32	-----	.32	.27	-----	.31	-----
Hamburg.....	.37	.38	.41	.35	-----	.37	.31	-----	.33	-----
Leipzig.....	.33	.33	.34	.34	-----	.33	.27	-----	.29	-----
Munich.....	.33	.33	.37	.32	-----	.33	.27	-----	.28	-----

TABLE 1.—RATES OF WAGES PER HOUR IN SPECIFIED OCCUPATIONS AND COUNTRIES IN JANUARY, 1931, OR NEAREST AVAILABLE DATE—Continued

Country and city	Building—Continued							Furniture making—Con.			
	Bricklayers and masons	Carpenters and joiners	Plumbers	Painters (general)	Structural-iron workers	Concrete workers	Laborers (general)	Cabinet workers	Upholsterers	French polishers	
Great Britain:											
Birmingham	\$0.39	\$0.39	\$0.39	\$0.39	\$0.35	\$0.30	\$0.29	\$0.37	\$0.37	\$0.37	
Bristol	.39	.39	.39	.39	.35	.30	.29	.37	.37	.37	
Glasgow	.40	.40	.40	.41	.30		.29	.38	.38	.38	
Leeds	.39	.39	.39	.39		.30	.29	.39	.39	.39	
London	.42	.42	.42	.40	.38	.31	.31	.43	.43	.42	
Manchester	.39	.39	.39	.39	.35	.30	.29	.40	.40	.40	
Newcastle	.39	.39	.39	.39		.30	.29	.39	.37	.37	
Irish Free State:											
Cork	.43	.43	.43	.43		.27	.27	.43	.43	.43	
Dublin	.45	.45	.45	.44	.42	.32	.32	.45	.45	.45	
Dundalk	.40	.39	.39	.39	.39	.21	.21	.39	.39	.39	
Italy:											
Florence	.14	.15		.15	.11	.14	.10	.15		.12	
Genoa	.16	.17	.14	.17		.14	.12	.17		.17	
Milan	.17	.18			.19		.11	.19		.11	
Rome	.16	.16	.17	.15		.18	.12	.18	.22	.18	
Trieste	.18	.17		.19	.18	.14	.13	.21	.15	.12	
Turin	.17	.17	.13	.17	.13	.17	.12	.18	.18	.18	
Latvia:											
Riga	.15	.12	.18	.14	.15	.15	.09	.12	.16		
Netherlands:											
Amsterdam	.41	.37				.36	.34	.31	.31		
The Hague	.32	.32	.32	.30	.32	.32	.30	.32	.31	.29	
Rotterdam	.31	.32	.32	.30	.32	.32	.30	.30	.30	.28	
Utrecht	.30	.30	.30	.30	.30	.29	.28	.28	.28	.26	
Poland:											
Katowitz	.16	.19				.17	.10				
Lodz	.17	.18				.22	.10				
Posen	.19	.19				.20	.11	.12			
Warsaw	.20	.17		.18	.18		.11				
Portugal:											
Lisbon	.11	.11	.11	.11	.11	.07	.06	.11	.11	.11	
Spain:											
Barcelona	.16	.16	.13	.13	.13	.13	.10	.16	.14	.15	
Bilbao	.16	.16	.16	.15	.10	.10	.09	.15	.15	.15	
Madrid	.16	.17	.16	.16	.16	.17	.10	.16	.17	.17	
Valencia	.12	.11	.12	.11	.12	.12	.10	.12	.12	.10	
Sweden:											
Goteborg	.52	.47	.45	.53		.41	.41	.35	.39	.35	
Malmö	.51	.46	.36	.51		.38	.38	.34	.39	.34	
Stockholm	.85	.76	.58	.80	.45	.53	.53	.39	.42	.39	
United States:											
Baltimore	1.75	1.10	1.38	1.10	1.65	1.38		.53	.74	.46	
Boston	1.50	1.38	1.50	1.38	1.38	1.38	.80	.71	.86	.72	
Chicago	1.70	1.63	1.63	1.75	1.63	1.63		.69	.73	.61	
Denver	1.50	1.25	1.38	1.25	1.25	1.25					
Los Angeles	1.38	1.00	1.13	1.00	1.13	1.25	.63	.65	.74	.78	
New Orleans	1.50	.90	1.05	.90	1.25	1.00					
New York	1.93	1.65	1.65	1.65	1.93	1.65	1.03	.61	.83	.58	
Philadelphia	1.75	1.25	1.25	1.05	1.50	1.25	.50	.53	.65	.50	
St. Louis	1.75	1.50	1.63	1.50	1.75	1.58	.88	.51	.80	.50	
San Francisco	1.38	1.13	1.25	1.13	1.38	1.13	.69	.65	.74	.78	
Yugoslavia:											
Belgrade	.14	.16		.11		.13	.05	.13	.14	.13	
Novi Sad	.11	.11	.11	.11	.09	.07	.05	.14	.14	.09	
Sarajevo	.14	.15		.15		.12	.06	.16	.14	.15	

TABLE 1.—RATES OF WAGES PER HOUR IN SPECIFIED OCCUPATIONS AND COUNTRIES IN JANUARY, 1931, OR NEAREST AVAILABLE DATE—Continued

Country and city	Mechanical engineering				Printing and bookbinding					Electrical installation (building)
	Fitters and turners	Iron molders (sand)	Pat-tern makers	Labor-ers (un-skilled)	Hand compos-itors <sup>1</sup>	Ma-chine compos-itors <sup>1</sup>	Ma-chine mind-ers	Book-binders	Labor-ers (un-skilled)	Electri-cal fitters (skilled)
Austria:										
Graz.....	\$0.11	\$0.11	\$0.11	\$0.09	\$0.21	\$0.21	\$0.23	\$0.19	\$0.13	\$0.14
Linz.....	.15	.15	.15	.12	.20	.20	.23	.19	.14	.18
Vienna.....	.17	.17	.20	.12	.21	.21	.23	.19	.13	.20
Belgium:										
Brussels.....	.18	.19	.19	.13	.19	.20	.19	.19	-----	.19
Canada:										
Halifax.....	.65	.70	.75	.35	.68	.68	.70	.87	-----	.90
Montreal.....	.70	.83	.85	.40	.78	.78	.78	.73	-----	.90
Ottawa.....	.65	.65	.80	.45	.78	.78	.78	.71	-----	.80
Toronto.....	.65	.65	.80	.45	.78	.78	.78	.78	-----	1.25
Vancouver.....	.80	.75	1.00	.53	.98	.98	.98	.98	-----	1.18
Winnipeg.....	.70	.75	.88	.45	.86	.86	.86	.76	-----	1.10
Denmark:										
Copenhagen.....	.45	.51	.50	.35	.49	.49	.48	.49	.37	.41
Estonia:										
Tallinn.....	.14	.12	.13	.08	.16	.20	.18	.13	.11	.12
Tartu.....	.11	.08	.09	.05	.13	.16	.16	.11	.09	.09
France:										
Bordeaux.....	.16	.16	.18	.15	.23	.24	.23	.23	.17	.15
Lille.....	.16	.19	.21	.13	.21	.21	.21	.21	.16	-----
Lyon.....	-----	-----	-----	-----	.26	.26	.26	-----	-----	.26
Marseilles.....	.18	.22	.21	.15	.23	.23	.23	.23	.17	.19
Nancy.....	.20	.20	.23	.14	.19	.21	.19	.20	.13	.19
Paris.....	.25	.25	.31	.17	.26	-----	.27	.21	-----	.25
Germany:										
Berlin.....	.30	.30	.30	.20	.29	.35	.29	.27	.25	.36
Breslau.....	.26	.26	.26	.15	.28	.33	.28	.26	.23	.21
Cologne.....	.25	.25	.25	.19	.29	.35	.29	.27	.25	.27
Hamburg.....	.26	.26	.26	.19	.29	.35	.29	.27	.25	.32
Leipzig.....	.24	.24	.24	.20	.29	.35	.29	.26	.25	.25
Munich.....	.26	.26	.26	.19	.29	.34	.29	.26	.25	.25
Great Britain:										
Birmingham.....	.30	.31	.32	.22	.38	.42	.42	.38	.28	.40
Bristol.....	.30	.30	.31	.21	.38	.42	.42	.38	.28	.40
Glasgow.....	.30	.33	.33	.22	.40	.43	-----	.40	.30	.38
Leeds.....	.29	.32	.31	.22	.38	.42	.42	.38	.28	.40
London.....	.32	.32	.34	.23	.45	.51	.53	.41	.36	.46
Manchester.....	.30	.32	.32	.21	.40	.44	.44	.40	.29	.40
Newcastle.....	.30	.31	.32	.22	.38	.42	.42	.38	.28	.40
Irish Free State:										
Cork.....	.45	.45	.45	.28	.42	.46	.42	.43	.30	.46
Dublin.....	.38	.38	.38	.28	.43	.45	.43	.43	.27	.45
Dundalk.....	.39	.31	.37	.22	.37	.41	.41	-----	-----	.45
Italy:										
Florence.....	.12	.12	-----	.10	.18	.22	.18	.18	-----	.15
Genoa.....	.16	.16	-----	.10	.20	.22	.20	.20	.12	.17
Milan.....	.15	.16	-----	.12	.22	.24	.21	.22	.15	-----
Rome.....	.17	.15	-----	.11	.19	.20	.19	.16	.14	.24
Trieste.....	.16	.13	.17	.10	.21	.21	.21	.19	.14	.19
Turin.....	.15	.17	-----	.11	.21	.24	.21	.21	.12	.19
Latvia:										
Riga.....	.14	.15	.14	.11	.23	.38	-----	.22	.12	.13
Netherlands:										
Amsterdam.....	.35	.35	.35	.27	.30	.34	.30	.30	.25	-----
The Hague.....	-----	-----	-----	-----	.30	.34	.30	.30	-----	.32
Rotterdam.....	.33	.30	.32	-----	.29	.33	.29	.29	.25	.32
Utrecht.....	.29	.33	.30	.27	.28	.32	.28	.25	.23	.27
Poland:										
Katowitz.....	.14	.13	-----	.10	.27	.34	-----	.20	.09	-----
Lodz.....	.14	.17	-----	.08	.21	.28	-----	.18	.09	-----
Posen.....	.17	.18	-----	.10	.22	.28	.27	.20	.08	.20
Warsaw.....	.24	.23	-----	.10	.28	.39	-----	.19	.13	.35
Portugal:										
Lisbon.....	.11	.11	.11	-----	.11	-----	.11	.11	.08	.11

<sup>1</sup> Book and job.



TABLE 1.—RATES OF WAGES PER HOUR IN SPECIFIED OCCUPATIONS AND COUNTRIES IN JANUARY, 1931, OR NEAREST AVAILABLE DATE—Continued

Country and city	Mechanical engineering—Con.				Printing and bookbinding—Continued					Electrical installation (building)—Contd.
	Fitters and turners	Iron molders (sand)	Pattern-makers	Laborers (unskilled)	Hand compositors <sup>1</sup>	Machine compositors <sup>1</sup>	Machine minders	Book-binders	Laborers (unskilled)	Electrical fitters (skilled)
Spain:										
Barcelona.....	\$0.16	\$0.16	\$0.16	\$0.11	\$0.13	\$0.16	\$0.17	\$0.12	\$0.10	\$0.13
Bilbao.....	.16	.17	.17	.10	.14	.19	.21	.12	.10	.14
Madrid.....	.16	.16	.16	.10	.16	.22	.22	.14	.08	.16
Valencia.....	.10	.10	.10	-----	.13	.17	.18	.14	.09	.10
Sweden:										
Goteborg.....	.38	.42	.38	.33	.39	.43	.41	.36	.31	.41
Malmö.....	-----	-----	-----	-----	.37	.42	.37	.36	.30	.41
Stockholm.....	.41	.47	.45	.34	.43	.48	.43	.38	.32	.53
United States:										
Baltimore.....	.66	-----	-----	.43	1.00	1.00	1.00	-----	-----	-----
Boston.....	.66	-----	.77	.48	.96	1.00	1.00	.84	-----	-----
Chicago.....	.73	-----	.95	.51	1.30	1.33	1.33	1.06	-----	-----
Denver.....	.63	-----	-----	.47	1.02	1.02	-----	1.02	-----	-----
Los Angeles.....	.85	-----	1.12	.57	1.07	1.21	1.21	.96	-----	-----
New Orleans.....	.67	-----	.82	.28	.78	.78	.78	.78	-----	-----
New York.....	.73	-----	.88	.51	1.32	1.32	1.32	1.05	-----	-----
Philadelphia.....	.65	-----	.84	.44	.96	1.00	-----	.88	-----	-----
St. Louis.....	.56	-----	.85	.41	1.03	1.11	1.11	1.00	-----	-----
San Francisco.....	.85	-----	1.12	.57	1.18	1.18	1.18	1.14	-----	-----
Yugoslavia:										
Belgrade.....	.16	.21	.25	.06	.19	.21	.19	.19	.09	.25
Novi Sad.....	.12	.11	.07	.05	.19	.16	.30	.19	.09	.11
Sarajevo.....	.14	.16	.16	.07	.21	.27	.30	.19	.11	.18

Country and city	Electrical power distribution		Transport					Food industry	Local authorities	
	Electrical fitters (skilled)	Laborers (unskilled)	Tram and bus drivers	Tram and bus conductors	Motor drivers (van and lorry)	Drivers (one horse)	Railway goods porters	Railway permanent way laborers	Bakers	Laborers (unskilled)
Austria:										
Graz.....	-----	-----	\$0.20	\$0.20	\$0.17	\$0.16	-----	-----	\$0.21	-----
Linz.....	-----	-----	.22	.21	.17	.17	-----	-----	.23	-----
Vienna.....	-----	-----	.25	.25	.21	.14	-----	-----	.23	-----
Belgium:										
Brussels.....	\$0.19	\$0.14	-----	-----	-----	-----	-----	-----	.19	-----
Canada:										
Halifax.....	.77	.45	.58	.58	.45	.33	\$0.50	\$0.45	.40	\$0.40
Montreal.....	.75	.35	.58	.58	.44	.33	.50	.45	.50	.50
Ottawa.....	.65	.50	.51	.51	.49	.35	.50	.45	.46	.50
Toronto.....	.75	.50	.63	.63	.52	.35	.50	.45	.59	.60
Vancouver.....	.97	.50	.66	.66	.56	.39	.50	.45	.72	.60
Winnipeg.....	.95	.40	.64	.64	.53	.40	.50	.45	.60	.50
Denmark:										
Copenhagen.....	-----	-----	.37	.37	.33	.29	-----	-----	.41	.42
Estonia:										
Tallinn.....	.16	.11	.12	.09	.14	.09	.08	.07	.08	.09
Tartu.....	.11	.08	.08	-----	.09	.08	.06	.07	.08	.08
France:										
Bordeaux.....	.15	.14	-----	-----	.19	.18	.16	-----	.19	-----
Lille.....	-----	-----	-----	-----	.18	.16	-----	.15	.18	-----
Lyon.....	-----	-----	.17	.17	-----	-----	-----	-----	.20	.18
Marsailles.....	.20	.17	.22	.22	.22	.21	.11	.15	.22	.17
Nancy.....	.17	.12	-----	-----	-----	-----	.15	.16	-----	.14

<sup>1</sup> Book and job.

TABLE 1.—RATES OF WAGES PER HOUR IN SPECIFIED OCCUPATIONS AND COUNTRIES IN JANUARY, 1931, OR NEAREST AVAILABLE DATE—Continued

Country and city	Electrical power distribution—Continued		Transport—Continued						Food industry—Contd.	Local authorities—Contd.
	Electrical fitters (skilled)	Laborers (unskilled)	Tram and bus drivers	Tram and bus conductors	Motor drivers (van and lorry)	Drivers (one horse)	Railway goods porters	Railway permanent way laborers	Bakers	Laborers (unskilled)
Germany:										
Berlin.....	\$0.36	\$0.30	\$0.34	\$0.31	\$0.33	\$0.27	\$0.23	\$0.24	\$0.30	\$0.26
Breslau.....	.21	.16	.26	.24	.21	.16	.18	.19	.25	.22
Cologne.....	.27	.22	.28	.27	.25	.23	.20	.20	.30	.25
Hamburg.....	.32	.29	.32	.30	.29	.29	.25	.25	.30	.26
Leipzig.....	.25	.21	.28	.27	.25	.23	.21	.22	.30	.23
Munich.....	.25	.21			.26	.25	.20	.21	.27	.24
Great Britain:										
Birmingham.....	.37	.27	.32	.30	.33	.25	.23	.23	.30	.27
Bristol.....	.39	.29			.35	.29	.23	.23	.30	.31
Glasgow.....	.39	.28	.31	.30	.30	.25	.23	.23	.41	.28
Leeds.....	.37	.28	.31	.29	.32	.26	.23	.23	.31	.26
London.....	.45	.32	.39	.37	.37	.29	.24	.24	.31	.33
Manchester.....	.36	.27	.31	.30	.31	.26	.23	.23	.31	.28
Newcastle.....	.35	.28	.30	.30	.30	.26	.23	.23	.32	.30
Irish Free State:										
Cork.....	.58		.30	.29	.32	.35	.24	.23	.49	.28
Dublin.....	.49		.31	.22	.34	.27	.24	.23	.43	.32
Dundalk.....	.43				.35	.28	.23	.23	.39	.26
Italy:										
Florence.....	.15	.10	.15	.13	.15	.14	.12			
Genoa.....	.15	.12	.16	.15	.11	.10	.15	.13		
Milan.....			.15	.14					.15	.14
Rome.....								.18		.13
Trieste.....	.17	.14	.13	.13	.16	.12	.12	.14	.17	.11
Turin.....	.17	.12	.16	.15	.14	.14	.14	.14		.09
Latvia:										
Riga.....	.22	.17				.10	.08	.08	.16	.12
Netherlands:										
Amsterdam.....			.36	.33					.30	.33
The Hague.....	.32	.27	.28	.28	.24	.23	.19	.21		
Rotterdam.....	.31		.26	.24	.25	.22		.30	.30	.31
Utrecht.....	.30	.26	.29	.26	.23	.25			.29	.26
Poland:										
Katowitz.....			.12	.12						.12
Lodz.....	.27	.15	.12	.11					.20	.14
Posen.....									.15	.12
Warsaw.....	.36	.14	.16	.16					.27	.14
Portugal:										
Lisbon.....	.14	.08	.14		.14	.10	.08	.07		
Spain:										
Barcelona.....	.12	.10	.10	.10	.13	.13	.13	.10	.13	.10
Bilbao.....	.18	.10	.10	.10	.15	.13	.09	.10	.12	.11
Madrid.....	.13	.09	.08	.08	.16	.13	.10	.07	.15	.10
Valencia.....	.12	.09	.09	.09	.13	.12	.08	.07	.10	.07
Sweden:										
Goteborg.....	.39		.46	.46	.38	.30	.38	.38	.41	.43
Malmö.....	.38		.43	.43	.33	.31	.36	.31	.47	.40
Stockholm.....	.42		.46	.46	.41	.37	.39	.43	.44	.54
United States:										
Boston.....	.95		.80	.80					.73	
Chicago.....	1.70		.81	.81					.82	
Denver.....									.67	
Los Angeles.....									.79	
New Orleans.....	.95		.54	.54					.56	
New York.....	1.65		.74	.74					.93	
Philadelphia.....									.73	
St. Louis.....	1.65		.72	.72					.77	
San Francisco.....	1.00		.75	.75					.90	
Yugoslavia:										
Belgrade.....	.13	.09	.13		.12			.08	.09	.05
Novi Sad.....	.12	.07	.07	.07	.12	.05	.05	.06	.07	.05
Sarajevo.....	.18	.07			.14	.07		.11	.12	.05

Retail Prices

TABLE 2 gives average retail prices of certain items in the budgets of wage earners' families in 19 countries.

TABLE 2.—RETAIL PRICES OF SPECIFIED COMMODITIES, BY COUNTRIES, JANUARY, 1931<sup>1</sup>

[Conversions into United States currency made on basis of schilling=14.07 cents; Belgian franc=2.78 cents; Czechoslovak crown=2.96 cents; Scandinavian krone=26.8 cents; Estonian crown=26.8 cents; French franc=3.92 cents; mark=23.8 cents; £=\$1.8665, shilling=24.33 cents, and penny=2.03 cents; lira=5.26 cents; lat=19.3 cents; florin=40.2 cents; zloty=11.22 cents; escudo=4.49 cents; peseta=10.4 cents; dinar=1.77 cents]

Article	Unit <sup>2</sup>	Austria (3 towns)	Belgium (Brussels)	Canada (6 towns)	Czechoslovakia (3 towns)	Denmark (Copenhagen)	Estonia (2 towns)	France (6 towns)	Germany (6 towns)	Great Britain (7 towns)	Irish Free State (3 towns)
Bread, white	Kg	\$0.18	\$0.05	\$0.15	\$0.06	\$0.18	\$0.13	\$0.09	\$0.20	\$0.08	\$0.10
Bread, rye or "black"	do.	.08			.06	.05	.04		.09		
Flour, wheat	do.	.08	.06	.08	.09	.08	.13	.14	.13	.09	.08
Oatmeal	do.		.11	.11		.16	.09		.15	.13	.12
Butter, fresh	do.	.79	.70	.81	.67	.59	.90	.78	.75	.75	.73
Butter, salted	do.		.67			.76	.51			.71	
Margarine	do.	.41	.34		.43	.37	.37	.44	.40	.32	.44
Lard	do.	.41	.40	.44	.43	.49	.36	.44	.37	.42	.45
Beef (home produce):											
First quality	do.	.50	.92	.68	.44	.70	.21	1.07		.76	.71
Second quality	do.	.33	.45	.38	.34	.39	.14	.50	.54	.35	.44
Mutton (home produce):											
First quality	do.	.37	.65	.61	.37		.18	1.08		.77	.51
Second quality	do.	.20	.34				.16	.47	.59	.40	.45
Pork:											
First quality	do.	.55	.73	.58	.45	.28	.24	.68			
Second quality	do.	.33	.50	.54	.33		.22	.56	.46		.63
Veal:											
First quality	do.	.53	1.06	.44			.17	1.10			
Second quality	do.	.32	.50		.40	.40	.14	.64	.59		
Bacon	do.	.60	.44	.82		.44	.25	.41	.57	.56	.59
Potatoes	do.	.02	.03	.03	.02	.04	.01	.04	.02	.04	.02
Sugar, white, granulated	do.	.16	.07	.13	.19	.12	.08	.14	.14	.11	.14
Coffee	do.	1.14	.55	1.18	1.30	1.11	1.17	.82	1.51	1.20	1.43
Tea	do.	2.72	.97	1.25		2.32	1.80	1.06	2.57	.95	1.40
Cocoa	do.	.76	.57	1.11			.54	.57	.95	.51	1.22
Cheese	do.	.68	.60	.67	.16	.45	.65	.74	.35	.49	.72
Milk, unskimmed	Liter	.07	.06	.11	.06	.08	.03	.06	.07	.12	.11
Eggs, fresh	One	.03	.03	.05	.03	.04	.02	.04	.04	.05	.05
Rice	Kg	.11	.14	.21	.13	.19	.14	.17	.15	.12	.20
Macaroni or similar products	do.	.22	.19				.21	.22	.43		.39
Peas, dried	do.	.17	.13		.11		.09	.13	.13	.16	.17
Haricot beans, white or red	do.	.14	.17	.17			.13	.17	.15	.13	.24
Prunes, dried	do.	.25	.39	.26		.32				.32	.44
Olive oil	Liter	.64	.43					.26			
Firewood (fir)	100 kg	1.32	1.33	.75	1.05	2.68	.35	1.36	1.41		
Coal, bituminous	do.	1.51	.98	1.42	.69			1.69	.89	1.07	1.28
Coke	do.	1.55	.75	1.37		1.64			1.22		1.01
Electricity (for lighting)	Kwh	.09	.06	.04	.08	.08	.07	.06	.08		.10
Gas	M	.03	.03		.05	.04		.04	.05		
Paraffin oil	Liter	.04	.06		.06	.06	.05	.09	.08		

<sup>1</sup> Except for the United States (December, 1930), and France and Portugal (February, 1931).

<sup>2</sup> Kilogram=2.2046 pounds; liter=1.057 quarts.

TABLE 2.—RETAIL PRICES OF SPECIFIED COMMODITIES, BY COUNTRIES, JANUARY, 1931—Continued

Article	Unit	Italy (6 towns)	Latvia (Riga)	Nether- lands (4 towns)	Poland (4 towns)	Portu- gal (Lis- bon)	Spain (4 towns)	Swen- den (3 towns)	United States (10 towns)	Yugo- slavia (3 towns)
Bread, white.....	Kg.	\$0.10	\$0.12	\$0.10	\$0.09	\$0.13	\$0.07	\$0.21	\$0.19	\$0.07
Bread, rye or "black".....	do.		.05	.08	.04	.09		.17		.05
Flour, wheat.....	do.	.12	.11	.08	.06	.13	.09	.10	.09	.05
Oatmeal.....	do.	.51		.09	.35			.10	.18	.05
Butter, fresh.....	do.	.82	.63		.62	1.17	.89		.95	.83
Butter, salted.....	do.		.58		.52	1.08	.97	.69		.78
Margarine.....	do.	.46		.36	.32	.63		.37	.56	.50
Lard.....	do.	.30	.39	.39	.32	.36	.38	.39	.37	.29
Beef (home produce):										
First quality.....	do.	.73	.25	{ .49	.26	.54	.51	.54	.79	.28
Second quality.....	do.			{ .42	.22	.40	.40	.42	.61	
Mutton (home produce):										
First quality.....	do.	.50	.27	{ -----	.30	{ .40	.48	.64	.68	.27
Second quality.....	do.	.45		{ -----		{ .22	.38			
Pork:										
First quality.....	do.	.53	.27	{ .61	.23	.40	.65	.62	.73	.34
Second quality.....	do.			{ .37	.19	.31	.48			
Veal:										
First quality.....	do.	.79	.22	{ -----	.31	.63	.68	.65		.38
Second quality.....	do.			{ -----	.24	.40	.48	.37		
Bacon.....	do.	.39	.37	.33	.22	.18	.33	.50	.95	.31
Potatoes.....	do.	.04	.02	.03	.01	.04	.03	.03	.07	.03
Sugar, white, granulated.....	do.	.34	.08	.16	.18	.20	.17	.09	.12	.21
Coffee.....	do.	1.68	1.54	.67	1.00	.45	.87	.85	.81	.80
Tea.....	do.	2.22	.75	2.74	1.35			2.14	1.55	.97
Cocoa.....	do.	.69	.39	.51	.95	.54		.58		.76
Cheese.....	do.	.85	.42	.53	.51	.72	.54	.53	.80	.48
Milk, unskimmed.....	Liter.	.06	.04	.06	.04	.09	.07	.06	.13	.07
Eggs, fresh.....	One.	.03	.03	.04	.02	.02	.02	.03	.04	.02
Rice.....	Kg.	.07	.13	.14	.14	.13	.08	.14	.20	.14
Macaroni or similar products.....	do.	.14	.17	.23	.18	.18	.15	.23	.40	.17
Peas, dried.....	do.	.10	.10	.13	.06	.16		.09		
Haricot beans, white or red.....	do.	.11	.12	.12	.09	.07	.13	.11	.24	.10
Prunes, dried.....	do.	.32	.43	.16	.30	.54		.26	.28	.15
Olive oil.....	Liter.	.35		.24	.74	.29	.20	.54		.33
Firewood (fir).....	100 kg.	1.22	.37		1.01	1.35	1.24	.63		.46
Coal, bituminous.....	do.	3.45	.81	1.18	.94	1.57	1.55	.87	1.63	.98
Coke.....	do.	1.48	.97	.99	.79	1.80	1.25	1.47		1.41
Electricity (for lighting).....	Kwh.	.09	.08	.10	.08	.09	.07	.07	.07	.10
Gas.....	M.	.04	.04	.04	.04	.05	.04	.03	.04	.06
Paraffin oil.....	Liter.	.11	.04	.05	.09	.06	.08	.08		.13

## Basic Wage in Various Australian States

ACCORDING to the Employers' Review, the official organ of the Employers' Federation of New South Wales, the basic wage of Queensland was reduced by a recent order of the State industrial court, effective July 1, from £3 17s. (\$18.74)<sup>1</sup> to £3 14s. (\$18.01) a week for adult male workers. The basic wages and working hours in the various States are given as follows:

## BASIC WAGES IN VARIOUS AUSTRALIAN STATES

[Conversions into United States currency on basis of £=\$4.8665, shilling=24.33 cents; penny=2.03 cents.]

Locality	British currency	United States currency	Hours per week
Sydney (New South Wales).....	£ 4 2 6	\$20.07	44
Melbourne (Victoria).....	3 10 0	17.03	48
Adelaide (South Australia).....	3 15 6	18.37	48
Brisbane (Queensland).....	3 14 0	18.01	48
Perth (West Australia).....	3 17 0	18.74	48

<sup>1</sup> Conversions into United States currency on basis of £=\$4.8665; shilling=24.33 cents; penny=2.03 cents

### Wages of Construction Workers in Nantes, France, 1931

**A** REPORT from W. J. Yerby, American consul at Nantes, France, gives the following wages of construction workers, which were in force for the year ending June 30, 1931.

#### WAGES OF CONSTRUCTION WORKERS IN NANTES, FRANCE, 1931

[Conversions into United States currency on basis of franc=3.92 cents]

Occupation	Average hourly wages	
	French currency	United States currency
	<i>Francs</i>	<i>Cents</i>
Stonecutters.....	4.10	16.1
Carpenters.....	4.10	16.1
Roof workers.....	4.10	16.1
Joiners.....	4.05	15.9
Plasterers.....	4.20	16.5
Painters.....	4.05	15.9
Earth workers.....	3.50	13.7
Laborers.....	3.45	13.5

### Wages in French Indo-China in 1930

**A** REPORT from Henry S. Waterman, American consul at Saigon, the principal city of French Indo-China, dated December 15, 1930, gives the average daily wages in various occupations in Saigon and in Hanoi, the capital of the country. The wages of coolies as reported from the two cities are 0.41 piastre (16.1 cents) per day in Hanoi and 0.78 piastre (31 cents) in Saigon, but the average wages of coolies in the country, working in the rice fields and rubber plantations, range from 0.30 piastre (11.8 cents) to 0.50 piastre (19.6 cents) per day. The wage study was made by the labor department in the latter part of 1930 among both commercial and governmental employers of labor and covered about 16,000 workers in Saigon and 2,000 in Hanoi.

The following table shows the average daily wages in the two principal cities of Indo-China in the latter part of 1930:

#### AVERAGE DAILY WAGES IN HANOI AND SAIGON, FRENCH INDO-CHINA, 1930

[Conversions into United States currency on basis of piastre=39.25 cents United States currency]

Occupation	Average daily wages in—			
	Hanoi		Saigon	
	<i>Piastres</i>	<i>United States currency</i>	<i>Piastres</i>	<i>United States currency</i>
Carpenter.....	0.60	\$0.24	1.36	\$0.53
Joiner.....	.53	.21	1.53	.60
Steam fitter.....	.67	.26	1.52	.60
Coppersmith.....	.68	.27	1.45	.57
Electrician.....	.86	.34	2.00	.79
Electrician (apprentice).....	.44	.17	1.50	.59
Tinsmith.....	.63	.25	1.46	.57
Foundry man.....	.70	.27	1.37	.54
Blacksmith.....	.81	.32	1.50	.59
Mechanic.....	.96	.38	1.69	.66
Lathe operator.....	.90	.35	1.66	.65
Mason.....	.53	.21	1.40	.55
Painter.....	.63	.25	1.32	.52
Chauffeur.....	1.33	.52	1.82	.71
Laborer.....	.66	.26	1.50	.59
Coolie, male.....	.41	.16	.78	.31
Coolie, female.....	.23	.09	.46	.18
Cook.....	1 17.00	1 6.67	1 35.00	1 13.74
House boy.....	1 13.00	1 5.10	1 28.00	1 10.99
Nurse.....	1 11.00	1 4.32	1 25.00	1 9.81

<sup>1</sup> Per month.



Wages in German Industries, 1931<sup>1</sup>

DURING the months of February and March, 1931, new wage agreements calling for a reduction of wages have been effected in various districts of the German textile industry, such as in the districts of Rhine (Westphalia), Gladbach-Rheydt, Krefeld, Chemnitz, Plauen, Forst, and others. The reductions amounted to from 2.9 to 7.3 per cent.

As fixed by these agreements, the average wage rates in the German textile industry declined from 79.4 pfennigs<sup>2</sup> (18.9 cents) per hour for skilled male workers in January, to 77.7 pfennigs (18.5 cents) in February, and to 77.1 pfennigs (18.3 cents) in March, and those for unskilled male workers fell from 66.7 pfennigs (15.9 cents) in January, to 65.1 pfennigs (15.5 cents) in February, and to 64.2 pfennigs (15.3 cents) in March. The average wage rates for skilled female textile workers declined from 58.1 pfennigs (13.8 cents) per hour in January, to 57.2 pfennigs (13.6 cents) in February, and to 56.5 pfennigs (13.4 cents) in March, and those for unskilled female workers from 46.9 pfennigs (11.2 cents) to 46.2 pfennigs (11 cents) and 45.3 pfennigs (10.8 cents), respectively, during the same months.

The following table gives the average wages per hour fixed by collective agreements for skilled and unskilled workers of both sexes in the German textile industry during the first quarter of 1931, compared with those in other important German trades and industries during the same period.

HOURLY WAGES FIXED BY COLLECTIVE AGREEMENTS IN EFFECT ON THE FIRST OF JANUARY, FEBRUARY, AND MARCH, 1931, FOR SPECIFIED TRADE AND INDUSTRY GROUPS

[Conversions into United States currency on basis of mark=23.8 cents]

Trade or industry	Skilled workers			Unskilled workers		
	January	February	March	January	February	March
Textiles:	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Males.....	18.9	18.5	18.3	15.9	15.5	15.3
Females.....	13.8	13.6	13.4	11.2	11.0	10.8
Brewing.....	30.8	30.8	30.8	27.4	27.4	27.4
Building trades.....	33.6	33.6	33.6	27.7	27.7	27.7
Candy, confectionery, and pastry.....	25.1	25.1	25.1	21.6	21.6	21.6
Cardboard:						
Males.....	23.1	23.1	21.6	19.7	19.7	18.3
Females.....	15.2	15.2	14.2	12.6	12.6	11.8
Chemical.....	25.7	25.7	25.7	21.3	21.3	21.3
Metal.....	24.1	23.5	23.5	18.0	17.6	17.6
Mining.....	27.9	27.9	27.9	17.6	17.6	17.6
Paper making.....	23.2	22.0	22.0	18.5	17.6	17.6
Printing.....	27.8	27.8	26.2	24.2	24.2	22.8
Railway.....	23.8	23.8	23.8	19.3	19.3	19.3

<sup>1</sup> Report of George P. Waller, United States consul at Dresden, dated May 21, 1931.

<sup>2</sup> Conversions into United States currency on basis of pfennig=0.238 cent.

## Wages in the Mining Industry in Greece in 1929

THE annual report of the Bureau of Mines<sup>1</sup> of Greece for the year 1929 gives the total number of man-days worked in the mines and quarries and the total amount of wages, from which the following average daily wages have been computed:

Metal mines.....	Cents
Lignite mines.....	70. 1
Smelting and refining.....	56. 3
Quarries.....	71. 0
	76. 6
Total.....	62. 7

## Recent Wage Scales Established by Collective Agreement in Italy

THE table following shows wage scales in various industries adopted by agreement between employers and workers in the localities specified.<sup>2</sup>

## WAGE RATES ESTABLISHED BY AGREEMENT IN ITALY

[Conversions into United States currency on basis of lira=5.26 cents]

Industry, occupation, and locality	Wages per hour		Industry, occupation, and locality	Wages per hour	
	Italian currency	United States currency		Italian currency	United States currency
<i>Building workers—Palermo</i>			<i>Tailors—Zara<sup>a</sup>—Contd.</i>		
Mosaic workers:	<i>Lire</i>		Apprentices, production:	<i>Lire</i>	
First class.....	1. 70	\$0. 09	Boys.....	6. 00	\$0. 32
Second class.....	1. 25	. 07	Girls.....	5. 00	. 26
Bricklayers:			<i>Woodworkers—Macerata<sup>b</sup></i>		
Master.....	2. 35	. 12	Carvers:		
Second class.....	2. 10	. 11	Skilled workers <sup>c</sup> .....	2. 35	. 12
Blacksmiths and carpenters:			Qualified workers <sup>c</sup> .....	2. 05	. 11
First class.....	2. 35	. 12	Common workers.....	1. 85	. 10
Second class.....	2. 15	. 11	Cabinetmakers, turners, carpenters, machinists, upholsterers:		
Building laborers.....	1. 35	. 07	Skilled workers <sup>c</sup> .....	2. 00	. 11
Boys:			Qualified workers <sup>c</sup> .....	1. 70	. 09
16 to 18 years.....	1. 05	. 06	Common workers.....	1. 50	. 08
Under 16 years.....	. 75	. 04	Helpers.....	1. 15	. 06
Teamsters with horse and wagon.....	3. 20	. 17	Women:		
Drivers with mule or horse.....	2. 30	. 12	Skilled workers <sup>c</sup> .....	1. 00	. 05
Drivers.....	1. 30	. 07	Qualified workers <sup>c</sup> .....	. 75	. 04
			Common workers.....	. 55	. 03
<i>Tailors—Zara<sup>a</sup></i>			Apprentices over 20 years.....	. 80- 1. 15	. 04- . 06
Workers:			Boys over 16 years.....	. 50	. 03
First class.....	24. 00	1. 26	<i>Miscellaneous industries—Lephorn district</i>		
Second class.....	20. 00	1. 05	Shipbuilding:		
Apprentices:			Mechanics, skilled.....	1. 95- 2. 90	1. 03- 1. 53
Boys.....	3. 50	. 18	Laborers.....	1. 85- 2. 15	. 97- 1. 13
Girls.....	3. 00	. 16			

<sup>a</sup> Piecework rates are fixed so as to give a return of 15 per cent more than time rates.

<sup>b</sup> Piecework rates are fixed so as to give a return of 18 per cent more than time rates.

<sup>c</sup> Skilled workers do work without direction; qualified workers do work under direction.

<sup>1</sup> Greece. Ministère de l'Économie Nationale. Direction du Service des Mines. Statistique de l'industrie minière de la Grèce pendant l'année 1929.

<sup>2</sup> Data are from Lavoro Fascista (Rome), June 3, 1931, Lavoro Industriale (Rome), April, 1931; and report from Jose de Olivares, American consul at Lephorn, dated May 12, 1931.

## WAGE RATES ESTABLISHED BY AGREEMENT IN ITALY—Continued

Industry, occupation, and locality	Wages per hour		Industry, occupation, and locality	Wages per day	
	Italian currency	United States currency		Italian currency	United States currency
<i>Miscellaneous industries— Leghorn district—Contd.</i>			<i>Miscellaneous industries— Leghorn district—Contd.</i>		
Metallurgy:	<i>Lire</i>		Chemical industry:	<i>Lire</i>	
Mechanics, skilled.....	1.95- 2.90	\$1.03-1.53	Operators, skilled.....	21.30-30.00	\$1.12-1.58
Mechanics, unskilled.....	1.85- 2.15	.97-1.13	Laborers.....	17.00-22.00	.89-1.16
Road construction:			Glass industry:		
Mechanics, skilled.....	2.75- 3.00	.15- .16	Blowers.....	25.00-55.00	1.32-2.89
Laborers.....	2.25- 2.50	.12- .13	Laborers.....	18.00-22.00	.95-1.16
Building construction:			Agriculture:		
Masons.....	2.75- 3.00	.15- .16	Farm hands, skilled.....	15.40-17.40	.81- .92
Masons' helpers.....	2.25- 2.90	.12- .15	Farm hands, unskilled.....	10.40-12.40	.55- .65
Carpenters.....	2.25- 3.00	.12- .16	Harbor work: Dock laborers.....	40.00-45.00	2.10-2.37
Carpenters' helpers.....	2.10- 2.90	.11- .15			

### Effect of Economic Depression on Wages and Labor Conditions in Japan <sup>1</sup>

THE general economic depression has had a marked effect on wages and labor conditions in Japan. During 1930 wages fell, the number of unemployed increased rapidly, and the number of labor disputes increased by about 30 per cent. The general average wage index declined from 112.2 in 1929 to 101.9 in 1930, based on the latter half of 1920 as 100. The general drop in commodity prices reacted unfavorably rather than favorably on the laboring classes in that it further depressed business and industry and thus forced down wages. At the middle of 1930 there were 4,774,047 laborers in Japan according to an announcement of the Japanese Home Department. Of these workers, 3,239,733 were men and 1,534,314 were women. Among the factory workers, there were 1,077,188 men and 1,013,428 women, a decrease of 111,888 compared to 1929. The number of miners decreased 29,892 from 1929. Of these miners, 203,427 were men and 44,774 were women. The number of transport laborers and casual laborers increased. Of the transport laborers, 465,785 were men and 47,684 were women, an increase of 32,567; of the casual laborers, 1,493,000 were men and 428,428 were women, an increase of 10,179.

#### Wages and Prices

ACCORDING to wage index numbers, wages have fallen most in the metal industry and least in the food industry. The following tables show the general decline in wages in the various industries in Tokyo and as compared with the decline in prices.

Table 1 gives the index numbers, on the 1920 base, of daily wages in certain specified industries in 1928, 1929, and 1930.

<sup>1</sup> Excerpt from Annual Review of Commerce and Industry of Japan for 1930, forwarded by Hiram Bingham, jr., American Consulate General, Tokyo, under date of Mar. 28, 1931.

TABLE 1.—INDEX NUMBERS OF WAGES PER DAY IN TOKYO, 1928, 1929, AND 1930, BY INDUSTRY GROUP

[Latter half of 1920=100]

Industry	1928	1929	1930
Dyeing and weaving industry	107.6	114.3	105.1
Metal industry	117.8	112.4	93.5
Chemical industry	102.1	103.2	95.7
Food industry	122.8	128.5	126.7
Sundry industry	100.5	104.3	96.6
Other industries	116.8	114.3	100.1
General average	111.4	112.2	101.9

The trend of wages and of wholesale prices, by years, since 1920, is shown in Table 2:

TABLE 2.—INDEX NUMBERS OF WHOLESALE PRICES AND OF LABORERS' WAGES IN TOKYO, 1920 TO 1930<sup>1</sup>

[Average for latter half of 1920=100]

Year	Index numbers of—		Year	Index numbers of—	
	Wholesale prices	Wages		Wholesale prices	Wages
1920	100.0	100.0	1926	84.4	108.8
1921	91.2	102.2	1927	79.8	113.0
1922	90.8	109.8	1928	78.4	111.4
1923	91.2	111.9	1929	74.8	112.2
1924	95.0	115.8	1930	61.6	101.9
1925	93.6	110.4			

<sup>1</sup> Source: The Tokyo Chamber of Commerce and Industry.

As the statement below indicates, the index numbers of wages per day in Tokyo showed a steady downward tendency throughout 1930, with the exception of March, when a very slight increase took place.

1929: Average for year	Index of daily wages (1920=100)	112.2
1930:		
January		107.8
February		106.5
March		106.9
April		104.7
May		103.0
June		102.0
July		101.1
August		100.6
September		98.4
October		97.7
November		97.4
December		96.4
Average for year		101.9

Table 3 shows daily wages in specified occupations in the same city in December, 1930:

TABLE 3.—DAILY WAGES IN REPRESENTATIVE OCCUPATIONS IN TOKYO, DECEMBER, 1930

[Conversions into United States currency on basis of yen=49.6 cents]

Occupation	Daily wage		
	Amount		Index numbers (December, 1929=100)
	Japanese currency	United States currency	
	Yen		
Female reeler in silk filature.....	0.87	\$0.43	88.8
Female spinner in cotton spinning.....	1.09	.54	76.2
Female weaver, cotton.....	.97	.48	121.2
Female weaver, silk.....	1.35	.67	84.4
Cement maker.....	2.46	1.22	85.1
Typesetter.....	3.55	1.76	100.0
Carpenter.....	2.37	1.18	82.6
Painter.....	2.57	1.27	91.1
Stevedore.....	2.45	1.22	87.2
Manservant.....	1.00	.50	90.9
Maid-servant.....	.95	.47	88.8
General average.....			88.9

### Unemployment

As a result of the national census taken on October 1, 1930, the Japanese Bureau of Statistics announced that the total number of jobless on that date was 322,527. Of this number, 46.9 per cent were in the cities—Osaka leading with 30,000, and followed by Tokyo with 22,800, Yokohama with 12,600, and Kobe with 9,900. Tokyo Prefecture showed the greatest number of unemployed (62,959), while Osaka Prefecture followed with 36,809.

As compared with the census of five years ago, the number of persons unemployed has increased 47.3 per cent. Much of the unemployment is undoubtedly caused by the rapid increase in population. There has been a great deal of agitation for the issuance of governmental loans for the relief of the unemployed, and according to a report in the Tokyo newspaper, *Nichi Nichi*, a loan of 41,000,000 yen (\$20,336,000) will be floated by the Government, the proceeds of which will be used for unemployment relief. The disposition of the funds made available was expected to be approximately as follows: 28,000,000 yen (\$13,888,000) to the home office, of which 13,000,000 yen (\$6,448,000) will be expended as the home office quota for national highway construction, 7,000,000 yen (\$3,472,000) will be furnished to the prefectural government as a State subsidy for prefectural road construction, and 8,000,000 yen (\$3,968,000) will be applied in aiding jobless relief work planned by public utility organs; 8,000,000 yen (\$3,968,000) to the communications office for subsidizing shipping concerns; and 10,000,000 yen (\$4,960,000) to the railway office for construction and maintenance work to be started primarily to alleviate the distress of the unemployed.



## Labor Disputes

THE hard times caused an increase of approximately 30 per cent in the number of labor disputes in Japan. Depression often made it impossible to settle disputes so that lockouts, unfair discharges, and violence occasionally resulted. There were 1,823 disputes settled in 1930 as compared with 1,408 in 1929. The workers involved in 1930 numbered only 160,000, however, as compared with 170,000 involved in disputes in 1929.

---

**Hours of Labor in Mozambique**

**A** DISPATCH from the United States vice consul in Portuguese East Africa gives the details of a law regulating hours of labor recently passed by the Mozambique Government, which became effective early in April of this year. A 48-hour week is the maximum permitted, and four hours is the longest permissible period of work without a break. Labor is divided into two classes, shop and office, and the length of the working week and the arrangement of hours differ according to the class concerned. For shop labor, the working-day is divided into two 4-hour periods, one from 8 a. m. to noon, and the second from 2 p. m. to 6 p. m., making a total of 48 hours per week. For office labor, the Saturday afternoon holiday is recognized, and the working periods for the first 5 days of the week are from 8 a. m. to 11.30 a. m. and from 2 p. m. to 5 p. m., with 4 hours (from 8 a. m. to noon) on Saturdays, making a maximum of 6½ hours a day.

Overtime not to exceed 12 hours per week is permitted to allow for emergencies and stock taking, but any overtime worked under this provision must be balanced by an equal time off, allowed from the regular hours. Retail food stores may remain open until 7 p. m. on Saturday, and shops of every kind have the same privilege on the evenings before Christmas and New Year's Day. Shops and offices are both required to observe Sundays and national and municipal holidays as days of rest.

Certain exemptions from the prescribed hours are made for particular types of establishments, such as shops dealing in drugs, food, and tobacco, hotels and restaurants, hospitals, places of public entertainment, and the like. One exemption is for "industrial establishments which demand continuous work."

Employment of minors under 15 years of age is forbidden, and there are special prohibitions of overtime work for minors of 15 years and persons aged 46 and upward.

The provision as to hours, it is explained, merely makes mandatory the practice which is already customary among most of the commercial and industrial enterprises in the larger towns of the colony, but which has been less general in the small establishments in urban zones and in the rural areas.

## Hours and Earnings in the Iron and Steel Industry in Sweden in 1929

THE following table, supplied to the Bureau of Labor Statistics by the Bureau of Social Statistics of Sweden, shows the hours and earnings in the various branches of the iron and steel industry in that country in 1929:

HOURS AND EARNINGS IN SPECIFIED BRANCHES OF THE IRON AND STEEL INDUSTRY IN SWEDEN IN 1929

[Conversions into United States currency on basis of krona=26.8 cents]

Branch of industry, and class of worker	Average number of workers	Hours per worker per year		Average earnings						
		Average number	Per cent on piece-work	Per hour		Per day	Per year			
				Time-work	Piece-work	All work (including over-time, payments in kind, etc.)	All work (including over-time, payments in kind, etc.)	Ordinary work	All work (including over-time, payments in kind, etc.)	
										Ordinary work
<b>Iron and steel (42 plants):</b>										
Males .....	15,018	2,362	71.7	\$0.21	\$0.30	\$0.29	\$2.18	\$637.57	\$674.82	
Minors .....	988	2,245	51.4	.10	.17	.14	.91	302.57	312.76	
Total .....	16,108	2,355	70.5				2.12	615.33	650.70	
<b>Hardware (110 plants):</b>										
Males .....	6,545	2,350	53.0	.25	.33	.30	2.37	681.52	708.32	
Females .....	793	2,323	43.3	.14	.19	.16	1.25	368.23	373.59	
Minors .....	1,025	2,176	46.9	.11	.16	.13	1.02	289.98	222.66	
Total .....	8,588	2,326	51.4				2.06	603.27	630.07	
<b>Foundries and machinshops (350 plants):</b>										
Males .....	37,998	2,341	65.1	.27	.35	.33	2.65	741.82	776.66	
Females .....	614	2,207	57.5	.18	.27	.24	1.74	507.86	522.60	
Minors .....	2,939	2,326	61.8	.11	.18	.16	1.22	356.71	357.78	
Total .....	45,513	2,338	64.8				2.54	711.27	738.07	
<b>Electro-mechanical (46 plants):</b>										
Males .....	5,469	2,331	59.7	.31	.39	.37	2.91	817.40	860.55	
Females .....	1,208	2,169	84.9	.20	.26	.26	1.96	540.56	559.58	
Minors .....	850	2,185	71.3	.11	.16	.15	1.12	319.99	323.48	
Total .....	7,527	2,288	64.8				2.58	716.36	751.47	

The workers in the iron and steel industry average, in the country plants, from 24 to 31 cents per hour, and those in plants located in towns and cities average 31 cents. The employees in hardware plants average from 25 to 30 cents in the country plants, those in the town and city plants from 29 to 33 cents, and those in plants in Stockholm and a few localities in the far north 49 cents. In the foundries and machine shops the hourly earnings average from 26 to 30 cents in the country plants, from 30 to 35 cents in the town plants, and 39 cents in Stockholm. All these figures cover the total earnings—regular pay, overtime pay, payments in kinds, etc.

## Wages and Hours of Agricultural Labor in Switzerland, 1930

IN 1888 the Swiss census showed 1,092,827 persons engaged in agriculture. Each successive census since that time has shown a decrease, there being in 1920 only 971,696 persons so engaged. During the same period the number of agricultural workers employed decreased from 126,020 to 96,575. These figures are part of a study of conditions in agriculture in Switzerland made in 1929-30 by the secretariat of the Swiss Farmers' Union, the results of which have recently been published.<sup>1</sup> According to the report, the number of workers in agriculture has shown a still further decrease since 1920, so marked a decrease that one of the purposes of the study was to ascertain to what conditions the exodus of workers has been due and what could be done to remedy the situation.

The study covered all of the Cantons of Switzerland. Inquiries were addressed to 3,019 communes and replies were received from 2,335, or 77.3 per cent. Among the subjects covered were the questions of money wages, payments in kind, working hours, and general farm costs.

Table 1, compiled from the report, shows the rates paid in specified occupations in 1930 and gives comparative figures for the period before the World War and in 1921, taken from previous studies by the secretariat:

TABLE 1.—WAGE RATES PAID FOR SPECIFIED AGRICULTURAL OCCUPATIONS IN SWITZERLAND

[Conversions into United States currency on basis of franc=19.3 cents]

Occupation	Average wage rates					
	Pre-war		1921		1930	
	Francs	United States currency	Francs	United States currency	Francs	United States currency
	Per week					
Head men.....	15.80	\$3.05	29.65	\$5.72	{ <sup>a</sup> 27.55 <sup>b</sup> 32.90	{ <sup>a</sup> \$5.32 <sup>b</sup> 6.35
Cowherds.....	13.90	2.68	25.90	5.00	{ <sup>a</sup> 23.80 <sup>b</sup> 28.40	{ <sup>a</sup> 4.59 <sup>b</sup> 5.48
Carters.....	13.30	2.57	24.90	4.81	23.10	4.46
Field hands.....	10.90	2.10	21.20	4.09	19.55	3.77
Domestic and farm servants.....	6.85	1.32	13.00	2.51	13.70	2.64
	Per day					
Day laborers:						
Males—						
Summer rate.....			11.30	\$2.18	9.60	\$1.85
Winter rate.....			8.20	1.58	6.85	1.32
Females—						
Summer rate.....			5.90	1.14	5.75	1.11
Winter rate.....			4.45	.86	4.05	.78
Day laborers receiving board and lodging:						
Males—						
Summer rate.....			7.25	1.40	6.30	1.22
Winter rate.....			4.80	.93	4.15	.80
Females—						
Summer rate.....			3.90	.75	3.90	.75
Winter rate.....			2.85	.55	2.70	.52

<sup>a</sup> Single men.<sup>b</sup> Married men.

<sup>1</sup> Secrétariat des Paysans Suisses. Publication No. 98: Les salaires et les conditions du travail dans l'agriculture suisse, enquête de 1929-30. Brugg, 1930.

Table 2 shows the index numbers of the wages actually paid in 1921 and 1930, based on the pre-war rate as 100, and also the index numbers of "real" wages in 1930, i. e., taking into consideration the purchasing power of wages. The table reveals a rather general decrease in wage rates between 1921 and 1930.

TABLE 2.—INDEX NUMBERS OF WAGES OF AGRICULTURAL LABOR IN SWITZERLAND  
[Pre-war rate=100]

Occupation	Index numbers of wage rates		Index numbers of "real" wages 1930 <sup>1</sup>	Occupation	Index numbers of wage rates		Index numbers of "real" wages 1930 <sup>1</sup>
	1921	1930			1921	1930	
Head men.....	187	191	112	Day laborers receiving board and lodging: Males— Summer rate..... Winter rate..... Females— Summer rate..... Winter rate.....			
Cowherds.....	186	188	118		213	185	116
Carters.....	187	174	109		223	193	121
Field hands.....	194	179	112				
Domestic and farm servants.....	190	199	124		205	205	128
Day laborers:					203	193	121
Males—							
Summer rate.....	215	184	115				
Winter rate.....	222	185	116				
Females—							
Summer rate.....	203	198	124				
Winter rate.....	217	198	124				

<sup>1</sup> Based on purchasing power.

In addition to money wages, it is the custom in some places to furnish certain payments in kind. In the case of married workers these usually include housing accommodations, use of work animals, and the use of land for gardening. In the case of unmarried workers, clothing is sometimes furnished, or their laundry work done, etc. In the 937 cases in which data were obtained, the average annual value of such additional payments was 57 francs (\$11) per capita in the case of unmarried workers, and 95 francs (\$18) in the case of married workers.

The report gives data showing, for 1929, the average daily wages in various industries and in agriculture. The figures, given in Table 3, show a much higher rate in all the branches of industry than in agriculture, except in the case of woman workers.

TABLE 3.—AVERAGE DAILY WAGE RATES IN AGRICULTURE AND IN SPECIFIED INDUSTRIES IN SWITZERLAND, 1929

[Conversions into United States currency on basis of franc=19.3 cents]

Industry group	Foremen, master workmen, etc.		Skilled and semiskilled workmen		Unskilled workmen		Workers under 18 years of age		Women	
	Swiss currency	United States currency	Swiss currency	United States currency	Swiss currency	United States currency	Swiss currency	United States currency	Swiss currency	United States currency
Agriculture.....	Francs 10.60	\$2.05	Francs 8.57	\$1.65	Francs 6.97	\$1.35	Francs 5.97	\$1.15	Francs 5.57	\$1.08
Metallurgy and mechanical construction.....	16.65	3.21	12.08	2.33	9.50	1.83	4.65	.90	-----	-----
Building construction.....	16.03	3.09	13.19	2.54	10.23	1.97	7.64	1.47	-----	-----
Woodworking.....	15.63	3.02	11.69	2.26	8.85	1.71	-----	-----	-----	-----
Textiles.....	14.96	2.89	-----	-----	-----	-----	4.52	.87	6.53	1.26
Food.....	17.16	3.31	13.89	2.68	11.27	2.18	-----	-----	5.63	1.09
Earth and stone.....	-----	-----	-----	-----	9.53	1.84	5.69	1.10	-----	-----
Average, all industries.....	16.07	3.10	12.45	2.40	9.85	1.90	5.31	1.02	6.45	1.24

Table 4 shows the average number of working hours per day in the various seasons of the year in 1930 as compared with 1909. As is seen, a slight increase has taken place.

TABLE 4.—AVERAGE LENGTH OF WORKING-DAY IN AGRICULTURE IN SWITZERLAND, 1909 AND 1930

Season	Average working hours per day			
	Stable employees		Other male employees	
	1909	1930	1909	1930
	<i>Hrs. Min.</i>	<i>Hrs. Min.</i>	<i>Hrs. Min.</i>	<i>Hrs. Min.</i>
Spring.....	12 10	12 25	11 20	11 25
Hay harvest.....	13 30	13 45	13 30	13 30
Summer.....	13 10	13 10	12 25	12 45
Autumn.....	12 10	12 10	11 20	11 20
Winter.....	11 10	11 10	9 40	10 00
Yearly average.....	12 10	12 15	11 15	11 25

### Wages in Certain Industries in Switzerland, 1930

THE average wages paid in 1930 to workers in the metal and machine, building, and wood industries in Switzerland are given in the May, 1931, issue of *La Vie Économique*, published by the Federal Department of Public Affairs. These figures are reported by the Federal Bureau of Industry, Arts and Trades, and Labor, and relate to workmen injured in industrial accidents.

The following table shows the average daily wages of different classes of workers in Switzerland in 1930:

#### AVERAGE DAILY WAGES OF WORKERS IN SPECIFIED INDUSTRIES IN 1930

[Conversions into United States currency on basis of franc=19.3 cents]

Class of workers	Average daily wages of workers in—					
	Metal and machine industries		Building industry		Wood industries	
	French currency	United States currency	French currency	United States currency	French currency	United States currency
	<i>Francs</i>		<i>Francs</i>		<i>Francs</i>	
Foremen and master workmen.....	17.16	\$3.31	15.93	\$3.07	15.65	\$3.02
Skilled and semiskilled workers.....	12.13	2.34	13.23	2.55	11.81	2.28
Unskilled workers.....	9.55	1.84	10.28	1.98	8.89	1.72
Women, 18 years of age and over.....	6.46	1.25				
Young persons, under 18 years of age.....	4.90	.95	7.86	1.52	5.19	1.00



# TREND OF EMPLOYMENT

## Summary for June, 1931

EMPLOYMENT decreased 2 per cent in June, 1931, as compared with May, 1931, and pay-roll totals decreased 4.5 per cent.

The industrial groups surveyed, the number of establishments reporting in each group, the number of employees covered, and the total pay rolls for one week, for both May and June, together with the per cents of change in June, are shown in the following summary:

SUMMARY OF EMPLOYMENT AND PAY-ROLL TOTALS, MAY AND JUNE, 1931

Industrial group	Estab-lish-ments	Employment		Per cent of change	Pay roll in 1 week		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>1. Manufacturing</b> .....	14, 925	3, 018, 212	2, 942, 179	<sup>1</sup> -2. 6	\$72, 247, 400	\$67, 647, 610	<sup>1</sup> -6. 2
<b>2. Coal mining</b> .....	1, 460	307, 185	291, 672	-5. 1	6, 404, 150	5, 965, 023	-7. 8
Anthracite.....	160	109, 977	104, 217	-5. 2	3, 024, 282	2, 648, 925	-12. 4
Bituminous.....	1, 301	197, 208	187, 455	-4. 9	3, 379, 868	3, 256, 098	-3. 7
<b>3. Metalliferous mining</b> .....	321	40, 679	39, 114	-3. 8	978, 409	916, 161	-6. 4
<b>4. Quarrying and nonmetallic mining</b> .....	741	31, 672	30, 539	-3. 6	701, 294	677, 007	-3. 5
<b>5. Crude petroleum producing</b> .....	577	26, 692	25, 582	-4. 2	940, 899	911, 525	-3. 1
<b>6. Public utilities</b> .....	12, 266	698, 717	694, 860	-0. 6	21, 281, 368	21, 330, 355	+0. 2
Telephone and telegraph.....	8, 042	309, 929	308, 099	-0. 6	9, 018, 698	9, 106, 921	+1. 0
Power, light and water.....	3, 675	243, 067	242, 059	-0. 4	7, 658, 207	7, 631, 089	-0. 4
Electric-railroad operation and maintenance, exclusive of car shops.....	549	145, 721	144, 702	-0. 7	4, 604, 463	4, 592, 345	-0. 3
<b>7. Trade</b> .....	12, 038	387, 105	384, 153	-0. 8	9, 676, 536	9, 625, 328	-0. 5
Wholesale.....	2, 366	68, 721	68, 699	-( <sup>2</sup> )	2, 123, 773	2, 108, 315	-0. 7
Retail.....	9, 672	318, 384	315, 454	-0. 9	7, 552, 763	7, 517, 013	-0. 5
<b>8. Hotels</b> .....	2, 086	147, 769	146, 294	-1. 0	3, 607, 042	3, 345, 415	-2. 6
<b>9. Canning and preserving</b> .....	853	34, 504	43, 497	+26. 1	612, 941	611, 811	+4. 7
<b>10. Laundries</b> .....	451	38, 452	38, 750	+0. 8	717, 181	721, 874	+0. 7
<b>11. Dyeing and cleaning</b> .....	192	7, 241	7, 417	+2. 4	165, 006	169, 712	+2. 9
<b>Total</b> .....	45, 911	4, 738, 168	4, 644, 057	-2. 0	116, 132, 226	110, 891, 821	-4. 5

## RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION <sup>4</sup>							
New England.....	6, 048	509, 536	502, 722	-1. 3	\$12, 091, 037	\$11, 711, 501	-3. 1
Middle Atlantic.....	7, 403	1, 383, 962	1, 347, 289	-2. 6	35, 650, 418	33, 853, 385	-4. 8
East North Central.....	9, 967	1, 310, 334	1, 276, 694	-2. 6	34, 658, 642	32, 139, 356	-6. 9
West North Central.....	4, 813	296, 677	295, 980	-0. 2	7, 238, 744	7, 150, 209	-1. 2
South Atlantic.....	4, 758	496, 877	487, 673	-1. 9	9, 487, 418	9, 230, 546	-2. 6
East South Central.....	2, 450	197, 146	193, 423	-1. 9	3, 291, 008	3, 283, 399	-3. 2
West South Central.....	3, 376	181, 186	177, 782	-1. 9	4, 265, 076	4, 140, 574	-2. 9
Mountain.....	1, 689	84, 776	84, 393	-0. 5	2, 164, 926	2, 112, 558	-2. 4
Pacific.....	5, 407	277, 674	278, 101	+0. 2	7, 384, 957	7, 244, 233	-1. 9
<b>All divisions</b> .....	45, 911	4, 738, 168	4, 644, 057	-2. 0	116, 132, 226	110, 891, 821	-4. 5

<sup>1</sup> Weighted per cent of change for the combined 54 manufacturing industries. Figures in parentheses, p. 150 the remaining per cents of change, including total, are unweighted.

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

<sup>3</sup> Cash payments only; see note 4, p. 163.

<sup>4</sup> *New England:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. *Middle Atlantic:* New Jersey, New York, Pennsylvania. *East North Central:* Illinois, Indiana, Michigan, Ohio, Wisconsin. *West North Central:* Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. *South Atlantic:* Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia. *East South Central:* Alabama, Kentucky, Mississippi, Tennessee. *West South Central:* Arkansas, Louisiana, Oklahoma, Texas. *Mountain:* Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming. *Pacific:* California, Oregon, Washington.



Per capita earnings for June, 1931, given in the preceding table must not be confused with full-time weekly rates of wages; they are actual per capita weekly earnings computed by dividing the total number of employees reported into the total amount of pay roll in the week reported, and the "number of employees" includes all persons who worked any part of the period reported—that is, part-time workers as well as full-time workers.

Comparisons are made with per capita earnings in May, 1931, and with June, 1930, where data are available.

For convenient reference the latest data available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are shown in the following statement. These reports are for the months of April and May, instead of for May and June, 1931, consequently the figures can not be combined with those presented in the summary table.

EMPLOYMENT AND PAY-ROLL TOTALS, CLASS I RAILROADS

Industry	Number on pay roll		Per cent of change	Amount of pay roll in entire month		Per cent of change
	Apr. 15, 1931	May 15, 1931		April, 1931	May, 1931	
Class I railroads.....	1,315,371	1,321,683	+0.5	\$179,680,621	\$179,131,761	-0.3

The total number of employees included in this summary is 5,965,740 whose combined earnings in one week amount to approximately \$151,500,000.

## 1. Employment in Selected Manufacturing Industries in June, 1931

### Comparison of Employment and Pay-Roll Totals in Manufacturing Industries, May and June, 1931

**E**MPLOYMENT in manufacturing industries in June, 1931, decreased 2.6 per cent as compared with May, and pay-roll totals decreased 6.2 per cent.

These changes are based upon returns from 13,887 identical establishments in 54 of the principal manufacturing industries in the United States, having in June 2,798,185 employees whose combined earnings in one week were \$64,068,865.

The bureau's weighted index of employment for June, 1931, is 72.2, as compared with 74.1 for May, 1931, and 74.5 for April, 1931, and 85.5 for June, 1930; the index of pay-roll totals for June, 1931, is 62.5, as compared with 66.6 for May, 1931, 67.4 for April, 1931, and 84.1 for June, 1930.

Of the 12 groups of manufacturing industries on which the bureau's indexes of employment and pay rolls are based, increased employment was shown in the food group alone, and increased earnings were reported in only one group, tobacco products. The remaining groups reported decreased employment and earnings; the greatest loss in number of employees (6.6 per cent) was shown in the chemicals group,

and the greatest decline in pay-roll totals (11.6 per cent) was reported in the vehicles group. An additional group of 10 manufacturing industries surveyed but not yet included in the bureau's indexes of employment and pay-roll totals will be found at the end of Table 1. This group, due largely to the seasonal character of several of the industries included, showed an increase in both employment and pay-roll totals from May to June.

Employment increased in June in 18 of the 64 separate manufacturing industries surveyed, and increased earnings were reported in 13 industries.

The greatest increases in employment over the month interval, largely of seasonal nature, were reported in the following industries: Beet sugar, 14.3 per cent; radio, 8.9 per cent; ice cream, 7.9 per cent; aircraft, 5.1 per cent; woolen and worsted goods, 4.5 per cent; beverages, 4.4 per cent; and rubber boots and shoes, 4.2 per cent. The men's clothing industry reported a small gain in employment combined with an increase of 9.7 per cent in pay-roll totals. The woolen and worsted goods industry, in which the greatest gain in earnings in May was reported, showed a further increase in pay-roll totals of 2.9 per cent over the previous month.

The outstanding decrease in employment in June was a seasonal decline in the fertilizer industry, which reported a falling-off in employment of 39 per cent. Pianos and organs showed a loss of 18.6 per cent in number of employees from May to June, silk goods 12.3 per cent, and agricultural implements, 11.7 per cent. Employment in the women's clothing industry declined 8.9 per cent over the month interval, the automobile industry reported 6 per cent fewer employees, foundry and machine-shop products decreased 4.2 per cent, and the iron and steel industry reported a loss of 4.8 per cent. The cotton goods industry had 2.6 per cent fewer employees in June than in May, and employment in the electrical machinery, apparatus, and supplies industry declined 2.3 per cent.

The Mountain geographic division alone of the nine geographic divisions reported increased employment and pay-roll totals. The greatest decreases in both employment and earnings over the month interval in the remaining eight geographic divisions were shown in the East North Central division, which reported losses of 3.2 per cent and 9.4 per cent in the two items, respectively.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN MAY AND JUNE, 1931, BY INDUSTRIES

Industry	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>Food and kindred products.</b>	<b>2, 022</b>	<b>217, 917</b>	<b>218, 221</b>	( <sup>1</sup> )	<b>\$5, 486, 572</b>	<b>\$5, 484, 346</b>	( <sup>1</sup> )
Slaughtering and meat pack- ing .....	211	84, 191	83, 866	-0.4	2, 171, 336	2, 157, 784	-0.6
Confectionery.....	332	32, 395	31, 846	-1.7	567, 282	561, 225	-1.1
Ice cream.....	330	13, 612	14, 691	+7.9	447, 576	473, 055	+5.7
Flour.....	407	15, 705	15, 527	-1.1	397, 422	384, 931	-3.1
Baking.....	729	65, 293	65, 438	+0.2	1, 707, 981	1, 707, 135	-( <sup>2</sup> )
Sugar refining, cane.....	13	6, 721	6, 853	+2.0	194, 975	200, 216	+2.7

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN MAY AND JUNE, 1931, BY INDUSTRIES—Continued

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>Textiles and their products..</b>	<b>2, 403</b>	<b>565, 200</b>	<b>550, 703</b>	(1)	<b>\$9, 778, 757</b>	<b>\$9, 377, 338</b>	(1)
Cotton goods.....	505	195, 103	190, 005	-2.6	2, 806, 503	2, 635, 743	-6.1
Hosiery and knit goods.....	346	86, 619	87, 208	+0.7	1, 471, 408	1, 427, 915	-3.0
Silk goods.....	258	53, 783	47, 179	-12.3	959, 430	833, 765	-13.1
Woolen and worsted goods.....	201	56, 461	58, 988	+4.5	1, 164, 059	1, 197, 535	+2.9
Carpets and rugs.....	31	18, 955	18, 701	-1.3	417, 235	401, 726	-3.7
Dyeing and finishing tex- tiles.....	129	36, 727	34, 590	-5.8	856, 327	770, 878	-10.0
Clothing, men's.....	336	56, 805	57, 217	+0.7	957, 038	1, 049, 406	+9.7
Shirts and collars.....	102	16, 450	15, 980	-2.9	227, 219	209, 576	-7.8
Clothing, women's.....	368	30, 402	27, 685	-8.9	651, 591	561, 760	-13.8
Millinery and lace goods.....	127	13, 895	13, 150	-5.4	267, 947	249, 034	-7.1
<b>Iron and steel and their products.....</b>	<b>1, 971</b>	<b>541, 429</b>	<b>519, 181</b>	(1)	<b>13, 105, 882</b>	<b>11, 787, 999</b>	(1)
Iron and steel.....	194	224, 471	213, 774	-4.8	5, 613, 175	4, 889, 702	-12.9
Cast-iron pipe.....	45	9, 844	9, 557	-2.9	209, 632	182, 499	-12.9
Structural ironwork.....	174	23, 895	23, 467	-1.8	593, 112	572, 725	-3.4
Foundry and machine-shop products.....	1, 070	191, 897	183, 883	-4.2	4, 650, 937	4, 248, 987	-8.6
Hardware.....	97	27, 157	26, 621	-2.0	550, 909	505, 027	-8.3
Machine tools.....	151	22, 674	21, 534	-5.0	557, 125	517, 187	-7.2
Steam fittings and steam and hot-water heating apparatus.....	107	24, 022	23, 483	-2.2	531, 452	506, 316	-4.7
Stoves.....	133	17, 469	16, 862	-3.5	399, 540	365, 556	-8.5
<b>Lumber and its products.....</b>	<b>1, 484</b>	<b>171, 132</b>	<b>169, 406</b>	(1)	<b>3, 090, 441</b>	<b>3, 018, 199</b>	(1)
Lumber, sawmills.....	691	93, 369	93, 359	-(2)	1, 582, 944	1, 587, 590	+0.3
Lumber, millwork.....	344	25, 619	24, 855	-3.0	534, 881	515, 521	-3.6
Furniture.....	449	52, 144	51, 192	-1.8	972, 616	915, 088	-5.9
<b>Leather and its products.....</b>	<b>432</b>	<b>126, 903</b>	<b>125, 136</b>	(1)	<b>2, 493, 483</b>	<b>2, 420, 298</b>	(1)
Leather.....	142	24, 984	24, 999	+(2)	600, 047	593, 868	-1.0
Boots and shoes.....	290	101, 919	100, 137	-1.7	1, 893, 436	1, 826, 430	-3.5
<b>Paper and printing.....</b>	<b>1, 750</b>	<b>239, 598</b>	<b>235, 026</b>	(1)	<b>7, 416, 581</b>	<b>7, 163, 165</b>	(1)
Paper and pulp.....	383	79, 558	78, 019	-1.9	1, 911, 185	1, 808, 375	-5.4
Paper boxes.....	313	23, 930	23, 786	-0.6	528, 461	515, 610	-2.4
Printing, book and job.....	605	56, 100	54, 346	-3.1	1, 831, 100	1, 763, 037	-3.7
Printing, newspapers.....	449	80, 010	78, 875	-1.4	3, 145, 835	3, 076, 143	-2.2
<b>Chemicals and allied prod- ucts.....</b>	<b>466</b>	<b>97, 808</b>	<b>91, 309</b>	(1)	<b>2, 755, 366</b>	<b>2, 589, 918</b>	(1)
Chemicals.....	163	35, 708	35, 205	-1.4	961, 999	939, 700	-2.3
Fertilizers.....	205	10, 774	6, 575	-39.0	177, 529	118, 004	-33.5
Petroleum refining.....	98	51, 326	49, 529	-3.5	1, 615, 838	1, 532, 214	-5.2
<b>Stone, clay, and glass prod- ucts.....</b>	<b>1, 155</b>	<b>113, 495</b>	<b>113, 281</b>	(1)	<b>2, 545, 633</b>	<b>2, 462, 674</b>	(1)
Cement.....	110	20, 192	19, 601	-2.9	537, 852	531, 260	-1.2
Brick, tile, and terra cotta.....	736	31, 166	31, 285	+0.4	592, 832	569, 622	-3.9
Pottery.....	118	18, 557	17, 603	-5.1	399, 386	338, 447	-15.3
Glass.....	191	43, 580	44, 792	+2.8	1, 015, 563	1, 023, 345	+0.8
<b>Metal products, other than iron and steel.....</b>	<b>245</b>	<b>47, 015</b>	<b>46, 278</b>	(1)	<b>1, 067, 905</b>	<b>1, 005, 596</b>	(1)
Stamped and enameled ware.....	83	16, 904	16, 982	+0.5	360, 193	349, 430	-3.0
Brass, bronze, and copper products.....	162	30, 111	29, 296	-2.7	707, 715	656, 166	-7.3
<b>Tobacco products.....</b>	<b>210</b>	<b>57, 250</b>	<b>56, 566</b>	(1)	<b>843, 339</b>	<b>846, 382</b>	(1)
Chewing and smoking to- bacco and snuff.....	28	8, 641	8, 350	-3.4	132, 600	129, 958	-2.0
Cigars and cigarettes.....	182	48, 609	48, 216	-0.8	710, 739	716, 424	+0.8
<b>Vehicles for land transporta- tion.....</b>	<b>1, 251</b>	<b>429, 640</b>	<b>408, 531</b>	(1)	<b>12, 808, 114</b>	<b>11, 026, 154</b>	(1)
Automobiles.....	213	303, 161	284, 955	-6.0	9, 189, 579	7, 551, 346	-17.8
Carriages and wagons.....	46	815	730	-10.4	16, 960	15, 891	-6.3
Car building and repairing, electric-railroad.....	444	28, 396	27, 962	-1.5	858, 142	838, 616	-2.3
Car building and repairing, steam-railroad.....	548	97, 268	94, 884	-2.5	2, 743, 433	2, 620, 301	-4.5

See footnotes at end of table.



TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN MAY AND JUNE, 1931, BY INDUSTRIES—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>Miscellaneous industries</b> .....	<b>498</b>	<b>269,567</b>	<b>264,547</b>	( <sup>1</sup> )	<b>\$7,291,907</b>	<b>\$6,926,796</b>	( <sup>1</sup> )
Agricultural implements.....	85	13,276	11,718	-11.7	267,886	236,304	-11.8
Electrical machinery, apparatus, and supplies.....	212	154,305	150,827	-2.3	4,252,161	3,975,459	-6.5
Pianos and organs.....	61	5,064	4,124	-18.6	112,291	93,896	-16.4
Rubber boots and shoes.....	10	12,066	12,573	+4.2	202,118	213,184	+5.5
Automobile tires and inner tubes.....	41	49,371	49,899	+1.1	1,437,310	1,459,160	+1.5
Shipbuilding.....	89	35,485	35,406	-0.2	1,020,141	948,793	-7.0
<b>Total—54 industries used in computing index numbers of employment and pay roll</b> .....	<b>13,887</b>	<b>2,876,954</b>	<b>2,798,185</b>	( <sup>1</sup> )	<b>68,683,983</b>	<b>64,068,865</b>	( <sup>1</sup> )
<b>Industries added since February, 1929, for which data for the index-base year (1926) are not available</b> .....	<b>1,038</b>	<b>141,258</b>	<b>143,994</b>	( <sup>1</sup> )	<b>3,563,417</b>	<b>3,578,745</b>	( <sup>1</sup> )
Rayon.....	18	23,208	23,684	+2.1	481,917	479,085	-0.6
Radio.....	43	18,007	19,608	+8.9	463,585	479,824	+3.5
Aircraft.....	40	8,260	8,680	+5.1	272,489	290,550	+6.6
Jewelry.....	158	15,067	14,835	-1.5	308,836	300,627	-2.7
Paint and varnish.....	302	17,762	17,610	-0.9	498,008	483,868	-2.8
Rubber goods, other than boots, shoes, tires, and inner tubes.....	80	18,098	18,120	+0.1	402,547	398,878	-0.9
Beet sugar.....	61	2,383	2,724	+14.3	76,922	84,821	+10.3
Beverages.....	273	11,738	12,252	+4.4	359,060	370,857	+3.3
Cash registers, adding machines, and calculating machines.....	46	16,764	16,559	-1.2	479,760	476,257	-0.7
Typewriters and supplies.....	17	9,971	9,922	-0.5	220,293	213,978	-2.9
<b>All industries</b> .....	<b>14,925</b>	<b>3,018,212</b>	<b>2,942,179</b>	( <sup>2</sup> )	<b>72,247,400</b>	<b>67,647,610</b>	( <sup>3</sup> )

## RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISIONS <sup>4</sup>							
New England.....	1,701	362,474	354,548	-2.2	\$7,985,121	\$7,582,480	-5.0
Middle Atlantic.....	3,657	853,218	827,084	-3.1	21,302,777	20,082,359	-5.7
East North Central.....	3,586	968,181	937,565	-3.2	25,633,935	23,230,983	-9.4
West North Central.....	1,889	159,590	159,004	-0.4	3,893,493	3,796,563	-2.5
South Atlantic.....	1,830	339,713	332,680	-2.1	6,059,186	5,790,093	-4.4
East South Central.....	728	109,757	108,472	-1.2	1,885,452	1,813,074	-3.8
West South Central.....	822	88,020	86,077	-2.2	1,959,477	1,876,256	-4.2
Mountain.....	317	27,130	27,783	+2.4	694,549	703,854	+1.3
Pacific.....	895	110,129	108,966	-1.1	2,833,410	2,771,948	-2.2
<b>All divisions</b> .....	<b>14,925</b>	<b>3,018,212</b>	<b>2,942,179</b>	( <sup>2</sup> )	<b>72,247,400</b>	<b>67,647,610</b>	( <sup>3</sup> )

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

<sup>3</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.

<sup>4</sup> See footnote 4, p. 144.

TABLE 2.—PER CENT OF CHANGE, MAY TO JUNE, 1931—12 GROUPS OF MANUFACTURING INDUSTRIES AND TOTAL OF 54 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 May to June, 1931		Group	Per cent of change May to June, 1931	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products.....	+0.1	-0.1	Metal products other than iron and steel.....	-1.6	-6.0
Textiles and their products.....	-2.9	-4.9	Tobacco products.....	-1.2	+0.4
Iron and steel and their products.....	-4.1	-10.0	Vehicles for land transportation.....	-4.4	-11.6
Lumber and its products.....	-0.9	-2.4	Miscellaneous industries.....	-1.9	-5.1
Leather and its products.....	-1.4	-3.0			
Paper and printing.....	-2.0	-3.3			
Chemicals and allied products.....	-6.6	-5.8	<b>Total: 54 industries.....</b>	<b>-2.6</b>	<b>-6.2</b>
Stone, clay, and glass products.....	-0.3	-3.8			

#### Comparison of Employment and Pay-Roll Totals in Manufacturing Industries, June, 1931, with June, 1930

THE level of employment in manufacturing industries in June, 1931, was 15.6 per cent below the level of June, 1930, and pay-roll totals were 25.7 per cent lower.

Decreased employment and pay-roll totals were reported in each of the 12 groups of industries, the lumber group and the iron and steel group showing the greatest losses over the year interval. The leather group reported the least change in employment in this yearly comparison, a decrease of 5.7 per cent from the level of the corresponding month in 1930.

The woolen and worsted goods industry was the only industry of the 54 upon which the bureau's indexes are based which reported more employees at the end of the 12-month period than at the beginning. The agricultural-implement industry showed the greatest loss in employment over the year interval, a decrease of 52 per cent. The machine-tool industry and the carriage and wagon industry both reported losses of 37 per cent from June, 1930, to June, 1931, and the piano industry showed a drop of 30 per cent in number of employees. Decreases of 20 per cent or more were reported in the following nine industries: Silk goods, structural ironwork, foundry and machine-shop products, sawmills, fertilizers, petroleum, cement, brick, and steam-railroad car shops. The automobile industry had 18.3 per cent fewer employees at the end of the 12-month interval, and the iron and steel industry was 19.4 per cent below the level of a year ago.

Decreased employment, ranging from 10.2 per cent in the New England geographic division to 20.5 per cent in the West South Central division, was shown in this year-to-year comparison for June in each of the nine geographic divisions, and in each division with the exception of the Mountain division the decrease in employment was exceeded by the decrease in employees' earnings.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JUNE, 1931, WITH JUNE, 1930

[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	Per cent of change June, 1931, compared with June, 1930		Industry	Per cent of change June, 1931, compared with June, 1930	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
<b>Food and kindred products</b> .....	-7.6	-12.4	<b>Chemicals and allied products</b> .....	-16.1	-21.3
Slaughtering and meat packing.....	-8.5	-11.1	Chemicals.....	-10.0	-14.6
Confectionery.....	-2.4	-12.2	Fertilizers.....	-29.1	-37.5
Ice cream.....	-9.0	-12.9	Petroleum refining.....	-20.1	-25.1
Flour.....	-10.7	-19.2	<b>Stone, clay, and glass products</b> .....	-16.7	-28.2
Baking.....	-7.1	-11.7	Cement.....	-23.0	-30.7
Sugar refining, cane.....	-13.7	-17.9	Brick, tile, and terra cotta.....	-23.8	-40.9
<b>Textiles and their products</b> .....	-7.4	-12.8	Pottery.....	-6.3	-18.1
Cotton goods.....	-5.3	-7.3	Glass.....	-10.0	-17.4
Hosiery and knit goods.....	-7.9	-14.9	<b>Metal products, other than iron and steel</b> .....	-14.2	-26.4
Silk goods.....	-21.8	-27.3	Stamped and enameled ware.....	-8.6	-18.4
Woolen and worsted goods.....	+1.3	-3.2	Brass, bronze, and copper products.....	-16.8	-29.4
Carpets and rugs.....	-2.2	+11.3	<b>Tobacco products</b> .....	-10.4	-18.7
Dyeing and finishing textiles.....	-4.9	-4.7	Chewing and smoking tobacco and snuff.....	-6.9	-12.9
Clothing, men's.....	-10.2	-19.8	Cigars and cigarettes.....	-10.8	-19.5
Shirts and collars.....	-9.0	-14.6	<b>Vehicles for land transportation</b> .....	-21.0	-30.2
Clothing, women's.....	-6.2	-17.4	Automobiles.....	-18.3	-30.4
Millinery and lace goods.....	-9.8	-19.1	Carriages and wagons.....	-37.6	-40.3
<b>Iron and steel and their products</b> .....	-23.4	-39.0	Car building and repairing, electric-railroad.....	-12.7	-18.5
Iron and steel.....	-19.4	-37.8	Car building and repairing, steam-railroad.....	-24.6	-31.0
Cast-iron pipe.....	-18.7	-33.1	<b>Miscellaneous industries</b> .....	-20.2	-29.7
Structural ironwork.....	-25.8	-38.8	Agricultural implements.....	-52.0	-60.6
Foundry and machine-shop products.....	-27.1	-41.0	Electrical machinery, apparatus, and supplies.....	-19.5	-32.0
Hardware.....	-16.3	-28.6	Pianos and organs.....	-30.1	-41.0
Machine tools.....	-37.3	-48.5	Rubber boots and shoes.....	-11.1	-31.6
Steam fittings and steam and hot-water heating apparatus.....	-12.9	-29.1	Automobile tires and inner tubes.....	-14.9	-15.2
Stoves.....	-19.3	-34.6	Shipbuilding.....	-16.5	-24.5
<b>Lumber and its products</b> .....	-24.4	-37.3	<b>All industries</b> .....	-15.6	-25.7
Lumber, sawmills.....	-28.0	-42.7			
Lumber, millwork.....	-18.3	-29.4			
Furniture.....	-18.8	-30.2			
<b>Leather and its products</b> .....	-5.7	-9.7			
Leather.....	-9.1	-12.9			
Boots and shoes.....	-4.9	-8.4			
<b>Paper and printing</b> .....	-8.5	-13.5			
Paper and pulp.....	-13.6	-24.3			
Paper boxes.....	-8.1	-13.4			
Printing, book and job.....	-10.6	-16.1			
Printing, newspapers.....	-1.8	-4.5			

## RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION			GEOGRAPHIC DIVISION (CONT.)		
New England.....	-10.2	-17.4	West South Central.....	-20.5	-28.6
Middle Atlantic.....	-15.5	-26.0	Mountain.....	-19.5	-17.5
East North Central.....	-18.5	-30.1	Pacific.....	-18.5	-28.6
West North Central.....	-15.5	-20.8	<b>All divisions</b> .....	-15.6	-25.7
South Atlantic.....	-11.0	-18.5			
East South Central.....	-14.6	-23.7			

## Per Capita Earnings in Manufacturing Industries

ACTUAL per capita weekly earnings in June, 1931, for each of the 64 manufacturing industries surveyed by the Bureau of Labor Statistics, together with per cents of change in June, 1931, as compared with May, 1931, and June, 1930, are shown in Table 4.

Per capita earnings in June, 1931, for the combined 54 chief manufacturing industries of the United States, upon which the bureau's indexes of employment and pay rolls are based, were 3.7 per cent less than in May, 1931, and 12 per cent less than in June, 1930.

The actual average per capita weekly earnings in June, 1931, for the 54 manufacturing industries were \$22.90; the average per capita earnings for all of the 64 manufacturing industries surveyed were \$22.99.

Per capita earnings given in Table 4 must not be confused with full-time weekly rates of wages. They are actual per capita weekly earnings computed by dividing the total number of employees reported into the total amount of pay roll in the week reported, and the "number of employees" includes all persons who worked any part of the period reported—that is, part-time workers as well as full-time workers.

TABLE 4.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN JUNE, 1931, AND COMPARISON WITH MAY, 1931, AND JUNE, 1930

Industry	Per capita weekly earnings in June, 1931	Per cent of change June, 1931, compared with—	
		May, 1931	June, 1930
<b>Food and kindred products:</b>			
Slaughtering and meat packing.....	\$25.73	-0.2	-2.7
Confectionery.....	17.62	+0.6	-10.0
Ice cream.....	32.20	-2.1	-4.4
Flour.....	24.79	-2.1	-9.7
Baking.....	26.09	-0.3	-5.1
Sugar refining, cane.....	29.22	+0.7	-4.8
<b>Textiles and their products:</b>			
Cotton goods.....	13.87	-3.5	-2.0
Hosiery and knit goods.....	16.37	-3.6	-7.7
Silk goods.....	17.67	-1.0	-7.2
Woolen and worsted goods.....	20.30	-1.6	-4.8
Carpets and rugs.....	21.48	-2.4	+13.4
Dyeing and finishing textiles.....	22.29	-4.4	-0.1
Clothing, men's.....	18.34	+8.8	-10.9
Shirts and collars.....	13.11	-5.1	-6.3
Clothing, women's.....	20.29	-5.3	-12.2
Millinery and lace goods.....	18.94	-1.8	-10.2
<b>Iron and steel and their products:</b>			
Iron and steel.....	22.87	-8.6	-22.8
Cast-iron pipe.....	19.10	-10.3	-17.5
Structural ironwork.....	24.41	-4.7	-17.7
Foundry and machine-shop products.....	23.11	-4.7	-19.3
Hardware.....	18.97	-6.5	-14.8
Machine tools.....	24.02	-2.2	-17.6
Steam fittings and steam and hot-water heating apparatus.....	21.56	-2.5	-18.7
Stoves.....	21.68	-5.2	-18.6
<b>Lumber and its products:</b>			
Lumber, sawmills.....	17.01	+0.4	-20.2
Lumber, millwork.....	20.74	-0.7	-13.5
Furniture.....	17.88	-4.1	-14.1
<b>Leather and its products:</b>			
Leather.....	23.76	-1.1	-4.4
Boots and shoes.....	18.24	-1.8	-3.5
<b>Paper and printing:</b>			
Paper and pulp.....	23.18	-3.5	-12.5
Paper boxes.....	21.68	-1.8	-5.5
Printing, book and job.....	32.44	-0.6	-6.2
Printing, newspapers.....	39.00	-0.8	-2.6

TABLE 4.—PER CAPITA WEEKLY EARNINGS IN MANUFACTURING INDUSTRIES IN JUNE, 1931, AND COMPARISON WITH MAY, 1931, AND JUNE, 1930—Continued

Industry	Per capita weekly earnings in June, 1931	Per cent of change June, 1931, compared with—	
		May, 1931	June, 1930
Chemicals and allied products:			
Chemicals.....	\$26.69	-0.9	-5.2
Fertilizers.....	17.95	+8.9	-11.9
Petroleum refining.....	30.94	-1.7	-6.5
Stone, clay, and glass products:			
Cement.....	27.10	+1.7	-9.9
Brick, tile, and terra cotta.....	18.21	-4.3	-22.5
Pottery.....	19.23	-10.6	-12.6
Glass.....	22.85	-1.9	-8.0
Metal products, other than iron and steel:			
Stamped and enameled ware.....	20.58	-3.4	-10.8
Brass, bronze, and copper products.....	22.40	-4.7	-15.2
Tobacco products:			
Cheewing and smoking tobacco and snuff.....	15.56	+1.4	-6.0
Cigars and cigarettes.....	14.86	+1.6	-9.6
Vehicles for land transportation:			
Automobiles.....	26.50	-12.6	-14.9
Carriages and wagons.....	21.77	+4.6	-4.4
Car building and repairing, electric-railroad.....	29.99	-0.8	-6.8
Car building and repairing, steam-railroad.....	27.62	-2.1	-8.3
Miscellaneous industries:			
Agricultural implements.....	20.17	-( <sup>1</sup> )	-17.9
Electrical machinery, apparatus, and supplies.....	26.36	-4.4	-15.7
Pianos and organs.....	22.77	+2.7	-15.9
Rubber boots and shoes.....	16.96	+1.3	-22.8
Automobile tires and inner tubes.....	29.24	+0.4	-0.4
Shipbuilding.....	26.80	-6.8	-9.6
Industries added since February, 1929, for which data for the index-base year (1926) are not available:			
Rayon.....	20.23	-2.6	-0.3
Radio.....	24.47	-4.9	-10.2
Aircraft.....	33.47	+1.5	+6.2
Jewelry.....	20.26	-1.2	-16.7
Paint and varnish.....	27.48	-2.0	-5.4
Rubber goods, other than boots, shoes, tires, and inner tubes.....	22.01	-1.0	-8.4
Beef sugar.....	31.14	-3.5	( <sup>2</sup> )
Beverages.....	30.27	-1.0	( <sup>2</sup> )
Cash registers, adding machines, and calculating machines.....	28.76	+0.5	( <sup>2</sup> )
Typewriters and supplies.....	21.57	-2.4	( <sup>2</sup> )

<sup>1</sup> Less than one-tenth of 1 per cent.<sup>2</sup> Data not available.

### Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

TABLE 5 shows the general index of employment in manufacturing industries and the general index of pay-roll totals, by months, from January, 1923, to June, 1931, together with the average indexes for each of the years 1923 to 1930, inclusive.

Index numbers showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 manufacturing industries upon which the bureau's general indexes are based and in each of the 12 groups of industries, and also general indexes for the combined 12 groups of industries, are shown in Table 6 for June, 1930, and April, May, and June, 1931.

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



TABLE 5.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY, 1923, TO JUNE, 1931

[Monthly average, 1926=100]

Month	Employment										Pay-roll totals									
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1923	1924	1925	1926	1927	1928	1929	1930	1931		
Jan...	106.6	103.8	97.9	100.4	97.3	91.6	95.2	90.2	73.1	95.8	98.6	93.9	98.0	94.9	89.6	94.5	87.6	62.3		
Feb...	108.4	105.1	99.7	101.5	99.0	93.0	97.4	90.3	74.1	99.4	103.8	99.3	102.2	100.6	93.9	101.8	90.7	67.0		
Mar...	110.8	104.9	100.4	102.0	99.5	93.7	98.6	89.8	74.8	104.7	103.3	100.8	103.4	102.0	95.2	103.9	90.8	68.5		
Apr...	110.8	102.8	100.2	101.0	98.6	93.3	99.1	89.1	74.5	105.7	101.1	98.3	101.5	100.8	93.8	104.6	89.8	67.4		
May...	110.8	98.8	98.9	99.8	97.6	93.0	99.2	87.7	74.1	109.4	96.5	98.5	99.8	99.8	94.1	104.8	87.6	66.6		
June...	110.9	95.6	98.0	99.3	97.0	93.1	98.8	85.5	72.2	109.3	90.8	95.7	99.7	97.4	94.2	102.8	84.1	62.5		
July...	109.2	92.3	97.2	97.7	95.0	92.2	98.2	81.6	-----	104.3	84.3	93.5	95.2	93.0	91.2	98.2	75.9	-----		
Aug...	108.5	92.5	97.8	98.7	95.1	93.6	98.6	79.9	-----	103.7	87.2	95.4	99.7	95.0	94.2	102.6	74.2	-----		
Sept...	108.6	94.3	98.9	100.3	95.8	95.0	99.3	79.7	-----	104.4	89.8	94.4	102.9	94.1	95.4	102.3	72.7	-----		
Oct...	108.1	95.6	100.4	100.7	95.3	95.9	98.3	78.6	-----	106.8	92.4	100.4	99.6	95.2	99.0	102.6	72.7	-----		
Nov...	107.4	95.5	100.7	99.5	93.5	95.4	94.8	76.5	-----	105.4	91.4	100.4	99.6	91.6	96.1	95.1	68.5	-----		
Dec...	105.4	97.3	100.8	98.9	92.6	95.5	91.9	75.1	-----	103.2	95.7	101.6	99.8	93.2	97.7	92.0	67.4	-----		
Av...	108.8	98.2	99.2	100.0	96.4	93.8	97.5	83.7	173.8	104.3	94.6	97.7	100.0	96.5	94.5	100.4	80.3	65.7		

<sup>1</sup> Average for six months.

Following Table 6 are two charts which represent the 54 separate industries combined and show the course of pay-roll totals as well as the course of employment for each month of the years 1926 to 1930, and January to June, 1931, inclusive.

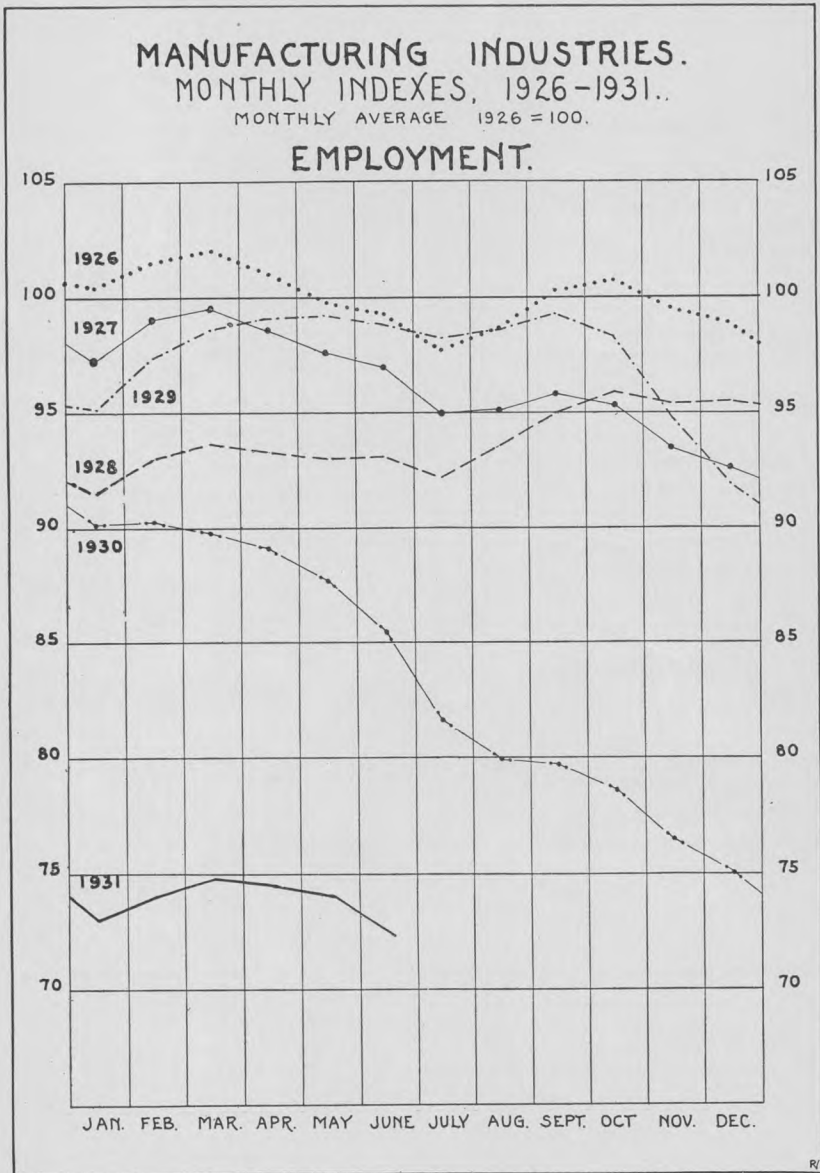
TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES JUNE, 1930, AND APRIL, MAY, AND JUNE, 1931

[Monthly average, 1926=100]

Industry	Employment				Pay-roll totals			
	1930		1931		1930		1931	
	June	April	May	June	June	April	May	June
<b>General index</b> .....	<b>85.5</b>	<b>74.5</b>	<b>74.1</b>	<b>72.2</b>	<b>84.1</b>	<b>67.4</b>	<b>66.6</b>	<b>62.5</b>
<b>Food and kindred products</b> .....	<b>95.3</b>	<b>87.0</b>	<b>88.0</b>	<b>88.1</b>	<b>99.6</b>	<b>85.9</b>	<b>87.3</b>	<b>87.2</b>
Slaughtering and meat packing.....	98.6	89.4	90.6	90.2	102.4	90.0	91.6	91.0
Confectionery.....	79.2	78.1	78.6	77.3	82.6	73.2	73.3	72.5
Ice cream.....	99.2	78.5	83.7	90.3	100.2	79.4	82.6	87.3
Flour.....	95.5	87.9	86.3	85.3	100.9	84.4	84.1	81.5
Baking.....	98.9	90.1	91.7	91.9	101.6	87.5	89.7	89.7
Sugar refining, cane.....	93.5	83.5	79.1	80.7	99.4	83.5	79.5	81.6
<b>Textiles and their products</b> .....	<b>83.7</b>	<b>80.1</b>	<b>79.8</b>	<b>77.5</b>	<b>75.1</b>	<b>71.4</b>	<b>68.9</b>	<b>65.5</b>
Cotton goods.....	81.3	77.3	79.1	77.0	73.5	71.4	72.6	68.1
Hosiery and knit goods.....	88.9	80.6	81.4	81.9	85.1	72.9	74.7	72.4
Silk goods.....	86.2	80.7	76.9	67.4	79.9	71.9	66.9	58.1
Woolen and worsted goods.....	79.9	71.7	77.4	80.9	77.0	65.4	72.4	74.5
Carpets and rugs.....	78.8	77.2	78.2	77.1	56.6	64.6	65.4	63.0
Dyeing and finishing textiles.....	90.4	93.5	91.2	86.0	80.0	90.6	84.7	76.2
Clothing, men's.....	81.6	76.1	72.8	73.3	69.3	58.2	50.7	55.6
Shirts and collars.....	79.9	75.1	74.9	72.7	67.7	62.8	62.7	57.8
Clothing, women's.....	90.5	98.3	93.2	84.9	75.5	83.7	72.4	62.4
Millinery and lace goods.....	80.3	84.4	76.5	72.4	70.0	77.7	60.9	56.6
<b>Iron and steel and their products</b> .....	<b>88.0</b>	<b>71.9</b>	<b>70.3</b>	<b>67.4</b>	<b>85.2</b>	<b>60.7</b>	<b>57.8</b>	<b>52.0</b>
Iron and steel.....	87.7	76.2	74.2	70.7	87.0	67.3	62.1	54.1
Structural iron pipe.....	72.8	60.6	61.0	59.2	72.6	58.2	55.8	48.6
Cast-iron work.....	96.0	74.1	72.5	71.2	95.9	60.7	60.8	58.7
Foundry and machine-shop products.....	91.3	70.9	69.5	66.6	87.5	58.2	56.4	51.6

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES JUNE, 1930, AND APRIL, MAY, AND JUNE, 1931—Continued

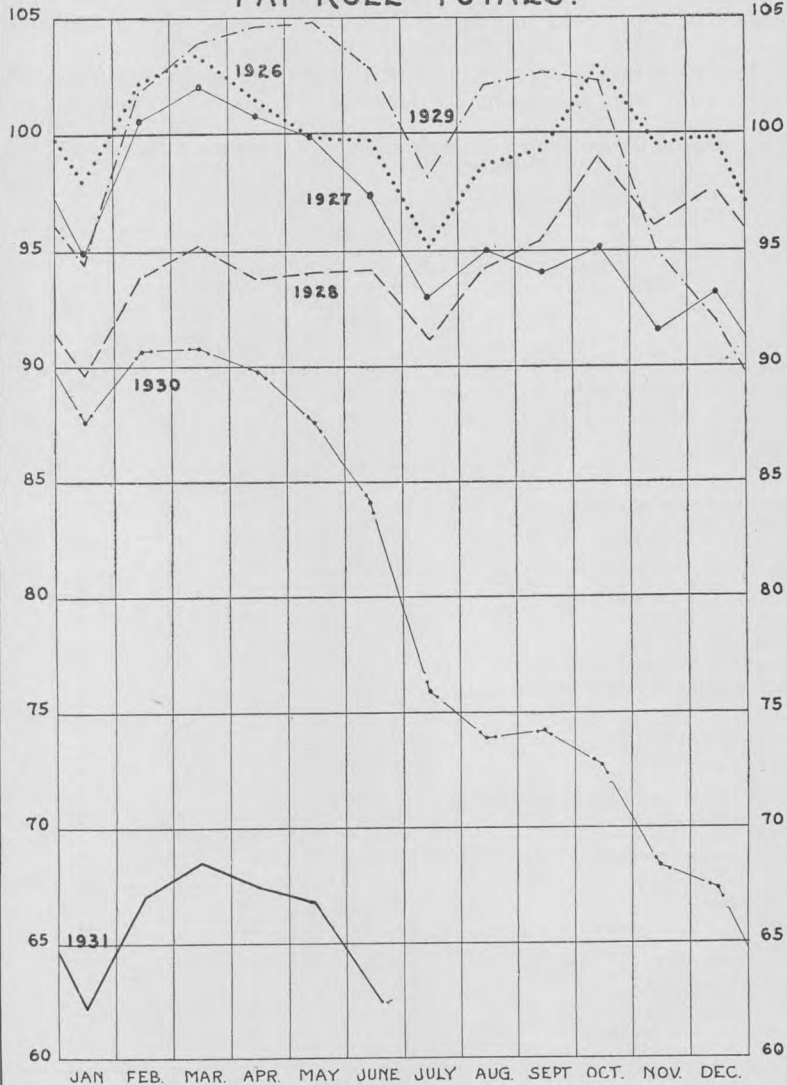
Industry	Employment				Pay-roll totals			
	1930	1931			1930	1931		
	June	April	May	June	June	April	May	June
<b>Iron and steel and their products—Continued.</b>								
Hardware.....	79.7	68.8	68.0	66.7	68.3	53.6	53.2	48.8
Machine tools.....	104.1	70.8	68.7	65.3	98.2	56.1	54.5	50.6
Steam fittings and steam and hot-water heating apparatus.....	62.7	57.7	55.8	54.6	56.4	44.7	41.9	40.0
Stoves.....	77.6	65.4	64.8	62.6	70.3	50.0	50.3	46.0
<b>Lumber and its products.</b>	<b>71.6</b>	<b>54.3</b>	<b>54.6</b>	<b>54.1</b>	<b>70.0</b>	<b>44.1</b>	<b>45.0</b>	<b>43.9</b>
Lumber, sawmills.....	71.7	51.1	51.6	51.6	73.1	40.1	41.8	41.9
Lumber, millwork.....	66.5	55.2	56.0	54.3	67.0	47.7	49.1	47.3
Furniture.....	74.4	62.2	61.5	60.4	65.6	49.7	48.7	45.8
<b>Leather and its products.</b>	<b>83.6</b>	<b>81.5</b>	<b>79.9</b>	<b>78.8</b>	<b>71.4</b>	<b>68.2</b>	<b>66.5</b>	<b>64.5</b>
Leather.....	85.0	77.6	77.3	77.3	83.9	73.3	73.8	73.1
Boots and shoes.....	83.3	82.5	80.6	79.2	67.8	66.8	64.4	62.1
<b>Paper and printing.</b>	<b>98.6</b>	<b>92.0</b>	<b>92.0</b>	<b>90.2</b>	<b>103.6</b>	<b>93.4</b>	<b>92.7</b>	<b>89.6</b>
Paper and pulp.....	93.8	82.0	82.6	81.0	94.1	75.5	75.2	71.2
Paper boxes.....	88.0	82.0	81.4	80.9	92.1	82.1	81.7	79.8
Printing, book and job.....	99.2	91.9	91.5	88.7	104.3	92.6	90.9	87.5
Printing, newspapers.....	108.2	107.6	107.7	106.2	113.0	110.2	110.3	107.9
<b>Chemicals and allied products.</b>	<b>89.8</b>	<b>86.8</b>	<b>80.6</b>	<b>75.3</b>	<b>95.5</b>	<b>83.7</b>	<b>79.8</b>	<b>75.2</b>
Chemicals.....	93.1	86.6	85.0	83.8	94.9	84.1	82.9	81.0
Fertilizers.....	62.8	116.4	72.9	44.5	70.7	105.4	66.5	44.2
Petroleum refining.....	94.4	77.9	78.1	75.4	100.3	79.7	79.2	75.1
<b>Stone, clay, and glass products.</b>	<b>77.9</b>	<b>63.6</b>	<b>65.1</b>	<b>64.9</b>	<b>74.7</b>	<b>54.7</b>	<b>55.7</b>	<b>53.6</b>
Cement.....	83.4	63.9	66.1	64.2	87.1	57.6	61.1	60.4
Brick, tile, and terra cotta.....	69.4	51.1	52.7	52.9	64.1	38.5	39.4	37.9
Pottery.....	83.1	80.6	82.1	77.9	71.4	70.6	69.0	58.5
Glass.....	84.6	72.9	74.0	76.1	84.1	68.1	69.0	69.5
<b>Metal products, other than iron and steel.</b>	<b>80.8</b>	<b>71.0</b>	<b>70.4</b>	<b>69.3</b>	<b>78.7</b>	<b>63.1</b>	<b>61.6</b>	<b>57.9</b>
Stamped and enameled ware.....	79.4	73.8	72.3	72.6	76.0	67.3	63.9	62.0
Brass, bronze, and copper products.....	81.4	69.7	69.5	67.7	79.7	61.5	60.7	56.3
<b>Tobacco products.</b>	<b>91.2</b>	<b>82.1</b>	<b>82.7</b>	<b>81.7</b>	<b>89.3</b>	<b>69.5</b>	<b>72.3</b>	<b>72.6</b>
Chewing and smoking tobacco and snuff.....	87.9	79.8	84.6	81.8	88.5	73.9	78.7	77.1
Cigars and cigarettes.....	91.6	82.4	82.4	81.7	89.4	69.0	71.5	72.0
<b>Vehicles for land transportation.</b>	<b>82.7</b>	<b>68.2</b>	<b>68.3</b>	<b>65.3</b>	<b>83.1</b>	<b>64.7</b>	<b>65.6</b>	<b>58.0</b>
Automobiles.....	90.9	76.8	79.1	74.3	86.8	68.8	73.5	60.4
Carriages and wagons.....	59.5	40.8	41.5	37.1	67.0	40.9	42.6	40.0
Car building and repairing, electric-railroad.....	87.6	78.9	77.7	76.5	91.3	77.9	76.2	74.4
Car building and repairing, steam-railroad.....	75.2	59.9	58.2	56.7	78.8	59.6	56.9	54.4
<b>Miscellaneous industries.</b>	<b>95.9</b>	<b>79.3</b>	<b>78.0</b>	<b>76.5</b>	<b>97.2</b>	<b>71.9</b>	<b>72.0</b>	<b>68.3</b>
Agricultural implements.....	91.5	59.9	49.7	43.9	81.3	43.6	36.3	32.0
Electrical machinery, apparatus, and supplies.....	102.3	86.2	84.3	82.4	107.4	78.9	78.1	73.0
Pianos and organs.....	45.5	41.5	39.1	31.8	38.8	31.6	27.4	22.9
Rubber boots and shoes.....	74.5	61.7	63.5	66.2	70.3	43.9	45.6	48.1
Automobile tires and inner tubes.....	86.1	69.0	72.5	73.3	83.1	65.1	69.4	70.5
Shipbuilding.....	117.3	100.3	98.2	98.0	119.0	94.9	96.6	89.8



# MANUFACTURING INDUSTRIES. MONTHLY INDEXES, 1926-1931

MONTHLY AVERAGE 1926 = 100

## PAY-ROLL TOTALS.



[417]

## Time Worked in Manufacturing Industries in June, 1931

REPORTS as to working time of employees in June were received from 12,277 establishments in 64 manufacturing industries. Two per cent of the establishments were idle, while employees in 56 per cent were working full time, and employees in 42 per cent were working part time.

Employees in the establishments in operation in June were working an average of 89 per cent of full time, this percentage showing a decrease of 1 per cent in average full-time operation over the month interval.

Employees in the 42 per cent of the establishments working part time in June were averaging 75 per cent of full-time operation.

TABLE 7.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN JUNE, 1931

Industry	Establishments reporting		Per cent of establishments in which employees worked		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
<b>Food and kindred products</b> .....	<b>1,776</b>	<b>1</b>	<b>78</b>	<b>21</b>	<b>95</b>	<b>78</b>
Slaughtering and meat packing.....	184		77	23	97	87
Confectionery.....	278	1	49	50	88	76
Ice cream.....	272	(1)	79	21	97	85
Flour.....	370	3	74	23	93	71
Baking.....	660		93	7	99	80
Sugar refining, cane.....	12		67	33	96	89
<b>Textiles and their products</b> .....	<b>1,956</b>	<b>4</b>	<b>63</b>	<b>33</b>	<b>92</b>	<b>78</b>
Cotton goods.....	459	3	60	37	90	75
Hosiery and knit goods.....	288	1	65	33	92	77
Silk goods.....	242	9	64	27	95	82
Woolen and worsted goods.....	184	2	61	36	94	82
Carpets and rugs.....	28		46	54	86	74
Dyeing and finishing textiles.....	120		47	53	89	78
Clothing, men's.....	253	5	68	27	94	79
Shirts and collars.....	80	1	64	35	94	82
Clothing, women's.....	216	8	72	20	95	76
Millinery and lace goods.....	86	1	59	40	91	77
<b>Iron and steel and their products</b> .....	<b>1,774</b>	<b>2</b>	<b>27</b>	<b>72</b>	<b>77</b>	<b>68</b>
Iron and steel.....	143	7	38	55	80	65
Cast-iron pipe.....	42	12	17	71	65	57
Structural ironwork.....	162	1	36	64	86	78
Foundry and machine-shop products.....	1,004	1	27	72	76	67
Hardware.....	58	2	17	81	74	69
Machine tools.....	140	1	16	82	74	69
Steam fittings and steam and hot-water heating apparatus.....	103	2	13	85	72	68
Stoves.....	122	1	27	72	77	68
<b>Lumber and its products</b> .....	<b>1,130</b>	<b>2</b>	<b>43</b>	<b>55</b>	<b>85</b>	<b>74</b>
Lumber, sawmills.....	509	3	48	50	86	73
Lumber, millwork.....	277	1	38	61	86	77
Furniture.....	344	2	40	58	83	71
<b>Leather and its products</b> .....	<b>378</b>	<b>2</b>	<b>55</b>	<b>43</b>	<b>90</b>	<b>77</b>
Leather.....	119		62	38	93	81
Boots and shoes.....	259	3	52	45	89	75
<b>Paper and printing</b> .....	<b>1,390</b>	<b>1</b>	<b>67</b>	<b>32</b>	<b>94</b>	<b>81</b>
Paper and pulp.....	197	5	54	42	90	78
Paper boxes.....	259		39	61	88	80
Printing, book and job.....	543		66	34	94	83
Printing, newspapers.....	391		92	8	99	89
<b>Chemicals and allied products</b> .....	<b>366</b>	<b>5</b>	<b>68</b>	<b>27</b>	<b>95</b>	<b>81</b>
Chemicals.....	137	2	63	35	94	82
Fertilizers.....	160	9	61	31	93	79
Petroleum refining.....	69	1	96	3	100	91

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



TABLE 7.—PROPORTION OF FULL TIME WORKED IN MANUFACTURING INDUSTRIES BY ESTABLISHMENTS REPORTING IN JUNE, 1931—Continued

Industry	Establishments reporting		Per cent of establishments in which employees worked		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
<b>Stone, clay, and glass products</b> .....	<b>740</b>	<b>9</b>	<b>57</b>	<b>34</b>	<b>90</b>	<b>74</b>
Cement.....	90	9	81	10	98	77
Brick, tile, and terra cotta.....	412	11	53	36	89	72
Pottery.....	106	4	31	65	82	74
Glass.....	132	6	73	20	96	80
<b>Metal products, other than iron and steel</b> .....	<b>209</b>	<b>(1)</b>	<b>36</b>	<b>64</b>	<b>84</b>	<b>75</b>
Stamped and enameled ware.....	70	-----	46	54	89	79
Brass, bronze, and copper products.....	139	1	31	68	82	74
<b>Tobacco products</b> .....	<b>199</b>	<b>3</b>	<b>40</b>	<b>58</b>	<b>87</b>	<b>79</b>
Chewing and smoking tobacco and snuff.....	26	4	54	42	93	85
Cigars and cigarettes.....	173	2	38	60	86	78
<b>Vehicles for land transportation</b> .....	<b>1,128</b>	<b>(1)</b>	<b>56</b>	<b>44</b>	<b>91</b>	<b>79</b>
Automobiles.....	176	-----	37	63	85	75
Carriages and wagons.....	39	10	59	31	90	72
Car building and repairing, electric-railroad.....	408	-----	82	18	97	86
Car building and repairing, steam-railroad.....	505	(1)	41	59	87	78
<b>Miscellaneous industries</b> .....	<b>429</b>	<b>1</b>	<b>38</b>	<b>61</b>	<b>86</b>	<b>78</b>
Agricultural implements.....	76	1	32	67	81	71
Electrical machinery, apparatus, and supplies.....	178	1	21	78	84	80
Pianos and organs.....	50	4	24	72	80	73
Rubber boots and shoes.....	9	-----	44	56	85	72
Automobile tires and inner tubes.....	32	-----	75	25	98	86
Shipbuilding.....	84	2	70	27	95	83
<b>Industries added since February, 1929</b> .....	<b>802</b>	<b>1</b>	<b>71</b>	<b>29</b>	<b>94</b>	<b>79</b>
Radio.....	41	2	61	37	94	84
Rayon.....	15	-----	67	33	95	84
Aircraft.....	37	3	76	22	99	90
Jewelry.....	127	2	36	62	83	73
Paint and varnish.....	248	(1)	77	22	97	84
Rubber goods, other than boots, shoes, tires, and inner tubes.....	69	-----	52	48	91	80
Beet sugar.....	15	18	47	40	84	65
Beverages.....	210	-----	91	9	99	81
Cash registers, adding machines, and calculating machines.....	34	-----	79	21	97	85
Typewriters and supplies.....	6	-----	50	50	84	68
<b>Total</b> .....	<b>12,277</b>	<b>2</b>	<b>56</b>	<b>42</b>	<b>89</b>	<b>75</b>

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

## 2. Employment in Nonmanufacturing Industries in June, 1931

IN THE following table the bureau presents by geographic divisions the data for 14 nonmanufacturing industries, the totals for which also appear in the summary of employment and pay-roll totals, page 144. The canning and preserving industry reported the usual seasonal increase in employment in June, but pay-roll totals in this industry did not show a corresponding gain, several very large canneries reporting the termination of the packing of certain seasonal vegetables during the June pay period. The decrease in employment in the bituminous coal mining industry was accentuated by labor troubles in certain localities.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL NONMANUFACTURING ESTABLISHMENTS IN MAY AND JUNE, 1931, BY INDUSTRIES

Geographic division	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>ANTHRACITE MINING</b>							
Middle Atlantic.....	160	109,977	104,217	-5.2	\$3,024,282	\$2,648,925	-12.4
<b>BITUMINOUS COAL MINING</b>							
Middle Atlantic.....	391	61,430	56,371	-8.2	\$1,025,695	\$924,604	-9.8
East North Central.....	155	25,472	24,622	-3.3	492,632	490,378	-0.5
West North Central.....	52	3,569	3,370	-5.6	62,208	63,864	+2.5
South Atlantic.....	315	50,011	48,157	-3.7	843,835	860,774	+2.0
East South Central.....	228	41,100	39,902	-2.9	607,619	582,982	-4.1
West South Central.....	25	1,632	1,656	+1.5	23,950	25,462	+6.3
Mountain.....	125	12,516	11,885	-5.0	293,338	269,307	-8.2
Pacific.....	10	1,478	1,492	+0.9	30,491	38,637	+26.7
<b>All divisions.....</b>	<b>1,301</b>	<b>197,208</b>	<b>187,455</b>	<b>-4.9</b>	<b>3,379,865</b>	<b>3,256,098</b>	<b>-3.7</b>
<b>METALLIFEROUS MINING</b>							
Middle Atlantic.....	7	1,018	1,054	+3.5	\$20,529	\$20,974	+2.2
East North Central.....	49	10,463	10,120	-3.3	195,122	184,276	-5.6
West North Central.....	57	6,125	5,906	-3.6	153,197	146,737	-4.2
East South Central.....	14	2,666	2,452	-8.0	50,773	46,367	-8.7
West South Central.....	59	2,093	1,886	-9.9	36,261	33,027	-8.9
Mountain.....	101	16,137	15,522	-3.8	459,465	422,134	-8.1
Pacific.....	34	2,177	2,174	-0.1	63,062	62,646	-0.7
<b>All divisions.....</b>	<b>321</b>	<b>40,679</b>	<b>39,114</b>	<b>-3.8</b>	<b>978,409</b>	<b>916,161</b>	<b>-6.4</b>
<b>QUARRYING AND NONMETALLIC MINING</b>							
New England.....	103	4,240	3,998	-5.7	\$114,941	\$101,721	-11.5
Middle Atlantic.....	111	6,333	6,569	+3.7	151,280	149,830	-1.0
East North Central.....	217	7,559	7,245	-4.2	191,437	184,342	-3.7
West North Central.....	68	1,884	1,808	-4.0	40,669	40,618	-0.1
South Atlantic.....	95	5,205	5,075	-2.5	82,803	84,038	+1.5
East South Central.....	63	3,269	2,810	-14.0	43,552	41,609	-4.5
West South Central.....	41	1,984	1,792	-9.7	44,210	41,585	-5.9
Mountain.....	3	53	53	( <sup>1</sup> )	1,793	1,911	+6.6
Pacific.....	40	1,145	1,189	+3.8	30,609	31,353	+2.4
<b>All divisions.....</b>	<b>741</b>	<b>31,672</b>	<b>30,539</b>	<b>-3.6</b>	<b>701,294</b>	<b>677,007</b>	<b>-3.5</b>

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL NONMANUFACTURING ESTABLISHMENTS IN MAY AND JUNE, 1931, BY INDUSTRIES—Continued

Geographic division	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>CRUDE PETROLEUM PRODUCING</b>							
Middle Atlantic.....	42	667	636	-4.6	\$16,590	\$15,809	-4.7
East North Central.....	5	28	26	-7.1	552	545	-1.3
West North Central.....	24	108	106	-1.9	2,241	1,824	-18.6
South Atlantic.....	14	297	296	-0.3	7,479	6,939	-7.2
East South Central.....	5	210	204	-2.9	4,494	4,271	-5.0
West South Central.....	376	18,048	17,743	-1.7	628,946	619,156	-1.6
Mountain.....	20	278	273	-1.8	9,466	9,823	+3.8
Pacific.....	91	7,056	6,298	-10.7	271,131	253,158	-6.6
<b>All divisions.....</b>	<b>577</b>	<b>26,692</b>	<b>25,582</b>	<b>-4.2</b>	<b>940,899</b>	<b>911,525</b>	<b>-3.1</b>
<b>TELEPHONE AND TELEGRAPH</b>							
New England.....	724	27,406	27,567	+0.6	\$862,279	\$877,312	+1.7
Middle Atlantic.....	1,245	99,744	98,842	-0.9	3,255,895	3,277,533	+0.7
East North Central.....	1,431	69,465	68,782	-1.0	1,912,580	1,924,042	+0.6
West North Central.....	1,371	28,876	28,953	+0.3	719,673	732,333	+1.8
South Atlantic.....	560	20,063	19,778	-1.4	550,846	554,463	+0.7
East South Central.....	621	9,963	9,927	-0.4	223,366	226,015	+1.2
West South Central.....	692	17,121	17,090	-0.2	391,354	397,682	+1.6
Mountain.....	483	7,214	7,269	+0.8	177,166	180,300	+1.8
Pacific.....	915	30,077	29,891	-0.6	925,539	937,241	+1.3
<b>All divisions.....</b>	<b>8,042</b>	<b>309,929</b>	<b>308,099</b>	<b>-0.6</b>	<b>9,018,698</b>	<b>9,106,921</b>	<b>+1.0</b>
<b>POWER, LIGHT, AND WATER</b>							
New England.....	268	22,391	22,397	+(?)	\$714,558	\$725,757	+1.6
Middle Atlantic.....	320	60,675	60,412	-0.4	2,007,454	2,003,584	-0.2
East North Central.....	657	55,838	56,322	+0.9	1,824,995	1,828,626	+0.2
West North Central.....	431	27,406	27,858	+1.6	802,211	807,524	+0.7
South Atlantic.....	284	23,223	23,068	-0.7	716,739	717,077	+(?)
East South Central.....	170	6,945	6,955	+0.1	172,270	173,942	+1.0
West South Central.....	584	16,943	16,226	-4.2	467,056	452,355	-3.1
Mountain.....	124	6,106	5,826	-4.6	186,280	179,967	-3.4
Pacific.....	837	23,540	22,995	-2.3	766,644	742,257	-3.2
<b>All divisions.....</b>	<b>3,675</b>	<b>243,667</b>	<b>242,659</b>	<b>-0.4</b>	<b>7,658,207</b>	<b>7,631,089</b>	<b>-0.4</b>
<b>ELECTRIC RAILROADS <sup>3</sup></b>							
New England.....	47	13,671	13,724	+0.4	\$489,548	\$491,160	+0.3
Middle Atlantic.....	159	37,122	37,021	-0.3	1,189,161	1,195,947	+0.6
East North Central.....	107	43,093	42,301	-1.8	1,392,380	1,377,534	-1.1
West North Central.....	84	13,969	14,118	+1.1	426,733	431,531	+1.1
South Atlantic.....	52	11,660	11,583	-0.7	328,021	329,449	+0.4
East South Central.....	13	2,723	2,703	-0.7	75,933	75,200	-1.0
West South Central.....	34	5,186	5,045	-2.7	139,298	137,511	-1.3
Mountain.....	15	2,009	2,005	-0.2	54,446	54,100	-0.6
Pacific.....	38	16,288	16,202	-0.5	508,943	499,913	-1.8
<b>All divisions.....</b>	<b>549</b>	<b>145,721</b>	<b>144,702</b>	<b>-0.7</b>	<b>4,604,463</b>	<b>4,592,345</b>	<b>-0.3</b>

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **NONMANUFACTURING** ESTABLISHMENTS IN MAY AND JUNE, 1931, BY INDUSTRIES—Continued

Geographic division	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>WHOLESALE TRADE</b>							
New England.....	564	13,011	13,310	+2.3	\$399,324	\$403,492	+1.0
Middle Atlantic.....	308	9,287	9,337	+0.5	304,817	300,183	-1.5
East North Central.....	302	11,591	11,428	-1.4	357,289	350,799	-1.8
West North Central.....	213	12,295	12,176	-1.0	360,719	356,436	-1.2
South Atlantic.....	184	3,504	3,466	-1.1	105,890	104,530	-1.3
East South Central.....	65	1,635	1,655	+1.2	44,557	45,034	+1.1
West South Central.....	297	5,851	5,811	-0.7	169,377	167,624	-1.0
Mountain.....	80	1,770	1,761	-0.5	59,287	59,085	-0.3
Pacific.....	353	9,777	9,735	-0.2	322,513	321,132	-0.4
<b>All divisions.....</b>	<b>2,366</b>	<b>68,721</b>	<b>68,699</b>	<b>-0.2</b>	<b>2,123,773</b>	<b>2,108,315</b>	<b>-0.7</b>
<b>RETAIL TRADE</b>							
New England.....	2,379	53,048	52,977	-0.1	\$1,284,527	\$1,277,536	-0.5
Middle Atlantic.....	408	79,505	79,410	-0.1	2,051,939	2,044,101	-0.4
East North Central.....	2,738	74,348	73,435	-1.2	1,780,357	1,804,781	+1.4
West North Central.....	693	20,955	20,535	-2.0	440,024	437,334	-0.6
South Atlantic.....	1,064	21,215	21,285	+0.3	468,224	468,307	-(?)
East South Central.....	370	8,519	7,939	-6.8	154,608	148,501	-4.1
West South Central.....	228	12,739	12,805	+0.5	258,923	251,917	-2.7
Mountain.....	218	4,975	5,069	+1.9	105,342	108,634	+3.1
Pacific.....	1,574	43,080	41,999	-2.5	1,008,519	976,002	-3.2
<b>All divisions.....</b>	<b>9,672</b>	<b>318,334</b>	<b>315,454</b>	<b>-0.9</b>	<b>7,552,763</b>	<b>7,517,013</b>	<b>-0.5</b>
<b>HOTELS <sup>4</sup></b>							
New England.....	126	8,168	9,020	+10.4	\$134,284	\$142,788	+6.3
Middle Atlantic.....	398	44,980	45,313	+0.7	790,785	771,762	-2.4
East North Central.....	393	31,310	31,038	-0.9	531,057	522,523	-1.6
West North Central.....	284	15,098	14,936	-1.1	213,055	206,977	-2.9
South Atlantic.....	169	12,066	11,289	-6.4	174,629	160,574	-8.0
East South Central.....	95	6,346	5,944	-6.3	75,180	69,101	-8.1
West South Central.....	160	9,447	8,859	-6.2	121,393	112,514	-7.3
Mountain.....	112	3,600	3,607	+0.2	60,698	60,143	-0.9
Pacific.....	349	16,694	16,288	-2.4	305,961	299,033	-2.3
<b>All divisions.....</b>	<b>2,086</b>	<b>147,709</b>	<b>146,294</b>	<b>-1.0</b>	<b>2,407,042</b>	<b>2,345,415</b>	<b>-2.6</b>
<b>CANNING AND PRESERVING</b>							
New England.....	61	1,185	1,154	-2.6	\$22,586	\$22,522	-0.3
Middle Atlantic.....	86	7,250	8,090	+11.6	142,024	146,437	+3.1
East North Central.....	225	6,647	7,512	+13.0	120,197	134,763	+12.1
West North Central.....	59	1,264	1,615	+27.8	22,608	25,606	+13.3
South Atlantic.....	99	3,148	3,953	+25.6	37,838	45,198	+19.5
East South Central.....	34	1,203	1,675	+39.2	14,306	17,929	+25.3
West South Central.....	33	1,024	1,662	+62.3	7,116	7,240	+1.7
Mountain.....	53	953	1,299	+36.3	25,922	26,581	+2.5
Pacific.....	203	11,830	16,537	+39.8	220,344	215,535	-2.2
<b>All divisions.....</b>	<b>683</b>	<b>34,504</b>	<b>43,497</b>	<b>+26.1</b>	<b>612,941</b>	<b>641,811</b>	<b>+4.7</b>

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **NONMANUFACTURING** ESTABLISHMENTS IN MAY AND JUNE, 1931, BY INDUSTRIES—Continued

Geographic division	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
<b>LAUNDRIES</b>							
New England.....	53	2, 818	2, 850	+1.1	\$57, 934	\$58, 966	+1.8
Middle Atlantic.....	89	11, 345	11, 450	+0.9	231, 288	233, 655	+1.0
East North Central.....	80	5, 445	5, 416	-0.5	104, 599	104, 121	-0.5
West North Central.....	58	4, 654	4, 692	+0.8	82, 112	82, 685	+0.7
South Atlantic.....	52	5, 728	5, 958	+4.0	92, 120	94, 731	+2.8
East South Central.....	32	2, 246	2, 211	-1.6	27, 924	28, 466	+1.9
West South Central.....	13	777	787	+1.3	11, 082	11, 081	-(?)
Mountain.....	19	1, 772	1, 781	+0.5	30, 754	30, 442	-1.0
Pacific.....	55	3, 667	3, 605	-1.7	79, 368	77, 727	-2.1
<b>All divisions.....</b>	<b>451</b>	<b>38, 452</b>	<b>38, 750</b>	<b>+0.8</b>	<b>717, 181</b>	<b>721, 874</b>	<b>+0.7</b>
<b>DYEING AND CLEANING</b>							
New England.....	22	1, 124	1, 177	+4.7	\$25, 935	\$27, 767	+7.1
Middle Atlantic.....	22	1, 411	1, 483	+5.1	35, 902	37, 592	+4.7
East North Central.....	22	894	882	-1.3	21, 510	21, 643	+0.6
West North Central.....	30	884	903	+2.1	19, 701	20, 237	+2.7
South Atlantic.....	40	1, 044	1, 085	+3.9	19, 808	20, 473	+3.4
East South Central.....	12	564	574	+1.8	10, 674	10, 908	+2.2
West South Central.....	12	321	343	+6.9	6, 633	7, 164	+8.0
Mountain.....	19	263	260	-1.1	6, 420	6, 277	-2.2
Pacific.....	13	736	710	-3.5	18, 423	17, 651	-4.2
<b>All divisions.....</b>	<b>192</b>	<b>7, 241</b>	<b>7, 417</b>	<b>+2.4</b>	<b>165, 006</b>	<b>169, 712</b>	<b>+2.9</b>

<sup>1</sup> No change.<sup>2</sup> Less than one-tenth of 1 per cent.<sup>3</sup> Not including car building and repairing; see manufacturing industries, Table 1, et seq.<sup>4</sup> The amount of pay roll given represents cash payments only; the additional value of board, room, and tips can not be computed.<sup>5</sup> Included in the total of 853 establishments reporting in June were 43 establishments which were closed in May but had resumed operation in June, and 10 establishments which were operating in May and reported a seasonal closing in June, 1931. There were also 266 additional canning establishments whose reports were not included in the total number of reporting establishments, as the plants had been seasonally closed for a period of 2 or more months.TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN **NONMANUFACTURING** INDUSTRIES, JUNE, 1931, WITH JUNE, 1930

Industry	Per cent of change, June, 1931, compared with June, 1930		Industry	Per cent of change, June, 1931, compared with June, 1930	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Anthracite mining.....	-16.2	-29.3	Electric railroads.....	-10.0	-12.6
Bituminous coal mining.....	-11.3	-30.7	Wholesale trade.....	-9.7	-14.7
Metalliferous mining.....	-29.1	-43.5	Retail trade.....	-5.1	-9.5
Quarrying and nonmetallic mining.....	-19.9	-33.9	Hotels.....	-6.5	-12.9
Crude petroleum producing.....	-27.9	-28.0	Canning and preserving.....	-14.9	-28.1
Telephone and telegraph.....	-12.9	-8.1	Laundries.....	(1)	(1)
Power, light, and water.....	-7.1	-8.8	Dyeing and cleaning.....	(1)	(1)

<sup>1</sup> Data not available.**Indexes of Employment and Pay-Roll Totals for Nonmanufacturing Industries**

TABLE 3 shows the index numbers of employment and pay-roll totals for anthracite, bituminous coal, and metalliferous mining, quarrying, crude petroleum producing, telephone and telegraph, power, light, and water, electric railroads, wholesale and retail trade, hotels, and canning and preserving, by months, from January, 1930, to June, 1931, with the monthly average for 1929 as 100.



TABLE 3.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY, 1930, TO JUNE, 1931

[Monthly average, 1929=100]

Year and month	Anthracite mining		Bituminous coal mining		Metalliferous mining		Quarrying and non-metallic mining		Crude petroleum producing		Telephone and telegraph		Power, light, and water		Operation and maintenance of electric railroads <sup>1</sup>		Wholesale trade		Retail trade		Hotels		Canning and preserving		
	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	Em- p- loy- ment	Pay- roll totals	
<b>1930</b>																									
January.....	102.1	105.8	102.5	101.4	95.7	92.7	79.6	71.9	92.7	94.0	101.6	105.1	99.6	99.7	97.1	97.8	100.0	100.0	98.9	99.7	100.4	100.3	46.1	50.3	
February.....	106.9	121.5	102.4	102.1	92.3	92.5	79.8	83.5	90.8	88.6	100.2	101.9	98.8	100.4	95.1	95.7	98.7	98.3	94.4	96.0	102.4	103.8	45.7	51.5	
March.....	82.6	78.5	98.6	86.4	90.9	90.8	83.0	80.0	89.3	91.3	99.4	105.8	99.7	102.1	94.4	95.4	97.7	93.9	93.9	95.5	102.4	104.4	49.7	50.8	
April.....	84.1	75.0	94.4	81.7	89.3	88.3	87.4	85.4	86.8	86.6	98.9	103.4	100.7	102.6	95.2	97.1	97.3	97.9	97.3	97.5	100.1	100.3	74.8	72.6	
May.....	93.8	98.8	90.4	77.5	87.5	85.6	90.8	90.2	89.8	85.4	99.7	103.2	103.4	104.5	95.2	96.0	96.8	97.4	96.7	97.3	98.0	98.4	65.7	66.9	
June.....	90.8	94.3	88.4	75.6	84.6	81.6	90.3	90.9	90.2	87.1	99.8	103.4	104.6	107.8	94.8	97.0	96.5	98.6	93.9	96.8	98.0	98.1	83.0	81.5	
July.....	91.6	84.0	88.0	68.9	80.5	71.9	89.9	85.5	89.9	88.5	100.0	106.6	105.9	106.7	95.3	95.6	96.0	96.0	89.0	91.7	101.3	99.8	126.3	112.7	
August.....	80.2	78.8	89.2	71.1	79.0	89.3	85.8	87.7	86.0	98.8	102.5	106.4	106.6	92.9	92.1	95.0	93.6	85.6	87.6	101.5	98.6	185.7	172.0		
September.....	93.8	91.6	90.5	74.9	78.1	69.9	87.7	82.5	85.0	84.0	96.8	102.2	105.2	106.1	91.8	90.5	94.8	93.6	92.0	92.4	100.1	97.1	246.6	214.8	
October.....	99.0	117.2	91.8	79.4	77.2	68.6	84.7	79.3	85.2	82.6	94.5	100.9	104.8	105.6	91.0	88.9	94.2	92.9	95.5	95.1	97.5	95.5	164.7	140.0	
November.....	97.2	98.0	92.5	79.1	72.8	63.4	78.3	66.8	83.0	93.0	97.9	103.4	103.7	89.3	87.7	92.6	91.0	98.4	96.8	95.2	93.6	96.7	82.9		
December.....	99.1	100.0	92.5	77.7	70.1	59.9	70.2	59.9	77.2	91.6	101.3	103.2	106.3	88.8	88.6	92.0	91.3	115.1	107.7	93.5	91.5	61.6	57.4		
<b>Average.....</b>	<b>93.4</b>	<b>95.3</b>	<b>93.4</b>	<b>81.3</b>	<b>83.2</b>	<b>78.0</b>	<b>84.3</b>	<b>79.3</b>	<b>87.4</b>	<b>85.9</b>	<b>97.9</b>	<b>102.9</b>	<b>103.0</b>	<b>104.3</b>	<b>93.4</b>	<b>93.5</b>	<b>96.0</b>	<b>95.9</b>	<b>95.9</b>	<b>96.2</b>	<b>99.2</b>	<b>98.5</b>	<b>103.9</b>	<b>96.1</b>	
<b>1931</b>																									
January.....	90.6	89.3	93.9	73.3	68.3	55.0	64.4	50.4	74.8	71.5	90.5	96.3	99.2	98.6	86.9	85.6	89.5	87.5	90.0	89.4	95.0	91.0	48.9	46.1	
February.....	89.5	101.9	91.5	68.3	65.3	54.6	66.6	54.4	73.2	70.0	89.2	94.8	97.8	99.7	86.6	87.1	88.2	88.4	87.1	86.7	96.8	93.7	48.3	48.6	
March.....	82.0	71.3	88.8	65.2	63.5	52.8	70.0	58.2	72.2	73.2	88.6	97.9	96.7	102.4	86.4	88.1	87.4	89.1	87.8	87.5	96.8	93.4	53.0	50.3	
April.....	85.2	75.2	85.9	58.6	63.9	51.4	76.1	62.6	69.8	66.3	88.1	95.0	97.1	97.6	86.8	86.6	87.4	85.2	90.1	88.3	95.9	89.9	59.6	57.1	
May.....	80.3	76.1	82.4	54.4	62.4	49.3	75.0	62.3	67.8	64.7	87.4	94.1	97.6	98.7	85.9	85.1	87.1	84.7	89.9	88.0	92.5	87.7	56.0	56.0	
June.....	76.1	66.7	78.4	52.4	60.0	46.1	72.3	60.1	65.0	62.7	86.9	95.0	97.2	98.3	85.3	84.8	87.1	84.1	89.1	87.6	91.6	85.4	70.6	58.6	

<sup>1</sup> Not including electric-railroad car building and repairing; see vehicles group, manufacturing industries, p. 148, et seq.

## Employment in Building Construction in June, 1931

EMPLOYMENT in the building construction industry in June, 1931, increased 3.7 per cent, as compared with May, 1931, and pay-roll totals increased 1.5 per cent, according to reports received from 4,333 firms having in June 65,370 employees, whose earnings in one week were \$1,948,957.

The bureau's survey of employment in this industry now covers 20 cities and their suburbs. Data furnished by three cooperating State bureaus which collect information concerning employment and earnings in this industry within their respective States are also presented. Reports from contractors in 5 additional cities—Birmingham, Charlotte (N. C.), Hartford, Oklahoma City, and Portland (Me.)—have been secured for one pay period nearest June 15, and information concerning these localities will be published when comparable data from identical contractors for two months are available.

The following table shows the localities covered, the number of identical firms reporting for both months, the number of employees and amount of earnings for one week in May and June, 1931, together with the per cents of change over the month interval.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN BUILDING CONSTRUCTION IN MAY AND JUNE, 1931, BY CITIES

Locality	Number of establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		May, 1931	June, 1931		May, 1931	June, 1931	
Atlanta.....	119	1, 732	1, 572	-9.2	\$34, 295	\$30, 528	-11. 0
Cleveland.....	339	6, 652	5, 938	-10.7	249, 337	223, 464	-10. 4
Dallas.....	113	1, 648	1, 786	+8.4	43, 965	46, 065	+4. 8
Denver.....	171	1, 328	1, 327	-0.1	38, 390	37, 476	-2. 4
Des Moines.....	57	889	1, 118	+25. 8	28, 467	32, 607	+14. 5
Indianapolis.....	169	2, 111	2, 190	+3.7	67, 657	74, 257	+9. 8
Jacksonville.....	45	374	494	+32.1	6, 757	8, 879	+31. 4
Louisville.....	118	1, 095	1, 154	+5.4	26, 071	27, 353	+4. 9
Memphis.....	77	695	816	+17.4	14, 397	16, 840	+17. 0
Minneapolis.....	229	3, 365	3, 559	+5.8	103, 413	106, 755	+3. 2
New Orleans.....	114	2, 579	2, 445	-5.2	49, 519	46, 352	-6. 4
Omaha.....	103	1, 052	1, 157	+10.0	27, 694	29, 673	+7. 1
Portland, Oreg.....	184	1, 532	1, 633	+6.6	47, 873	50, 073	+4. 6
Providence.....	209	2, 553	2, 732	+7.0	80, 192	79, 618	-0. 7
Richmond.....	115	1, 710	1, 735	+1.5	40, 831	41, 526	+1. 7
St. Louis.....	456	4, 320	4, 195	-2.9	154, 468	154, 487	+( <sup>1</sup> )
Salt Lake City.....	84	654	720	+10.1	18, 392	21, 224	+15. 4
Seattle.....	174	2, 770	2, 950	+6.5	86, 672	88, 462	+2. 1
Washington, D. C.....	454	9, 683	10, 499	+8.4	293, 781	326, 674	+11. 2
Wilmington, Del.....	93	1, 522	1, 544	+1.4	42, 763	43, 113	+0. 8
Baltimore <sup>2</sup> .....	72	1, 774	2, 161	+21. 8	44, 475	54, 097	+21. 6
Massachusetts <sup>2</sup> .....	764	10, 352	10, 611	+2.5	350, 534	335, 648	-4. 2
Wisconsin <sup>2</sup> .....	74	2, 636	3, 034	+15. 1	69, 589	73, 786	+6. 0
<b>Total</b> .....	<b>4, 333</b>	<b>63, 026</b>	<b>65, 370</b>	<b>+3.7</b>	<b>1, 919, 532</b>	<b>1, 948, 957</b>	<b>+1. 5</b>

<sup>1</sup> Less than one-tenth of 1 per cent.<sup>2</sup> Data supplied by cooperating State bureau.

The bureau's monthly employment survey of the building-construction industry, while being steadily expanded, has not yet attained sufficient volume to represent its proper proportion in comparison with the other 15 industrial groups in the summary table, page 144, and therefore the figures have not been included. The several industrial groups in the summary table are not weighted according to their relative importance, and the significance of the trend in employment and earnings in this industry would not be properly reflected in the combined total of the summary table at the present time.

### Employment on Class I Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to May, 1931, on Class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by the index numbers published in Table 1. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the monthly average for 1926 as 100.

TABLE 1.—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO MAY, 1931

[Monthly average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931
January.....	98.3	96.9	95.6	95.8	95.5	89.3	88.2	86.3	73.7
February.....	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7
March.....	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9
April.....	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0	73.5
May.....	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9
June.....	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	-----
July.....	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	-----
August.....	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7	-----
September.....	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	-----
October.....	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	-----
November.....	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	-----
December.....	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	-----
<b>Average.....</b>	<b>104.1</b>	<b>98.3</b>	<b>97.9</b>	<b>100.0</b>	<b>97.5</b>	<b>92.9</b>	<b>93.3</b>	<b>83.5</b>	<b>73.3</b>

<sup>1</sup> Average for 5 months.

Table 2 shows the total number of employees on the 15th day each of May, 1930, and April and May, 1931, and pay-roll totals for the entire months.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES, MAY, 1930, AND APRIL AND MAY, 1931

[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.]

Occupation	Number of employees at middle of month			Total earnings		
	May, 1930	April, 1931	May, 1931	May, 1930	April, 1931	May, 1931
<b>Professional, clerical, and general</b>	<b>260,033</b>	<b>230,359</b>	<b>227,838</b>	<b>\$38,589,452</b>	<b>\$34,109,960</b>	<b>\$33,616,285</b>
Clerks.....	145,221	125,828	124,284	20,424,305	17,525,537	17,251,169
Stenographers and typists.....	24,130	21,514	21,219	3,193,339	2,845,479	2,780,258
<b>Maintenance of way and structures</b>	<b>408,042</b>	<b>290,569</b>	<b>308,317</b>	<b>38,441,526</b>	<b>27,060,604</b>	<b>27,963,239</b>
Laborers, extra gang and work train.....	69,309	31,228	37,276	5,273,817	2,200,223	2,583,532
Laborers, track and roadway section.....	208,997	153,036	164,113	15,313,913	10,534,865	11,087,960
<b>Maintenance of equipment and stores</b>	<b>422,105</b>	<b>362,654</b>	<b>355,740</b>	<b>57,690,602</b>	<b>46,085,439</b>	<b>44,599,187</b>
Carmen.....	90,577	75,677	74,062	14,094,616	10,780,323	10,385,232
Machinists.....	52,413	47,473	46,916	8,524,700	7,055,912	6,825,478
Skilled trades helpers.....	92,808	79,601	78,128	10,809,096	8,450,424	8,172,276
Laborers (shops, engine houses, power plants, and stores).....	34,715	29,655	29,073	3,371,566	2,712,074	2,701,841
Common laborers (shops, engine houses, power plants, and stores).....	47,385	38,821	38,039	3,830,098	2,925,200	2,783,144

[426]







PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Monthly period—Continued

State, and industry group	Employment—index numbers (1925-1927 = 100)		State, and industry group	Per cent of change, May to June, 1931	
	Employment	Pay roll		Employment	Pay roll
<b>Massachusetts—Contd.</b>			<b>New York—Continued</b>		
Silk goods.....	70.4	60.3	Metals and machinery.....	-3.3	-----
Textile machinery and parts.....	61.3	61.9	Silver and jewelry.....	-3.6	-----
Woolen and worsted goods.....	65.4	69.3	Brass, copper, and aluminum.....	-5.2	-----
All industries.....	72.2	70.8	Iron and steel.....	-6.6	-----
	Per cent of change, April to May, 1931		Structural and architectural iron.....	-10.0	-----
	Employment	Pay roll	Sheet metal and hardware.....	-3.7	-----
			Firearms, tools, and cutlery.....	-5.1	-----
<b>Michigan</b>			Cooking, heating, and ventilating apparatus.....	-4.6	-----
Paper and printing.....	- .7	+1.3	Machinery, including electrical apparatus.....	-2.2	-----
Chemicals and allied products.....	-4.3	-1.1	Automobiles, carriages, and airplanes.....	-9.7	-----
Stone, clay, and glass products.....	+8.2	+11.8	Railroad equipment and repair.....	+ .9	-----
Metal products, not iron and steel.....	+4.9	+5.6	Boat and ship building.....	+4.0	-----
Iron and steel products.....	- .4	+2.3	Instruments and appliances.....	-2.3	-----
Lumber and its products.....	-10.2	-1.5	Wood manufactures.....	-7.2	-----
Leather and its products.....	-4.6	-10.0	Saw and planing mills.....	+2.4	-----
Food and kindred products.....	+17.2	+3.0	Furniture and cabinet-work.....	-6.4	-----
Textiles and their products.....	-1.9	+12.3	Pianos and other musical instruments.....	-30.3	-----
Tobacco products.....	+4.0	+14.8	Miscellaneous wood.....	-1.4	-----
Vehicles for land transportation.....	+3.5	+10.0	Furs, leather, and rubber goods.....	-1.5	-----
Miscellaneous.....	+8.7	+14.7	Leather.....	+9.3	-----
All industries.....	+2.7	+8.6	Furs and fur goods.....	+2.3	-----
<b>New Jersey</b>			Shoes.....	-1.4	-----
Food and kindred products.....	+1.1	-3.5	Other leather and canvas goods.....	-9.8	-----
Textiles and their products.....	+ .1	+3.1	Rubber and gutta percha.....	+ .4	-----
Iron and steel and their products.....	-3.1	-3.1	Pearl, horn, bone, etc.....	+1.3	-----
Lumber and its products.....	-3.1	-4.6	Chemicals, oils, paints, etc.....	-2.0	-----
Leather and its products.....	+3.2	-----	Drugs and chemicals.....	- .9	-----
Tobacco products.....	+ .5	-2.3	Paints and colors.....	- .9	-----
Paper and printing.....	+1.3	+ .8	Oil products.....	-2.7	-----
Chemicals and allied products.....	-2.6	-4.8	Miscellaneous chemicals.....	-2.3	-----
Stone, clay, and glass products.....	+1.9	+1.9	Paper.....	-2.8	-----
Metal products other than iron and steel.....	-2.7	-2.8	Printing and paper goods.....	-3.4	-----
Vehicles for land transportation.....	+4.1	+16.4	Paper boxes and tubes.....	-2.0	-----
Miscellaneous.....	+1.1	+1.8	Miscellaneous paper goods.....	-3.1	-----
All industries.....	- .5	+ .1	Printing and book-making.....	-3.6	-----
	May to June, 1931		Textiles.....	-1.7	-----
<b>New York</b>			Silk and silk goods.....	-8.8	-----
Stone, clay, and glass.....	-0.3	-----	Wool manufactures.....	+ .2	-----
Miscellaneous stone and minerals.....	- .9	-----	Cotton goods.....	+1.4	-----
Lime, cement, and plaster.....	+1.4	-----	Knit goods (excluding silk).....	+1.0	-----
Brick, tile, and pottery.....	-4.1	-----	Other textiles.....	-4.0	-----
Glass.....	+3.6	-----			

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Monthly period—Continued

State, and industry group	Per cent of change, May to June, 1931		State, and industry group	Per cent of change, May to June, 1931	
	Employment	Pay roll		Employment	Pay roll
<b>New York—Continued</b>			<b>Texas—Continued</b>		
Clothing and millinery	-7.6	-----	Commercial printing	-13.3	-----
Men's clothing	-1.4	-----	Newspaper publishing	-6	-----
Men's furnishings	-2.9	-----	Quarrying	+1.9	-----
Women's clothing	-19.0	-----	Public utilities	-5.2	-----
Women's underwear	-5.4	-----	Retail stores	-7	-----
Women's headwear	-18.1	-----	Wholesale stores	-1.1	-----
Miscellaneous sewing	-3.3	-----	Hotels	-5.2	-----
Laundry and cleaning	+1.1	-----	Miscellaneous	-5.5	-----
Food and tobacco	+3.4	-----	All industries	-1.8	-----
Flour, feed, and cereal	+5.7	-----			
Canning and preserving	+57.1	-----			
Other groceries	-1.4	-----			
Meat and dairy products	-7	-----			
Bakery products	-1.4	-----			
Candy	-5.3	-----			
Beverages	+26.6	-----			
Tobacco	+2.2	-----			
Water, light, and power	-8	-----			
All industries	-3.0	-----			
<b>Pennsylvania</b>			<b>Wisconsin</b>		
Metal products	-3.9	-9.2			
Transportation equipment	1-3.8	1-14.2			
Textile products	-5.7	-6.0			
Foods and tobacco	+4	+2.9			
Stone, clay, and glass products	+2	-1.7			
Lumber products	+5	-8			
Chemical products	+1.1	-1.6			
Leather and rubber products	-6.2	-4.7			
Paper and printing	-1.3	-5.2			
All manufacturing	-3.4	-6.8			
<b>Texas</b>			<b>Manual</b>		
Auto and body works	+4.2	-----	Logging	-15.2	-42.0
Bakeries	-2.7	-----	Mining:		
Confectioneries	-7.2	-----	Lead and zinc	-8.3	-17.8
Pure food products	+14.4	-----	Iron	-6	-18.5
Ice cream factories	-1.0	-----	Stone crushing and quarrying	-1.2	-1.2
Flour mills	+2	-----	Manufacturing:		
Ice factories	+10.1	-----	Stone and allied industries	+17.2	+35.0
Meat packing and slaughtering	+1.9	-----	Metal	-1.2	-6.4
Cotton-oil mills	-10.6	-----	Wood	-1.4	-9
Cotton compresses	-8.9	-----	Rubber	+7	+1.8
Men's clothing manufacture	+11.9	-----	Leather	+1.0	+2.6
Women's clothing manufacture	-1.4	-----	Paper	-7	+6
Brick, tile, and terra cotta	-2.2	-----	Textiles	+4	-2.7
Foundries and machine shops	-10.9	-----	Foods	+4.0	+5.3
Structural-iron works	+5	-----	Printing and publishing	+1	-2.2
Railroad car shops	+1.6	-----	Chemicals (including soap, glue, and explosives)	-1.5	-1.6
Electric-railway car shops	+1.6	-----	All manufacturing	.0	-1.8
Petroleum refining	-4	-----			
Sawmills	+7.9	-----	Construction:		
Lumber mills	-11.2	-----	Building	+6.2	+8.1
Furniture manufacture	+2.4	-----	Highway	+34.2	+55.4
Paper-box manufacture	+8	-----	Railroad	+47.3	+36.0
Cotton-textile mills	-2.1	-----	Marine dredging, sewer digging	-2.1	-29.7
Cement plants	-1.8	-----	Communication:		
			Steam railways	+1.7	+2
			Electric railways	+2.0	-2.1
			Express, telephone, telegraph	+1.8	+8
			Light and power	-1.4	-1.3
			Wholesale trade	-2.7	+6.5
			Hotels and restaurants	+3.3	-----
			Laundry and dyeing	-1.3	-5.1
			<b>Nonmanual</b>		
			Manufacturing, mines, and quarries	-9	-2
			Construction	-5	-3.5
			Communication	-4	-3
			Wholesale trade	-2.1	+3
			Retail trade—sales force only	+2.8	+1.8
			Miscellaneous professional services	-4	-15.3

1 Preliminary figures.

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Yearly period

State, and industry group	Per cent of change, May, 1930, to May, 1931		State, and industry group	Employment—index numbers (1925-1927= 100)	
	Employ- ment	Pay roll		May, 1930	May, 1931
<b>California</b>			<b>Massachusetts—Con.</b>		
Stone, clay, and glass products.....	-16.7	-22.4	Foundry and machine-shop products.....	103.5	83.8
Metals, machinery, and conveyances.....	-17.9	-23.7	Furniture.....	90.6	70.2
Wood manufactures.....	-21.2	-29.9	Hosiery and knit goods.....	76.6	70.0
Leather and rubber goods.....	-5.1	-14.2	Leather, tanned, curried, and finished.....	96.7	94.6
Chemicals, oils, paints, etc.	-22.4	-29.4	Paper and wood pulp.....	91.6	81.3
Printing and paper goods.....	-8.2	-12.4	Printing and publishing.....	104.1	98.0
Textiles.....	-3.9	-14.8	Rubber footwear.....	80.1	60.6
Clothing, millinery, and laundering.....	-4.9	-10.4	Rubber goods, tires, and tubes.....	82.3	60.3
Foods, beverages, and tobacco.....	-10.1	-9.2	Silk goods.....	84.7	60.3
Miscellaneous <sup>2</sup> .....	-18.7	-27.4	Textile machinery and parts.....	73.0	61.9
All industries.....	-15.6	-22.0	Woolen and worsted goods.....	69.8	69.3
Public utilities.....	-8.9	-11.1	All industries.....	81.3	70.8
Wholesale and retail.....	-9.3	-10.1			
	Employment—index numbers (1925-1927= 100)			Per cent of change, May, 1930, to May, 1931	
	June, 1930	June, 1931		Employ- ment	Pay roll
<b>Illinois</b>			<b>Michigan</b>		
Stone, clay, and glass products.....	87.4	69.4	Paper and printing.....	-10.6	-13.8
Metals, machinery, and conveyances.....	96.0	68.9	Chemicals and allied products.....	-14.9	-17.5
Wood products.....	63.5	48.6	Stone, clay, and glass products.....	-24.3	-36.7
Furs and leather goods.....	90.8	95.7	Metal products, not iron and steel.....	-12.7	-16.5
Chemicals, oils, paints, etc.	95.9	81.7	Iron and steel products.....	-26.3	-32.5
Printing and paper goods.....	101.2	88.3	Lumber and its products.....	-28.3	-42.5
Textiles.....	85.6	93.4	Leather and its products.....	-14.1	-28.7
Clothing and millinery.....	78.9	73.4	Food and kindred products.....	-	-20.8
Foods, beverages, and tobacco.....	90.2	76.2	Textiles and their products.....	-10.8	-13.0
All manufacturing.....	91.2	72.3	Tobacco products.....	+8.1	-9.5
Trade, wholesale and retail.....	69.5	65.1	Vehicles for land transportation.....	-19.7	-20.8
Public utilities.....	103.0	95.9	Miscellaneous.....	-25.1	-18.5
Coal mining.....	54.3	68.8	All industries.....	-19.6	-21.7
Building and contracting.....	76.5	47.1			
All industries.....	90.7	76.7		June, 1930, to June 1931	
	May, 1930	May, 1931	<b>Pennsylvania</b>		
<b>Massachusetts</b>			Metal products.....	-23.2	-40.4
Boot and shoe cut stock and findings.....	89.1	86.3	Transportation equipment.....	-34.1	<sup>1</sup> -51.9
Boots and shoes.....	83.1	66.2	Textile products.....	-12.9	-14.0
Bread and other bakery products.....	107.1	97.9	Foods and tobacco.....	-6.8	-10.8
Clothing, men's.....	59.6	51.4	Stone, clay, and glass products.....	-16.7	-29.1
Clothing, women's.....	103.2	99.5	Lumber products.....	-29.9	-32.5
Confectionery.....	84.2	80.9	Chemical products.....	-8.2	-18.0
Cotton goods.....	63.6	58.1	Leather and rubber products.....	-10.6	-15.1
Dyeing and finishing textiles.....	93.6	92.0	Paper and printing.....	-6.7	-14.6
Electrical machinery, apparatus, and supplies.....	97.0	66.2	All manufacturing.....	-18.6	-32.0

<sup>1</sup> Preliminary figures.<sup>2</sup> Includes motion pictures.

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Yearly period—Continued

State, and industry group	Per cent of change, June, 1930, to June, 1931		State, and industry group	Per cent of change June, 1930, to June, 1931	
	Employ- ment	Pay roll		Employ- ment	Pay roll
<b>Texas</b>			<b>Texas—Continued</b>		
Auto and body works.....	-8.3	-----	Railroad car shops.....	-18.6	-----
Bakeries.....	-9.2	-----	Electric-railway car shops.....	-3.8	-----
Confectioneries.....	-6	-----	Petroleum refining.....	-17.4	-----
Pure-food products.....	-13.4	-----	Sawmills.....	-23.5	-----
Ice-cream factories.....	-14.2	-----	Lumber mills.....	-23.8	-----
Flour mills.....	-18.6	-----	Furniture manufacture.....	-18.7	-----
Ice factories.....	-17.8	-----	Paper-box manufacture.....	-5.6	-----
Meat packing and slaugh- tering.....	-4.2	-----	Cotton-textile mills.....	-37.8	-----
Cotton-oil mills.....	+40.0	-----	Cement plants.....	-13.1	-----
Cotton compresses.....	-1.5	-----	Commercial printing.....	-11.6	-----
Men's clothing manufac- ture.....	+2.5	-----	Newspaper publishing.....	-12.9	-----
Women's clothing manu- facture.....	+43.5	-----	Quarrying.....	-3.2	-----
Brick, tile, and terra cotta	-41.6	-----	Public utilities.....	-12.8	-----
Foundries and machine shops.....	-56.2	-----	Retail stores.....	-7	-----
Structural-iron works.....	-16.0	-----	Wholesale stores.....	-7.0	-----
			Hotels.....	-5.9	-----
			Miscellaneous.....	-21.0	-----
			All industries.....	-17.4	-----

# WHOLESALE AND RETAIL PRICES

## Retail Prices of Food in June, 1931

THE following tables are compiled from simple averages of the actual selling prices<sup>1</sup> received monthly by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food June 15, 1930, and May 15 and June 15, 1931, as well as the percentage changes in the year and in the month. For example, the retail price per pound of lard was 16.6 cents on June 15, 1930; 13.5 cents on May 15, 1931; and 13.0 cents on June 15, 1931. These figures show decreases of 22 per cent in the year and 4 per cent in the month.

The cost of various articles of food combined shows a decrease of 20.1 per cent June 15, 1931, as compared with June 15, 1930, and a decrease of 2.2 per cent June 15, 1931, as compared with May 15, 1931.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JUNE 15, 1931, COMPARED WITH MAY 15, 1931, AND JUNE 15, 1930

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

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (–) June 15, 1931, compared with—	
		June 15, 1930	May 15, 1931	June 15, 1931	June 15, 1930	May 15, 1931
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak.....	Pound.....	47.9	39.5	38.7	-19	-2
Round steak.....	do.....	42.7	34.5	33.7	-21	-2
Rib roast.....	do.....	35.1	29.1	28.3	-19	-3
Chuck roast.....	do.....	28.1	21.7	20.9	-26	-4
Plate beef.....	do.....	19.4	14.5	13.6	-30	-6
Pork chops.....	do.....	36.6	30.1	29.4	-20	-2
Bacon, sliced.....	do.....	42.3	37.6	36.9	-13	-2
Ham, sliced.....	do.....	54.0	46.5	45.8	-15	-2
Lamb, leg of.....	do.....	36.6	31.2	30.5	-17	-2
Hens.....	do.....	35.7	31.7	31.1	-13	-2
Salmon, red, canned.....	do.....	31.8	33.8	33.6	+6	-1
Milk, fresh.....	Quart.....	14.0	12.3	12.0	-14	-2
Milk, evaporated.....	16-oz. cans.....	10.1	9.1	9.1	-10	0
Butter.....	Pound.....	43.3	31.2	30.7	-29	-2
Oleomargarine (all butter substitutes).....	do.....	25.6	19.6	19.0	-26	-3
Cheese.....	do.....	34.9	27.4	26.5	-24	-3
Lard.....	do.....	16.6	13.5	13.0	-22	-4
Vegetable lard substitute.....	do.....	24.3	23.3	23.3	-4	0
Eggs, strictly fresh.....	Dozen.....	33.6	24.8	25.8	-23	+4
Bread.....	Pound.....	8.8	7.7	7.6	-14	-1
Flour.....	do.....	4.8	3.7	3.7	-23	0
Corn meal.....	do.....	5.3	4.6	4.5	-15	-2
Rolled oats.....	do.....	8.7	8.0	8.0	-8	0
Corn flakes.....	8-oz. package.....	9.4	9.0	8.9	-5	-1
Wheat cereal.....	28-oz. package.....	25.4	24.1	24.0	-6	-0.4

<sup>1</sup> In addition to monthly retail prices of food and coal, the bureau publishes periodically the prices of gas and electricity for household use in each of 51 cities. At present this information is being collected in June and December of each year.



TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE JUNE 15, 1931, COMPARED WITH MAY 15, 1931, AND JUNE 15, 1930—Continued

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (-) June 15, 1931, compared with—	
		June 15, 1930	May 15, 1931	June 15, 1931	June 15, 1930	May 15, 1931
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Macaroni.....	Pound.....	19.4	17.1	16.9	-13	-1
Rice.....	do.....	9.5	8.3	8.2	-14	-1
Beans, navy.....	do.....	11.5	8.2	8.0	-30	-2
Potatoes.....	do.....	4.2	2.8	2.4	-43	-14
Onions.....	do.....	5.9	4.6	4.8	-19	+4
Cabbage.....	do.....	5.6	4.1	4.0	-29	-2
Pork and beans.....	No. 2 can.....	11.0	9.4	9.3	-15	-1
Corn, canned.....	do.....	15.4	13.6	13.3	-14	-2
Peas, canned.....	do.....	16.3	14.1	13.8	-15	-2
Tomatoes, canned.....	do.....	12.4	10.2	10.1	-19	-1
Sugar.....	Pound.....	6.1	5.6	5.6	-8	0
Tea.....	do.....	77.8	74.5	74.2	-5	-0.4
Coffee.....	do.....	40.6	33.5	33.1	-18	-1
Prunes.....	do.....	17.0	12.1	11.8	-31	-2
Raisins.....	do.....	12.0	11.0	11.1	-8	+1
Bananas.....	Dozen.....	31.0	26.6	26.1	-16	-2
Oranges.....	do.....	67.2	37.8	37.6	-44	-1
Weighted food index.....					-20.1	-2.2

Table 2 shows for the United States average retail prices of specified food articles on June 15, 1913, and on June 15 of each year from 1925 to 1931, together with percentage changes in June of each of these specified years compared with June, 1913. For example, the retail price per pound of ham was 27.3 cents in June, 1913; 53.0 cents in June, 1925; 59.7 cents in June, 1926; 55.5 cents in June, 1927; 51.7 cents in June, 1928; 55.3 cents in June, 1929; 54.0 cents in June, 1930; and 45.8 cents in June, 1931.

As compared with June, 1913, these figures show increases of 94 per cent in June, 1925; 119 per cent in June, 1926; 103 per cent in June, 1927; 89 per cent in June, 1928; 103 per cent in June, 1929; 98 per cent in June, 1930; and 68 per cent in June, 1931.

The cost of the various articles of food combined showed an increase of 21.0 per cent in June, 1931, as compared with June, 1913.

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

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

Article	Average retail prices on June 15—								Per cent of increase June 15 of each specified year compared with June 15, 1913							
	1913	1925	1926	1927	1928	1929	1930	1931	1925	1926	1927	1928	1929	1930	1931	
Sirloin steak... pound	25.9	41.0	42.0	42.4	47.4	51.2	47.9	38.7	58	62	64	83	98	85	49	
Round steak... do	22.6	35.2	36.2	37.0	41.6	45.8	42.7	33.7	56	60	64	84	103	89	49	
Rib roast... do	20.1	29.8	30.6	31.1	34.7	37.6	35.1	28.3	48	52	55	73	87	75	41	
Chuck roast... do	16.3	21.8	22.7	23.5	27.6	30.7	28.1	20.9	34	39	44	69	88	72	28	
Plate beef... do	12.2	13.8	14.6	15.2	18.5	21.3	19.4	13.6	13	20	25	52	75	59	11	
Pork chops... do	20.8	36.2	42.0	34.7	34.8	37.6	36.6	29.4	74	102	67	67	81	76	41	
Bacon, sliced... do	27.3	47.0	51.5	47.1	43.2	43.8	42.3	36.9	72	89	73	58	60	55	35	
Ham, sliced... do	27.3	53.0	59.7	55.5	51.7	55.3	54.0	45.8	94	119	103	89	103	98	68	
Lamb, leg of... do	19.4	38.4	41.9	41.0	42.2	41.2	36.6	30.5	98	116	111	118	112	89	57	
Hens... do	21.9	36.9	40.2	36.3	37.1	41.3	35.7	31.1	68	84	66	69	89	63	42	
Salmon, red, canned																
pound		31.3	38.1	32.3	35.3	31.4	31.8	33.6								
Milk, fresh... quart	8.8	13.7	13.8	13.9	14.0	14.2	14.0	12.0	56	57	58	59	61	50	36	
Milk, evaporated																
16-ounce can		11.3	11.5	11.5	11.1	10.9	10.1	9.1								
Butter... pound	35.2	52.7	50.3	51.8	53.9	53.8	43.3	30.7	50	43	47	53	53	23	13	
Oleomargarine (all butter substitutes)																
pound		30.3	30.1	28.2	27.3	27.2	25.6	19.0								
Cheese... do	21.8	36.5	35.7	37.0	38.1	38.0	34.9	26.5	67	64	70	75	74	60	22	
Lard... do	15.8	22.9	22.6	18.8	18.2	18.3	16.6	13.0	45	43	19	15	16	5	18	
Vegetable lard substitute... pound		25.8	25.8	25.1	24.9	24.8	24.3	23.3								
Eggs, strictly fresh																
dozen	27.9	42.3	40.7	33.5	38.8	41.4	33.6	25.8	52	46	20	39	48	20	18	
Bread... pound	5.6	9.4	9.4	9.3	9.2	9.0	8.8	7.6	68	68	66	64	61	57	36	
Flour... do	3.3	6.1	6.1	5.5	5.7	4.9	4.8	3.7	85	85	67	73	48	45	12	
Corn meal... do	2.9	5.4	5.1	5.2	5.3	5.3	5.3	4.5	86	76	79	83	83	83	55	
Rollled oats... do		9.2	9.1	9.0	8.9	8.9	8.7	8.0								
Corn-flakes																
8-ounce package		11.0	10.9	10.0	9.5	9.5	9.4	8.9								
28-ounce package		24.6	25.4	25.4	25.5	25.4	25.4	24.0								
Macaroni... pound		20.5	20.3	20.0	19.8	19.7	19.4	16.9								
Rice... do	8.6	11.0	11.7	10.7	9.9	9.7	9.5	8.2	28	36	24	15	13	10	15	
Beans, navy... do		10.3	9.2	9.3	12.3	14.2	11.5	8.0								
Potatoes... do	1.8	3.5	5.0	6.0	2.9	3.1	4.2	2.4	94	178	233	61	72	133	33	
Onions... do		9.9	7.4	8.8	6.4	7.0	5.9	4.8								
Cabbage... do		6.0	6.1	9.6	5.5	4.8	5.6	4.0								
Pork and beans																
No. 2 can		12.4	11.9	11.5	11.4	11.9	11.0	9.3								
Corn, canned... do		18.2	16.4	15.6	15.9	15.8	15.4	13.3								
Peas, canned... do		18.4	17.4	16.7	16.8	16.6	16.3	13.8								
Tomatoes, canned																
No. 2 can		13.8	11.9	12.0	11.6	13.4	12.4	10.1								
Sugar, granulated																
pound	5.3	7.2	6.9	7.3	7.3	6.4	6.1	5.6	36	30	38	38	21	15	6	
Tea... do	54.4	75.8	76.9	77.3	77.3	77.5	77.8	74.2	39	41	42	42	42	43	36	
Coffee... do	29.8	50.8	51.0	47.9	49.2	49.4	40.6	33.1	70	71	61	65	66	36	11	
Prunes... do		17.3	17.1	15.6	13.6	14.6	17.0	11.8								
Raisins... do		14.5	14.7	14.3	13.6	11.6	12.0	11.1								
Bananas... dozen		36.5	35.9	33.5	32.5	31.7	31.0	26.1								
Oranges... do		60.9	50.3	49.3	62.6	44.0	67.2	37.6								
All articles combined <sup>1</sup>									58.6	63.3	62.1	56.1	58.3	51.3	21.0	

<sup>1</sup> Decrease.

<sup>2</sup> 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 trend in the retail cost of three important groups of food commodities, viz, cereals, meats, and dairy products, by years,

from 1913 to 1930, and by months for 1929, 1930, and 1931. The articles within these groups are as follows:

Cereals: Bread, flour, corn meal, rice, rolled oats, corn flakes, wheat cereal, and macaroni.

Meats: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, hens, and leg of lamb.

Dairy products: Butter, cheese, fresh milk, and evaporated milk.

TABLE 3.—INDEX NUMBERS OF RETAIL COST OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES, 1913 TO JUNE, 1931

[Average cost in 1913=100.0]

Year and month	Cereals	Meats	Dairy products	Year and month	Cereals	Meats	Dairy products
1913: Average for year	100.0	100.0	100.0	1929—Continued.			
1914: Average for year	106.7	103.4	97.1	September	165.2	194.2	148.1
1915: Average for year	121.6	99.6	96.1	October	163.5	189.2	149.3
1916: Average for year	126.8	108.2	103.2	November	163.6	184.1	147.0
1917: Average for year	186.5	137.0	127.6	December	162.9	181.8	144.9
1918: Average for year	194.3	172.8	153.4	1930: Average for year	158.0	175.8	136.5
1919: Average for year	198.0	184.2	176.6	January	162.9	183.6	138.9
1920: Average for year	232.1	185.7	185.1	February	161.6	183.1	138.5
1921: Average for year	179.8	158.1	149.5	March	160.9	183.0	137.6
1922: Average for year	159.3	150.3	135.9	April	160.3	183.3	138.9
1923: Average for year	156.9	149.0	147.6	May	159.8	181.5	137.0
1924: Average for year	160.4	150.2	142.8	June	160.1	179.9	133.7
1925: Average for year	176.2	163.0	147.1	July	158.6	175.2	133.9
1926: Average for year	175.5	171.3	145.5	August	156.9	169.9	137.4
1927: Average for year	170.7	169.9	148.7	September	156.4	173.3	138.8
1928: Average for year	167.2	179.2	150.0	October	154.4	171.1	137.8
1929: Average for year	164.1	188.4	148.6	November	152.4	164.0	135.3
January	164.1	180.9	151.9	December	151.6	161.6	129.8
February	164.1	180.3	152.6	1931:			
March	164.1	182.8	152.4	January	147.1	159.5	123.6
April	164.1	187.5	148.9	February	144.6	153.4	120.2
May	163.5	191.2	147.5	March	142.4	152.5	120.5
June	163.0	192.4	146.8	April	138.9	151.4	116.5
July	163.5	195.9	146.8	May	137.7	149.3	110.2
August	164.7	196.0	147.1	June	136.3	145.7	108.0

#### 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, for 1913 and 1920 to 1930,<sup>2</sup> by months for 1930 and 1931. 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 sirloin steak for the year 1930 was 182.7, which means that the average money price for the year 1930 was 82.7 per cent higher than the average money price for the year 1913. As compared with the relative price, 196.9 in 1929, the figures for 1930 show a decrease of 14.2 points, but a decrease of 7.2 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

<sup>2</sup> For index numbers of each month, January, 1913, to December, 1928, see Bulletin No. 396, pp. 44 to 61; and Bulletin No. 495, pp. 32 to 45. Index numbers for 1929 are published in each Labor Review, February, 1930, to February, 1931.

of food articles 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 100.0 are 121.0 for May, 1931, and 118.3 for June, 1931.

TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920 TO 1930, AND BY MONTHS FOR 1930 AND 1931

[Average for year 1913—100.0]

Year and month	S-rioin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Lamb, leg of	Hens	Milk	Butter
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920.....	172.1	177.1	167.7	163.8	161.2	201.4	193.7	206.3	207.9	209.9	187.6	183.0
1921.....	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	178.3	186.4	164.0	135.0
1922.....	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	193.7	169.0	147.2	125.1
1923.....	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	194.2	164.3	155.1	144.7
1924.....	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	196.3	165.7	155.1	135.0
1925.....	159.8	155.6	149.5	135.0	114.1	174.3	173.0	195.5	204.2	171.8	157.3	143.1
1926.....	162.6	159.6	153.0	140.6	120.7	188.1	186.3	213.4	206.3	182.2	157.3	138.6
1927.....	167.7	166.4	158.1	148.1	127.3	175.2	174.8	204.5	205.8	173.2	168.4	145.2
1928.....	188.2	138.3	176.8	174.4	157.0	165.7	163.0	196.7	208.5	175.6	159.6	147.5
1929.....	196.9	199.1	185.4	186.9	172.7	175.7	161.1	204.1	212.2	186.4	160.7	143.9
1930.....	182.7	184.8	172.7	170.0	155.4	171.0	156.7	198.5	185.7	166.7	157.3	120.4
January.....	192.9	195.5	183.3	184.4	172.7	168.1	157.0	199.3	206.9	178.4	159.6	121.9
February.....	191.3	194.2	181.8	184.4	171.9	167.6	157.8	200.7	201.6	179.3	158.4	122.7
March.....	190.6	192.8	181.3	182.5	170.2	171.9	157.8	201.1	193.7	179.8	157.3	121.9
April.....	190.2	193.3	181.3	182.5	168.6	176.7	157.4	200.4	189.4	179.3	157.3	125.6
May.....	190.2	192.8	179.8	179.4	164.5	171.9	156.7	200.7	189.9	175.6	157.3	120.9
June.....	188.6	191.5	177.3	175.6	160.3	174.3	156.7	200.7	193.7	167.6	157.3	113.1
July.....	182.3	184.3	171.7	166.3	149.6	149.6	173.8	200.0	188.9	161.5	157.3	114.1
August.....	175.6	176.7	163.1	155.6	138.8	174.8	155.6	198.1	178.3	158.7	157.3	123.8
September.....	177.2	178.0	166.7	160.0	142.1	186.2	158.1	198.9	179.9	159.6	157.3	127.2
October.....	175.2	176.2	164.1	158.7	142.1	180.5	157.8	197.4	173.5	158.7	157.3	124.8
November.....	170.5	170.9	160.6	154.5	139.7	156.2	155.9	193.7	166.1	153.1	157.3	118.5
December.....	168.9	169.1	159.6	153.8	139.7	149.5	153.0	191.4	164.6	150.2	151.7	111.0
1931:												
January.....	167.3	168.2	159.1	152.5	138.0	141.9	148.9	188.1	166.1	153.5	149.4	98.4
February.....	161.4	161.0	154.0	145.6	131.4	131.4	145.2	183.3	164.6	148.8	146.1	94.8
March.....	158.7	157.8	153.0	141.9	128.1	140.0	143.0	178.4	164.0	150.2	144.9	97.4
April.....	157.5	156.5	150.0	139.4	124.8	141.4	141.1	175.5	165.6	153.1	141.6	91.9
May.....	155.5	154.7	147.0	135.6	119.8	143.3	139.3	172.9	165.1	148.8	138.2	81.5
June.....	152.4	151.1	142.9	130.6	112.4	140.0	136.7	170.3	161.4	146.0	134.8	80.2

Year and month	Cheese	Lard	Eggs	Bread	Flour	Corn meal	Rice	Pota-toes	Sugar	Tea	Coffee	All ar-ticles <sup>1</sup>
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920.....	188.2	186.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4
1921.....	153.9	113.9	147.5	176.8	175.8	150.0	109.2	182.4	145.5	128.1	121.8	153.3
1922.....	148.9	107.6	128.7	155.4	154.5	130.0	109.2	164.7	132.7	125.2	121.1	141.6
1923.....	167.0	112.0	134.8	155.4	142.4	136.7	109.2	170.6	183.6	127.8	126.5	146.2
1924.....	159.7	120.3	138.6	157.1	148.5	156.7	116.1	158.8	167.3	131.4	145.3	145.9
1925.....	166.1	147.5	151.0	167.9	184.8	180.0	127.6	211.8	130.9	138.8	172.8	157.4
1926.....	165.6	138.6	140.6	167.9	181.8	170.0	133.3	288.2	125.5	141.0	171.1	160.6
1927.....	170.1	122.2	131.0	166.1	166.7	173.3	123.0	223.5	132.7	142.5	162.1	155.4
1928.....	174.2	117.7	134.5	162.5	163.5	176.7	114.9	158.8	129.1	142.3	165.1	154.3
1929.....	171.9	115.8	142.0	160.7	154.6	176.7	111.5	188.2	120.0	142.6	164.8	156.7
1930.....	158.8	107.6	118.8	155.4	142.4	176.7	109.2	211.8	112.7	142.5	136.2	147.1
January.....	169.2	108.9	160.6	158.9	154.5	180.0	110.3	229.4	120.0	143.4	147.0	155.4
February.....	167.0	108.2	136.8	157.1	154.5	176.7	110.3	229.4	118.2	143.3	143.3	153.0
March.....	164.7	107.0	102.3	157.1	151.6	176.7	109.2	229.4	116.4	142.8	140.6	150.1
April.....	162.9	106.3	100.0	157.1	148.6	176.7	110.3	241.2	114.5	142.5	138.9	151.2
May.....	162.0	105.7	97.7	157.1	145.6	176.7	109.2	252.9	114.5	142.5	137.2	150.1
June.....	157.9	105.1	97.4	157.1	145.6	176.7	109.2	247.1	110.9	143.0	136.2	147.9
July.....	155.2	108.2	101.7	157.1	139.4	176.7	109.2	194.1	110.9	143.0	135.6	144.0
August.....	153.4	104.4	112.5	155.4	136.4	176.7	109.2	182.4	110.9	142.3	134.6	143.7
September.....	154.8	110.8	124.9	155.4	133.3	176.7	110.3	188.2	107.3	142.1	132.6	145.6
October.....	154.8	112.0	129.9	153.6	130.3	176.7	109.2	182.4	105.5	141.9	131.2	144.4
November.....	152.9	110.8	140.3	151.8	127.3	173.3	106.9	170.6	107.3	141.4	129.9	141.4
December.....	150.2	105.7	120.6	151.8	124.2	173.3	105.8	170.6	107.3	141.4	129.2	137.2
1931:												
January.....	145.2	99.4	104.6	146.4	121.2	170.0	102.3	170.6	107.3	141.0	126.8	132.8
February.....	141.2	91.8	78.8	142.9	121.2	166.7	102.3	158.8	107.3	145.6	125.2	127.0
March.....	137.1	89.9	82.6	141.1	118.2	166.7	98.9	158.8	105.5	139.7	121.8	126.4
April.....	132.6	89.9	79.4	137.5	115.2	163.3	96.6	164.7	103.6	138.2	116.1	124.0
May.....	124.0	85.4	71.9	137.5	112.1	153.3	95.4	164.7	101.8	136.9	112.4	121.0
June.....	119.9	82.3	74.8	135.7	112.1	150.0	94.3	141.2	101.8	136.4	111.1	118.3

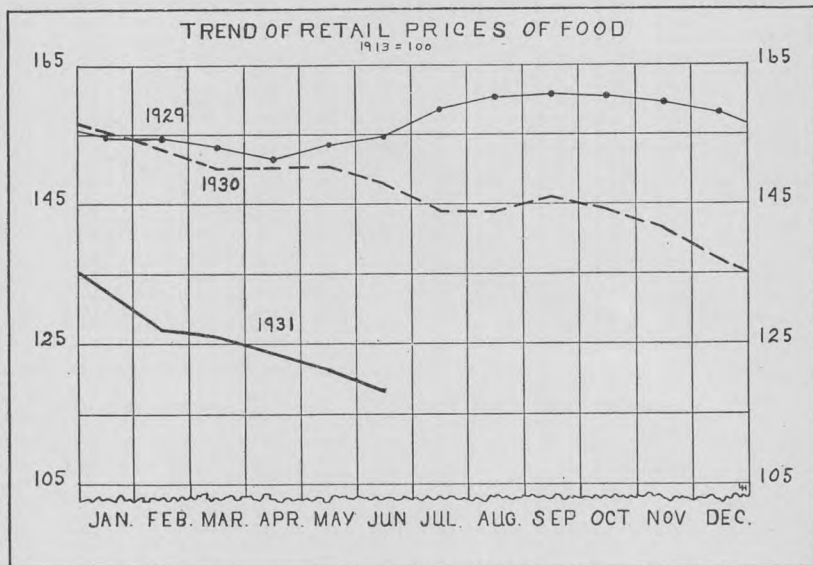
<sup>1</sup> 22 articles in 1913-1920; 42 articles in 1921-1931

The curve shown in the chart below pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

#### Comparison of Retail Food Costs in 51 Cities

Table 5 shows for 39 cities the percentage of increase or decrease in the retail cost of food<sup>3</sup> June, 1931, compared with the average cost in the year 1913, in June, 1930, and May, 1931. For 12 other cities comparisons are given for the 1-year and the 1-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average consumption of these articles in each city.<sup>4</sup>

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



June, 99 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 37 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, Birmingham, Boston, Bridgeport, Butte, Chicago, Cincinnati, Columbus, Dallas, Denver, Houston, Indianapolis, Jacksonville, Kansas City, Little Rock, Los Angeles, Louisville, Memphis, Minneapolis, Newark, New Haven, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland (Me.), Portland (Oreg.), Providence, Richmond, Rochester, St. Louis, St. Paul, San Francisco, and Scranton.

<sup>3</sup> For list of articles see note 2, p. 175.

<sup>4</sup> The consumption figures used for 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.



TABLE 5.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN JUNE, 1931, COMPARED WITH THE COST IN MAY, 1931, JUNE, 1930, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES AND IN THE UNITED STATES

City	Percentage increase June, 1931, compared with 1913	Percentage decrease June, 1931, compared with—		City	Percentage increase June, 1931, compared with 1913	Percentage decrease June, 1931, compared with—	
		June, 1930	May, 1931			June, 1930	May, 1931
<b>United States</b> .....	<b>18.3</b>	<b>20.1</b>	<b>2.2</b>	Milwaukee.....	21.8	19.6	1.6
Atlanta.....	19.8	17.7	1.3	Minneapolis.....	20.8	20.4	0.9
Baltimore.....	23.0	19.3	1.9	Mobile.....		19.6	0.9
Birmingham.....	14.3	23.9	3.5	Newark.....	19.8	16.0	3.2
Boston.....	19.8	20.3	1.2	New Haven.....	23.8	16.5	1.2
Bridgeport.....		16.1	0.7	New Orleans.....	12.1	22.7	3.2
Buffalo.....	19.9	21.2	3.1	New York.....	24.9	16.7	1.9
Butte.....		17.0	10.4	Norfolk.....		19.8	1.5
Charleston, S. C.....	23.1	18.3	1.6	Omaha.....	14.0	21.3	0.3
Chicago.....	30.0	19.2	1.6	Peoria.....		23.7	1.3
Cincinnati.....	25.7	19.4	1.7	Philadelphia.....	26.2	15.3	1.0
Cleveland.....	12.3	22.8	4.5	Pittsburgh.....	19.6	19.8	2.3
Columbus.....		22.2	2.0	Portland, Me.....		17.4	1.0
Dallas.....	12.4	22.2	2.6	Portland, Oreg.....	9.3	19.4	10.4
Denver.....	8.5	19.1	0.5	Providence.....	18.0	20.5	1.6
Detroit.....	18.2	22.3	4.4	Richmond.....		22.1	2.3
Fall River.....	14.5	21.5	3.0	Rochester.....		20.7	2.3
Houston.....		22.2	3.7	St. Louis.....	21.7	22.5	1.1
Indianapolis.....	12.7	24.4	2.1	St. Paul.....		19.5	2.2
Jacksonville.....	12.6	17.8	1.4	St. Paul.....		19.7	1.2
Kansas City.....	20.0	17.8	2.1	Salt Lake City.....	7.1	18.9	11.1
Little Rock.....	10.0	21.9	2.9	San Francisco.....	20.9	17.5	1.6
Los Angeles.....	5.3	21.2	4.0	Savannah.....		19.0	1.8
Louisville.....	11.7	22.9	2.4	Scranton.....	25.5	19.6	1.4
Manchester.....	18.5	19.0	1.4	Seattle.....	16.7	18.8	1.7
Memphis.....	9.6	22.9	2.3	Springfield, Ill.....		24.8	1.9
				Washington.....	27.4	17.6	2.8

1 Increase.

Retail Prices of Coal in June, 1931<sup>1</sup>

THE following table shows the average retail prices of coal on June 15, 1930, and May 15 and June 15, 1931, 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.

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JUNE 15, 1930, AND MAY 15 AND JUNE 15, 1931

City, and kind of coal	1930			1931		
	June 15	May 15	June 15	June 15	May 15	June 15
United States:						
Pennsylvania anthracite—						
Stove—						
Average price.....	\$14.62	\$14.22	\$14.33			
Index (1913=100).....	189.3	184.0	185.5			
Chestnut—						
Average price.....	\$14.32	\$14.19	\$14.31			
Index (1913=100).....	180.9	179.4	180.8			
Bituminous—						
Average price.....	\$8.54	\$8.04	\$8.00			
Index (1923=100).....	157.2	148.0	147.3			
Atlanta, Ga.:						
Bituminous, prepared sizes.	\$7.19	\$6.69	\$6.69			
Baltimore, Md.:						
Pennsylvania anthracite—						
Stove.....	13.58	13.25	13.25			
Chestnut.....	13.08	13.00	13.00			
Bituminous, run of mine—						
High volatile.....	7.68	7.61	7.61			
Birmingham, Ala.:						
Bituminous, prepared sizes.	6.90	6.31	6.35			
Boston, Mass.:						
Pennsylvania anthracite—						
Stove.....	15.35	14.75	14.75			
Chestnut.....	14.85	14.69	14.69			
Bridgeport, Conn.:						
Pennsylvania anthracite—						
Stove.....	14.50	14.13	14.00			
Chestnut.....	14.50	14.13	14.00			
Buffalo, N. Y.:						
Pennsylvania anthracite—						
Stove.....	13.20	12.60	12.80			
Chestnut.....	12.71	12.60	12.80			
Butte, Mont.:						
Bituminous, prepared sizes.	11.11	10.49	10.47			
Charleston, S. C.:						
Bituminous, prepared sizes.	9.67	9.67	9.67			
Chicago, Ill.:						
Pennsylvania anthracite—						
Stove.....	16.38	15.75	16.00			
Chestnut.....	15.92	15.75	16.00			
Bituminous—						
Prepared sizes—						
High volatile.....	7.69	7.39	7.45			
Low volatile.....	10.38	9.86	10.14			
Run of mine—						
Low volatile.....	7.75	7.24	7.23			
Cincinnati, Ohio:						
Bituminous—						
Prepared sizes—						
High volatile.....	\$5.70	\$5.05	\$5.30			
Low volatile.....	7.75	7.03	7.28			
Cleveland, Ohio:						
Pennsylvania anthracite—						
Stove.....	14.80	14.00	14.00			
Chestnut.....	14.50	13.88	14.00			
Bituminous—						
Prepared sizes—						
High volatile.....	6.90	6.58	6.58			
Low volatile.....	9.15	8.57	8.57			
Columbus, Ohio:						
Bituminous—						
Prepared sizes—						
High volatile.....	5.79	5.30	5.36			
Low volatile.....	7.13	7.00	7.00			
Dallas, Tex.:						
Arkansas anthracite—Egg.	14.00	14.50	14.50			
Bituminous, prepared sizes.	12.17	12.25	12.25			
Denver, Colo.:						
Colorado anthracite—						
Furnace, 1 and 2 mixed.	14.94	15.25	15.13			
Stove, 3 and 5 mixed.	14.94	15.25	15.13			
Bituminous, prepared sizes.	9.76	8.47	8.24			
Detroit, Mich.:						
Pennsylvania anthracite—						
Stove.....	14.25	14.50	14.50			
Chestnut.....	14.25	14.50	14.50			
Bituminous—						
Prepared sizes—						
High volatile.....	8.00	6.97	6.97			
Low volatile.....	9.46	8.13	8.06			
Run of mine—						
Low volatile.....	7.67	7.13	7.13			
Fall River, Mass.:						
Pennsylvania anthracite—						
Stove.....	15.75	15.00	15.25			
Chestnut.....	15.50	15.00	15.25			
Houston, Tex.:						
Bituminous, prepared sizes.	11.60	10.40	10.20			
Indianapolis, Ind.:						
Bituminous—						
Prepared sizes—						
High volatile.....	5.73	5.68	5.84			
Low volatile.....	7.96	7.75	7.75			
Run of mine—						
Low volatile.....	6.80	6.65	6.65			

<sup>1</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.

TABLE 1.—AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JUNE 15, 1930, AND MAY 15 AND JUNE 15, 1931—Continued

City, and kind of coal	1930			1931		
	June 15	May 15	June 15	June 15	May 15	June 15
Jacksonville, Fla.:						
Bituminous, prepared sizes	\$13.00	\$10.00	\$10.00			
Kansas City, Mo.:						
Arkansas anthracite—						
Furnace	12.05	11.94	11.69			
Stove No. 4	12.67	13.33	13.00			
Bituminous, prepared sizes	7.06	6.73	6.69			
Little Rock, Ark.:						
Arkansas anthracite—Egg	12.50	13.00	12.50			
Bituminous, prepared sizes	9.40	9.39	9.17			
Los Angeles, Calif.:						
Bituminous, prepared sizes	16.25	15.50	15.75			
Louisville, Ky.:						
Bituminous—						
Prepared sizes—						
High volatile	6.19	5.03	4.88			
Low volatile	8.50	7.50	7.50			
Manchester, N. H.:						
Pennsylvania anthracite—						
Stove	16.00	15.50	15.50			
Chestnut	16.00	15.50	15.50			
Memphis, Tenn.:						
Bituminous, prepared sizes	7.82	7.02	6.91			
Milwaukee, Wis.:						
Pennsylvania anthracite—						
Stove	15.75	15.25	15.39			
Chestnut	15.30	15.25	15.39			
Bituminous—						
Prepared sizes—						
High volatile	7.68	7.45	7.45			
Low volatile	10.16	9.54	9.54			
Minneapolis, Minn.:						
Pennsylvania anthracite—						
Stove	17.75	17.25	17.41			
Chestnut	17.30	17.20	17.41			
Bituminous—						
Prepared sizes—						
High volatile	10.26	9.91	9.92			
Low volatile	13.14	12.48	13.34			
Mobile, Ala.:						
Bituminous, prepared sizes	8.83	8.31	8.19			
Newark, N. J.:						
Pennsylvania anthracite—						
Stove	13.46	12.81	13.06			
Chestnut	12.96	12.81	13.06			
New Haven, Conn.:						
Pennsylvania anthracite—						
Stove	14.40	14.15	14.15			
Chestnut	14.40	14.15	14.15			
New Orleans, La.:						
Bituminous, prepared sizes	9.11	8.07	8.07			
New York, N. Y.:						
Pennsylvania anthracite—						
Stove	13.21	12.96	13.17			
Chestnut	12.71	12.96	13.17			
Norfolk, Va.:						
Pennsylvania anthracite—						
Stove	13.50	13.50	13.50			
Chestnut	13.50	13.50	13.50			
Bituminous—						
Prepared sizes—						
High volatile	6.75	6.50	6.50			
Low volatile	7.00	7.00	7.75			
Run of mine—						
Low volatile	6.50	6.63	6.50			
Omaha, Nebr.:						
Bituminous, prepared sizes	9.38	9.11	9.11			
Peoria, Ill.:						
Bituminous, prepared sizes	6.29	6.23	6.13			
Philadelphia, Pa.:						
Pennsylvania anthracite—						
Stove	13.00	12.25	12.25			
Chestnut	12.50	12.25	12.25			
Pittsburgh, Pa.:						
Pennsylvania anthracite—						
Chestnut	\$14.75	\$14.25	\$14.25			
Bituminous, prepared sizes	5.11	4.66	4.64			
Portland, Me.:						
Pennsylvania anthracite—						
Stove	16.32	15.84	16.32			
Chestnut	16.32	15.84	16.32			
Portland, Ore.:						
Bituminous, prepared sizes	13.18	12.82	12.43			
Providence, R. I.:						
Pennsylvania anthracite—						
Stove	\$15.25	\$14.75	\$15.25			
Chestnut	\$15.25	\$14.75	\$15.25			
Richmond, Va.:						
Pennsylvania anthracite—						
Stove	14.00	13.50	13.50			
Chestnut	14.00	13.50	13.50			
Bituminous—						
Prepared sizes—						
High volatile	7.75	7.25	7.25			
Low volatile	7.86	7.83	7.83			
Run of mine—						
Low volatile	6.89	6.75	6.75			
Rochester, N. Y.:						
Pennsylvania anthracite—						
Stove	13.95	13.50	13.78			
Chestnut	13.45	13.50	13.78			
St. Louis, Mo.:						
Pennsylvania anthracite—						
Stove	16.23	15.97	15.63			
Chestnut	15.98	15.91	15.50			
Bituminous, prepared sizes	5.77	5.19	5.06			
St. Paul, Minn.:						
Pennsylvania anthracite—						
Stove	17.75	17.25	17.45			
Chestnut	17.30	17.25	17.45			
Bituminous—						
Prepared sizes—						
High volatile	10.08	9.67	9.62			
Low volatile	13.15	12.52	12.51			
Salt Lake City, Utah.:						
Bituminous, prepared sizes	8.36	7.60	7.58			
San Francisco, Calif.:						
New Mexico anthracite—						
Cerrillos egg	25.00	25.00	25.00			
Colorado anthracite—						
Egg	24.50	24.50	24.50			
Bituminous, prepared sizes	15.75	15.75	16.00			
Savannah, Ga.:						
Bituminous, prepared sizes	* 9.62	* 9.62	* 9.62			
Scranton, Pa.:						
Pennsylvania anthracite—						
Stove	9.75	9.50	9.70			
Chestnut	9.38	9.48	9.68			
Seattle, Wash.:						
Bituminous, prepared sizes	10.57	10.68	9.59			
Springfield, Ill.:						
Bituminous, prepared sizes	4.37	4.34	4.34			
Washington, D. C.:						
Pennsylvania anthracite—						
Stove	14.98	12.02	13.12			
Chestnut	14.48	12.92	13.12			
Bituminous—						
Prepared sizes—						
High volatile	18.21	7.36	7.36			
Low volatile	10.68	9.25	9.25			
Run of mine—						
Mixed	7.78	7.04	7.10			

\* The average price of coal delivered in bins is 50 cents higher than here shown. Practically all coal is delivered in bin.

† All coals 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 price.

‡ Per ton of 2,240 pounds.

The following table shows for the United States both average and relative retail prices of Pennsylvania white-ash anthracite coal, stove and chestnut sizes, and of bituminous coal in January and July, 1913 to 1929, and for each month from January, 1930 to June, 1931. An average price for the year 1913 has been made from the averages for January and July of that year. The average price for each month has been divided by this average price for the year 1913 to obtain the relative price.

TABLE 2.—AVERAGE AND RELATIVE PRICES OF COAL FOR THE UNITED STATES ON SPECIFIED DATES FROM JANUARY, 1913, TO JUNE, 1931

Year and month	Pennsylvania anthracite, white ash—				Bituminous	
	Stove		Chestnut		Average price	Relative price
	Average price	Relative price	Average price	Relative price		
1913: Average for year .....	\$7.73	100.0	\$7.91	100.0	\$5.43	100.0
January .....	7.99	103.4	8.15	103.0	5.48	100.8
July .....	7.46	96.6	7.68	97.0	5.39	99.2
1914: January .....	7.80	100.9	8.00	101.0	5.97	109.9
July .....	7.60	98.3	7.78	98.3	5.46	100.6
1915: January .....	7.83	101.4	7.99	101.0	5.71	105.2
July .....	7.54	97.6	7.72	97.7	5.44	100.1
1916: January .....	7.93	102.7	8.13	102.7	5.69	104.8
July .....	8.12	105.2	8.28	104.6	5.52	101.6
1917: January .....	9.29	120.2	9.40	118.8	6.96	128.1
July .....	9.08	117.5	9.16	115.7	7.21	132.7
1918: January .....	9.88	127.9	10.03	126.7	7.68	141.3
July .....	9.96	128.9	10.07	127.3	7.92	145.8
1919: January .....	11.51	149.0	11.61	146.7	7.90	145.3
July .....	12.14	157.2	12.17	153.8	8.10	149.1
1920: January .....	12.59	162.9	12.77	161.3	8.81	162.1
July .....	14.28	184.9	14.33	181.1	10.55	194.1
1921: January .....	15.99	207.0	16.13	203.8	11.82	217.6
July .....	14.90	192.8	14.95	188.9	10.47	192.7
1922: January .....	14.98	193.9	15.02	189.8	9.89	182.0
July .....	14.87	192.4	14.92	188.5	9.49	174.6
1923: January .....	15.43	199.7	15.46	195.3	11.18	205.7
July .....	15.10	195.5	15.05	190.1	10.04	184.7
1924: January .....	15.77	204.1	15.76	199.1	9.75	179.5
July .....	15.24	197.2	15.10	190.7	8.94	164.5
1925: January .....	15.45	200.0	15.37	194.2	9.24	170.0
July .....	15.14	196.0	14.93	188.6	8.61	158.5
1926: January .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	9.74	179.3
July .....	15.43	199.7	15.19	191.9	8.70	160.1
1927: January .....	15.66	202.7	15.42	194.8	9.96	183.3
July .....	15.15	196.1	14.81	187.1	8.91	163.9
1928: January .....	15.44	199.8	15.08	190.6	9.30	171.1
July .....	14.91	192.9	14.63	184.9	8.69	159.9
1929: January .....	15.38	199.1	15.06	190.3	9.09	167.2
July .....	14.94	193.4	14.63	184.8	8.62	158.6
1930: January .....	15.33	198.4	15.00	189.5	9.11	167.6
February .....	15.33	198.4	15.00	189.6	9.04	166.4
March .....	15.33	198.4	15.00	189.6	9.02	166.0
April .....	15.32	198.3	14.99	189.4	8.84	162.7
May .....	14.65	189.6	14.33	181.0	8.53	157.0
June .....	14.62	189.3	14.32	180.9	8.54	157.2
July .....	14.84	192.1	14.53	183.6	8.65	159.1
August .....	14.88	192.6	14.57	184.1	8.70	160.1
September .....	15.08	195.2	14.80	187.0	8.79	161.7
October .....	15.13	195.8	14.87	187.9	8.88	163.3
November .....	15.14	196.0	14.90	188.2	8.94	164.6
December .....	15.13	195.9	14.89	188.1	8.94	164.4
1931: January .....	15.12	195.8	14.88	188.1	8.87	163.2
February .....	15.09	195.3	14.85	187.6	8.83	162.5
March .....	15.09	195.4	14.85	187.7	8.71	160.3
April .....	14.45	187.0	14.39	181.8	8.46	155.8
May .....	14.22	184.0	14.19	179.4	8.04	148.0
June .....	14.33	185.5	14.31	180.8	8.00	147.3

<sup>1</sup> Insufficient data.

## Retail Prices of Gas in the United States

THE net price per 1,000 cubic feet of gas for household use in each of 51 cities is shown in the following table. In Table 1 the average family consumption of manufactured gas is assumed to be 3,000 cubic feet per month. In cities where a service charge or a sliding scale is in operation, families using less than 3,000 cubic feet per month pay a somewhat higher rate than here shown, while those consuming more than this amount pay a lower rate. The figures here given are believed to represent quite closely the actual monthly cost of gas per 1,000 cubic feet to the average wage-earner's family. Prices for natural gas and for manufactured and natural mixed gas are shown in Table 2 for those cities where it is in general use. These prices are based on an estimated average family consumption of 5,000 cubic feet per month.

TABLE 1.—NET PRICE PER 1,000 CUBIC FEET OF MANUFACTURED GAS BASED ON A FAMILY CONSUMPTION OF 3,000 CUBIC FEET, IN SPECIFIED MONTHS FROM APRIL, 1913, TO JUNE, 1931, BY CITIES

City	Apr. 15, 1913	June 15, 1924	June 15, 1925	June 15, 1926	June 15, 1927	June 15, 1928	June 15, 1929	Dec. 15, 1929	June 15, 1930	Dec. 15, 1930	June 15, 1931
Atlanta.....	\$1.00	\$1.55	\$1.55	\$1.55	\$1.55	\$1.55	\$1.43	\$1.43			
Baltimore.....	.90	.85	.85	.85	.85	.85	.85	.85	\$.85	\$.85	\$.85
Birmingham.....	1.00	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80
Boston.....	.81	1.20	1.18	1.18	1.18	1.18	1.18	1.16	1.16	1.16	1.16
Butte.....	1.49	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Charleston, S. C.....	1.10	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.45
Chicago.....	.80	1.02	1.02	1.02	1.02	.98	.98	.98	.98	1.98	1.98
Cleveland.....	.80	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Denver.....	.85	.95	.95	.95	.90	.90					
Detroit.....	.75	.82	.82	.79	.79	.79	.79	.79	.79	.79	.79
Fall River.....	.80	1.15	1.15	1.15	1.15	1.15	1.15	1.14	1.14	1.14	1.14
Houston.....	1.00	1.09	1.05								
Indianapolis.....	.60	1.15	1.10	1.05	1.05	.95	.95	.95	.95	.95	.95
Jacksonville.....	1.20	1.97	1.97	1.97	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Manchester.....	1.10	1.38	1.38	1.38	1.38	1.34	1.34	1.34	1.34	1.34	1.34
Memphis.....	1.00	1.20	1.20	1.20	1.20	1.20					
Milwaukee.....	.75	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82
Minneapolis.....	.85	1.01	.95	.97	.96	.94	.89	.89	1.05	.96	.96
Mobile.....	1.10	1.80	1.80	1.80	1.76	1.76	1.76	1.76	1.76		
Newark.....	1.00	1.20	1.20	1.20	1.20	1.20	1.20	1.21	1.21	1.21	1.21
New Haven.....	.90	1.18	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
New Orleans.....	1.10	1.30	1.30	1.30	1.30	1.30					
New York.....	.84	1.23	1.23	1.23	1.24	1.25	1.25	1.24	1.24	1.24	1.24
Norfolk.....	1.00	1.40	1.40	1.33	1.33	1.33	1.33	1.32	1.32	1.32	1.32
Omaha.....	1.15	1.18	1.08	1.08	1.08	1.00	.95	.95	.95	.88	.88
Peoria.....	.90	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Philadelphia.....	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.95
Portland, Me.....	1.10	1.55	1.55	1.50	1.42	1.42	1.42	1.42	1.42	1.42	1.42
Portland, Ore.....	.95	1.16	1.16	1.19	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Providence.....	.85	1.22	1.17	1.17	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Richmond.....	.90	1.30	1.30	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Rochester.....	.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
St. Louis.....	.80	1.00	1.00	1.00	1.00	1.00	1.11	1.11	1.11	1.11	1.11
St. Paul.....	.95	.85	.85	.90	.90	.90	.90	.90	.90	.90	.90
Salt Lake City.....	.87	1.57	1.54	1.53	1.52	1.51	1.51				
San Francisco.....	.75	1.00	1.05	.95	.95	.94	.90	.90			
Savannah.....		1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Scranton.....	.95	1.50	1.50	1.50	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Seattle.....	1.00	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.43	1.43	1.43
Springfield, Ill.....	1.00	1.35	1.35	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Washington, D. C.....	.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.95	.95
Honolulu, Hawaii.....							1.77	1.77	1.77	1.77	1.77

<sup>1</sup> Price is based on 15.9 therms, which is the equivalent of 3,000 cubic feet of gas of a heating value of 530 British thermal units.

<sup>2</sup> Price is based on 17 therms which is the equivalent of 3,000 cubic feet of gas of a heating value of 565 British thermal units.

[443]



TABLE 2.—NET PRICE PER 1,000 CUBIC FEET OF GAS BASED ON A FAMILY CONSUMPTION OF 5,000 CUBIC FEET, IN SPECIFIED MONTHS FROM APRIL, 1913, TO JUNE, 1931, BY CITIES

*Natural gas*

City	Apr. 15, 1913	June 15, 1924	June 15, 1925	June 15, 1926	June 15, 1927	June 15, 1928	June 15, 1929	Dec. 15, 1929	June 15, 1930	Dec. 15, 1930	June 15, 1931
Atlanta.....									\$1.17	\$1.09	\$1.09
Buffalo.....	\$0.30										
Cincinnati.....	.30	\$0.50	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	\$0.75	.75	.75	.75
Cleveland.....	.30	.55	.55	.60	.60	.60	.60	.60	.60	.60	.60
Columbus.....	.30	.45	.55	.55	.48	.48	.48	.48	.48	.48	.48
Dallas.....	.45	.68	.74	.74	.79	.79	.79	.79	.79	.79	.79
Denver.....							.99	.99	.99	.99	.99
Houston.....				.75	.75	.75	.75	.75	.75	.75	.75
Kansas City.....	.27	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95
Little Rock.....	.40	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Los Angeles.....					.91	.91	.84	.84	.84	.84	.84
Louisville.....		.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
Memphis.....							.97	.95	.95	.95	.95
Mobile.....										1.24	1.24
New Orleans.....							.95	.95	.95	.95	.95
Pittsburgh.....	.28	.53	0.6	.60	.60	.60	.60	.60	.60	.60	.60
Salt Lake City.....								.99	.99	.99	.99
San Francisco.....									.97	.97	.97

*Manufactured and natural gas mixed*

Buffalo.....	\$0.60	\$0.60	\$0.65	\$0.65	\$0.65	\$0.65	\$0.65	\$0.65	\$0.65	\$0.65	\$0.65
Los Angeles.....	.68	.68	.68								

From the prices quoted on manufactured gas, average prices have been computed for all of the cities combined and are shown in Table 3 for specified months of each year from 1913 to 1930. These prices are based on an estimated average family consumption of 3,000 cubic feet.

Relative prices have been computed by dividing the price in each year by the price in April, 1913.

The price of manufactured gas in June, 1931, showed an increase of 24.2 per cent since April, 1913. From December, 1930, to June, 1931, there was no change in the average price of gas.

TABLE 3.—AVERAGE AND RELATIVE NET PRICE PER 1,000 CUBIC FEET OF MANUFACTURED GAS IN UNITED STATES, BASED ON A FAMILY CONSUMPTION OF 3,000 CUBIC FEET IN SPECIFIED MONTHS OF EACH YEAR, 1913 TO 1931

Date	Average net price	Relative price	Date	Average net price	Relative price
Apr. 15, 1913.....	\$0.95	100.0	Dec. 15, 1923.....	\$1.25	131.6
Apr. 15, 1914.....	.94	98.9	Mar. 15, 1924.....	1.24	130.5
Apr. 15, 1915.....	.93	97.9	June 15, 1924.....	1.24	130.5
Apr. 15, 1916.....	.92	96.8	Sept. 15, 1924.....	1.24	130.5
Apr. 15, 1917.....	.91	95.8	Dec. 15, 1924.....	1.24	130.5
Apr. 15, 1918.....	.95	100.0	June 15, 1925.....	1.23	129.5
Apr. 15, 1919.....	1.04	109.5	Dec. 15, 1925.....	1.23	129.5
Apr. 15, 1920.....	1.09	114.7	June 15, 1926.....	1.23	129.5
May 15, 1921.....	1.32	138.9	Dec. 15, 1926.....	1.22	128.4
Sept. 15, 1921.....	1.31	137.9	June 15, 1927.....	1.22	128.4
Dec. 15, 1921.....	1.30	136.8	Dec. 15, 1927.....	1.22	128.4
Mar. 15, 1922.....	1.29	135.8	June 15, 1928.....	1.21	127.4
June 15, 1922.....	1.27	133.7	Dec. 15, 1928.....	1.22	128.4
Sept. 15, 1922.....	1.26	132.6	June 15, 1929.....	1.22	128.4
Dec. 15, 1922.....	1.25	131.6	Dec. 15, 1929.....	1.21	127.4
Mar. 15, 1923.....	1.25	131.6	June 15, 1930.....	1.21	127.4
June 15, 1923.....	1.24	130.5	Dec. 15, 1930.....	1.18	124.2
Sept. 15, 1923.....	1.24	130.5	June 15, 1931.....	1.18	124.2

## Retail Prices of Electricity in the United States

### Explanation of Prices

**T**HE following table shows for 51 cities the net rates per kilowatt-hour of electricity used for household purposes for specified months in 1929, 1930, and 1931. For the cities having more than one tariff for domestic consumers the rates are shown for the schedule under which most of the residences are served.

Several cities have sliding scales based on a variable number of kilowatt-hours payable at each rate. The number of kilowatt-hours payable at each rate in these cities is determined for each customer according to the watts of installation, either in whole or in part, in the individual home. The number of watts so determined is called the customer's "demand."

In Baltimore the demand is the maximum normal rate of use of electricity in any half-hour period of time. It may be estimated or determined by the company from time to time according to the customer's normal use of electricity and may equal the total installation reduced to kilowatts.

In Buffalo the demand consists of two parts—lighting, 25 per cent of the total installation, but never less than 250 watts; and power, 2½ per cent of the capacity of any electric range, water heater, or other appliance of 1,000 watts or over and 25 per cent of the rated capacity of motors exceeding one-half horsepower but less than 1 horsepower. The installation is determined by inspection of premises.

In Houston the demand is estimated as 50 per cent of the connected load, each socket opening being rated at 50 watts.

In New York the demand for Company C, when not determined by meter, has been computed at 50 per cent of total installation in residences, each standard socket being rated at 50 watts and all other outlets being rated at their actual kilowatt capacity.

In Portland, Oreg., the demand for Company A has been estimated as one-third of the connected lighting load. Ranges, heating devices, and small power up to a rated capacity of 2 kilowatts are not included.

## NET PRICE PER KILOWATT-HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS OF 1929, 1930, AND 1931, FOR 51 CITIES

City	Measure of consumption, per month	June, 1929	December, 1929	June, 1930	December, 1930	June, 1931
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Atlanta	Service charge	100.0	100.0	100.0	100.0	100.0
	First 50 kilowatt-hours	5.0	5.0	5.0	5.0	5.0
	Next 150 kilowatt-hours	3.0	3.0	3.0	3.0	3.0
Baltimore	First 20 hours' use of demand <sup>1</sup>	7.0	6.7	6.7	6.7	6.7
	Next kilowatt-hours equal to 8 times the consumption at the primary rate—minimum 200 kilowatt-hours	4.0	3.4	3.4	3.4	3.4
Birmingham	First 100 kilowatt-hours	7.7	7.7	7.7	7.7	7.7
Boston	First 2 kilowatt-hours per 100 square feet of floor area	8.5	8.5	8.5	7.5	7.5
	Next 70 kilowatt-hours	5.0	5.0	5.0	5.0	5.0
	Excess	3.0	3.0	3.0	3.0	3.0
Bridgeport	All current	5.5	5.5	5.5	5.5	5.5
Buffalo	First 60 hours' use of demand <sup>1</sup>	5.0	5.0	5.0	5.0	5.0
	Next 120 hours' use of demand <sup>1</sup>	4.0	4.0	4.0	4.0	4.0
	Excess	1.5	1.5	1.5	1.5	1.5
Butte	First 25 kilowatt-hours	8.0	8.0	8.0	8.0	8.0
	Next 25 kilowatt-hours	8.0	4.0	4.0	4.0	4.0
Charleston, S. C.	First 100 kilowatt-hours	10.0	10.0	10.0	10.0	9.0
Chicago	First 3 kilowatt-hours per room	7.0	7.0	7.0	7.0	7.0
	Next 3 kilowatt-hours per room	5.0	5.0	5.0	5.0	5.0
	Excess	3.0	3.0	3.0	3.0	3.0
Cincinnati	Service charge per room	10.0	10.0	10.0	10.0	10.0
	First 6 kilowatt-hours per room; minimum, 4 rooms	50.0	5.0	5.0	5.0	5.0
	Excess	3.0	3.0	3.0	3.0	3.0
Cleveland:						
Company A	First 40 kilowatt-hours	4.50	4.50	5.0	5.0	5.0
	Next 200 kilowatt-hours			4.0	4.0	4.0
Company B	Service charge	30.0	30.0	30.0	30.0	30.0
	First 600 kilowatt-hours	3.0	3.0	3.0	3.0	3.0
Columbus	First 50 kilowatt-hours	7.0	6.0	6.0	6.0	6.0
Dallas	First 600 kilowatt-hours	6.0	6.0	6.0	6.0	6.0
Denver	First 15 kilowatt-hours	7.0	7.0	7.0	7.0	7.0
	Next 30 kilowatt-hours	6.0	6.0	6.0	6.0	6.0
	Excess	5.0	5.0	5.0	5.0	5.0
Detroit	First 3 kilowatt-hours per active room; minimum, 3 rooms	9.0	9.0	9.0	9.0	9.0
	Next 50 kilowatt-hours	3.6	3.6	3.6	3.6	3.6
	Excess	2.3	2.3	2.3	2.3	2.3
Fall River	First 25 kilowatt-hours	8.0	8.0	8.0	8.0	8.0
	Next 75 kilowatt-hours	5.0	5.0	5.0	5.0	5.0
Houston	First 3 kilowatt-hours per room; minimum, 4 rooms	7.2	7.0	7.0	7.0	7.0
	Next 100 kilowatt-hours	4.5	4.0	4.0	4.0	4.0
Indianapolis	First 50 kilowatt-hours	6.5	6.5	6.5	6.5	6.5
	Next 50 kilowatt-hours	6.0	6.0	6.0	6.0	6.0
Jacksonville	First 500 kilowatt-hours	7.0	7.0	7.0	7.0	7.0
Kansas City	First 5 kilowatt-hours per active room; minimum, 3 rooms	7.0	6.5	6.5	6.5	6.5
	Next 5 kilowatt-hours per active room	5.0	4.5	4.5	4.5	4.5
	Excess	2.5	2.5	2.5	2.5	2.5
Little Rock	First 4 rooms or less. (Rooms in excess of 4, 10 cents each additional)			50.0	50.0	50.0
	First 6 kilowatt-hours per room	10.0	10.0	7.0	7.0	7.0
	Next 6 kilowatt-hours per room			5.0	5.0	5.0
Los Angeles	First 35 kilowatt-hours	5.0	5.0	4.8	4.8	4.8
	Next 140 kilowatt-hours			2.5	2.5	2.5
Louisville	First 30 kilowatt-hours	7.6	7.6	7.6	7.6	7.6
Manchester	First step: 3 rooms, 15 kilowatt-hours; 4 rooms, 18 kilowatt-hours; 5 rooms, 21 kilowatt-hours; 6 rooms, 24 kilowatt-hours; 7 rooms, 27 kilowatt-hours; 8 rooms, 30 kilowatt-hours	10.0	10.0	10.0	10.0	10.0
	Next step: Number of kilowatt-hours equal to the first step	7.0	7.0	7.0	6.0	6.0
Memphis	First 6 kilowatt-hours per room	8.0	8.0	8.0	8.0	8.0
	Excess	5.0	5.0	5.0	5.0	5.0
Milwaukee	First 9 kilowatt-hours for each of the first 6 active rooms and the first 7 kilowatt-hours for each active room in addition to the first 6	6.7	6.7	6.2	6.2	6.2
	Next kilowatt-hours up to a total of 150	2.9	2.9	2.9	2.9	2.9
	Excess	1.9	1.9	1.9	1.9	1.9
Minneapolis	First 3 kilowatt-hours per active room; minimum, 2 rooms	8.6	8.6	8.6	8.6	8.6
	Next 3 kilowatt-hours per active room	7.1	7.1	7.1	7.1	7.1

For footnotes see end of table.

[446]

NET PRICE PER KILOWATT-HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS OF 1929, 1930, AND 1931, FOR 51 CITIES—Continued

City	Measure of consumption, per month	June, 1929	December, 1929	June, 1930	December, 1930	June, 1931
		Cents	Cents	Cents	Cents	Cents
Mobile.....	Service charge for house of 3 rooms—consumption of 5 kilowatt-hours included, 10 cents extra for each additional room; not more than 10 rooms counted.	80.0	80.0	80.0	80.0	80.0
	Next 45 kilowatt-hours.....	5.0	5.0	5.0	5.0	5.0
Newark.....	First 20 kilowatt-hours.....	9.0	9.0	9.0	9.0	9.0
	Next 30 kilowatt-hours.....	8.0	8.0	8.0	8.0	8.0
New Haven.....	All current.....	5.5	5.5	5.5	5.5	5.5
New Orleans.....	Service charge.....	25.0	25.0	25.0	25.0	25.0
	First 20 kilowatt-hours.....	9.1	9.1	9.1	9.1	9.1
	Next 30 kilowatt-hours.....	7.8	7.8	7.8	7.8	7.8
New York:						
Company A.....	First 1,000 kilowatt-hours.....	7.0	7.0	7.0	7.0	7.0
Company B.....	All current.....	9.5	9.5	9.5	9.5	9.5
Company C.....	First 60 hours' use of demand <sup>1</sup> .....	7.0	7.0	7.0	7.0	7.0
Norfolk.....	First 100 kilowatt-hours.....	8.5	8.5	8.5	8.5	8.5
Omaha.....	First 10 kilowatt-hours per room.....	5.5	5.5	5.5	5.5	5.5
	Next 160 kilowatt-hours.....	3.0	3.0	3.0	3.0	3.0
Peoria.....	First 4 kilowatt-hours per active room.....	9.0	9.0	9.0	9.0	9.0
	Next 4 kilowatt-hours per active room.....	6.0	6.0	6.0	6.0	6.0
	Excess.....	3.0	3.0	3.0	3.0	3.0
Philadelphia:						
Company A.....	Minimum charge including use of first 10 kilowatt-hours.....	13 8.0	13 8.0	13 8.0	75.0	75.0
	Next 38 kilowatt-hours.....	14 6.0	14 6.0	14 6.0	6.0	6.0
Company B.....	First 20 kilowatt-hours.....	9.0	9.0	9.0	9.0	9.0
	Next 30 kilowatt-hours.....	8.0	8.0	8.0	8.0	8.0
Pittsburgh.....	First 10 kilowatt-hours.....	8.0	8.0	8.0	8.0	8.0
	Next 20 kilowatt-hours.....	5.5	5.5	5.5	5.5	5.5
	Next 30 kilowatt-hours.....	4.0	4.0	4.0	4.0	4.0
Portland, Me.....	First 3 rooms, 15 kilowatt-hours; 4 rooms, 18 kilowatt-hours; 5 rooms, 21 kilowatt-hours; 6 rooms, 24 kilowatt-hours; 7 rooms, 27 kilowatt-hours; 8 rooms, 30 kilowatt-hours.	8.0	8.0	8.0	8.0	8.0
	Next 3 rooms, 35 kilowatt-hours; 4 rooms, 42 kilowatt-hours; 5 rooms, 49 kilowatt-hours; 6 rooms, 56 kilowatt-hours; 7 rooms, 63 kilowatt-hours; 8 rooms, 70 kilowatt-hours.	5.0	5.0	5.0	5.0	5.0
Portland, Oreg.:						
Company A.....	First 30 kilowatt-hours.....	15 6.7	15 7.6	15 7.6	5.5	5.5
	Next 40 kilowatt-hours.....	16 6.7	16 6.7	16 6.7	3.0	3.0
	Excess.....	17 2.9	17 2.9	17 2.9	1.8	1.8
Company B.....	First 30 kilowatt-hours.....	18 7.3	18 7.3	18 7.3	5.5	5.5
	Next 40 kilowatt-hours.....	19 6.7	19 6.7	19 6.7	3.0	3.0
	Excess.....	17 2.9	17 2.9	17 2.9	1.8	1.8
Providence.....	Service charge.....	50.0	50.0	50.0	50.0	50.0
	All current.....	6.5	6.5	6.5	6.5	6.5
Richmond.....	First 100 kilowatt-hours.....	8.5	8.5	8.5	8.5	8.5
Rochester.....	Service charge including first 12 kilowatt-hours.	8 8.0	8 8.0	8 8.0	8 8.0	100.0
	Next 48 kilowatt-hours.....					5.5
St. Louis:						
Company A.....	First 9 kilowatt-hours per active room.....	6.7	6.7	6.7	6.7	6.7
	Excess.....	2.4	2.4	2.4	2.4	2.4
Company B.....	First 4 rooms or less, 18 kilowatt-hours; 5 or 6 rooms, 27 kilowatt-hours; 7 or 8 rooms, 36 kilowatt-hours.	6.7	6.7	6.7	6.7	6.7
	Excess.....	2.4	2.4	2.4	2.4	2.4
St. Paul.....	First 3 kilowatt-hours per room, minimum 2 rooms.	8.6	8.6	8.6	8.6	8.6
	Next 3 kilowatt-hours per room.....	7.1	7.1	7.1	7.1	7.1
	Excess.....	2.9	2.9	2.9	2.9	2.9
Salt Lake City.....	Service charge—consumption of 11 kilowatt-hours included.	90.0	90.0	90.0	90.0	90.0
	Excess.....	7.0	7.0	7.0	7.0	7.0
San Francisco.....	Service charge.....	40.0	40.0	40.0	40.0	40.0
	First 30 kilowatt-hours for residence of 6 rooms. 5 kilowatt-hours added for each additional room.	5.0	5.0	4.5	4.5	4.5
	Next 140 kilowatt-hours.....	3.5	3.5	3.5	3.5	3.5
Savannah.....	Service charge.....	20 9.0	6.0	6.0	6.0	6.0
	First 50 kilowatt-hours.....	21 9.0	21 9.0	21 9.0	21 8.0	100.0
Scranton.....	Service charge.....	21 9.0	21 9.0	21 9.0	21 8.0	100.0
	All current.....					5.0

For footnotes see end of table.

NET PRICE PER KILOWATT-HOUR FOR ELECTRICITY FOR HOUSEHOLD USE IN SPECIFIED MONTHS OF 1929, 1930, AND 1931, FOR 51 CITIES—Continued

City	Measure of consumption, per month	June, 1929	December, 1929	June, 1930	December, 1930	June, 1931
Seattle:		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Company A.....	First 40 kilowatt-hours.....	5.5	5.5	5.5	5.5	5.5
	Next 200 kilowatt-hours.....	2.0	2.0	2.0	2.0	2.0
Company B.....	First 40 kilowatt-hours.....	5.5	5.5	5.5	5.5	5.5
	Next 200 kilowatt-hours.....	2.0	2.0	2.0	2.0	2.0
Springfield, Ill.:						
Company A.....	First 30 kilowatt-hours.....	6.0	6.0	6.0	6.0	6.0
	Next 70 kilowatt-hours.....	3.0	3.0	3.0	3.0	3.0
Company B.....	First 30 kilowatt-hours.....	6.0	6.0	6.0	6.0	6.0
	Next 70 kilowatt-hours.....	3.0	3.0	3.0	3.0	3.0
Washington, D. C.	All current.....	5.2	5.2	4.7	4.7	4.2
Honolulu, Hawaii..	First 100 kilowatt-hours.....	8.0	8.0	8.0	8.0	-----

<sup>1</sup> For determination of demand see explanation of prices.

<sup>2</sup> Next kilowatt-hours up to 800.

<sup>3</sup> First 50 kilowatt-hours.

<sup>4</sup> First 80 kilowatt-hours.

<sup>5</sup> All current.

<sup>6</sup> First 30 hours' use of demand. For determination of demand see explanation of prices.

<sup>7</sup> Excess.

<sup>8</sup> First 200 kilowatt hours.

<sup>9</sup> First 50 kilowatt-hours.

<sup>10</sup> 1 to 149 kilowatt-hours.

<sup>11</sup> Next kilowatt-hours up to a total of 300.

<sup>12</sup> Next kilowatt-hours up to a total of 200.

<sup>13</sup> First 12 kilowatt-hours.

<sup>14</sup> Next 36 kilowatt-hours.

<sup>15</sup> First 9 kilowatt-hours.

<sup>16</sup> Next kilowatt-hours in excess of the first 9 kilowatt-hours until 100 use of demand has been reached.

For determination of demand see explanation of prices.

<sup>17</sup> Next 50 kilowatt-hours.

<sup>18</sup> First 13 kilowatt-hours.

<sup>19</sup> Next kilowatt-hours: For an installation of 600 watts or less 7 kilowatt-hours will apply. For each 300 watts of installation in excess of 600 watts 1 additional kilowatt-hour will apply.

<sup>20</sup> First 100 kilowatt-hours.

<sup>21</sup> First 150 kilowatt-hours.

<sup>22</sup> First 250 kilowatt-hours.

### Index Numbers of Wholesale Prices in June, 1931

THE index number of wholesale prices computed by the Bureau of Labor Statistics of the United States Department of Labor shows a decline for June. This index number, which includes 550 commodities or price quotations weighted according to the importance of each article and based on prices in 1926 as 100.0, declined from 71.3 in May to 70.0 in June, a decrease of slightly more than 1¾ per cent. The purchasing power of the 1926 dollar in June was \$1.429.

Farm products as a group averaged 2½ per cent below May prices, due to decreases for oats, rye, wheat, beef cattle, hogs, sheep and lambs, poultry, cotton, hay, domestic wool, and oranges. Corn, onions, fresh milk at Chicago, fresh apples, and lemons, on the other hand, were higher than in the month before.

Among foods price decreases were reported for butter, fresh and cured meats, canned salmon, bananas, oleomargarine, and edible tallow, resulting in a net decrease of about one-half of 1 per cent for the group. Cheese, dressed poultry, coffee, sugar, rye flour, corn meal, and lard averaged higher than in May.

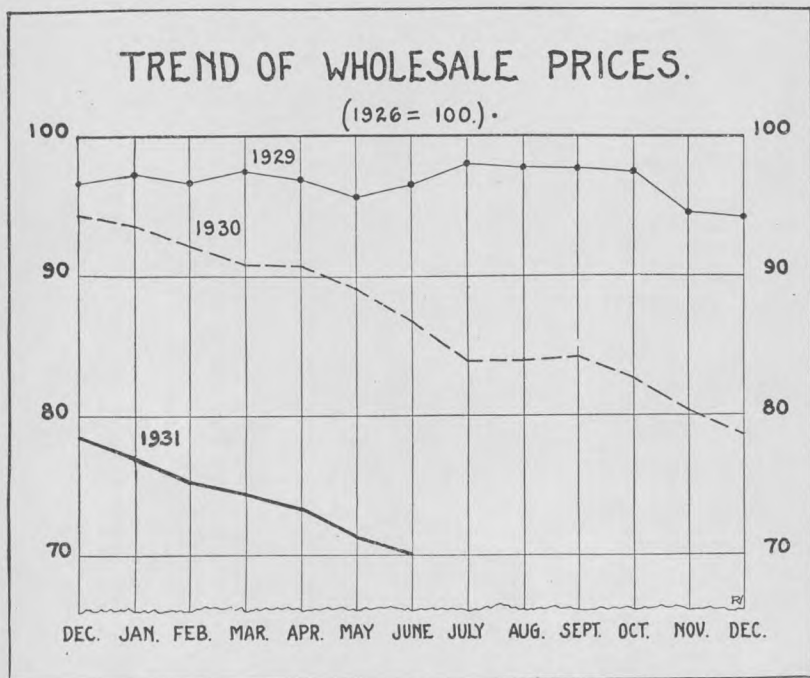
Advances in hides and skins more than offset slight declines in leather and boots and shoes, netting an upward trend for the group as a whole. No change was reported for other leather products.



In the group of textile products further decreases are shown for cotton goods, silk and rayon, woolen and worsted goods, and other textiles, causing the group to decline nearly 1½ per cent within the month.

A decided decrease in petroleum products forced the fuel and lighting group down 4½ per cent from May to June. Anthracite coal advanced slightly, while bituminous coal and coke showed further recessions.

Among metals there were slight declines in certain iron and steel products and agricultural implements, with larger decreases for non-ferrous metals. Automobiles and other metal products remained at the May level.



Lumber, brick, cement, paint materials, and other building materials continued to move downward in June. No change was reported for structural steel. The group as a whole showed a decrease of a little more than 1 per cent.

With further price recessions during June for chemicals, fertilizer materials, and mixed fertilizers, the chemicals and drugs group showed a decrease of 1½ per cent. Both furniture and furnishings in the group of house-furnishing goods continued to decline in the month.

In the group of miscellaneous commodities, prices of cattle feed fell markedly, while paper and pulp, crude rubber, and other miscellaneous items declined slightly. No change was reported for automobile tires.

Raw materials as a whole averaged lower than in May, as did also semimanufactured articles and finished products.

In the large group of nonagricultural commodities, including all articles other than farm products, and among all commodities other than farm products and foods, the June prices averaged lower than those for the month before.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES [1925=100.0]

Groups and subgroups	June, 1930	May, 1931	June, 1931	Purchasing power of the dollar June, 1931
All commodities.....	86.8	71.3	70.0	\$1.429
Farm products.....	88.9	67.1	65.4	1.529
Grains.....	78.7	59.6	56.0	1.786
Livestock and poultry.....	88.5	64.1	61.9	1.616
Other farm products.....	92.7	71.5	70.8	1.412
Foods.....	90.5	72.9	72.4	1.381
Butter, cheese, and milk.....	90.4	78.4	79.1	1.264
Meats.....	99.9	74.4	71.3	1.403
Other foods.....	85.1	69.7	70.1	1.427
Hides and leather products.....	102.4	87.3	87.8	1.139
Hides and skins.....	99.0	62.6	65.5	1.527
Leather.....	102.9	88.1	87.8	1.139
Boots and shoes.....	103.0	94.8	94.7	1.056
Other leather products.....	105.1	101.3	101.3	.987
Textile products.....	82.2	66.3	65.4	1.529
Cotton goods.....	89.3	73.9	72.6	1.377
Silk and rayon.....	64.3	44.0	43.8	2.283
Woolen and worsted goods.....	88.6	76.4	75.9	1.318
Other textile products.....	69.0	55.9	53.1	1.883
Fuel and lighting materials.....	76.4	60.9	58.1	1.721
Anthracite coal.....	85.8	87.6	88.8	1.126
Bituminous coal.....	88.2	83.9	83.2	1.202
Coke.....	84.0	83.7	81.5	1.227
Gas.....	99.7	99.0	(1)	-----
Petroleum products.....	63.6	35.9	30.7	3.257
Metals and metal products.....	95.4	87.8	87.4	1.144
Iron and steel.....	91.7	87.2	86.9	1.151
Nonferrous metals.....	78.1	60.6	58.9	1.698
Agricultural implements.....	95.0	94.7	94.6	1.057
Automobiles.....	105.5	98.6	98.6	1.014
Other metal products.....	98.4	94.4	94.4	1.059
Building materials.....	90.0	78.4	77.5	1.290
Lumber.....	85.3	68.4	67.8	1.475
Brick.....	83.0	80.8	80.8	1.238
Cement.....	91.7	79.7	77.7	1.287
Structural steel.....	86.8	84.3	84.3	1.186
Paint materials.....	88.7	70.5	70.1	1.427
Other building materials.....	99.6	93.2	91.7	1.091
Chemicals and drugs.....	88.9	79.1	77.9	1.284
Chemicals.....	93.8	81.9	80.2	1.247
Drugs and pharmaceuticals.....	67.9	62.8	62.1	1.610
Fertilizer materials.....	85.3	80.5	79.8	1.253
Mixed fertilizers.....	94.1	82.8	82.4	1.214
House-furnishing goods.....	96.2	89.2	88.6	1.129
Furniture.....	96.5	93.5	92.8	1.078
Furnishings.....	95.9	85.5	85.0	1.176
Miscellaneous.....	74.5	62.8	61.8	1.618
Cattle feed.....	102.0	67.9	61.1	1.637
Paper and pulp.....	85.2	81.3	80.3	1.245
Rubber.....	25.9	13.7	13.3	7.519
Automobile tires.....	52.2	45.7	45.7	2.188
Other miscellaneous.....	103.3	84.9	84.0	1.190
Raw materials.....	84.8	66.5	64.7	1.546
Semimanufactured articles.....	82.0	68.9	68.5	1.460
Finished products.....	88.9	75.1	74.0	1.351
Nonagricultural commodities.....	86.3	72.6	71.4	1.401
All commodities, less farm products and foods.....	85.7	73.2	71.9	1.391

<sup>1</sup> Data not yet available.

# COST OF LIVING

## Changes in Cost of Living in the United States

The index number for cost of living for June, 1931, is 150.3, as computed by the Bureau of Labor Statistics of the United States Department of Labor, and shows a decline of 6.5 per cent as compared with December, 1930. This index number includes prices obtained from 51 cities on food and from 32 cities on various articles of clothing, rents, fuel and light, house-furnishing goods, and miscellaneous items, weighted according to their importance in the family budget, and is based on prices in 1913 as 100.

For 19 of these cities the base period of the index is December, 1914, and for 13 cities it is December, 1917. To determine the change in cost of living between the average of 1913 and December, 1914, retail food prices, wholesale prices of other articles, and certain other data were compiled by the bureau.

Changes in the total cost of living in the United States for all periods for which data were gathered are shown by the index numbers in Table 1.

TABLE 1.—INDEX NUMBERS SHOWING CHANGES IN COST OF LIVING IN THE UNITED STATES, 1913 TO JUNE, 1931

Date	Index number	Date	Index number	Date	Index number
<b>Average, 1913</b> .....	<b>100.0</b>	March, 1922.....	166.9	December, 1925.....	177.9
December, 1914.....	163.0	June, 1922.....	166.4	June, 1926.....	174.8
December, 1915.....	105.1	September, 1922.....	166.3	December, 1926.....	175.6
December, 1916.....	118.3	December, 1922.....	169.5	June, 1927.....	173.4
December, 1917.....	142.4	March, 1923.....	168.8	December, 1927.....	172.0
December, 1918.....	174.4	June, 1923.....	169.7	June, 1928.....	170.0
June, 1919.....	177.3	September, 1923.....	172.1	December, 1928.....	171.3
December, 1919.....	199.3	December, 1923.....	173.2	June, 1929.....	170.2
June, 1920.....	216.5	March, 1924.....	170.4	December, 1929.....	171.4
December, 1920.....	200.4	June, 1924.....	169.1	June, 1930.....	166.6
May, 1921.....	180.4	September, 1924.....	170.6	December, 1930.....	160.7
September, 1921.....	177.3	December, 1924.....	172.5	June, 1931.....	150.3
December, 1921.....	174.3	June, 1925.....	173.5		

Table 2 shows the index numbers which represent changes in six groups of items entering into the cost of living in the United States from 1913 to June, 1931.

Since 1913 prices in the food group have increased 18.3 per cent; clothing, 46 per cent; rents, 42 per cent; fuel and light, 65.4 per cent; house-furnishing goods, 77 per cent; and miscellaneous items, 106.6 per cent.

The peak of prices occurred in June, 1920, and between this period and June, 1931, clothing shows the largest decrease, 49.2 per cent; food comes next, showing a reduction of 46.0 per cent; house-furnishing goods showed a decline of 39.5 per cent and fuel and light showed a recession of 3.8 per cent. Rents and miscellaneous items increased during this period 5.3 and 2.6 per cent, respectively.

In the period between June, 1930 and June, 1931, the decrease in the cost-of-living groups averaged 20 per cent for food; 9.6 per cent for house-furnishing goods; 8.1 per cent for clothing; 5.1 per cent for rent; 4.3 per cent for fuel and light; and 0.9 per cent for miscellaneous items.

During the 6-month period ending June, 1931, prices declined 13.8 per cent in the food group; 6 per cent in the house-furnishings group; 5.5 per cent in fuel and light group; 4.6 per cent in the clothing group; 3.1 per cent in the rent group; and 0.7 in the miscellaneous group.

TABLE 2.—INDEX NUMBERS SHOWING CHANGES IN COST OF GROUPS OF ITEMS ENTERING INTO COST OF LIVING IN THE UNITED STATES, 1913 TO JUNE, 1931

Date	Index numbers						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
Average, 1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
December, 1914.....	105.0	101.0	( <sup>1</sup> )	101.0	104.0	103.0	103.0
December, 1915.....	105.0	104.7	101.5	101.0	110.6	107.4	105.1
December, 1916.....	126.0	120.0	102.3	108.4	127.8	113.3	118.3
December, 1917.....	157.0	149.1	100.1	124.1	150.6	140.5	142.4
December, 1918.....	187.0	205.3	109.2	147.9	213.6	165.8	174.4
June, 1919.....	184.0	214.5	114.2	145.6	225.1	173.2	177.3
December, 1919.....	197.0	268.7	125.3	156.8	263.5	190.2	199.3
June, 1920.....	219.0	287.5	134.9	171.9	292.7	201.4	216.5
December, 1920.....	178.0	258.5	151.1	194.9	285.4	208.2	200.4
May, 1921.....	144.7	222.6	159.0	181.6	247.7	208.8	180.4
September, 1921.....	153.1	192.1	160.1	180.9	224.7	207.8	177.3
December, 1921.....	149.9	184.4	161.4	181.1	218.0	206.8	174.3
March, 1922.....	158.7	175.5	160.9	175.8	206.2	203.3	166.9
June, 1922.....	140.7	172.3	160.9	174.2	202.9	201.5	166.4
September, 1922.....	139.7	171.3	161.1	183.6	202.9	201.1	166.3
December, 1922.....	146.6	171.5	161.9	186.4	208.2	200.5	169.5
March, 1923.....	141.9	174.4	162.4	186.2	217.6	200.3	168.8
June, 1923.....	144.3	174.9	163.4	180.6	222.2	200.3	169.7
September, 1923.....	149.3	176.5	164.4	181.3	222.4	201.1	172.1
December, 1923.....	150.3	176.3	166.5	184.0	222.4	201.7	173.2
March, 1924.....	143.7	175.8	167.0	182.2	221.3	201.1	170.4
June, 1924.....	142.4	174.2	168.0	177.3	216.0	201.1	169.1
September, 1924.....	146.8	172.3	168.0	179.1	214.9	201.1	170.6
December, 1924.....	151.5	171.3	168.2	180.5	216.0	201.7	172.5
June, 1925.....	155.0	170.6	167.4	176.5	214.3	202.7	173.5
December, 1925.....	165.5	169.4	167.1	186.9	214.3	203.5	177.9
June, 1926.....	159.7	168.2	165.4	180.7	210.4	203.3	174.8
December, 1926.....	161.8	166.7	164.2	188.3	207.7	203.9	175.6
June, 1927.....	158.5	164.9	162.1	180.8	205.2	204.5	173.4
December, 1927.....	155.9	162.9	160.2	183.2	204.6	205.1	172.0
June, 1928.....	152.6	162.6	157.6	177.2	201.1	205.5	170.0
December, 1928.....	155.8	161.9	155.9	181.3	199.7	207.1	171.3
June, 1929.....	154.8	161.3	153.7	175.2	198.5	207.3	170.2
December, 1929.....	158.0	160.5	151.9	178.7	197.7	207.9	171.4
June, 1930.....	147.9	158.9	149.6	172.8	195.7	208.5	166.6
December, 1930.....	137.2	153.0	146.5	175.0	188.3	208.1	160.7
June, 1931.....	118.3	146.0	142.0	165.4	177.0	206.6	150.3

<sup>1</sup> No change.

Table 3 shows the per cent of decrease in the price of electricity in 32 cities since December, 1913. The June, 1931, figure shows a decrease of 1.6 per cent as compared with December, 1930.

TABLE 3.—PER CENT OF DECREASE IN THE PRICE OF ELECTRICITY AT SPECIFIED PERIODS AS COMPARED WITH DECEMBER, 1913

Date	Per cent of decrease from December, 1913	Date	Per cent of decrease from December, 1913	Date	Per cent of decrease from December, 1913
December, 1914	3.7	June, 1922	6.2	June, 1926	11.1
December, 1915	6.2	September, 1922	6.2	December, 1926	11.1
December, 1916	8.6	December, 1922	7.4	June, 1927	12.3
December, 1917	11.1	March, 1923	7.4	December, 1927	12.3
December, 1918	6.2	June, 1923	7.4	June, 1928	13.6
June, 1919	6.2	September, 1923	8.6	December, 1928	14.8
December, 1919	7.4	December, 1923	8.6	June, 1929	17.3
June, 1920	7.4	March, 1924	8.6	December, 1929	17.3
December, 1920	4.9	June, 1924	8.6	June, 1930	18.5
May, 1921	4.9	September, 1924	8.6	December, 1930	18.5
September, 1921	4.9	December, 1924	8.6	June 1931	19.8
December, 1921	4.9	June, 1925	9.9		
March, 1922	4.9	December, 1925	9.9		

The per cent of decrease in the total cost of living in each of the 32 cities and in the United States, from June, 1920, June, 1930, and December, 1930, to June, 1931, is presented in Table 4. In the period between June, 1920, and June, 1931, the decreases in the 32 cities ranged from 25.8 to 36.3 per cent and averaged 30.6 for the United States. In the year from June, 1930, to June, 1931, the decreases ranged from 5.6 to 12.8 per cent and averaged 9.8 per cent in the United States.

Considering the 6-month period from December, 1930, to June, 1931, the decreases for the 32 cities ranged from 3.9 to 9.1 per cent and for the United States averaged 6.5 per cent.

TABLE 4.—PER CENT OF DECREASE IN COST OF LIVING IN SPECIFIED CITIES FROM JUNE, 1920, JUNE, 1930, AND DECEMBER, 1930, TO JUNE, 1931

City	Per cent of decrease from—			City	Per cent of decrease from—		
	June, 1920, to June, 1931	June, 1930, to June, 1931	December, 1930, to June, 1931		June, 1920, to June, 1931	June, 1930, to June, 1931	December, 1930, to June, 1931
Atlanta	33.0	8.9	5.9	Mobile	30.9	10.8	7.4
Baltimore	27.3	9.2	6.0	New Orleans	28.7	11.8	8.2
Birmingham	33.5	12.8	9.1	New York	28.3	8.5	6.2
Boston	30.2	9.8	7.6	Norfolk	30.7	8.3	6.6
Buffalo	28.5	10.1	6.6	Philadelphia	27.3	8.1	5.6
Chicago	29.3	10.2	6.4	Pittsburgh	27.3	9.6	5.9
Cincinnati	25.8	9.2	6.4	Portland, Me.	28.6	8.2	5.7
Cleveland	29.9	10.9	6.1	Portland, Oreg.	32.5	9.3	4.5
Denver	30.9	8.1	5.4	Richmond	28.8	9.0	6.3
Detroit	33.3	12.7	6.9	St. Louis	28.7	10.2	6.8
Houston	31.6	10.5	6.1	San Francisco	27.1	8.4	5.7
Indianapolis	31.5	11.4	7.1	Savannah	32.8	8.1	5.1
Jacksonville	31.9	8.4	6.1	Scranton	26.2	9.5	6.4
Kansas City	31.9	5.6	4.5	Seattle	27.6	7.9	3.9
Los Angeles	26.5	9.5	6.3	Washington	29.0	8.0	5.8
Memphis	29.4	9.9	6.3	Average, United States	30.6	9.8	6.5
Minneapolis	26.8	8.0	5.1				



Retail prices of standard articles of food are reported regularly by mail from a representative number of grocers, meat dealers, bakers and dairy men in each of the 32 cities. Coal, wood, gas and electricity prices are also reported by mail for these cities. All other cost-of-living data are secured by personal visits of agents of the bureau. On each article of clothing, house furnishings, and miscellaneous items, four quotations are obtained in every city except New York, where five are taken. The number of rents varies from 400 to 2,500 according to the population of the city; these figures are secured from real-estate agencies on unfurnished houses, flats, and apartments.

For the 6-month period ending June, 1931, food prices decreased materially in all cities, ranging from 8.1 to 19.3 per cent, with an average of 13.8 per cent for the United States.

Clothing prices are less than six months ago. The decreases in this group ranged from 1.1 to 9.6 per cent and averaged 4.6 per cent for all cities.

Rents are also reduced but not so materially. The decreases for this group ranged from 0.4 to 9.1 per cent and averaged 3.1 per cent for the United States.

The fuel and light group showed a decline in all cities except one and the slight increase in this city was caused by higher coal prices. The decreases in this group ranged from 0.4 to 18.3 per cent and averaged for the United States 5.5 per cent.

The prices of house-furnishing goods, including rugs, linoleum, dining and living room furniture, stoves and other necessary household articles, have also joined the general downward movement. Price recessions in June in this group ranged from 1.8 to 12.4 per cent and averaged 6.0 per cent for the United States.

Miscellaneous items also moved downward in price in the last 6 months. Included in this group are street-car fares, motion pictures, newspapers, doctor and dentist fees, medicine, hospital care, spectacles, laundry, cleaning supplies, barber service, toilet articles and preparations, telephone rates and tobacco price. The decrease for the 32 cities averaged 0.7 per cent. In only one city the miscellaneous items showed an increase, occasioned by an advance in street-car fare, while no change was reported in four cities.

Table 5 shows the per cent of change in the cost of living for 19 cities for each of 6 groups of items from December, 1914, to June, 1931.

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Baltimore, Md.:</b>							
December, 1915.....	14.1	2.7	10.2	0.5	5.6	11.4	11.4
December, 1916.....	20.9	24.0	.9	9.1	26.4	18.5	18.5
December, 1917.....	64.4	52.1	3.0	25.5	60.8	51.3	51.3
December, 1918.....	96.4	107.7	13.8	46.0	122.3	78.7	84.7
June, 1919.....	91.1	128.9	16.8	37.1	134.6	82.8	84.0
December, 1919.....	92.5	177.4	25.8	48.1	167.0	99.4	98.4
June, 1920.....	110.9	191.3	41.6	57.6	191.8	111.4	114.3
December, 1920.....	75.6	159.5	49.5	79.0	181.9	112.9	96.8
May, 1921.....	43.4	123.2	63.0	70.9	147.5	111.8	77.4
December, 1921.....	46.9	88.6	64.7	85.5	123.7	108.6	73.2
June, 1922.....	39.9	78.9	65.4	84.8	113.3	104.4	67.6
December, 1922.....	46.1	80.5	66.9	94.9	116.6	102.6	70.9
June, 1923.....	46.5	81.4	69.6	91.6	127.5	103.8	72.0

<sup>1</sup> Decrease.

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Baltimore, Md.—Continued.</b>							
December, 1923.....	50.6	81.8	71.9	93.5	130.2	105.2	74.8
June, 1924.....	44.0	78.3	72.4	84.8	129.4	109.9	71.9
December, 1924.....	53.0	78.2	72.2	88.7	125.7	107.1	74.8
June, 1925.....	57.7	76.0	72.0	85.3	122.8	111.0	77.3
December, 1925.....	66.2	76.2	72.2	90.9	122.1	111.6	81.2
June, 1926.....	62.2	73.0	71.3	89.8	112.8	111.2	78.4
December, 1926.....	63.0	72.5	70.6	87.3	110.5	112.3	78.6
June, 1927.....	56.7	71.3	69.9	82.2	106.9	112.9	75.3
December, 1927.....	56.7	68.4	68.0	85.5	104.8	112.3	74.5
June, 1928.....	52.9	68.1	66.7	82.0	103.2	118.7	73.7
December, 1928.....	51.9	68.3	65.7	87.3	102.0	120.9	73.9
June, 1929.....	53.8	67.5	65.2	80.7	100.4	119.8	73.8
December, 1929.....	56.7	67.2	63.4	86.1	99.4	120.2	75.1
June, 1930.....	47.2	65.9	62.4	80.9	95.6	127.0	71.6
December, 1930.....	36.9	58.1	61.3	85.6	86.0	126.5	65.8
June, 1931.....	18.7	51.6	59.8	78.7	72.1	125.6	55.8
<b>Boston, Mass.:</b>							
December, 1915.....	1.3	6.6	1.1	1.1	8.4	1.6	1.6
December, 1916.....	18.0	21.9	.1	10.5	26.3	15.7	15.7
December, 1917.....	45.8	47.5	1.1	29.2	58.4	38.1	38.1
December, 1918.....	74.9	117.5	2.8	56.6	137.6	62.0	70.6
June, 1919.....	67.9	137.9	5.1	55.0	153.7	64.8	72.8
December, 1919.....	80.8	192.4	12.2	63.2	198.7	81.1	92.3
June, 1920.....	105.0	211.1	16.2	83.6	233.7	91.8	110.7
December, 1920.....	74.4	192.7	25.8	106.0	226.4	96.6	97.4
May, 1921.....	41.9	150.3	29.8	97.8	171.2	96.2	74.4
December, 1921.....	50.4	106.3	33.8	98.5	136.9	93.0	70.2
June, 1922.....	32.5	96.7	34.4	92.5	124.2	89.5	59.6
December, 1922.....	44.9	92.0	36.7	99.9	133.6	87.8	65.1
June, 1923.....	39.7	93.0	40.2	88.8	150.5	89.2	63.5
December, 1923.....	48.5	92.6	47.0	97.0	148.2	93.0	69.4
June, 1924.....	37.9	91.2	50.7	90.7	136.9	88.0	63.2
December, 1924.....	47.8	89.1	52.4	93.7	138.1	85.9	67.3
June, 1925.....	44.5	88.9	52.9	90.4	136.9	86.3	65.8
December, 1925.....	60.6	87.8	54.0	107.2	136.7	91.0	74.7
June, 1926.....	51.5	85.9	53.2	94.4	133.1	91.0	69.4
December, 1926.....	56.6	85.3	53.5	98.7	129.6	92.3	71.9
June, 1927.....	50.5	82.9	53.2	92.5	125.5	91.5	68.1
December, 1927.....	54.4	80.2	52.4	96.5	124.4	91.3	69.5
June, 1928.....	45.0	80.2	52.2	90.4	123.1	90.2	64.8
December, 1928.....	50.5	80.4	51.6	96.7	118.4	94.4	68.2
June, 1929.....	47.1	79.0	50.7	87.7	118.4	92.1	65.4
December, 1929.....	53.2	79.0	49.2	94.3	118.0	92.9	68.4
June, 1930.....	43.7	78.3	47.1	88.7	113.6	92.5	63.1
December, 1930.....	36.7	72.6	44.7	95.7	107.6	92.3	59.2
June, 1931.....	14.6	66.7	41.8	85.3	97.4	92.3	47.1
<b>Buffalo, N. Y.:</b>							
December, 1915.....	2.4	8.9	1.2	3.2	7.1	3.5	3.5
December, 1916.....	30.1	29.6	4.7	9.3	24.1	24.4	24.4
December, 1917.....	64.1	58.5	9.4	23.5	50.2	51.1	51.1
December, 1918.....	87.8	123.1	20.7	49.3	106.3	76.0	80.9
June, 1919.....	82.9	140.7	28.0	51.9	118.1	78.7	84.2
December, 1919.....	94.7	190.8	29.0	55.7	165.4	90.3	102.7
June, 1920.....	115.7	210.6	46.6	69.8	149.7	101.9	121.5
December, 1920.....	78.5	168.7	48.5	74.9	189.2	107.4	101.7
May, 1921.....	37.7	131.6	61.1	73.9	151.3	107.8	80.3
December, 1921.....	50.8	96.5	61.7	79.7	124.7	103.0	76.8
June, 1922.....	38.5	83.6	64.7	78.8	108.0	97.9	68.6
December, 1922.....	48.8	81.4	64.9	115.7	112.8	97.5	73.9
June, 1923.....	41.6	83.4	70.0	119.1	127.9	100.5	74.1
December, 1923.....	51.9	83.9	71.8	120.4	127.5	102.5	78.6
June, 1924.....	39.5	81.7	76.3	116.6	121.0	101.9	73.9
December, 1924.....	51.6	79.9	76.8	117.9	121.0	100.9	77.8
June, 1925.....	52.0	80.3	79.1	115.5	119.5	107.7	79.7
December, 1925.....	66.5	79.8	79.5	117.9	118.2	107.9	84.8
June, 1926.....	60.9	76.7	78.1	127.3	113.6	110.6	82.8
December, 1926.....	63.6	74.6	77.4	127.1	110.2	112.5	83.6
June, 1927.....	56.7	72.2	75.8	126.9	106.2	111.4	79.8
December, 1927.....	55.9	71.2	73.7	128.5	106.0	116.3	80.2
June, 1928.....	51.6	71.7	72.7	126.7	105.4	117.8	78.7
December, 1928.....	54.9	72.4	69.4	128.5	104.2	117.8	79.6
June, 1929.....	54.6	71.2	67.0	123.2	104.4	118.9	78.8
December, 1929.....	57.9	71.0	66.5	127.0	104.2	119.1	80.0
June, 1930.....	47.2	70.0	65.0	122.9	105.0	120.4	76.0
December, 1930.....	35.8	62.0	62.5	126.7	96.4	118.4	69.4
June, 1931.....	16.0	52.3	56.5	121.3	84.0	116.4	58.3

<sup>1</sup> Decrease.

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Chicago, Ill.:</b>							
December, 1915.....	2.7	7.5	1 0.1	1 0.9	5.9	3.0	3.0
December, 1916.....	25.2	24.2	.7	6.6	20.0	19.5	19.5
December, 1917.....	53.4	50.6	1.4	19.3	47.5	41.8	41.8
December, 1918.....	78.7	138.9	2.6	37.1	108.9	58.7	72.2
June, 1919.....	73.3	157.1	8.0	35.7	126.9	61.7	74.5
December, 1919.....	93.1	224.0	14.0	40.1	176.0	84.3	100.6
June, 1920.....	120.0	205.3	35.1	62.4	215.9	87.5	114.6
December, 1920.....	70.5	158.6	48.9	83.5	205.8	96.5	93.3
May, 1921.....	41.9	122.7	78.2	65.3	162.4	98.5	78.4
December, 1921.....	48.3	74.3	83.9	69.4	133.7	94.5	72.3
June, 1922.....	41.6	63.0	87.4	55.4	108.5	87.9	65.0
December, 1922.....	44.8	67.5	88.9	65.6	120.4	86.7	68.0
June, 1923.....	45.1	72.2	92.1	54.9	133.1	87.7	69.6
December, 1923.....	52.5	76.0	95.4	59.3	132.9	88.1	73.7
June, 1924.....	47.9	72.6	104.4	53.0	122.2	90.7	72.6
December, 1924.....	56.2	67.8	105.8	56.1	121.9	90.7	75.3
June, 1925.....	61.4	65.8	105.6	53.9	118.1	93.9	77.1
December, 1925.....	69.4	65.3	104.4	65.8	118.5	93.9	80.6
June, 1926.....	67.2	62.7	99.5	55.4	112.4	94.3	77.8
December, 1926.....	69.6	61.9	96.7	64.4	109.2	95.7	79.0
June, 1927.....	68.2	58.7	93.9	57.2	105.2	96.7	77.1
December, 1927.....	62.4	53.8	90.0	59.2	104.4	99.7	74.3
June, 1928.....	59.4	53.3	86.8	51.2	96.0	98.5	71.5
December, 1928.....	62.4	52.1	83.6	56.5	97.2	101.7	73.1
June, 1929.....	63.0	51.5	80.3	50.7	97.4	101.7	72.3
December, 1929.....	67.3	49.2	77.2	56.7	97.0	102.9	73.7
June, 1930.....	56.9	47.7	75.1	51.5	92.1	104.7	69.1
December, 1930.....	45.6	37.2	71.1	54.8	82.7	104.5	62.2
June, 1931.....	26.7	30.3	64.4	49.5	67.7	103.3	51.8
<b>Cleveland, Ohio:</b>							
December, 1915.....	1.4	2.0	.1	.3	4.7	1.4	1.4
December, 1916.....	26.4	18.0	.9	10.0	19.7	19.1	19.1
December, 1917.....	54.3	43.7	11.3	26.8	47.8	42.9	42.9
December, 1918.....	79.4	102.6	16.5	51.9	102.4	67.1	71.4
June, 1919.....	79.7	125.2	21.8	47.9	117.0	74.7	77.2
December, 1919.....	92.9	171.2	39.9	62.9	165.5	85.9	98.2
June, 1920.....	118.7	185.1	47.3	90.3	186.5	117.9	120.3
December, 1920.....	71.7	156.0	80.0	94.5	176.8	134.0	107.3
May, 1921.....	37.4	124.0	88.1	89.6	133.6	129.6	87.5
December, 1921.....	40.9	85.8	81.2	103.8	100.8	123.2	78.8
June, 1922.....	34.6	72.4	69.6	102.2	87.8	110.7	68.9
December, 1922.....	41.1	70.9	74.0	116.3	104.8	109.4	72.9
June, 1923.....	42.1	77.6	73.8	151.6	129.6	108.1	77.1
December, 1923.....	43.6	79.6	78.7	147.0	129.3	113.1	79.6
June, 1924.....	37.2	78.4	77.7	142.6	118.0	112.7	75.9
December, 1924.....	46.2	72.9	78.6	144.1	113.4	112.1	78.1
June, 1925.....	53.8	71.9	76.8	143.9	111.9	112.3	80.4
December, 1925.....	58.3	71.9	75.6	168.8	113.4	111.5	82.7
June, 1926.....	60.0	70.7	71.6	162.3	106.1	111.9	81.9
December, 1926.....	58.7	68.3	71.8	170.7	105.3	112.7	81.5
June, 1927.....	56.6	68.5	67.5	163.9	103.2	115.9	80.2
December, 1927.....	55.1	66.0	66.3	164.2	97.9	115.9	79.0
June, 1928.....	50.6	65.7	61.8	161.3	90.2	118.1	76.3
December, 1928.....	48.5	63.9	60.5	163.7	89.2	119.0	75.4
June, 1929.....	50.6	63.9	59.5	160.5	89.4	117.9	75.7
December, 1929.....	47.0	63.2	58.9	163.1	88.8	118.3	74.3
June, 1930.....	42.0	61.6	56.4	160.2	87.7	125.3	73.3
December, 1930.....	29.5	52.1	55.3	162.5	75.5	124.2	66.2
June, 1931.....	9.6	41.8	48.6	158.0	64.4	118.6	54.4
<b>Detroit, Mich.:</b>							
December, 1915.....	4.1	2.3	2.1	1.6	8.7	3.5	3.5
December, 1916.....	26.5	18.9	17.5	9.9	24.5	22.3	22.3
December, 1917.....	59.7	46.7	32.6	30.2	50.4	49.9	49.9
December, 1918.....	82.5	113.8	39.0	47.6	107.3	72.6	78.0
June, 1919.....	86.4	125.2	45.2	47.6	129.3	80.3	84.4
December, 1919.....	99.5	181.8	60.2	57.9	172.6	100.1	107.9
June, 1920.....	132.0	208.8	68.8	74.9	206.7	141.3	136.0
December, 1920.....	75.6	176.1	108.1	104.5	184.0	144.0	118.6
May, 1921.....	41.1	134.1	101.4	83.6	134.0	140.1	93.3
December, 1921.....	47.3	92.5	91.1	77.5	96.8	130.7	82.4
June, 1922.....	43.1	81.4	86.9	75.2	76.0	121.3	75.3
December, 1922.....	44.8	79.9	92.1	95.5	81.1	121.5	78.2
June, 1923.....	46.7	84.0	96.9	87.3	105.7	124.2	81.7
December, 1923.....	47.5	85.3	107.5	84.9	105.3	128.4	84.7
June, 1924.....	45.5	82.3	105.6	81.8	103.4	127.2	82.8

1 Decrease.

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Detroit, Mich.—Continued.</b>							
December, 1924.....	49.7	76.1	103.8	82.7	98.1	125.4	82.2
June, 1925.....	60.6	75.2	98.7	78.9	94.1	124.7	84.5
December, 1925.....	68.1	74.3	97.7	101.1	93.7	122.5	87.8
June, 1926.....	65.7	73.4	95.5	76.4	91.8	122.5	84.7
December, 1926.....	63.8	71.0	95.5	86.8	88.7	121.6	84.1
June, 1927.....	65.2	68.3	89.6	73.4	86.8	125.1	82.7
December, 1927.....	57.6	64.1	84.1	76.9	84.7	128.3	79.0
June, 1928.....	53.5	64.3	79.1	73.2	81.4	128.8	76.4
December, 1928.....	55.7	62.5	78.2	77.0	81.2	131.1	77.4
June, 1929.....	59.2	62.5	77.3	72.8	81.2	130.4	78.1
December, 1929.....	57.9	61.7	77.8	77.5	79.4	130.6	77.8
June, 1930.....	47.6	59.6	73.2	67.2	76.7	131.1	72.3
December, 1930.....	32.6	50.2	60.0	71.0	66.5	125.1	61.6
June, 1931.....	14.7	44.0	45.4	61.4	58.8	123.7	50.4
<b>Houston, Tex.:</b>							
December, 1915.....	11.0	2.7	12.3	1.9	6.1	1.3	1.3
December, 1916.....	19.9	25.0	17.3	8.3	29.6	16.4	16.4
December, 1917.....	57.3	51.5	17.7	22.7	62.3	44.9	44.9
December, 1918.....	86.1	117.3	11.7	47.5	119.9	67.6	75.7
June, 1919.....	85.7	134.8	1.9	37.6	144.5	72.3	80.2
December, 1919.....	97.5	192.0	13.4	60.0	181.8	88.2	101.7
June, 1920.....	107.5	211.3	25.3	55.1	213.9	90.4	112.2
December, 1920.....	83.2	187.0	35.1	74.2	208.2	103.9	104.0
May, 1921.....	45.6	143.4	39.4	46.0	173.7	100.8	79.7
December, 1921.....	50.1	104.9	39.8	39.4	148.2	99.0	73.6
June, 1922.....	38.9	98.4	38.5	32.9	133.7	94.0	65.9
December, 1922.....	45.0	98.2	37.3	39.2	140.4	93.0	68.4
June, 1923.....	41.2	100.4	36.7	36.5	150.2	91.5	67.2
December, 1923.....	46.4	102.6	36.4	55.8	148.2	93.2	70.6
June, 1924.....	37.3	100.8	34.9	45.0	143.7	89.5	65.0
December, 1924.....	54.4	95.6	34.7	44.3	143.0	88.0	70.5
June, 1925.....	57.3	95.6	34.3	38.7	142.5	87.8	71.1
December, 1925.....	65.8	92.5	33.0	45.2	143.2	85.0	74.3
June, 1926.....	55.0	91.2	32.9	38.2	138.6	87.4	69.2
December, 1926.....	59.8	88.9	32.6	43.7	137.9	86.8	70.6
June, 1927.....	50.4	86.8	32.2	32.8	136.7	86.6	66.3
December, 1927.....	52.5	86.2	31.8	34.3	134.1	91.8	67.9
June, 1928.....	45.6	85.8	30.4	29.2	132.0	89.7	64.1
December, 1928.....	51.4	86.4	30.1	33.6	131.1	89.3	66.4
June, 1929.....	51.1	84.7	27.5	29.1	129.0	92.1	66.1
December, 1929.....	55.8	84.1	27.1	31.8	129.5	92.5	68.0
June, 1930.....	43.0	82.8	25.7	25.3	127.2	92.5	62.3
December, 1930.....	32.8	65.6	23.8	24.0	113.8	92.3	54.7
June, 1931.....	11.2	63.8	20.0	18.9	110.0	92.1	45.2
<b>Jacksonville, Fla.:</b>							
December, 1915.....	1.3	10.5	1 6.9	( <sup>2</sup> )	15.1	1.3	1.3
December, 1916.....	17.6	33.7	1 18.2	2.3	43.4	14.7	14.7
December, 1917.....	50.8	71.9	1 18.7	15.1	73.7	41.6	41.6
December, 1918.....	76.2	130.5	5.9	55.2	126.5	60.5	71.5
June, 1919.....	74.2	139.8	9.7	49.2	140.0	65.9	77.5
December, 1919.....	80.9	217.2	22.0	64.1	186.2	80.9	101.5
June, 1920.....	90.1	234.0	28.9	72.6	224.2	102.8	116.5
December, 1920.....	65.6	209.3	34.1	92.6	222.3	105.6	106.2
May, 1921.....	32.6	167.5	36.5	80.7	182.7	107.5	85.8
December, 1921.....	40.6	117.9	38.3	68.9	134.9	99.3	75.1
June, 1922.....	30.6	99.9	35.3	58.9	115.3	95.5	65.7
December, 1922.....	34.8	99.3	35.1	65.7	127.1	94.7	67.8
June, 1923.....	32.0	101.1	34.3	63.6	137.9	95.3	67.7
December, 1923.....	39.9	104.5	33.4	75.1	139.4	96.6	71.9
June, 1924.....	30.2	102.7	33.3	72.1	132.9	95.0	67.3
December, 1924.....	40.0	94.6	33.5	72.9	132.4	99.1	70.4
June, 1925.....	41.8	94.0	33.5	69.3	134.0	99.3	70.9
December, 1925.....	58.3	93.6	55.3	87.1	135.6	105.3	81.7
June, 1926.....	53.4	93.4	66.6	95.3	134.7	105.5	81.8
December, 1926.....	53.5	90.9	69.9	91.2	128.1	105.7	81.3
June, 1927.....	45.0	88.0	57.2	87.8	126.0	104.5	75.7
December, 1927.....	41.3	85.4	51.2	84.0	124.6	104.5	73.0
June, 1928.....	36.4	85.0	32.3	74.4	119.2	105.1	68.3
December, 1928.....	40.0	84.6	27.4	78.9	119.6	105.1	69.1
June, 1929.....	37.4	83.9	19.8	77.1	117.8	105.1	66.9
December, 1929.....	40.8	82.4	13.2	75.0	113.9	101.0	65.8
June, 1930.....	31.9	80.4	3.2	70.6	110.5	102.4	61.0
December, 1930.....	28.4	71.9	1 1.5	66.3	103.3	101.0	56.9
June, 1931.....	8.4	65.4	1 5.9	64.0	89.9	100.2	47.4

<sup>1</sup> Decrease.<sup>2</sup> No change.

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Los Angeles, Calif.:</b>							
December, 1915	14.1	2.8	12.7	0.4	6.3	11.9	11.9
December, 1916	.4	14.3	12.5	2.3	23.1	7.7	7.7
December, 1917	33.4	45.0	1.6	10.4	56.4	28.9	28.9
December, 1918	61.8	109.1	4.4	18.3	118.5	52.0	58.0
June, 1919	60.7	123.3	8.7	18.6	134.2	59.1	65.1
December, 1919	71.0	167.6	26.8	35.3	175.5	76.9	85.3
June, 1920	90.8	184.5	42.6	53.5	202.2	86.6	101.7
December, 1920	62.7	166.6	71.4	53.5	202.2	100.6	96.7
May, 1921	33.2	127.4	85.3	52.7	156.6	96.8	78.7
December, 1921	38.4	94.3	90.1	52.7	143.2	99.6	76.4
June, 1922	30.6	81.3	95.6	39.1	128.8	103.8	72.5
December, 1922	39.4	78.0	94.8	35.6	138.1	101.2	74.5
June, 1923	36.2	82.5	97.7	33.7	153.6	100.8	75.1
December, 1923	42.1	83.0	100.9	34.1	152.0	104.2	78.8
June, 1924	35.2	81.4	99.4	33.6	136.1	105.4	75.1
December, 1924	38.8	80.4	93.3	34.4	137.7	104.2	75.4
June, 1925	44.1	79.0	83.6	34.0	133.9	108.9	76.9
December, 1925	48.7	77.7	73.7	34.4	133.7	110.6	77.4
June, 1926	39.9	75.7	67.4	34.1	126.7	104.7	71.2
December, 1926	44.7	75.2	61.7	34.8	123.8	105.7	72.2
June, 1927	40.4	74.0	59.9	61.0	120.4	108.2	71.5
December, 1927	40.4	71.6	57.7	56.8	118.6	108.0	70.6
June, 1928	34.9	71.4	54.1	56.5	110.7	107.2	67.4
December, 1928	44.7	70.5	49.8	51.5	108.4	110.9	71.0
June, 1929	41.2	69.3	45.2	50.6	106.5	111.1	68.9
December, 1929	40.9	69.3	43.7	51.4	105.9	111.7	68.7
June, 1930	30.9	68.1	39.8	45.6	103.6	110.2	63.7
December, 1930	21.0	60.2	36.9	47.6	93.0	110.2	58.1
June, 1931	3.1	50.7	31.3	47.0	77.8	107.7	48.2
<b>Mobile, Ala.:</b>							
December, 1915	11.0	2.0	11.9	( <sup>2</sup> )	4.1	1.4	1.4
December, 1916	19.9	9.0	14.3	8.8	15.3	13.8	13.8
December, 1917	57.3	38.8	13.6	27.1	42.8	43.2	43.2
December, 1918	80.6	86.0	11.2	57.1	108.3	72.4	71.4
June, 1919	83.6	94.0	11.9	66.6	113.9	75.3	76.6
December, 1919	98.4	123.7	29.6	75.6	153.3	87.0	94.5
June, 1920	110.5	137.4	34.6	86.3	177.9	100.3	107.0
December, 1920	73.5	122.2	53.6	122.3	175.4	100.7	93.3
May, 1921	39.1	90.6	53.3	102.1	140.7	96.9	70.8
December, 1921	42.4	57.7	49.9	98.2	116.9	94.3	63.6
June, 1922	33.2	49.7	47.7	84.4	97.8	87.5	55.3
December, 1922	39.1	50.8	43.8	96.4	97.9	91.0	58.8
June, 1923	37.7	51.8	42.5	93.3	114.0	89.8	58.6
December, 1923	44.7	55.4	42.6	98.1	114.8	91.3	62.6
June, 1924	33.4	54.3	41.4	91.4	109.3	93.7	58.0
December, 1924	49.7	53.4	40.9	90.2	107.2	94.3	63.9
June, 1925	50.3	52.0	40.1	85.6	104.3	95.5	63.9
December, 1925	59.0	49.4	40.4	89.1	103.7	102.0	68.5
June, 1926	53.1	49.5	39.7	94.6	100.8	102.2	66.2
December, 1926	58.0	48.8	40.5	97.7	96.4	102.2	68.1
June, 1927	52.0	47.6	40.4	90.4	97.2	102.4	65.2
December, 1927	51.1	47.6	41.9	92.1	97.2	104.0	63.5
June, 1928	45.4	47.5	41.0	90.0	93.3	107.3	63.5
December, 1928	49.6	48.1	41.6	92.1	92.3	108.3	63.7
June, 1929	47.5	47.2	41.0	84.0	87.9	108.1	64.0
December, 1929	49.0	47.2	40.6	85.8	87.3	108.3	64.8
June, 1930	39.6	46.8	38.9	81.2	85.6	108.1	60.3
December, 1930	33.0	40.0	36.3	<sup>3</sup> 58.6	73.5	107.5	54.4
June, 1931	12.1	34.1	32.5	49.6	57.5	105.4	43.0
<b>New York, N. Y.:</b>							
December, 1915	1.3	4.8	1.1	1.1	8.4	2.0	2.0
December, 1916	16.3	22.3	1.1	11.0	27.6	14.9	14.9
December, 1917	55.3	54.2	2.6	19.9	56.6	44.7	44.7
December, 1918	82.6	131.3	6.5	45.5	128.5	70.0	77.3
June, 1919	75.3	151.6	13.4	45.4	136.6	75.1	79.2
December, 1919	91.0	219.7	23.4	50.6	172.9	95.8	103.8
June, 1920	105.3	241.4	32.4	60.1	205.1	111.9	110.2
December, 1920	73.5	201.8	38.1	87.5	185.9	116.3	101.4
May, 1921	42.5	159.5	42.2	95.9	156.5	117.6	81.7
December, 1921	51.8	117.8	53.7	90.7	132.0	116.9	79.3
June, 1922	40.0	103.0	55.7	89.0	118.3	112.8	70.7
December, 1922	49.5	98.3	56.7	95.7	121.6	111.6	74.2

<sup>1</sup> Decrease.<sup>2</sup> No change.<sup>3</sup> The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.



TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>New York, N. Y.—Continued.</b>							
June, 1923	44.4	100.7	59.4	89.1	130.3	110.8	72.6
December, 1923	52.0	102.7	62.4	94.2	131.5	113.5	77.3
June, 1924	41.1	100.7	64.5	88.8	121.4	115.0	72.5
December, 1924	50.0	97.7	67.1	93.3	119.4	116.7	76.5
June, 1925	48.9	97.5	67.8	91.0	110.6	116.9	75.8
December, 1925	62.6	95.9	69.5	126.0	110.4	118.2	83.2
June, 1926	56.0	94.7	69.5	95.9	106.6	117.3	78.6
December, 1926	59.1	93.7	70.2	96.1	106.0	117.5	80.0
June, 1927	54.0	92.9	70.2	92.2	102.5	119.0	77.8
December, 1927	57.5	91.4	70.2	96.0	102.9	118.8	79.1
June, 1928	47.5	90.3	69.3	94.4	97.8	118.6	74.4
December, 1928	53.0	88.4	68.6	96.3	96.4	118.8	76.3
June, 1929	50.6	87.8	67.6	92.0	96.2	121.4	75.5
December, 1929	54.9	85.9	66.1	95.1	95.4	122.9	77.1
June, 1930	43.7	85.5	65.1	85.7	90.5	123.3	71.7
December, 1930	35.9	82.2	63.1	90.9	85.5	123.7	67.5
June, 1931	19.6	67.6	61.5	86.3	62.5	123.5	57.1
<b>Norfolk, Va.:</b>							
December, 1915	.8	.8	.1	(2)	.6	.6	.6
December, 1916	22.4	6.0	11.7	17.0	8.7	14.7	14.7
December, 1917	63.9	31.6	11.7	33.3	39.0	45.2	45.2
December, 1918	86.2	94.6	39.0	74.6	105.5	76.8	80.7
June, 1919	89.8	104.8	46.5	69.7	110.7	83.7	87.1
December, 1919	91.5	158.4	63.3	89.9	143.6	97.5	107.0
June, 1920	107.6	176.5	70.8	110.6	165.0	108.4	122.2
December, 1920	76.3	153.6	90.8	128.9	160.5	106.3	109.0
May, 1921	45.4	121.6	94.6	97.3	129.0	106.3	88.1
December, 1921	43.4	90.2	93.4	91.6	106.1	109.3	79.2
June, 1922	33.5	77.6	88.1	87.7	88.4	100.8	69.5
December, 1922	38.6	73.2	77.2	106.5	89.1	99.6	69.9
June, 1923	36.9	79.1	73.0	102.1	101.0	102.2	7.1
December, 1923	40.7	80.8	67.0	96.9	103.8	104.4	72.4
June, 1924	33.1	78.6	64.2	94.4	100.1	103.0	68.4
December, 1924	46.0	75.4	59.4	99.1	102.1	103.4	72.1
June, 1925	47.9	74.7	58.4	96.7	96.0	103.4	71.9
December, 1925	60.8	74.0	53.0	107.9	96.8	103.8	76.4
June, 1926	56.0	73.0	52.1	102.1	93.7	100.5	73.1
December, 1926	58.7	72.8	49.2	109.6	90.4	103.7	74.6
June, 1927	54.7	71.1	45.9	96.8	88.9	114.9	73.9
December, 1927	55.5	70.9	43.6	98.2	88.5	112.5	73.4
June, 1928	50.2	71.6	41.7	95.6	85.7	114.6	71.5
December, 1928	55.0	71.8	29.6	100.3	86.1	118.2	74.1
June, 1929	51.9	71.3	38.8	94.3	85.2	118.0	72.3
December, 1929	55.8	70.4	37.1	92.7	83.0	119.3	73.5
June, 1930	43.3	68.7	36.0	87.3	80.4	118.6	67.9
December, 1930	36.7	66.2	33.3	97.0	73.5	119.0	64.8
June, 1931	15.0	57.7	32.6	83.6	63.8	119.0	54.0
<b>Philadelphia, Pa.:</b>							
December, 1915	.3	3.6	1.3	1.8	6.9	1.2	1.2
December, 1916	18.9	16.0	1.7	5.4	19.9	14.7	14.7
December, 1917	54.4	51.3	2.6	21.5	49.8	43.8	43.8
December, 1918	80.7	116.2	8.0	47.9	107.7	67.5	73.9
June, 1919	75.5	135.9	11.3	43.3	117.8	71.2	76.2
December, 1919	87.2	190.3	16.7	51.3	162.8	88.6	96.5
June, 1920	101.7	219.6	28.6	66.8	187.4	102.8	113.5
December, 1920	68.1	183.5	38.0	96.0	183.4	122.3	100.7
May, 1921	37.8	144.7	44.2	85.6	135.5	119.2	79.8
December, 1921	43.9	104.6	48.1	92.0	101.6	116.2	74.3
June, 1922	38.1	89.5	49.6	85.7	90.0	112.3	68.2
December, 1922	43.4	87.6	52.9	93.0	96.9	110.7	70.7
June, 1923	42.7	87.6	58.1	89.9	110.8	112.4	72.1
December, 1923	45.1	88.2	66.9	102.2	111.6	112.0	74.7
June, 1924	39.3	85.5	72.4	91.7	102.3	110.7	71.5
December, 1924	46.4	84.4	75.3	94.8	100.5	117.6	76.1
June, 1925	51.3	83.8	76.0	87.0	98.9	117.6	77.6
December, 1925	62.0	83.6	77.1	100.5	97.9	117.6	82.6
June, 1926	56.6	82.5	77.1	98.3	93.7	120.6	80.6
December, 1926	61.2	80.3	77.3	98.5	92.3	121.5	82.3
June, 1927	53.8	79.2	75.3	89.4	88.6	120.8	78.0
December, 1927	55.9	77.4	72.1	90.5	87.7	121.2	78.3
June, 1928	51.3	76.5	67.1	81.5	85.4	121.4	75.3
December, 1928	51.7	74.0	63.8	87.3	83.9	120.3	74.5
June, 1929	50.0	72.6	59.9	85.4	84.1	121.2	73.1
December, 1929	56.1	71.2	56.5	86.3	84.7	121.2	75.0
June, 1930	42.6	69.7	54.0	86.5	83.2	121.4	69.0
December, 1930	34.4	64.9	51.2	95.8	75.3	120.7	64.5
June, 1931	20.8	57.6	45.8	80.5	63.2	118.5	55.3

<sup>1</sup> Decrease.

<sup>2</sup> No change.

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnish-ing goods	Miscel-laneous	All items
<b>Portland, Me.:</b>							
December, 1915.....	12.0	2.1	0.2	0.4	6.2	10.4	10.4
December, 1916.....	18.6	9.7	6	11.4	20.9	13.8	13.8
December, 1917.....	49.8	32.8	2.4	28.9	43.5	38.0	38.0
December, 1918.....	86.8	85.8	2.5	67.7	110.8	65.6	72.2
June, 1919.....	80.6	103.8	5.7	58.4	126.4	72.1	74.3
December, 1919.....	91.9	148.5	10.7	69.8	163.7	83.2	91.6
June, 1920.....	114.5	165.9	14.5	83.9	190.3	89.4	107.6
December, 1920.....	78.7	147.8	20.0	113.5	191.2	94.3	93.1
May, 1921.....	46.7	116.3	23.1	96.8	152.2	94.1	72.1
December, 1921.....	54.8	88.1	26.6	99.5	123.6	91.2	69.6
June, 1922.....	39.9	76.7	24.8	96.1	108.1	88.2	59.7
December, 1922.....	49.1	74.8	30.7	94.7	114.2	88.0	64.1
June, 1923.....	45.3	77.3	27.3	94.9	129.7	88.0	63.3
December, 1923.....	52.3	76.7	31.7	100.0	130.2	89.3	66.9
June, 1924.....	44.1	75.4	27.4	96.2	126.7	87.9	62.4
December, 1924.....	52.4	75.0	28.8	99.6	126.0	87.2	66.0
June, 1925.....	52.2	75.0	25.5	95.8	126.0	87.8	65.3
December, 1925.....	64.5	74.0	24.4	100.3	126.9	87.6	70.3
June, 1926.....	58.7	71.7	23.7	100.5	121.7	88.4	67.3
December, 1926.....	63.3	70.3	23.8	102.9	120.8	88.6	69.2
June, 1927.....	59.4	67.6	23.6	98.6	118.8	88.6	66.8
December, 1927.....	60.0	66.8	23.0	102.2	118.4	88.0	67.0
June, 1928.....	54.2	66.5	21.5	98.4	112.5	88.8	63.8
December, 1928.....	57.0	64.8	20.9	102.4	112.3	97.3	66.6
June, 1929.....	54.3	65.8	19.8	94.1	112.3	97.3	64.8
December, 1929.....	55.7	65.6	19.8	101.9	112.1	97.1	65.8
June, 1930.....	45.9	65.4	19.9	96.9	111.9	97.1	61.5
December, 1930.....	38.5	60.4	19.3	99.9	105.8	95.9	57.2
June, 1931.....	20.5	55.7	17.9	95.3	99.2	95.9	48.2
<b>Portland, Oreg.:</b>							
December, 1915.....	13.8	3.0	110.9	11.0	2.9	13.1	13.1
December, 1916.....	9.8	15.8	119.6	3.4	18.0	6.1	6.1
December, 1917.....	42.2	44.4	122.2	20.2	54.5	31.2	31.2
December, 1918.....	70.6	96.6	12.3	30.9	109.0	57.9	64.2
June, 1919.....	67.1	115.5	20.2	31.3	122.0	62.3	69.2
December, 1919.....	81.6	142.1	27.7	42.3	145.1	71.6	83.7
June, 1920.....	107.1	158.6	33.2	46.9	183.9	81.1	100.4
December, 1920.....	60.9	122.1	36.9	65.9	179.9	81.1	80.3
May, 1921.....	26.0	91.2	42.9	67.1	148.0	81.1	62.2
December, 1921.....	33.1	65.3	43.3	59.4	121.9	80.0	58.3
June, 1922.....	26.5	53.2	43.3	50.3	101.9	78.5	52.1
December, 1922.....	34.3	54.9	43.6	65.7	102.9	79.4	56.1
June, 1923.....	29.5	61.3	42.5	61.3	109.8	75.8	54.6
December, 1923.....	35.1	61.1	42.7	67.1	109.0	79.6	57.8
June, 1924.....	28.5	61.1	43.3	55.5	102.2	73.0	52.8
December, 1924.....	36.1	59.2	42.9	62.4	102.2	74.4	55.8
June, 1925.....	40.6	57.6	40.9	52.2	98.6	73.0	55.8
December, 1925.....	43.2	57.0	40.1	60.0	100.6	73.0	56.9
June, 1926.....	38.6	56.5	37.9	50.9	95.2	74.2	54.6
December, 1926.....	40.6	54.0	33.5	61.9	90.7	76.6	55.1
June, 1927.....	39.2	53.2	30.3	56.9	87.8	76.4	53.7
December, 1927.....	37.5	51.1	26.9	65.7	86.1	77.1	52.8
June, 1928.....	36.6	50.8	20.9	51.6	80.5	76.4	50.5
December, 1928.....	41.8	49.4	16.4	63.0	80.1	78.0	52.4
June, 1929.....	41.4	48.4	11.0	51.4	79.7	77.3	50.7
December, 1929.....	43.7	47.8	8.2	61.8	81.0	77.7	51.6
June, 1930.....	34.2	44.8	5.4	49.7	78.6	86.6	49.1
December, 1930.....	17.8	38.4	2.4	55.5	69.7	85.1	41.5
June, 1931.....	8.2	32.9	11.3	36.4	65.8	83.6	35.2
<b>San Francisco and Oakland, Calif.:</b>							
December, 1915.....	14.3	2.5	1.7	1.1	6.0	11.7	11.7
December, 1916.....	9.6	14.5	1.5	4.6	21.7	8.3	8.3
December, 1917.....	35.9	43.6	14.0	14.4	48.2	28.6	28.6
December, 1918.....	66.2	109.0	13.9	30.1	103.4	50.5	57.8
June, 1919.....	63.3	134.6	13.5	28.9	116.6	61.0	65.6
December, 1919.....	74.2	170.4	4.7	41.3	143.8	74.7	87.3
June, 1920.....	93.9	191.0	9.4	47.2	180.1	79.6	96.0
December, 1920.....	64.9	175.9	15.0	66.3	175.6	84.8	85.1
May, 1921.....	33.3	140.9	21.7	63.3	143.9	84.4	66.7
December, 1921.....	40.4	106.3	25.8	65.3	113.9	86.8	63.6
June, 1922.....	31.1	90.7	29.4	59.5	104.4	83.7	56.8
December, 1922.....	38.8	85.4	30.0	52.5	105.4	84.2	58.8
June, 1923.....	34.2	92.1	33.4	42.6	116.7	79.4	57.6
December, 1923.....	42.3	94.4	36.0	48.8	116.9	81.2	62.1
June, 1924.....	35.0	91.5	38.0	49.9	113.4	73.2	57.3

<sup>1</sup> Decrease.

[460]

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>San Francisco and Oakland, Calif.—Continued.</b>							
December, 1924	42.1	90.5	39.4	53.5	114.7	72.7	60.1
June, 1925	47.6	90.5	40.1	54.3	115.1	72.9	62.2
December, 1925	53.3	89.7	40.0	50.8	115.7	74.6	64.7
June, 1926	44.3	88.4	39.6	48.5	105.6	75.3	60.7
December, 1926	48.3	85.6	39.5	51.0	104.6	75.3	61.7
June, 1927	45.4	83.7	38.7	47.1	103.8	77.8	60.5
December, 1927	46.1	82.4	37.3	45.6	103.4	79.2	60.7
June, 1928	41.5	82.9	35.7	45.9	102.0	79.6	58.8
December, 1928	48.0	83.4	33.5	47.5	99.0	83.2	61.7
June, 1929	45.1	82.8	31.9	43.7	97.8	83.4	60.1
December, 1929	48.7	81.5	30.4	40.3	97.4	82.5	60.8
June, 1930	40.4	77.9	28.1	32.7	100.6	80.9	55.9
December, 1930	32.0	72.0	26.1	32.0	91.6	82.0	51.5
June, 1931	15.8	66.3	24.2	28.8	79.3	79.1	42.8
<b>Savannah, Ga.:</b>							
December, 1915	1.3	.8	1 <sup>1</sup> .4	1 <sup>1</sup> .3	1.8	1.2	1.2
December, 1916	17.6	24.1	1 <sup>3</sup> .0	1 <sup>1</sup> .7	12.8	14.6	14.6
December, 1917	50.8	56.6	1 <sup>4</sup> .3	21.1	50.7	42.5	42.5
December, 1918	76.2	133.6	5.9	37.5	128.6	67.3	75.0
June, 1919	74.2	146.3	10.2	35.5	136.5	71.2	79.8
December, 1919	80.9	195.9	22.0	52.2	182.1	82.0	98.7
June, 1920	91.7	212.1	33.5	65.3	207.2	83.8	109.4
December, 1920	63.5	171.5	58.6	94.4	206.6	91.5	98.7
May, 1921	28.7	133.2	61.9	74.2	175.9	93.0	77.6
December, 1921	33.7	84.2	60.9	66.1	133.7	87.4	66.2
June, 1922	22.7	71.7	57.8	55.2	120.1	81.1	56.8
December, 1922	27.6	76.2	52.7	68.3	123.8	79.5	59.2
June, 1923	22.6	81.3	49.5	61.9	135.9	77.4	57.9
December, 1923	25.0	80.9	47.5	64.1	133.4	76.7	58.2
June, 1924	17.5	79.1	45.3	59.7	130.6	77.5	54.8
December, 1924	25.1	75.8	41.0	62.2	128.7	77.5	56.3
June, 1925	31.5	75.1	39.7	59.1	128.2	77.5	57.9
December, 1925	44.9	73.7	38.6	62.9	128.9	79.1	62.9
June, 1926	39.1	73.7	38.0	61.9	126.6	79.5	60.6
December, 1926	39.7	72.0	38.1	68.4	123.9	79.0	60.5
June, 1927	35.4	69.8	37.7	58.3	121.7	80.6	58.3
December, 1927	35.3	68.6	37.1	59.9	121.9	80.8	58.1
June, 1928	31.1	68.8	35.9	56.9	120.8	81.9	56.6
December, 1928	35.0	69.0	33.9	59.6	118.8	87.0	59.1
June, 1929	33.9	68.2	32.7	55.8	117.9	83.8	57.2
December, 1929	35.1	67.7	28.3	56.1	117.2	84.5	57.2
June, 1930	25.2	66.0	27.0	54.2	113.7	84.7	53.1
December, 1930	17.7	61.4	19.6	56.2	110.1	83.8	48.3
June, 1931	1.5	58.0	15.8	50.7	98.5	83.8	40.7
<b>Seattle, Wash.:</b>							
December, 1915	1 <sup>2</sup> .8	1.2	1 <sup>2</sup> .4	1.2	8.5	11.0	11.0
December, 1916	8.5	11.3	5.4	2.9	27.4	7.4	7.4
December, 1917	38.7	36.4	1.6	23.9	52.3	31.1	31.1
December, 1918	72.5	88.0	44.3	51.8	141.5	58.5	69.9
June, 1919	69.3	110.2	51.5	51.8	154.4	71.4	76.9
December, 1919	80.9	154.5	71.5	63.8	201.0	86.8	97.7
June, 1920	102.3	173.9	74.8	65.8	221.2	90.4	110.5
December, 1920	54.1	160.5	76.7	78.7	216.4	95.5	94.1
May, 1921	27.1	128.7	74.8	78.7	177.2	105.5	80.2
December, 1921	30.5	88.7	69.2	69.0	149.9	102.6	71.5
June, 1922	30.0	73.0	64.7	64.0	137.3	97.6	67.0
December, 1922	33.9	74.2	63.1	59.6	136.1	96.4	66.7
June, 1923	31.0	76.7	62.3	58.0	143.9	96.6	66.4
December, 1923	35.8	77.6	62.9	59.1	144.2	96.6	68.5
June, 1924	33.1	76.2	64.0	56.8	140.7	94.6	66.7
December, 1924	35.8	74.4	63.7	59.6	141.1	96.4	67.8
June, 1925	43.7	74.6	64.7	57.8	141.6	96.4	70.5
December, 1925	47.3	74.8	63.7	58.1	142.1	97.0	71.7
June, 1926	42.3	74.8	62.6	49.4	139.4	97.0	69.4
December, 1926	41.6	73.1	60.3	61.2	137.5	97.6	69.1
June, 1927	43.0	71.9	59.0	59.3	136.8	98.4	69.4
December, 1927	37.9	69.5	56.9	59.8	134.7	98.2	66.9
June, 1928	36.9	68.8	55.5	57.1	133.5	97.4	65.8
December, 1928	40.8	68.3	54.1	62.9	132.6	97.4	67.1
June, 1929	43.7	66.6	52.4	62.1	131.7	98.8	67.7
December, 1929	45.9	66.6	52.1	65.8	132.6	98.8	68.7
June, 1930	38.1	64.6	50.1	65.5	132.4	98.6	65.4
December, 1930	22.5	59.7	47.8	64.0	128.0	97.6	58.4
June, 1931	12.2	55.7	44.4	54.0	114.5	96.6	52.3

<sup>1</sup> Decrease.

<sup>3</sup> The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.

TABLE 5.—CHANGES IN COST OF LIVING IN 19 CITIES, DECEMBER, 1914, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1914, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Washington, D. C.:</b>							
December, 1915.....	0.6	3.7	11.5	(?)	6.3	0.4	1.0
December, 1916.....	15.7	23.2	13.7	7.3	30.5	15.3	14.6
December, 1917.....	61.1	60.1	13.4	24.9	72.1	44.3	47.3
December, 1918.....	90.9	112.6	11.5	40.9	125.0	55.9	73.8
April, 1919.....	84.6	109.5	11.4	41.8	125.0	57.4	71.2
November, 1919.....	93.3	165.9	5.4	42.8	159.3	62.7	87.6
June, 1920.....	108.4	184.0	15.6	53.7	196.4	68.2	101.3
December, 1920.....	79.0	151.1	24.7	68.0	194.0	73.9	87.8
May, 1921.....	47.4	115.9	28.8	57.1	149.0	72.0	67.1
December, 1921.....	51.1	87.1	30.4	49.9	122.4	75.8	63.0
June, 1922.....	44.3	77.5	31.4	44.5	108.1	73.7	57.6
December, 1922.....	49.2	74.8	32.6	55.1	112.6	72.0	59.5
June, 1923.....	48.8	78.9	33.9	51.2	123.0	72.5	60.9
December, 1923.....	52.3	81.2	34.3	47.0	128.8	74.9	63.2
June, 1924.....	43.7	78.9	35.7	42.9	124.5	75.0	59.2
December, 1924.....	53.6	75.8	36.7	44.9	125.2	76.5	63.1
June, 1925.....	57.2	75.4	37.7	39.8	119.8	76.5	64.0
December, 1925.....	65.6	73.5	40.3	48.7	115.0	75.4	67.3
June, 1926.....	63.3	73.3	38.6	41.7	112.6	75.0	65.5
December, 1926.....	66.3	70.9	37.4	45.7	107.5	75.0	66.0
June, 1927.....	55.0	69.2	36.4	39.3	104.4	73.6	60.5
December, 1927.....	57.9	67.0	33.8	40.3	103.2	73.8	60.8
June, 1928.....	55.5	67.0	32.7	38.8	102.2	73.6	59.7
December, 1928.....	58.2	65.2	31.0	41.0	90.4	73.8	60.2
June, 1929.....	58.4	64.4	30.5	38.0	100.0	74.0	60.0
December, 1929.....	57.4	62.3	30.0	39.7	100.2	74.3	59.2
June, 1930.....	49.1	60.5	29.7	36.2	100.4	73.8	55.5
December, 1930.....	41.3	55.4	28.7	36.6	93.0	76.8	51.8
June, 1931.....	22.8	49.7	28.2	32.5	86.6	75.7	43.0

<sup>1</sup> Decrease.<sup>2</sup> No change.

Table 6 shows the changes in the cost of living from December, 1917, to June, 1931, for 13 cities. The table is constructed in the same manner as the preceding one and differs from it only in the base period and in the length of time covered.

TABLE 6.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO JUNE, 1931

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Atlanta, Ga.:</b>							
December, 1918.....	19.0	29.1	14.0	17.0	24.9	14.8	19.7
June, 1919.....	18.0	40.7	14.5	17.9	30.1	21.5	23.3
December, 1919.....	27.9	66.9	32.6	30.8	49.9	31.7	37.9
June, 1920.....	34.0	80.5	40.4	61.0	65.0	34.6	46.7
December, 1920.....	12.8	56.5	73.1	66.8	58.4	39.7	38.5
May, 1921.....	18.9	35.2	78.8	56.1	38.0	40.5	25.2
December, 1921.....	17.2	8.3	75.4	43.7	23.0	39.7	18.7
June, 1922.....	110.5	.4	68.1	39.1	15.2	34.5	13.7
December, 1922.....	18.9	2.8	62.7	57.6	17.4	34.1	15.1
June, 1923.....	110.3	5.9	61.4	42.7	23.9	32.8	14.2
December, 1923.....	16.3	6.9	62.2	39.3	23.5	33.3	16.0
June, 1924.....	110.2	5.7	60.1	32.0	20.4	33.8	13.6
December, 1924.....	15.5	4.9	56.9	33.1	20.4	33.7	14.9
June, 1925.....	11.2	4.5	55.5	26.2	19.9	34.9	16.2
December, 1925.....	6.5	4.3	49.3	34.7	18.8	35.6	19.0
June, 1926.....	4.5	3.9	44.4	36.6	17.4	34.0	17.3
December, 1926.....	4.3	2.9	42.1	46.0	15.5	33.9	17.4
June, 1927.....	4.1	2.1	41.5	31.7	14.6	33.9	16.2
December, 1927.....	1.3	.2	39.5	38.0	15.9	31.5	14.3
June, 1928.....	11.0	.2	38.9	31.8	15.2	35.6	13.9

<sup>1</sup> Decrease.

TABLE 6.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Atlanta, Ga.—Continued.</b>							
December, 1928.....	2.9	0.4	38.2	36.3	24.9	35.3	15.6
June, 1929.....	.3	.3	37.5	28.4	14.6	33.0	13.6
December, 1929.....	.1	1.6	35.9	31.6	14.1	34.2	13.5
June, 1930.....	17.9	12.8	32.8	11.6	11.2	31.8	7.9
December, 1930.....	13.1	16.4	30.8	11.6	8.0	30.5	4.5
June, 1931.....	24.2	18.5	28.3	3.6	1.7	28.2	1.7
<b>Birmingham, Ala.:</b>							
December, 1918.....	17.7	23.9	8.1	22.8	19.4	13.8	17.0
June, 1919.....	18.3	29.8	12.8	31.9	20.2	16.3	19.8
December, 1919.....	26.5	57.6	34.9	39.8	45.1	26.8	34.3
June, 1920.....	36.4	66.4	40.3	55.3	55.6	28.7	41.9
December, 1920.....	11.9	45.1	68.5	74.2	48.1	30.4	33.3
May, 1921.....	19.1	24.8	77.4	54.3	32.0	33.8	22.1
December, 1921.....	18.5	1.4	70.9	44.1	12.0	35.5	16.2
June, 1922.....	13.1	16.1	67.0	25.0	3.3	30.4	10.7
December, 1922.....	19.9	11.7	62.3	49.9	8.9	29.6	13.2
June, 1923.....	19.9	1.8	63.1	40.7	17.8	28.5	13.6
December, 1923.....	16.6	3.8	67.9	50.2	19.7	27.2	16.0
June, 1924.....	12.6	3.2	63.6	40.5	14.3	27.2	13.1
December, 1924.....	13.1	1.6	68.6	45.7	14.9	27.3	16.8
June, 1925.....	1.9	1.5	68.3	33.8	15.5	27.2	16.9
December, 1925.....	4.5	1.3	68.0	41.4	15.5	27.8	19.2
June, 1926.....	1.5	1.9	66.5	41.0	13.5	26.9	17.5
December, 1926.....	1.8	11.9	65.8	51.3	12.4	26.9	17.8
June, 1927.....	13.1	13.1	64.5	39.6	11.2	26.4	14.8
December, 1927.....	11.3	14.1	61.7	45.9	14.1	28.5	15.7
June, 1928.....	14.7	14.3	59.4	37.1	13.9	28.2	13.7
December, 1928.....	12.2	14.2	54.8	43.4	12.3	27.2	14.2
June, 1929.....	13.9	14.3	50.8	35.5	10.6	26.1	12.3
December, 1929.....	12.8	15.0	40.8	38.8	10.5	27.2	11.8
June, 1930.....	18.9	15.9	35.9	33.2	9.3	26.4	8.2
December, 1930.....	14.0	19.1	23.5	38.5	2.7	25.1	3.8
June, 1931.....	30.6	13.1	15.1	25.3	5.4	24.2	5.6
<b>Cincinnati, Ohio:</b>							
December, 1918.....	15.3	33.8	.2	10.0	25.7	20.4	17.3
June, 1919.....	18.1	48.5	.8	5.6	30.5	21.8	21.1
December, 1919.....	22.9	84.2	12.8	11.0	51.1	40.3	35.2
June, 1920.....	38.7	96.7	13.6	26.9	75.5	47.6	47.1
December, 1920.....	10.3	73.5	25.0	34.1	66.7	53.4	34.7
May, 1921.....	17.4	49.0	27.6	15.7	39.7	52.3	21.7
December, 1921.....	18.3	13.9	28.5	42.4	22.3	47.3	15.3
June, 1922.....	18.9	4.9	31.0	35.2	15.8	44.0	12.7
December, 1922.....	10.4	5.5	35.2	61.0	17.2	42.7	13.8
June, 1923.....	19.3	8.8	40.7	51.9	24.3	42.8	15.5
December, 1923.....	16.7	9.2	45.6	53.0	26.2	43.3	17.7
June, 1924.....	10.2	6.4	49.3	39.3	23.2	46.9	16.3
December, 1924.....	8.3	1.5	50.1	44.5	23.2	52.3	17.6
June, 1925.....	1.9	1.2	51.2	61.1	23.4	55.0	22.1
December, 1925.....	3.9	11.1	51.8	70.4	21.3	49.9	23.0
June, 1926.....	2.7	11.2	54.8	62.2	17.7	50.5	22.6
December, 1926.....	3.1	11.7	55.9	83.6	16.9	50.5	23.8
June, 1927.....	3.9	12.3	56.8	66.7	16.1	50.0	23.3
December, 1927.....	1.0	13.9	57.9	66.9	16.6	50.0	21.3
June, 1928.....	1.5	13.9	57.1	61.1	15.4	49.7	21.0
December, 1928.....	.4	15.5	57.1	61.6	14.7	49.6	21.2
June, 1929.....	2.5	15.8	56.9	60.8	13.6	49.7	21.8
December, 1929.....	4.5	16.4	56.7	70.9	13.1	51.2	23.1
June, 1930.....	11.2	17.1	54.5	63.6	11.6	51.5	20.1
December, 1930.....	18.0	18.7	52.8	69.7	8.7	49.4	16.6
June, 1931.....	20.4	17.5	49.3	59.2	1.4	51.5	9.1
<b>Denver, Colo.:</b>							
December, 1918.....	20.0	40.1	12.8	8.1	22.6	14.8	20.7
June, 1919.....	20.7	53.2	21.8	8.4	31.3	17.7	25.3
December, 1919.....	26.0	82.1	33.5	19.6	46.3	32.3	38.2
June, 1920.....	41.5	96.8	51.9	22.3	60.2	35.4	50.3
December, 1920.....	7.9	78.3	69.8	47.1	58.9	38.8	38.7
May, 1921.....	13.1	53.9	76.9	37.5	42.5	42.8	26.9
December, 1921.....	18.8	27.7	82.6	39.7	27.9	43.1	24.5
June, 1922.....	14.2	15.3	84.8	32.8	20.4	38.1	18.8
December, 1922.....	19.0	16.6	86.9	40.7	21.2	37.6	21.6
June, 1923.....	11.5	16.9	85.4	30.4	26.1	37.1	19.9
December, 1923.....	8.7	17.9	88.9	37.2	27.0	36.8	22.1
June, 1924.....	13.5	16.1	84.4	19.7	23.8	35.1	17.8
December, 1924.....	7.8	15.1	84.0	25.4	24.2	35.6	20.2

<sup>1</sup> Decrease.

<sup>2</sup> The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.



TABLE 6.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Denver, Colo.—Continued.</b>							
June, 1925.....	1 5.3	14.5	82.5	27.0	24.8	35.6	21.1
December, 1925.....	1 1.3	13.1	78.5	37.4	25.2	35.6	22.5
June, 1926.....	1 3.8	12.4	71.9	25.3	24.2	35.1	19.7
December, 1926.....	1 3.0	11.8	65.5	38.1	23.5	36.6	20.4
June, 1927.....	1 2.8	10.1	61.2	20.8	22.9	36.1	18.4
December, 1927.....	1 6.9	8.9	58.3	32.9	21.2	34.2	16.6
June, 1928.....	1 8.6	8.4	55.8	26.9	20.5	33.4	14.9
December, 1928.....	1 6.3	8.2	54.1	39.3	19.8	33.8	16.3
June, 1929.....	1 7.4	8.0	52.3	1 19.0	17.4	38.8	15.6
December, 1929.....	1 6.8	7.9	51.1	29.2	16.0	38.7	16.1
June, 1930.....	1 11.9	7.0	49.4	22.6	15.3	38.0	13.0
December, 1930.....	1 19.9	5.5	47.8	27.4	12.4	37.6	9.7
June, 1931.....	1 28.7	2.3	43.1	7.9	8.1	36.9	3.8
<b>Indianapolis, Ind.:</b>							
December, 1918.....	17.8	32.4	1.6	19.8	18.9	21.9	19.1
June, 1919.....	16.4	40.1	2.6	16.7	24.8	26.8	21.1
December, 1919.....	28.2	73.8	11.6	27.3	48.4	38.2	36.5
June, 1920.....	49.0	87.9	18.9	45.6	67.5	50.4	50.2
December, 1920.....	11.0	72.3	32.9	60.3	63.0	47.5	37.6
May, 1921.....	1 10.1	45.8	37.4	49.4	35.3	47.4	23.9
December, 1921.....	1 8.4	16.2	43.8	42.5	22.5	46.2	19.3
June, 1922.....	1 9.9	7.9	41.3	44.9	13.7	45.4	16.4
December, 1922.....	1 11.1	8.6	44.1	73.4	16.7	46.7	18.8
June, 1923.....	1 8.0	11.6	44.6	54.9	23.2	46.1	19.4
December, 1923.....	1 6.5	13.4	47.1	41.5	24.0	49.2	20.6
June, 1924.....	1 10.0	11.9	46.5	38.2	21.4	51.5	19.3
December, 1924.....	1 4.9	10.4	46.7	41.5	21.5	53.3	21.4
June, 1925.....	1 2.3	9.8	44.1	33.9	20.6	53.8	21.5
December, 1925.....	4.4	7.5	41.7	44.9	21.8	54.1	24.2
June, 1926.....	2.6	7.4	38.3	33.9	20.6	51.6	21.9
December, 1926.....	2.9	5.4	36.5	47.8	19.9	51.8	22.3
June, 1927.....	3.5	5.9	34.6	34.6	18.0	52.3	21.4
December, 1927.....	1 1.5	4.3	33.4	34.2	17.5	52.6	19.2
June, 1928.....	1 1.8	4.3	31.3	29.2	13.7	52.3	18.2
December, 1928.....	1 1.3	3.2	30.4	32.3	12.6	52.0	18.5
June, 1929.....	1 1.8	3.0	28.4	26.1	12.7	52.3	17.7
December, 1929.....	2.0	2.4	27.9	31.0	11.7	52.0	18.8
June, 1930.....	1 2.7	1.2	25.9	24.8	9.0	51.8	16.1
December, 1930.....	1 14.2	1 1.6	23.9	30.2	5.6	50.4	10.8
June, 1931.....	1 26.5	1 10.4	16.8	23.8	1 4.7	49.5	2.9
<b>Kansas City, Mo.:</b>							
December, 1918.....	17.3	40.7	5.4	18.0	31.1	15.6	19.6
June, 1919.....	15.1	44.7	6.7	9.6	37.9	20.8	20.6
December, 1919.....	24.5	89.9	26.0	27.5	61.8	31.5	38.2
June, 1920.....	44.9	104.5	29.4	35.2	73.0	37.1	51.0
December, 1920.....	10.2	76.3	63.9	55.1	08.7	40.3	39.5
May, 1921.....	1 8.3	52.3	65.0	43.3	50.0	40.4	27.3
December, 1921.....	1 6.6	24.1	69.7	42.6	26.2	37.6	22.5
June, 1922.....	1 13.5	15.9	59.4	36.3	11.6	32.3	15.0
December, 1922.....	1 12.0	14.6	61.4	40.2	12.1	33.3	16.2
June, 1923.....	1 12.5	14.5	53.7	36.1	22.5	33.8	15.3
December, 1923.....	1 10.2	15.2	56.8	36.7	22.6	36.2	17.2
June, 1924.....	1 12.7	13.3	49.5	34.5	16.8	35.3	14.3
December, 1924.....	1 7.7	12.0	46.2	32.9	16.1	34.3	15.3
June, 1925.....	1 3.9	11.4	40.6	32.8	15.6	36.4	16.3
December, 1925.....	2.0	9.2	39.5	32.3	14.1	36.3	18.0
June, 1926.....	.5	8.7	35.9	29.4	12.8	36.3	16.6
December, 1926.....	1 1.7	6.3	34.1	33.5	10.8	36.3	15.2
June, 1927.....	1 2.2	5.4	29.1	29.8	8.6	36.6	14.0
December, 1927.....	1 6.8	3.7	28.3	29.0	7.7	36.5	11.9
June, 1928.....	1 5.4	2.7	24.8	28.7	6.8	35.0	11.2
December, 1928.....	1 6.0	2.9	23.8	26.8	5.6	37.8	11.3
June, 1929.....	1 5.3	2.4	21.1	26.3	5.1	37.0	11.0
December, 1929.....	1 2.2	1.8	20.1	23.9	3.4	36.9	11.7
June, 1930.....	1 8.6	1.5	19.4	24.0	2.1	36.9	9.0
December, 1930.....	1 15.8	1.0	19.8	22.0	1 1.1	44.3	7.7
June, 1931.....	1 24.9	1 1.7	17.4	19.7	1 6.2	44.0	2.9

<sup>1</sup> Decrease.

<sup>2</sup> The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.

TABLE 6.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>Memphis, Tenn.:</b>							
December, 1918.....	20.3	27.7	( <sup>3</sup> )	26.8	25.4	16.1	18.3
June, 1919.....	22.7	38.3	8.2	23.4	30.7	20.9	23.3
December, 1919.....	28.4	65.2	23.1	34.1	53.2	28.3	35.2
June, 1920.....	38.8	77.5	35.9	49.7	67.1	38.8	46.4
December, 1920.....	7.0	59.0	66.2	105.4	53.9	43.2	39.3
May, 1921.....	114.2	36.1	79.7	64.5	29.9	42.9	26.7
December, 1921.....	111.2	15.3	77.3	67.1	14.7	42.3	23.2
June, 1922.....	115.1	7.3	74.8	56.3	6.8	37.8	18.2
December, 1922.....	114.9	6.7	72.5	68.5	12.2	37.4	18.6
June, 1923.....	113.9	9.8	72.3	62.8	23.2	38.1	19.9
December, 1923.....	111.2	11.0	72.5	65.0	23.4	37.3	21.0
June, 1924.....	117.1	9.5	72.4	66.2	18.6	36.3	18.2
December, 1924.....	119.2	6.4	68.6	66.2	20.1	37.4	20.4
June, 1925.....	117.1	5.9	66.4	53.7	20.1	38.5	20.5
December, 1925.....	112.0	4.7	60.4	71.4	20.1	37.8	22.0
June, 1926.....	144.1	4.0	57.0	63.3	18.2	36.7	19.9
December, 1926.....	115.7	3.9	53.9	80.1	17.1	37.7	19.9
June, 1927.....	117.2	1.9	50.2	79.4	16.0	36.6	18.1
December, 1927.....	118.0	1.6	47.3	76.0	16.0	36.6	17.3
June, 1928.....	148.1	1.5	46.3	60.0	16.0	36.9	16.4
December, 1928.....	144.9	1.2	43.7	68.8	14.8	37.7	17.5
June, 1929.....	165.0	1.1	42.6	63.6	13.8	38.5	16.8
December, 1929.....	155.1	1.1	40.6	55.3	13.9	38.6	16.5
June, 1930.....	110.6	1.6	39.6	58.9	13.3	39.6	14.7
December, 1930.....	119.2	1.4	35.8	57.9	10.7	38.8	10.4
June, 1931.....	131.3	14.8	29.8	48.3	6.2	35.5	3.4
<b>Minneapolis, Minn.:</b>							
December, 1918.....	17.7	33.5	1.1	14.7	18.1	12.3	15.8
June, 1919.....	21.4	40.1	12.0	13.4	23.6	15.9	18.8
December, 1919.....	34.1	67.0	8.0	22.4	45.6	25.4	32.7
June, 1920.....	50.0	76.7	10.7	36.9	65.5	31.3	43.4
December, 1920.....	13.0	63.6	36.8	60.3	65.8	37.6	35.7
May, 1921.....	17.9	41.0	39.0	52.8	43.3	37.9	23.7
December, 1921.....	16.9	14.3	46.7	50.2	27.9	37.4	20.7
June, 1922.....	16.0	7.9	44.6	43.7	21.4	32.6	17.3
December, 1922.....	15.3	6.5	46.8	47.0	22.5	32.6	18.0
June, 1923.....	16.4	9.2	42.5	44.9	29.7	32.8	17.4
December, 1923.....	14.7	9.3	47.4	45.6	28.2	32.0	18.8
June, 1924.....	17.9	7.4	44.7	42.2	22.8	31.3	16.2
December, 1924.....	14.3	5.6	44.9	43.2	23.3	31.2	17.3
June, 1925.....	14.8	4.9	40.7	40.9	23.2	31.1	17.6
December, 1925.....	6.9	4.4	41.0	42.6	22.1	30.6	20.3
June, 1926.....	5.8	3.4	36.8	45.9	19.9	32.8	19.6
December, 1926.....	2.3	2.5	36.1	46.6	17.0	33.5	18.2
June, 1927.....	4.1	1.1	30.2	44.3	15.1	32.6	17.2
December, 1927.....	( <sup>3</sup> )	11.4	29.9	45.6	14.9	33.0	15.4
June, 1928.....	1.6	11.1	27.2	45.2	12.3	34.6	15.8
December, 1928.....	.7	11.5	27.5	44.6	10.5	34.5	15.2
June, 1929.....	1.8	11.8	25.6	41.9	10.5	36.7	15.4
December, 1929.....	3.9	12.8	25.2	44.3	10.9	36.6	16.2
June, 1930.....	11.0	13.5	23.6	46.2	10.6	36.3	14.1
December, 1930.....	19.4	14.4	23.5	39.9	7.8	37.0	10.6
June, 1931.....	121.2	18.8	21.4	41.6	3.7	35.4	5.0
<b>New Orleans, La.:</b>							
December, 1918.....	16.6	36.8	( <sup>3</sup> )	19.7	23.8	15.9	17.9
June, 1919.....	17.4	48.8	.1	20.8	30.0	17.5	20.7
December, 1919.....	21.1	83.2	10.8	24.7	57.7	35.1	33.9
June, 1920.....	28.6	94.9	12.9	36.3	75.9	42.8	41.9
December, 1920.....	10.7	69.4	39.7	41.5	63.9	57.1	36.7
May, 1921.....	110.7	45.0	46.7	29.2	47.7	58.2	23.8
December, 1921.....	19.3	24.9	57.9	40.4	28.5	60.2	22.7
June, 1922.....	112.8	15.6	58.5	33.4	17.9	58.6	18.9
December, 1922.....	110.5	16.2	54.7	38.5	26.2	51.9	18.6
June, 1923.....	113.2	17.8	55.5	32.9	34.8	50.1	17.7
December, 1923.....	18.7	19.5	57.4	37.1	33.6	50.3	20.2
June, 1924.....	114.6	18.6	57.1	32.9	29.2	48.7	16.8
December, 1924.....	15.7	17.2	57.2	36.2	30.0	48.7	20.6
June, 1925.....	15.7	17.0	57.0	33.7	27.0	48.3	20.2
December, 1925.....	.9	15.9	56.8	34.2	27.5	47.9	22.7
June, 1926.....	15.2	15.7	57.0	39.6	26.6	46.7	20.1
December, 1926.....	11.6	15.6	56.2	43.8	25.0	47.4	21.7
June, 1927.....	13.9	13.4	56.0	38.5	21.8	48.6	20.3
December, 1927.....	14.9	13.4	56.2	38.5	21.8	48.5	19.9
June, 1928.....	16.8	13.1	55.9	34.5	17.9	46.1	13.2

1 Decrease.

2 The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.

3 No change.

TABLE 6.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>New Orleans, La.—Continued.</b>							
December, 1928.....	13.2	13.1	54.8	28.4	17.9	46.8	19.5
June, 1929.....	14.3	12.6	53.6	<sup>2</sup> 14.9	15.9	45.9	17.8
December, 1929.....	11.8	12.6	51.3	18.1	15.7	45.8	18.8
June, 1930.....	19.8	12.0	49.2	12.4	14.8	46.5	14.8
December, 1930.....	<sup>1</sup> 15.0	1	45.3	14.4	10.2	46.5	10.2
June, 1931.....	<sup>1</sup> 30.3	12.7	43.0	16.5	5.9	43.1	1.2
<b>Pittsburgh, Pa.:</b>							
December, 1918.....	18.8	35.9	7.6	9.2	26.3	16.3	19.8
June, 1919.....	10.2	45.3	13.5	9.4	34.1	16.7	21.8
December, 1919.....	25.1	82.8	15.5	9.8	63.1	28.3	36.2
June, 1920.....	36.5	91.3	34.9	31.7	77.4	41.2	49.1
December, 1920.....	14.3	75.4	35.0	64.4	78.1	46.3	39.3
May, 1921.....	18.8	50.7	55.5	59.8	58.2	48.6	27.7
December, 1921.....	15.6	23.6	55.3	66.2	31.6	48.0	22.8
June, 1922.....	<sup>1</sup> 12.2	17.3	56.7	66.0	20.1	43.4	17.8
December, 1922.....	15.4	13.1	56.7	72.8	25.1	42.8	20.1
June, 1923.....	15.4	14.8	60.4	68.4	29.4	44.1	21.3
December, 1923.....	12.1	14.9	60.7	76.9	29.0	43.1	22.9
June, 1924.....	17.5	13.7	71.8	74.8	29.0	45.3	22.4
December, 1924.....	12.4	11.2	72.1	92.2	29.8	46.6	24.9
June, 1925.....	1.2	11.1	75.2	91.2	27.7	46.7	26.0
December, 1925.....	6.2	10.5	75.2	89.9	28.0	46.8	28.5
June, 1926.....	2.6	7.8	75.4	88.0	25.3	46.1	26.2
December, 1926.....	5.6	5.5	75.0	91.9	24.3	46.4	27.2
June, 1927.....	2.2	5.2	74.7	88.8	22.6	46.3	25.4
December, 1927.....	1.4	3.8	74.4	88.0	21.9	46.2	24.8
June, 1928.....	13.8	4.2	72.8	85.6	15.9	46.9	22.3
December, 1928.....	2.1	3.5	71.6	86.0	16.4	46.9	24.4
June, 1929.....	.6	2.9	68.3	85.6	15.1	48.1	23.2
December, 1929.....	1.2	2.1	67.1	86.0	14.6	47.5	23.2
June, 1930.....	15.6	1.5	64.9	85.1	13.5	47.9	19.9
December, 1930.....	<sup>1</sup> 13.4	13.9	63.7	84.4	6.6	47.5	15.2
June, 1931.....	<sup>1</sup> 24.2	19.4	56.8	83.1	.4	46.9	8.4
<b>Richmond, Va.:</b>							
December, 1918.....	20.5	33.8	1.0	11.8	26.3	9.0	17.9
June, 1919.....	20.6	42.3	3.6	11.4	28.6	13.5	20.6
December, 1919.....	23.1	78.6	9.8	18.7	55.9	24.0	32.0
June, 1920.....	36.1	93.6	12.5	36.1	75.4	32.4	43.8
December, 1920.....	11.9	69.0	25.9	62.2	70.0	36.0	33.3
May, 1921.....	17.4	43.8	29.4	47.1	48.8	38.7	20.2
December, 1921.....	17.3	21.2	34.1	46.8	33.0	38.4	18.3
June, 1922.....	16.3	12.9	34.5	33.4	27.6	34.7	13.2
December, 1922.....	17.2	10.6	35.3	54.2	29.4	33.5	14.4
June, 1923.....	14.2	12.5	35.7	52.7	40.0	33.9	14.9
December, 1923.....	<sup>1</sup> 11.3	11.9	39.5	49.1	40.5	35.4	17.1
June, 1924.....	13.3	8.9	41.3	47.9	37.8	35.8	13.5
December, 1924.....	12.4	8.6	41.4	44.2	38.2	36.0	16.7
June, 1926.....	4.8	8.4	40.4	53.6	39.2	39.1	20.8
December, 1926.....	1.6	8.1	39.6	51.0	38.1	40.8	19.7
June, 1927.....	11.2	7.0	36.0	61.4	36.7	40.8	19.3
December, 1927.....	12.9	5.8	34.0	51.9	35.6	40.9	17.4
June, 1928.....	13.8	5.3	31.1	54.2	35.3	40.9	16.4
December, 1928.....	13.1	5.0	30.6	43.9	33.8	41.0	15.3
June, 1929.....	15.0	4.2	28.9	47.5	32.7	40.9	15.7
December, 1929.....	13.4	4.2	27.0	42.0	32.4	40.2	14.2
June, 1930.....	18.0	3.3	26.5	38.5	30.0	40.4	12.5
December, 1930.....	<sup>1</sup> 14.9	2.0	25.5	42.0	26.6	41.0	9.3
June, 1931.....	27.2	12.4	24.4	33.1	18.6	40.6	2.4
<b>St. Louis, Mo.:</b>							
December, 1918.....	18.0	32.4	2.7	4.8	21.8	14.5	16.7
June, 1919.....	16.1	39.3	3.8	3.7	32.5	15.7	17.9
December, 1919.....	26.2	78.1	16.8	8.2	52.9	30.3	34.2
June, 1920.....	46.2	89.7	29.8	19.6	73.1	37.6	48.9
December, 1920.....	8.8	70.0	42.4	42.6	70.2	43.2	35.4
May, 1921.....	<sup>1</sup> 10.1	43.8	52.5	30.9	43.5	42.1	23.1
December, 1921.....	<sup>1</sup> 11.6	17.2	63.8	33.4	19.2	40.6	18.5
June, 1922.....	<sup>1</sup> 12.1	7.9	65.7	32.3	12.8	33.2	15.1
December, 1922.....	19.5	6.3	68.0	48.9	14.9	33.4	17.0
June, 1923.....	<sup>1</sup> 11.5	9.0	74.6	30.8	29.8	33.4	17.7
December, 1923.....	17.5	9.6	79.5	32.1	30.5	35.8	20.6

<sup>1</sup> Decrease.<sup>2</sup> The decrease is due primarily to the change in consumption and price accompanying the change from manufactured to natural gas.

TABLE 6.—CHANGES IN COST OF LIVING IN 13 CITIES, DECEMBER, 1917, TO JUNE, 1931—Continued

City and date	Per cent of increase over December, 1917, in expenditure for—						
	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous	All items
<b>St. Louis, Mo.—Continued.</b>							
June, 1924	<sup>1</sup> 11.4	8.6	83.4	21.6	26.2	35.7	18.8
December, 1924	<sup>1</sup> 6.5	7.9	83.4	24.6	27.4	35.8	20.7
June, 1925	<sup>1</sup> 2.5	7.4	85.2	19.5	28.0	36.6	22.4
December, 1925	3.4	6.9	85.4	26.9	27.9	37.0	25.0
June, 1926	2.8	6.8	84.7	18.3	27.1	36.6	24.1
December, 1926	2.0	7.0	83.2	38.9	22.7	36.6	24.5
June, 1927	1.2	4.4	81.0	34.0	22.3	36.5	23.2
December, 1927	<sup>1</sup> 2.3	3.4	78.3	34.3	23.3	36.9	21.4
June, 1928	<sup>1</sup> 3.5	3.1	76.3	18.9	21.6	37.2	19.9
December, 1928	<sup>1</sup> 2.2	2.5	74.2	23.1	19.5	38.7	20.4
June, 1929	1.4	1.7	71.8	22.5	17.8	38.4	20.5
December, 1929	1.5	.8	69.2	33.4	16.2	44.2	21.7
June, 1930	1 6.7	( <sup>2</sup> )	66.0	21.8	16.9	44.6	18.3
December, 1930	<sup>1</sup> 14.9	<sup>1</sup> 1.4	59.5	29.1	15.4	42.1	13.9
June, 1931	<sup>1</sup> 24.9	<sup>1</sup> 10.7	53.0	12.4	5.9	41.5	6.2
<b>Scranton, Pa.:</b>							
December, 1918	21.3	34.4	.5	24.7	27.0	21.4	21.9
June, 1919	18.1	49.6	6.2	25.7	35.6	24.9	25.0
December, 1919	26.9	82.1	2.4	31.5	48.9	34.7	37.1
June, 1920	41.4	97.7	17.2	43.5	62.8	47.9	51.5
December, 1920	17.8	76.5	18.5	67.3	62.0	50.4	39.1
May, 1921	<sup>1</sup> 4.0	54.3	41.5	62.8	48.6	54.6	28.2
December, 1921	4.1	29.1	44.6	67.1	30.7	52.4	26.3
June, 1922	<sup>1</sup> 6.7	24.2	52.8	68.0	24.2	49.9	20.9
December, 1922	<sup>1</sup> 2.1	20.7	53.6	68.6	28.5	49.3	22.4
June, 1923	<sup>1</sup> 5.1	21.7	59.0	65.2	34.7	51.4	22.4
December, 1923	.2	23.2	60.8	75.3	34.9	51.7	25.8
June, 1924	<sup>1</sup> 8.7	22.2	67.6	68.9	31.6	53.7	22.4
December, 1924	<sup>1</sup> 1.6	21.1	68.6	75.7	34.6	53.7	25.8
June, 1925	1.4	20.3	71.0	70.3	33.9	54.8	27.0
December, 1925	9.6	20.2	70.5	99.8	33.9	55.4	32.0
June, 1926	4.7	19.5	71.4	77.8	34.4	55.9	29.0
December, 1926	6.7	18.3	72.4	78.5	33.7	55.9	29.8
June, 1927	4.2	17.2	73.1	71.4	32.4	55.7	28.2
December, 1927	5.0	16.3	73.4	75.3	32.1	55.9	28.5
June, 1928	2.4	16.2	71.7	69.0	30.1	56.2	26.9
December, 1928	4.3	15.3	71.7	72.2	29.3	57.8	27.8
June, 1929	2.9	15.2	68.1	65.0	26.5	57.5	26.3
December, 1929	6.5	13.7	63.9	67.6	26.0	57.3	27.3
June, 1930	1.8	13.5	60.5	80.2	26.0	57.3	23.5
December, 1930	18.1	10.7	59.1	66.1	22.9	56.8	19.5
June, 1931	<sup>1</sup> 20.3	3.9	53.2	61.3	18.2	55.2	11.8

<sup>1</sup> Decrease.

<sup>2</sup> No change.

Cost of Living in the United States and in Foreign Countries <sup>1</sup>

THE trend of cost of living in the United States and in various foreign countries since 1913 is shown by the index numbers in the following tables. Table 1 contains general cost of living index numbers, while Tables 2, 3, 4, and 5, show changes in the cost of food, clothing, fuel and light, and rent, respectively.

Caution should be observed in the use of these figures, since not only are there differences in the base periods and in the number and kind of articles included, and the number of markets represented, but also there are radical differences of method in the construction of the index numbers. The number of countries included in the five tables varies according to the information available. Several countries publish a general index and an index number for food only, while others omit clothing and in some instances also rent.

<sup>1</sup> Preceding articles on this subject appeared in the Labor Review for December, 1922, July, 1923, January and July, 1924, January and July, 1925, January, 1926, February, 1927, August, 1928, February and August, 1929, February and August, 1930, and February, 1931.

TABLE 1.—INDEX NUMBERS OF COST OF LIVING IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931

Country	United States	Canada	Belgium	Czecho-slovakia	Denmark	Finland	France	Germany	Ireland	Italy
Number of localities	32	60	59	Prague	200	21	Paris	71	200	Milan
Commodities included	Food, clothing, fuel and light, rent, house-furnishings, etc.	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, taxes, etc.	Food, clothing, fuel, rent, taxes, etc.	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries
Computing agency	Bureau of Labor Statistics	Department of Labor	Ministry of Labor and Industry	Office of Statistics	Department of Statistics	Central Statistical Office	Commission for Study of Cost of Living	Federal Statistical Bureau	Department of Industry and Commerce	Municipal Administration
Base period	1913	1913	1921	July, 1914	July, 1914	January-June, 1914	January-June, 1914	1913-14	July, 1914	January-June, 1914
1913	100	100								
1914	<sup>1</sup> 103	<sup>1</sup> 103		<sup>2</sup> 100	<sup>2</sup> 100	<sup>3</sup> 100	<sup>3</sup> 100	<sup>4</sup> 100	<sup>2</sup> 100	<sup>3</sup> 100
1915	<sup>1</sup> 105	<sup>1</sup> 107			<sup>2</sup> 116					114
1916	<sup>1</sup> 118	<sup>1</sup> 124			<sup>2</sup> 136					146
1917	<sup>1</sup> 142	<sup>1</sup> 143			<sup>2</sup> 155					197
1918	<sup>1</sup> 174	<sup>1</sup> 162			<sup>2</sup> 182					285
1919	<sup>1</sup> 199	<sup>1</sup> 176			<sup>2</sup> 211		<sup>5</sup> 238			327
1920	<sup>1</sup> 200	<sup>1</sup> 190			<sup>2</sup> 262		<sup>5</sup> 341			442
1921	<sup>1</sup> 174	<sup>1</sup> 161	100		<sup>2</sup> 237	<sup>1</sup> 1172	<sup>5</sup> 307			541
1922	<sup>1</sup> 170	<sup>1</sup> 157	<sup>2</sup> 90		<sup>2</sup> 199	<sup>1</sup> 1157	<sup>5</sup> 302		<sup>2</sup> 185	501
1923	<sup>1</sup> 173	<sup>1</sup> 159	<sup>2</sup> 109	690	<sup>2</sup> 204	1147	<sup>5</sup> 334	<sup>1</sup> 142	<sup>2</sup> 180	494
1924			<sup>2</sup> 125	692	<sup>2</sup> 214	1170			<sup>2</sup> 183	527
Dec.	173	156	137	707	1217	1217	<sup>5</sup> 377	135		573
1925			<sup>2</sup> 133	721	<sup>2</sup> 219	1212			<sup>2</sup> 188	611
Dec.	178	160	143	703	1197	1197	<sup>5</sup> 421	141		649
1926			<sup>2</sup> 174	710	<sup>2</sup> 184	1183				654
Dec.	176	157	199	735	1197	1197	<sup>5</sup> 545	144	<sup>2</sup> 182	657
1927			<sup>2</sup> 204	739	<sup>2</sup> 176	1207				
Dec.	172	157	207	734		1243	<sup>5</sup> 498	151	<sup>2</sup> 171	531
1928:										
Mar.		156	203	730		1214	<sup>5</sup> 507	151		531
June	170	155	204	734		1219	<sup>5</sup> 519	151		530
Sept.		157	209	749		1249	<sup>5</sup> 519	152		526
Dec.	171	158	216	725		1260	<sup>5</sup> 531	153		538
1929:										
Mar.		157	216	736		1229	<sup>5</sup> 547	157		561
June	170	156	213	726		1215	<sup>5</sup> 556	153		544
Sept.		159	225	717		1230	<sup>5</sup> 555	154		540
Dec.	171	160	228	<sup>7</sup> 105		1207	<sup>5</sup> 565	153		549
1930:										
Jan.		160	226	<sup>7</sup> 106	170	1181		152	179	549
Feb.		160	238	<sup>7</sup> 106		1165		150		543
Mar.		159	232	<sup>7</sup> 104		1154	<sup>5</sup> 565	149		538
Apr.		157	226	<sup>7</sup> 103	167	1134		147	168	534
May		157	224	<sup>7</sup> 103		1115		147		529
June	167	157	224	<sup>7</sup> 105		1108	<sup>5</sup> 572	148		531
July		156	227	<sup>7</sup> 106	165	1128		149	168	531
Aug.		155	229	<sup>7</sup> 105		1144		149		527
Sept.		152	230	<sup>7</sup> 103		1130	<sup>5</sup> 592	147		522
Oct.		152	229	<sup>7</sup> 102	162	1109		145	168	525
Nov.		152	228	<sup>7</sup> 101		1101		144		523
Dec.	161		223			1083	<sup>5</sup> 597	142		508
1931:										
Jan.		150	219	<sup>7</sup> 99	159	1071		140	166	488
Feb.		146	212	<sup>7</sup> 98		1061		139		494
Mar.		145	209	<sup>7</sup> 98		1057	<sup>5</sup> 590	138		496
Apr.		142			157	1050		137		496
May		141								489
June	150									

<sup>1</sup> December.<sup>2</sup> July.<sup>3</sup> January-June.<sup>4</sup> October, 1913; January, April, and June, 1914.<sup>5</sup> April-June.<sup>6</sup> Quarter ending with month.<sup>7</sup> In gold.



TABLE 1.—INDEX NUMBERS OF COST OF LIVING IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913, TO JUNE, 1931—Continued

Country	Netherlands	Norway	Poland	Sweden	Switzerland	United Kingdom	South Africa	India	Australia	New Zealand
Number of localities.	Amsterdam	30	Warsaw	49	33	630	9	Bombay	30	25
Commodities included.	All commodities	Food, clothing, fuel, light, rent, sundries	Food, clothing, fuel, light, rent, sundries	Food, clothing, fuel, light, rent, sundries	Food, clothing, fuel, light, rent, sundries	Food, clothing, fuel, light, rent, sundries	Food, fuel light, rent, sundries	Food, clothing, fuel, light, rent	Food, groceries, rent	Food, clothing, fuel, light, rent, sundries
Computing agency.	Bureau of Statistics	Central Statistical Office	Central Statistical Office	Board of Social Welfare	Federal Labor Office	Ministry of Labor	Office of Census and Statistics	Labor Office	Bureau of Census and Statistics	Census and Statistics Office
Base period.	1911-1913	July, 1914	January, 1914	July, 1914	June, 1914	July, 1914	1914	July, 1914	1911	July, 1914
1913.									108	
1914.		<sup>8</sup> 100	100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100	100	<sup>2</sup> 100	111	<sup>2</sup> 100
1915.		<sup>8</sup> 117				<sup>2</sup> 125	105		126	107
1916.		<sup>8</sup> 146		<sup>1</sup> 139		<sup>2</sup> 148	112		130	116
1917.	<sup>2</sup> 142	<sup>8</sup> 190		<sup>9</sup> 166		<sup>2</sup> 180	122		129	129
1918.	<sup>1</sup> 117	<sup>8</sup> 253		<sup>2</sup> 219	204	<sup>2</sup> 203	131	154	134	143
1919.	<sup>1</sup> 205	<sup>8</sup> 275		<sup>2</sup> 257	222	<sup>2</sup> 208	145	175	148	157
1920.	<sup>1</sup> 222	<sup>8</sup> 302		<sup>2</sup> 270	224	<sup>2</sup> 252	179	183	175	178
1921.	<sup>1</sup> 190	<sup>8</sup> 302		<sup>2</sup> 236	200	<sup>2</sup> 219	162	173	167	177
1922.	<sup>1</sup> 176	<sup>8</sup> 255		<sup>2</sup> 190	164	<sup>2</sup> 184	135	164	157	160
1923.	<sup>1</sup> 178	<sup>8</sup> 239		<sup>2</sup> 174	164	<sup>2</sup> 169	131	154	168	158
1924.				<sup>2</sup> 171	169	<sup>2</sup> 170	133	157	166	160
Dec.	181	267				181	133	160	<sup>6</sup> 165	
1925.				<sup>2</sup> 176	168	<sup>2</sup> 173	133	155	170	162
Dec.	177	236			167	177	131	155	<sup>6</sup> 172	164
1926.				<sup>2</sup> 172	162	<sup>2</sup> 170			176	163
Dec.	168	216	115		161	179	129	156	<sup>6</sup> 174	163
1927.				<sup>2</sup> 169	160	<sup>2</sup> 166			174	162
Dec.	170	197	121		162	169	132	151	<sup>6</sup> 177	161
1928:										
Mar.	169	196	119		160	164	132	145	<sup>6</sup> 175	
June.	170	195	122		161	165	132	146	<sup>6</sup> 175	
Sept.	169	187	122		161	165	131	145	<sup>6</sup> 173	
Dec.	168	184	125		162	168	131	148	<sup>6</sup> 173	
1929:										
Mar.	169	182	125		161	166	132	149	<sup>6</sup> 180	
June.	169	181	123		161	160	132	147	<sup>6</sup> 180	
Sept.	167	182	123		163	164	131	149	<sup>6</sup> 180	
Dec.	167	180	126		162	167	129	150	<sup>6</sup> 180	
1930:										
Jan.		179	121	167	161	166	129	147		
Feb.		179	118		160	164	129	145	<sup>6</sup> 173	169
Mar.	163	177	117		159	161	129	142		
Apr.		177	117	165	158	157	129	141		
May.		176	116		158	155	129	141	<sup>6</sup> 171	158
June.	162	177	116		158	154	129	141		
July.		176	119	164	159	155	128	140		
Aug.		177	117		159	157	128	137	165	157
Sept.	162	176	117		159	157	126	137		
Oct.		175	117	163	158	156	126	132		
Nov.		175	119		157	157	126	128	157	155
Dec.	157	173	118		155	155	126	122		
1931:										
Jan.		172	110	161	152	153	126	119		
Feb.		171	109		150	152	125	114		160
Mar.	164	170	109		147	150	124	112		
Apr.		169	109	160	147	147	124	113		
May.		168				147				
June.						145				

<sup>1</sup> December.  
<sup>2</sup> July.

<sup>6</sup> Quarter ending with month.  
<sup>8</sup> June.

<sup>9</sup> September.

TABLE 2.—INDEX NUMBERS OF COST OF FOOD IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931

Country	United States	Canada	Belgium	Czechoslovakia	Denmark	Finland	France	Germany	Ireland	Italy
Number of localities	51	60	59	Prague	200	21	Paris	71	200	Milan
Computing agency	Bureau of Labor Statistics	Department of Labor	Ministry of Labor and Industry	Office of Statistics	Department of Statistics	Central Statistical Office	Commission for Study of Cost of Living	Federal Statistical Bureau	Department of Industry and Commerce	Municipal Administration
Base period	1913	1913	1921	July, 1914	July, 1914	January-June, 1914	January-June, 1914	1913-14	July, 1914	January-June, 1914
1913	100	100								
1914	<sup>1</sup> 105	<sup>1</sup> 108		<sup>2</sup> 100	<sup>2</sup> 100	<sup>3</sup> 100	<sup>3</sup> 100	<sup>4</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100
1915	<sup>1</sup> 105	<sup>1</sup> 111								116
1916	<sup>1</sup> 126	<sup>1</sup> 138								149
1917	<sup>1</sup> 157	<sup>1</sup> 167								265
1918	<sup>1</sup> 187	<sup>1</sup> 186								320
1919	<sup>1</sup> 197	<sup>1</sup> 201						<sup>5</sup> 260		359
1920	<sup>1</sup> 178	<sup>1</sup> 202						<sup>5</sup> 344		455
1921	<sup>1</sup> 150	<sup>1</sup> 150	100			<sup>1</sup> 1280	<sup>5</sup> 323			559
1922	<sup>1</sup> 147	<sup>1</sup> 142	<sup>2</sup> 87		<sup>2</sup> 184	<sup>1</sup> 1122	<sup>5</sup> 316		<sup>2</sup> 185	522
1923	<sup>1</sup> 150	<sup>1</sup> 146	<sup>2</sup> 105	769	<sup>2</sup> 188	1079	<sup>5</sup> 346	<sup>1</sup> 166	<sup>2</sup> 182	500
1924	146		<sup>2</sup> 124	787		1093			<sup>2</sup> 185	528
Dec	152	144	140	810		1160	<sup>5</sup> 389	146		579
1925	157		<sup>2</sup> 134	827	<sup>2</sup> 210	1147			<sup>2</sup> 188	622
Dec	166	157	147	796		1138	<sup>5</sup> 437	146		660
1926	161		<sup>2</sup> 185		<sup>2</sup> 159	1108			<sup>2</sup> 174	655
Dec	162	152	208	840		1110	<sup>5</sup> 574	150		631
1927	155		<sup>2</sup> 210		<sup>2</sup> 153	1115			<sup>2</sup> 166	
Dec	156	152	211	844		1171	<sup>5</sup> 504	153		513
1928:										
Mar	151	149	201	838		1123	<sup>5</sup> 521	151		516
June	153	146	203	843		1126	<sup>5</sup> 544	152		520
Sept	158	152	208	861		1174	<sup>5</sup> 536	153		513
Dec	156	154	218	820		1186	<sup>5</sup> 555	153		533
1929:										
Mar	153	153	215	830		1135	<sup>5</sup> 578	159		570
June	155	149	208	817		1103	<sup>5</sup> 590	154		541
Sept	161	159	225	796		1128	<sup>5</sup> 577	154		534
Dec	158	161	227	<sup>7</sup> 117		1090	<sup>5</sup> 589	152		548
1930:										
Jan	155	162	224	<sup>7</sup> 117	145	1048		150	172	546
Feb	153	161	221	<sup>7</sup> 116		1022		148		537
Mar	150	159	212	<sup>7</sup> 113		1006	<sup>5</sup> 579	145		527
Apr	151	153	204	<sup>7</sup> 113	140	975		143	156	519
May	150	152	201	<sup>7</sup> 112		945		142		520
June	148	151	201	<sup>7</sup> 115		937	<sup>5</sup> 593	143		523
July	144	149	206	<sup>7</sup> 117	137	909		146	156	519
Aug	144	145	208	<sup>7</sup> 114		995		145		511
Sept	146	141	210	<sup>7</sup> 110		976	<sup>5</sup> 626	142		504
Oct	144	141	209	<sup>7</sup> 109	132	944		140	150	515
Nov	141	140	208	<sup>7</sup> 109		934	<sup>5</sup> 626	138		512
Dec	137	138	200			903		135		499
1931:										
Jan	133	134	195	105	127	893		134	154	467
Feb	127	129	187	104		883		131		463
Mar	126	124	183	102		879	<sup>5</sup> 641	130		465
Apr	124	121				870				467
May	121	116								460
June	118									

<sup>1</sup> December.<sup>2</sup> July.<sup>3</sup> January-June.<sup>4</sup> October, 1913; January, April, and June, 1914.<sup>5</sup> April-June.<sup>6</sup> Quarter ending with month.<sup>7</sup> In gold.

TABLE 2.—INDEX NUMBERS OF COST OF FOOD IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931—Continued

Country	Netherlands	Norway	Poland	Sweden	Switzerland	United Kingdom	South Africa	India	Australia	New Zealand
Number of localities	Amsterdam	30	Warsaw	49	33	630	9	Bombay	30	25
Computing agency	Bureau of Statistics	Central Statistical Office	Central Statistical Office	Board of Social Welfare	Federal Labor Office	Ministry of Labor	Office of Census and Statistics	Labor Office	Bureau of Census and Statistics	Census and Statistics Office
Base period	1911-1913	July, 1914	January, 1914	July, 1914	June, 1914	July, 1914	1914	July, 1914	July, 1914	July, 1914
1914		<sup>8</sup> 100	100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100	100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100
1915		<sup>8</sup> 123					107		<sup>2</sup> 131	<sup>2</sup> 112
1916		<sup>8</sup> 153		<sup>1</sup> 152			111		<sup>2</sup> 130	<sup>2</sup> 119
1917	<sup>2</sup> 148	<sup>8</sup> 203					124		<sup>2</sup> 126	<sup>2</sup> 128
1918	<sup>1</sup> 181	<sup>8</sup> 271		<sup>2</sup> 258			125		<sup>2</sup> 131	<sup>2</sup> 139
1919	<sup>1</sup> 215	<sup>8</sup> 290		<sup>2</sup> 318			136		<sup>2</sup> 147	<sup>2</sup> 146
1920	<sup>1</sup> 240	<sup>8</sup> 319		<sup>2</sup> 287			178		<sup>2</sup> 164	<sup>2</sup> 168
1921	<sup>1</sup> 201	<sup>8</sup> 295		<sup>2</sup> 231	213	<sup>2</sup> 220	<sup>6</sup> 128	<sup>2</sup> 174	<sup>2</sup> 161	<sup>2</sup> 164
1922	<sup>1</sup> 171	<sup>8</sup> 231		<sup>2</sup> 178	163	<sup>2</sup> 180	<sup>1</sup> 118	<sup>2</sup> 160	<sup>2</sup> 148	<sup>2</sup> 142
1923	<sup>1</sup> 179	<sup>8</sup> 217		<sup>2</sup> 158	165	<sup>2</sup> 162	<sup>1</sup> 118	<sup>2</sup> 148	<sup>2</sup> 164	<sup>2</sup> 143
1924				<sup>2</sup> 155	172	<sup>2</sup> 162			<sup>2</sup> 148	<sup>2</sup> 148
Dec.	181	274			175	180	121	156	148	150
1925				<sup>2</sup> 168	169	<sup>2</sup> 167			<sup>2</sup> 156	<sup>2</sup> 151
Dec.	172	221	125		167	174	116	151	155	154
1926				<sup>2</sup> 156	160	<sup>2</sup> 161			<sup>2</sup> 159	<sup>2</sup> 150
Dec.	161	184	142		159	169	117	154	158	149
1927				148	158	<sup>2</sup> 159			<sup>2</sup> 152	<sup>2</sup> 145
Dec.	167	171	147		160	163	119	149	155	146
1928:										
Mar.	166	171	140		157	155	118	142	153	145
June	169	171	143		156	156	118	142	154	147
Sept.	166	164	142		157	156	115	141	150	147
Dec.	164	161	147		158	160	115	145	152	152
1929:										
Mar.	163	158	146		156	157	117	146	160	146
June	165	156	139		155	147	118	144	161	147
Sept.	160	160	137		158	154	114	146	162	147
Dec.	162	157	144		157	159	112	148	155	147
1930:										
Jan.		156	131	145	155	157	112	145	153	146
Feb.		154	125		154	154	111	143	151	145
Mar.	152	152	122		153	150	111	139	151	144
Apr.		152	121	140	152	143	113	138	151	144
May		151	119		150	140	113	137	150	144
June	152	151	120		151	138	112	137	149	144
July		151	126	138	152	141	109	136	147	143
Aug.		151	122		152	144	108	133	146	141
Sept.	153	151	122		152	144	107	134	141	140
Oct.		150	122	137	152	143	108	127	138	139
Nov.		149			151	144	108	123	135	139
Dec.	145	147	123		149	141	108	116	134	139
1931:										
Jan.		145	110		148	138	108	111	135	
Feb.		143	110		146	136		106	133	130
Mar.	140	142	109	133	144	134	107	103		
Apr.		141		132	142	129	107	104		
May				130	141	129				
June						127				

<sup>1</sup> December.

<sup>2</sup> July.

<sup>6</sup> Quarter ending with month.

<sup>8</sup> June.

TABLE 3.—INDEX NUMBERS OF COST OF CLOTHING IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931

Country...	United States	Canada	Belgium	Czecho-slovakia	Denmark	Finland	France	Germany	Italy
Number of localities	32	60	59	Prague	100+	21	Paris	71	Milan
Computing agency...	Bureau of Labor Statistics	Department of Labor	Ministry of Labor and Industry	Office of Statistics	Department of Statistics	Central Statistical Office	Commission for Study of Cost of Living	Federal Statistical Bureau	Municipal Administration
Base period...	1913	1913	1921	July, 1914	July, 1914	January-June, 1914	January-June, 1914	1913-14	January-June, 1914
1913	100	100							
1914	<sup>1</sup> 101	<sup>1</sup> 103		<sup>2</sup> 100	<sup>2</sup> 100	<sup>3</sup> 100	<sup>3</sup> 100	<sup>4</sup> 100	<sup>3</sup> 100
1915	<sup>1</sup> 105	<sup>1</sup> 115			<sup>2</sup> 110				
1916	<sup>1</sup> 120	<sup>1</sup> 136			<sup>2</sup> 160				
1917	<sup>1</sup> 149	<sup>1</sup> 158			<sup>2</sup> 190				
1918	<sup>1</sup> 205	<sup>1</sup> 185			<sup>2</sup> 260				<sup>2</sup> 284
1919	<sup>1</sup> 269	<sup>1</sup> 210			<sup>2</sup> 310		<sup>3</sup> 296		<sup>2</sup> 221
1920	<sup>1</sup> 259	<sup>1</sup> 232			<sup>2</sup> 355		<sup>3</sup> 485		<sup>2</sup> 692
1921	<sup>1</sup> 184	<sup>1</sup> 177	100		<sup>2</sup> 248	<sup>1</sup> 1107	<sup>3</sup> 353		<sup>2</sup> 512
1922	<sup>1</sup> 172	<sup>1</sup> 162	<sup>2</sup> 99		<sup>2</sup> 217	<sup>1</sup> 1090	<sup>3</sup> 315		610
1923	<sup>1</sup> 176	<sup>1</sup> 164	<sup>2</sup> 113	963	<sup>2</sup> 239	1065	<sup>3</sup> 365	<sup>1</sup> 194	615
1924			<sup>2</sup> 133	964	<sup>2</sup> 267	1039			611
Dec.	171	159	140	1006		1046	<sup>6</sup> 440	173	667
1925			<sup>2</sup> 142	996	<sup>2</sup> 272	1043			655
Dec.	169	159	144	995		1043	<sup>6</sup> 510	173	702
1926			<sup>2</sup> 166	988	<sup>2</sup> 210	1042			699
Dec.	167	157	199	982		1035	<sup>6</sup> 616	158	709
1927			<sup>2</sup> 217	987	<sup>2</sup> 192	1036			
Dec.	163	155	234	1013		1038	<sup>6</sup> 581	166	591
1928:									
Mar.		155	240	1020		1043	<sup>6</sup> 581	169	591
June.	163	157	242	1033		1048	<sup>6</sup> 581	170	559
Sept.		157	246	1032		1052	<sup>6</sup> 591	171	561
Dec.	162	157	250	1023		1055	<sup>6</sup> 591	173	555
1929:									
Mar.		157	253	1018		1055	<sup>6</sup> 594	173	555
June.	161	157	256	998		1055	<sup>6</sup> 604	172	555
Sept.		156	259	1006		1055	<sup>6</sup> 604	171	555
Dec.	160	156	262	<sup>7</sup> 147		1051	<sup>6</sup> 604	170	549
1930:									
Jan.		156	263	<sup>7</sup> 147	187	1051		170	549
Feb.		155	263	<sup>7</sup> 146		1051		169	549
Mar.		155	263	<sup>7</sup> 145		1050	<sup>6</sup> 626	169	549
Apr.		155	263	<sup>7</sup> 145		1046		168	549
May.		155	262	<sup>7</sup> 145		1046		167	509
June.	159	155	262	<sup>7</sup> 145		1046	<sup>6</sup> 626	167	509
July.		155	262	<sup>7</sup> 145		1045		166	509
Aug.		155	263	<sup>7</sup> 145		1045		163	509
Sept.		148	264	<sup>7</sup> 145		1042	<sup>6</sup> 626	161	509
Oct.		148	262	<sup>7</sup> 142		1039		159	480
Nov.		148	261	<sup>7</sup> 137		1035		155	476
Dec.	153	148	260			1034	<sup>6</sup> 610	150	448
1931:									
Jan.		148	255	<sup>7</sup> 135		1024		146	448
Feb.		142	253	<sup>7</sup> 135		1023		145	448
Mar.		141	252	<sup>7</sup> 135		1019	<sup>6</sup> 554	143	448
Apr.		137				1016			448
May.		137							
June.	146								

<sup>1</sup> December.<sup>2</sup> July.<sup>3</sup> January-June.<sup>4</sup> October, 1913; January, April, and June, 1914.<sup>5</sup> April-June.<sup>6</sup> Quarter ending with month.<sup>7</sup> In gold.

TABLE 3.—INDEX NUMBERS OF COST OF CLOTHING IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931—Continued

Country.....	Norway	Poland	Sweden	Switzer-land	United King- dom	India	Australia	New Zealand
Number of localities..	30	Warsaw	49	33	100	Bombay	6	4
Computing agency....	Central Statistical Office	Central Statistical Office	Board of Social Welfare	Federal Labor Office	Ministry of Labor	Labor Office	Bureau of Census and Statistics	Census and Statistics Office
Base period.....	July, 1914	January, 1914	July, 1914	June, 1914	July, 1914	July, 1914	November, 1914	July, 1914
1914.....	<sup>8</sup> 100	100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>9</sup> 100	<sup>2</sup> 100
1915.....	-----	-----	-----	-----	<sup>2</sup> 125	-----	<sup>9</sup> 105	109
1916.....	-----	-----	<sup>1</sup> 160	-----	<sup>2</sup> 155	-----	<sup>9</sup> 117	127
1917.....	-----	-----	<sup>10</sup> 210	-----	<sup>2</sup> 200	-----	<sup>9</sup> 132	156
1918.....	<sup>8</sup> 312	-----	<sup>2</sup> 285	-----	<sup>2</sup> 310	-----	<sup>9</sup> 145	179
1919.....	<sup>8</sup> 338	-----	<sup>2</sup> 310	-----	<sup>2</sup> 360	-----	<sup>9</sup> 164	216
1920.....	<sup>8</sup> 336	-----	<sup>2</sup> 390	-----	<sup>2</sup> 430	-----	<sup>9</sup> 181	245
1921.....	<sup>8</sup> 292	-----	<sup>2</sup> 270	232	<sup>2</sup> 290	<sup>2</sup> 263	<sup>9</sup> 165	226
1922.....	<sup>8</sup> 247	-----	<sup>2</sup> 210	186	239	247	<sup>9</sup> 140	188
1923.....	<sup>8</sup> 230	-----	<sup>2</sup> 196	176	222	214	<sup>9</sup> 136	176
1924.....	<sup>2</sup> 246	-----	<sup>2</sup> 192	179	226	226	-----	168
December.....	<sup>6</sup> 257	-----	-----	181	-----	214	-----	-----
1925.....	-----	-----	<sup>2</sup> 191	181	-----	<sup>2</sup> 192	-----	164
December.....	<sup>6</sup> 225	154	-----	179	225	176	-----	-----
1926.....	-----	-----	<sup>2</sup> 187	172	-----	<sup>2</sup> 160	-----	155
December.....	<sup>6</sup> 191	148	-----	166	218	148	-----	-----
1927.....	-----	-----	<sup>2</sup> 180	162	-----	<sup>2</sup> 149	-----	149
December.....	<sup>6</sup> 172	169	-----	162	215	154	-----	-----
1928:	-----	-----	-----	-----	-----	-----	-----	-----
March.....	<sup>6</sup> 169	169	-----	162	218	151	-----	-----
June.....	<sup>6</sup> 169	169	-----	166	220	156	-----	-----
September.....	<sup>6</sup> 168	169	-----	166	220	157	-----	-----
December.....	<sup>6</sup> 166	169	-----	169	220	160	-----	-----
1929:	-----	-----	-----	-----	-----	-----	-----	-----
March.....	<sup>6</sup> 164	169	-----	169	220	159	-----	-----
June.....	<sup>6</sup> 164	169	-----	167	218	159	-----	-----
September.....	<sup>6</sup> 163	169	-----	167	218	159	-----	-----
December.....	<sup>6</sup> 161	171	-----	165	215	161	-----	-----
1930:	-----	-----	-----	-----	-----	-----	-----	-----
January.....	-----	171	183	165	215	160	-----	-----
February.....	-----	171	-----	165	215	138	-----	141
March.....	160	171	-----	165	215	136	-----	-----
April.....	-----	171	181	160	213	137	-----	-----
May.....	-----	171	-----	160	213	138	-----	139
June.....	159	171	-----	160	213	138	-----	-----
July.....	-----	171	180	160	213	137	-----	-----
August.....	-----	171	-----	160	210	135	-----	138
September.....	156	171	-----	160	210	132	-----	-----
October.....	-----	171	178	155	208	129	-----	-----
November.....	-----	-----	-----	155	208	126	-----	135
December.....	154	-----	-----	155	205	125	-----	-----
1931:	-----	-----	-----	-----	-----	-----	-----	-----
January.....	-----	-----	-----	155	205	123	-----	-----
February.....	-----	-----	-----	155	203	124	-----	131
March.....	-----	-----	-----	155	200	124	-----	-----
April.....	-----	-----	-----	145	200	123	-----	-----
May.....	-----	-----	-----	145	198	-----	-----	-----
June.....	-----	-----	-----	-----	195	-----	-----	-----

<sup>1</sup> December.  
<sup>2</sup> July.  
<sup>6</sup> Quarter ending with month.

<sup>8</sup> June.  
<sup>9</sup> November.  
<sup>10</sup> September.



TABLE 4.—INDEX NUMBERS OF COST OF FUEL AND LIGHT IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931

Country.....	United States	Canada	Belgium	Czechoslovakia	Denmark	Finland	France	Germany
Number of localities..	32	60	59	Prague	110†	21	Paris	71
Computing agency...	Bureau of Labor Statistics	Department of Labor	Ministry of Labor and Industry	Office of Statistics	Department of Statistics	Central Statistical Office	Commission for Study of Cost of Living	Federal Statistical Bureau
Base period.....	1913	1913	1921	July, 1914	July, 1914	January-June, 1914	1914	1913-14
1913.....	100	100						
1914.....	1 101	1 98			‡ 100	‡ 100	100	‡ 100
1915.....	1 101	1 96				‡ 130		
1916.....	1 108	1 109				‡ 175		
1917.....	1 124	1 125				‡ 220		
1918.....	1 148	1 146				‡ 275		
1919.....	1 157	1 148				‡ 292	‡ 164	
1920.....	1 195	1 200				‡ 563	‡ 296	
1921.....	1 181	1 172	100		‡ 401	1 1249	‡ 308	
1922.....	1 186	1 177	‡ 92		‡ 301	1 1340	‡ 287	
1923.....	1 184	1 172	‡ 120	1041	‡ 282	1477	‡ 317	1 177
1924.....			‡ 127	881	‡ 298	1473		
December.....	181	162	127	837		1439	‡ 368	137
1925.....			‡ 113	829	‡ 252	1362		
December.....	187	166	114	807		1288	‡ 402	142
1926.....			‡ 144		‡ 215	1271		
December.....	188	162	206	814		1389	‡ 577	144
1927.....			‡ 186		‡ 201	1405		
December.....	183	158	177	819		1449	‡ 555	146
1928:								
March.....		159	168	819		1438	‡ 547	146
June.....	177	158	170	819		1436	‡ 504	144
September.....		157	170	842		1429	‡ 510	147
December.....	181	157	175	842		1452	‡ 515	151
1929:								
March.....		158	184	842		1456	‡ 535	153
June.....	175	157	194	842		1456	‡ 539	149
September.....		156	206	842		1450	‡ 569	151
December.....	179	157	213	‡ 125		1455	‡ 602	153
1930:								
January.....		157	214	‡ 125	185	1452		153
February.....		157	215	‡ 125		1447		154
March.....		157	211	‡ 125		1433	‡ 633	154
April.....		157	207	‡ 126		1423		152
May.....		156	206	‡ 126		1416		150
June.....	173	156	205	‡ 126		1407	‡ 607	149
July.....		156	205	‡ 126		1398		150
August.....		156	204	‡ 126		1397		150
September.....		156	198	‡ 126		1375	‡ 615	152
October.....		156	203	‡ 126		1354		154
November.....		156	197	‡ 126		1327		152
December.....	175	156	198	‡ 126		1290	‡ 633	151
1931:								
January.....		156	198	‡ 124		1244		150
February.....		156	193	‡ 124		1166		150
March.....		156	189	‡ 124		1135	‡ 633	150
April.....		155				1107		
May.....		154						
June.....	165							

1 December.

2 July.

3 January-June.

October, 1913; January, April, and June, 1914

4 April-June.

5 Quarter ending with month.

7 In gold.

TABLE 4.—INDEX NUMBERS OF **COST OF FUEL AND LIGHT** IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931—Continued

Country.....	Italy	Norway	Poland	Sweden	Switzer-land	United King- dom	India	New Zealand
Number of localities..	Milan	30	Warsaw	49	33	26-30	Bombay	4
Computing agency...	Municipal Ad- ministration	Central Statist- ical Office	Central Statist- ical Office	Board of Social Welfare	Federal Labor Office	Ministry of Labor	Labor Office	Census and Statistics Office
Base period.....	January- June, 1914	July, 1914	1914	July, 1914	June, 1914	July, 1914	July, 1914	July, 1914
1914.....	<sup>3</sup> 100	<sup>6</sup> 100	100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100
1915.....								101
1916.....				<sup>1</sup> 168				110
1917.....				<sup>9</sup> 240				126
1918.....	<sup>2</sup> 220			<sup>2</sup> 286				136
1919.....	<sup>2</sup> 220			<sup>2</sup> 326				149
1920.....	<sup>2</sup> 611			<sup>2</sup> 372		<sup>2</sup> 230		178
1921.....	<sup>2</sup> 899			<sup>2</sup> 264	213	<sup>2</sup> 260	<sup>2</sup> 176	199
1922.....	524	301		<sup>2</sup> 188	181	202	168	183
1923.....	529	282		<sup>2</sup> 185	173	183	163	175
1924.....	519			<sup>2</sup> 182	165	<sup>2</sup> 183		174
December.....	515	307			161	185	167	
1925.....	520			<sup>2</sup> 177	153	<sup>2</sup> 180		174
December.....	533	232	106		150	180	165	
1926.....	523			<sup>2</sup> 168	146	<sup>2</sup> 195		177
December.....	565	279	108		146	250	166	
1927.....				<sup>2</sup> 176	142	<sup>2</sup> 170		177
December.....	422	177	113		141	170	166	
1928:								
March.....	407	176	115		139	170	144	
June.....	407	171	124		136	168	158	
September.....	407	166	123		135	168	151	
December.....	408	163	137		136	170	143	
1929:								
March.....	425	166	140		135	173	143	
June.....	425	162	141		134	170	143	
September.....	434	162	143		134	170	143	
December.....	453	161	151		135	175	143	
1930:								
January.....	453	161	152	160	135	175	143	
February.....	453	161	146		134	175	143	175
March.....	453	160	146		134	175	143	
April.....	460	159	146	160	133	175	143	
May.....	473	160	146		132	170	143	175
June.....	473	159	147		132	170	143	
July.....	474	158	148	159	132	170	143	
August.....	477	158	148		131	170	143	175
September.....	477	157	148		132	170	143	
October.....	477	155	150	156	131	173	141	
November.....	477	153			131	173	141	175
December.....	457				131	175	141	
1931:								
January.....	446				131	175	141	
February.....	424				130	175	141	175
March.....	424				130	175	144	
April.....	424				129	175	144	
May.....					128	175		
June.....						170		

<sup>1</sup> December.

<sup>2</sup> July.

<sup>3</sup> January-June.

<sup>6</sup> June.

<sup>9</sup> September.

TABLE 5.—INDEX NUMBERS OF COST OF RENT IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931

Country...	United States	Canada	Belgium	Czechoslovakia	Denmark	Finland	France	Germany	Italy
Number of localities.	32	60	59	Prague	100+	21	Paris	71	Milan
Computing agency.....	Bureau of Labor Statistics	Department of Labor	Ministry of Labor and Industry	Office of Statistics	Department of Statistics	Central Statistical Office	Commission for Study of Cost of Living	Federal Statistical Bureau	Municipal Administration
Base period.....	1913	1913	1921	July, 1914	July, 1914	January-June, 1914	1914	1913-14	January-June, 1914
1913.....	100	100							
1914.....	<sup>1</sup> 100	<sup>1</sup> 97		<sup>2</sup> 100	<sup>2</sup> 100	<sup>2</sup> 100	100	<sup>4</sup> 100	<sup>3</sup> 100
1915.....	<sup>1</sup> 102	<sup>1</sup> 94			<sup>2</sup> 100				
1916.....	<sup>1</sup> 102	<sup>1</sup> 95			<sup>2</sup> 102				
1917.....	<sup>1</sup> 100	<sup>1</sup> 102			<sup>2</sup> 105				
1918.....	<sup>1</sup> 109	<sup>1</sup> 111			<sup>2</sup> 108				<sup>2</sup> 100
1919.....	<sup>1</sup> 125	<sup>1</sup> 122			<sup>2</sup> 113		<sup>3</sup> 100		<sup>2</sup> 100
1920.....	<sup>1</sup> 151	<sup>1</sup> 142			<sup>2</sup> 130		<sup>3</sup> 100		<sup>2</sup> 108
1921.....	<sup>1</sup> 161	<sup>1</sup> 150	100		<sup>2</sup> 141	<sup>1</sup> 603	<sup>3</sup> 110		<sup>2</sup> 139
1922.....	<sup>1</sup> 162	<sup>1</sup> 155	<sup>2</sup> 99		<sup>2</sup> 155	<sup>1</sup> 795	<sup>3</sup> 160		202
1923.....	<sup>1</sup> 167	<sup>1</sup> 158	<sup>2</sup> 134	206	<sup>2</sup> 160	901	<sup>3</sup> 200	1 22	234
1924.....			<sup>2</sup> 140	213	<sup>2</sup> 170	1088			328
Dec.....	168	158	140	222		1165	<sup>3</sup> 200	69	393
1925.....			<sup>2</sup> 152	236	<sup>2</sup> 178	1224			414
Dec.....	167	158	152	244		1266	<sup>3</sup> 220	89	477
1926.....			<sup>2</sup> 158	167	<sup>2</sup> 185	1306			517
Dec.....	164	156	167	256		1334	<sup>3</sup> 250	105	638
1927.....			<sup>2</sup> 183		<sup>2</sup> 189	1379			
Dec.....	160	156	184	261		1411	<sup>3</sup> 275	125	400
1928:									
Mar.....		156	209	261		1411	<sup>3</sup> 275	126	400
June.....	158	157	209	261		1430	<sup>3</sup> 275	126	400
Sept.....		157	210	278		1430	<sup>3</sup> 300	126	401
Dec.....	156	157	211	278		1430	<sup>3</sup> 300	126	408
1929:									
Mar.....		157	223	306		1430	<sup>3</sup> 300	126	408
June.....	154	158	224	306		1476	<sup>3</sup> 300	126	408
Sept.....		158	224	317		1476	<sup>3</sup> 350	126	408
Dec.....	152	158	227	7 47		1476	<sup>3</sup> 350	127	410
1930:									
Jan.....		158	227	7 50	196	1476		127	410
Feb.....		158	405	7 50		1476		127	410
Mar.....		158	405	7 50		1476	<sup>3</sup> 350	127	410
Apr.....		158	406	7 50		1476		128	410
May.....		160	406	7 50		1476		128	410
June.....	150	160	406	7 50		1467	<sup>3</sup> 350	130	410
July.....		160	406	7 53		1467		130	422
Aug.....		160	406	7 53		1467		130	422
Sept.....		160	406	7 53		1467	<sup>3</sup> 350	131	422
Oct.....		160	405	7 53		1467		131	422
Nov.....		160	405	7 53		1467		131	422
Dec.....	146	160	405	7 53		1467	<sup>3</sup> 350	131	422
1931:									
Jan.....		160	405	7 54		1448		132	422
Feb.....		160	404	7 54		1448		132	475
Mar.....		160	404	7 54		1448	<sup>3</sup> 350	132	475
Apr.....		160				1448			471
May.....		160							
June.....	142								

<sup>1</sup> December.<sup>2</sup> July.<sup>3</sup> January-June.<sup>4</sup> October, 1913; January, April, and June, 1914.<sup>5</sup> April-June.<sup>6</sup> Quarter ending with month.<sup>7</sup> In gold.

TABLE 5.—INDEX NUMBERS OF COST OF RENT IN THE UNITED STATES AND IN FOREIGN COUNTRIES, 1913 TO JUNE, 1931—Continued

Country.....	Norway	Poland	Sweden	Switzer-land	United Kingdom	India	Australia	New Zealand
Number of localities..	30	Warsaw	49	27	20-30	Bombay	6	25
Computing agency....	Central Statistical Office	Central Statistical Office	Board of Social Welfare	Federal Labor Office	Ministry of Labor	Labor Office	Bureau of Census and Statistics	Census and Statistics Office
Base period.....	July, 1914	January, 1914	July, 1914	June, 1914	July, 1914	July, 1914	1911	July, 1914
1914.....	100	100	100	100	100	100	108	100
1915.....								101
1916.....			108					101
1917.....			112					102
1918.....	111		112					105
1919.....	123		120					108
1920.....	147		130		118			114
1921.....	161		155	138	145	165	141	126
1922.....	171		163	146	153	165	149	136
1923.....	173		163	150	148	165	155	148
1924.....	176		178	155	147	165	162	160
December.....	176			158	147	172		
1925.....			186	162	147	172	165	169
December.....	179	41		163	148	172		
1926.....			188	166	150	172	168	180
December.....	179	44		167	150	172		
1927.....			198	172	151	172	168	187
December.....	181	49		174	151	172		
1928.....							174	
March.....	179	53		174	151	172		
June.....	179	56		177	151	172		
September.....	179	58		177	151	172		
December.....	179	58		177	150	172		
1929.....								
March.....	175	58		177	152	172		
June.....	175	58		181	153	172		
September.....	175	58		181	153	172		
December.....	175	58		181	152	172		
1930.....								
January.....		58	200	181	152	172		
February.....		58		181	152	172		190
March.....	174	58		181	152	172		
April.....		58	205	181	152	172		
May.....		58		185	153	172		189
June.....	174	58		185	153	172		
July.....		58	205	185	153	172		
August.....		58		185	153	172		189
September.....	174	58		185	153	172		
October.....		58	205	185	153	172		
November.....				185	153	172		187
December.....	174			185	154	172		
1931.....								
January.....				185	154	172		
February.....				185	154	172		185
March.....				185	154	172		
April.....				185	154	172		
May.....				187	154			
June.....					154			

<sup>1</sup> December.

<sup>2</sup> July.

<sup>3</sup> June.

<sup>4</sup> September.

# IMMIGRATION AND EMIGRATION

## Statistics of Immigration for May, 1931

By J. J. KUNNA, CHIEF STATISTICIAN UNITED STATES BUREAU OF IMMIGRATION

**D**URING May, 1931, immigrant aliens admitted to the United States numbered 3,799—less than one-fifth of the number admitted in the same month last year. The admissions of immigrants (19,414) in May, 1930, exceeded those of the last five months (January 1 to May 31, 1931) by 1,330.

Over seven-eighths (87.6 per cent) of the May immigrants were women and children. The total males for the month numbered 1,325 and females 2,474. Of the males, 877 were single, 411 were married, and 37 were widowed or divorced; 424 were under 16 years of age, while 204 ranged in age from 16 to 21 years, 241 from 22 to 29 years, 184 from 30 to 37 years, 79 from 38 to 44 years, and 193 from 45 to 60 years and over. Of the females, 855 were single, 1,402 were married, and 217 were widowed or divorced; 431 were children under 16 years, 362 were from 16 to 21 years of age, 664 from 22 to 29 years, 426 from 30 to 37 years, 172 from 38 to 44 years, and 419 were 45 years of age and over.

Nearly two-thirds of the immigrants arriving in May (2,501) came from Europe. Italy (with 925) sent the largest number, the major portion entering at New York as husbands, wives, and unmarried children of United States citizens. During May, 647 natives of Italy were admitted at that port as immigrants of this class under the immigration act of 1924. Great Britain (with 303) was second in the list, followed closely by Germany (with 291), while Poland sent 123 and the other European countries less than 100 each. Canada supplied 612 immigrants and Mexico 195. During May, 1930, Europe contributed 13,317 immigrants, Canada 4,216, and Mexico 476.

There were 14,062 nonimmigrant aliens admitted in May, of whom 5,897 were returning residents of the United States, 5,440 were visitors to this country for business or pleasure, and 2,438 were persons going through to some foreign country. Of these nonimmigrants, 8,391 were males and 5,671 females; 9,374 entered at New York and 2,651 at other seaports, while 2,037 came in over the northern and southern land borders. Over two-fifths of the returning residents make their home in New York, 2,459 giving that State as their permanent residence, while 460 went to California, 528 to New Jersey, 337 to Massachusetts, 330 to Pennsylvania, 256 to Illinois, and 248 to Michigan. The remaining home-coming aliens scattered among the other States.

During May last 5,616 emigrants, or alien residents of this country, departed for intended future permanent residence in foreign lands. Mexico was the destination of 1,920, practically all leaving via the southern land border, while 2,867 went to European countries, prin-



cipally Great Britain, Germany, Scandinavia, Yugoslavia, France, and Italy; 120 departed to Canada, 311 to Asia, and 398 to the West Indies and other regions.

The nonemigrant aliens leaving in May for a temporary sojourn abroad or after a short stay in this country numbered 15,602 (8,881 male and 6,721 female), nearly two-thirds (10,236) of whom embarked at the port of New York destined mainly to European countries.

Deportations in May, 1931, totaled 1,767, as compared with 1,574 for the corresponding month a year ago. In April and May last, 331 (249 males and 82 females) indigent aliens were at their own request returned to their native land. Practically all were born in Europe. Of the 331 aliens thus removed, 147 went to Great Britain, 52 to Germany, 26 to Netherlands, 23 each to Ireland and Scandinavia, 17 to Italy, and 27 to Other Europe; 6 departed for Cuba, 5 for Mexico, 4 to the Dominican Republic, and 1 to Costa Rica.

INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1, 1930, TO MAY 31, 1931

Period	Inward					Aliens de- barred from entering <sup>1</sup>	Outward					Aliens de- ported after entering <sup>2</sup>
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens de- parted	Total	
	Immi- grant	Non- immi- grant	Total				Emi- grant	Non- em- grant	Total			
1930												
July.....	13,323	16,466	29,789	38,822	68,611	881	4,818	22,588	27,406	55,366	82,772	1,440
August.....	14,816	19,724	34,540	69,957	104,497	837	5,245	29,166	34,411	88,372	122,783	1,208
September.....	17,792	29,359	47,151	80,900	128,051	929	5,100	24,604	29,704	56,526	86,230	1,552
October.....	13,942	23,304	37,246	40,702	77,948	854	5,352	22,938	28,290	32,988	61,278	1,526
November.....	9,209	13,032	22,241	22,381	44,622	734	4,951	19,285	24,236	24,420	48,656	1,405
December.....	6,439	9,939	16,378	28,535	44,913	806	5,450	17,603	23,053	21,140	44,193	1,377
1931												
January.....	4,091	8,724	12,815	19,844	32,659	693	4,397	17,169	21,566	24,885	46,451	1,517
February.....	3,147	9,065	12,212	27,508	39,720	689	4,720	16,170	20,890	33,172	54,062	1,210
March.....	3,577	12,767	16,344	34,861	51,205	597	4,693	12,751	17,444	32,278	49,722	1,726
April.....	3,470	14,289	17,759	28,281	46,040	809	5,647	14,346	19,993	24,418	44,411	1,897
May.....	3,799	14,062	17,861	22,518	40,379	1,001	5,616	15,602	21,218	23,242	44,460	1,767
Total...	93,605	170,731	264,336	414,309	678,645	8,830	55,989	212,222	268,211	416,807	685,018	16,625

<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 departed, they having entered the United States, legally or illegally, and later being deported.

# PUBLICATIONS RELATING TO LABOR

## Official—United States

COLORADO.—Bureau of Mines. *Annual report for the year 1930. Denver, 1931. 64 pp.*

Includes data on fatal and nonfatal accidents in metal mining and quarrying, and production of metals, also a list of operating mines, smelters, and quarries.

CONNECTICUT.—Board of Compensation Commissioners. *Tenth report, covering years 1928-1929. Hartford, 1930. 14 pp.*

Reviewed in this issue.

KANSAS.—Commission of Labor and Industry. Coal-Mine and Metal-Mine Inspection and Mine Rescue Departments. *Annual report, 1929. Topeka, 1930. 127 pp.*

Contains data on inspection of mines, fatal and nonfatal accidents, employment, and production; coal mine and metal mine directories, and a record of activities of the mine rescue department.

LOS ANGELES (CALIFORNIA).—Board of Education. *Teachers' salaries in the Los Angeles City elementary and high school districts. Report on a survey of salary schedules for the teaching, supervisory, and school administrative personnel. Los Angeles, March, 1931. 178 pp.; charts.*

Salary data from this report are published in this issue.

MARYLAND.—Board of Labor and Statistics. *Thirty-ninth annual report, 1930. Baltimore, 1931. 141 pp.*

Includes data relating to industrial disputes, women and children in industry, employment and unemployment, and home workers.

MONTANA.—Industrial Accident Board. *Fifteenth annual report, for the 12 months ending June 30, 1930. Helena, 1930. 42 pp.*

Reviewed in this issue.

NEW YORK.—Department of Labor. Bureau of Industrial Hygiene. *Splinters, a cause of injuries; precautionary measures. New York, 1930. 22 pp.*

Reviewed in this issue.

NORTH DAKOTA.—Coal Mine Inspection Department. *Twelfth annual report, 1930. Bismarck, (1931?). 31 pp.*

Contains data on inspection of mines, fatal and nonfatal accidents, employment, and production; and a directory of coal mines.

PORTO RICO.—Legislature. *Committee to investigate the industrial and agricultural uneasiness and restlessness causing unemployment in Porto Rico. Second report. San Juan, 1931. 739 pp.*

This volume contains reports in both English and Spanish. Legislation is recommended as well as appropriate use of the powers vested in the insular parliament.

WYOMING.—Inspector of Coal Mines. *Annual report, year ending December 31, 1930. Cheyenne, 1931. 80 pp., illus.*

Contains data on fatal and nonfatal accidents, employment, production, and safety work.

UNITED STATES.—Congress. House of Representatives. Committee on Ways and Means. *Prohibition of importation of goods produced by convict, forced, or indentured labor. Hearings, 71st Cong., 3d sess., on H. R. 15597, H. R. 15927, and H. R. 16517, January 27 and 28, 1931. Washington, 1931. 176 pp.*

— — — Senate. Committee on Manufactures. *Wages of laborers and mechanics on public buildings. Hearing, 71st Cong., 3d sess., on S. 5904, February 3, 1931. Washington, 1931. 25 pp.*

— Department of Commerce. Bureau of Mines. *Bulletin 279: Limits of inflammability of gases and vapors, by H. F. Coward and G. W. Jones. Washington, 1931. 114 pp., charts.*

A comprehensive survey of all available results, to assist in the prevention of explosions and fires in the metallurgical, petroleum, gas manufacturing, and related industries.

— — — *Bulletin 326: Explosives accidents in the anthracite mines of Pennsylvania, 1923-1927. Washington, 1931. 93 pp.*

A technical statistical study of fatal and serious explosives accidents, prepared for promotion of accident prevention.

— — — *Technical Paper 489; Coal-mine safety organizations in Alabama, by R. D. Currie. Washington, 1931. 48 pp., charts.*

Describes the activities of the safety organizations in the coal mines of the State, with the methods used by them in prevention of accidents, and results.

— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 536: Proceedings of the seventeenth annual meeting of the International Association of Industrial Accident Boards and Commissions, held at Wilmington, Del., September 22-26, 1930. Washington, 1931. 353 pp.*

— — — *Bulletin No. 537. Wages and hours of labor in the dyeing and finishing of textiles, 1930. Washington, 1931. 30 pp.*

Summary figures from this study were published in the Labor Review for November, 1930 (pp. 169-176).

— Department of the Interior. Bureau of Pensions. *Annual report for fiscal year ended June 30, 1930. Washington, 1930. 33 pp.*

Reviewed in this issue.

— Employees' Compensation Commission. *Accident Prevention Series, Bulletin 1: A comparison of safety codes for stevedoring operations, various ports and districts in the United States. Washington, 1930. 40 pp.*

— Federal Board for Vocational Education. *Bulletin No. 153: Training objectives in vocational education in agriculture, with suggestions as to ways and means of attaining these objectives. Washington, 1931. 28 pp.*

A report of the national committee of the American Vocational Guidance Association.

— Personnel Classification Board. *Closing report of wage and personnel survey. Washington, 1931. 404 pp.*

Reviewed in this issue.

### Official—Foreign Countries

AUSTRALIA.—[Bureau of Census and Statistics. Tasmania Branch.] *The pocket year book of Tasmania, 1931. Hobart, 1931. 146 pp.*

A handy-reference book, containing summary data on prices, cost of living, occupations, wages, etc.

BELGIUM.—Ministère de l'Industrie, du Travail et de la Prévoyance Sociale. *Inspection du Travail. Rapports annuels de l'inspection du travail, 1929. Brussels, 1930. 305 pp.*

This report covers the work of the labor inspection service in the different Provinces of Belgium for the year 1929.

[481]

CHINA.—Ministry of Industry, Commerce and Labor. Bureau of Industrial and Commercial Information. *Mining labor in China*, by Boris P. Torgasheff. Shanghai, 1930. 165 pp.

Data from this report, which were previously published in the August, 1930, number of the Chinese Economic Journal, appeared in the December, 1930, issue of the Monthly Labor Review.

CZECHOSLOVAKIA.—Office de Statistique. *Aperçu statistique*. Prague, 1930. 322 pp.; map, charts.

Contains statistical information for the Republic of Czechoslovakia, including the results of the census of occupations, housing, cooperation, wholesale and retail prices, public health, social insurance, unemployment, employment service, industrial disputes, labor organizations, wages, etc.

DENMARK.—Direktoren for Sygekassevæsenet. *Beretning i aaret 1929*. Copenhagen, 1931. 94 pp. (Reprinted from *Socialt Tidsskrift*, March, 1931.)

Report on the activities and financial transactions of the public health and invalidity insurance system in operation in Denmark, for the year of 1929, including legislation on the same subject.

FRANCE.—Ministère du Travail et de la Prévoyance Sociale. Direction du Travail. *Statistique des grèves survenues pendant les années 1927 et 1928*. Paris, 1931. 233 pp.

A report of the strikes occurring in France in 1927 and 1928, classified according to industry, and duration, causes, and result of each strike.

GERMANY.—Gutachterkommission zur Arbeitslosenfrage. *Gutachten zur Arbeitslosenfrage*. Erster Teil. Berlin, 1931. 16 pp.

This preliminary report of the German Federal commission to study unemployment in that country is reviewed briefly in this issue.

GREAT BRITAIN.—Department of Overseas Trade. *Economic conditions in Belgium in 1930*, by N. S. Reyntiens. London, 1931. 155 pp.

This report contains a short section on social questions, covering family allowances, technical education, foreign labor, housing, strikes, unemployment, and cost of living. There is also a brief discussion of the economic situation in the Grand Duchy of Luxemburg.

— — — *Economic conditions in the United States of America, March, 1931*, by J. Joyce Broderick and Arthur J. Pack. London, 1931. 111 pp.

— Mines Department. Safety in Mines Research Board. *Paper No. 68: A routine test of the inflammability of mine dusts*, by A. L. Godbert. London, 1931. 9 pp., illus.

This paper describes a laboratory method of measuring the inflammability of coal dusts. The determination is made from the amount of incombustible dust which has to be mixed with the coal dust in order to suppress flame when the mixture is blown through a red-hot tube.

— — — *Paper No. 66: Haulage accidents in coal mines*. London, 1931. 20 pp., chart.

This report was prepared by a committee appointed to investigate possible methods of reducing the number of haulage accidents in British coal mines. The report contains statistics of accidents in the different coal mining districts, an analysis of causes, and suggestions for study of the various aspects of the haulage-accident problem.

— Ministry of Labor. *Report for the year 1930*. London, 1931. (Cmd. 3859.) 159 pp.

Data from this report, relating to governmental training and placement of the unemployed in England, are given in this issue.

— Registry of Friendly Societies. *Report for the year 1929*. Part 3: *Industrial and provident societies; Section I, Proceedings and statistical notes*. London, 1931. 39 pp.

GREAT BRITAIN.—Royal Commission on Unemployment Insurance. *First report, London, 1931. (Cmd. 3872.) 74 pp.*  
Reviewed in this issue.

— — — *Minutes of evidence. London, 1931.*

Data from the minutes of the fifth day, January 9, 1931, showing the finances of the unemployment insurance system of Great Britain, by industries, are given in this issue.

GREECE.—Ministère de l'Économie Nationale. Direction du Service des Mines. *Statistique de l'industrie minière de la Grèce pendant l'année 1929. Athens, 1930. 48 pp.*

The annual report of the Greek mine inspection service. Data on average daily wages of mining employees, taken from the report, are given in this issue.

HESSE (GERMANY).—Ministerium des Innern. *Jahresbericht der hessischen Gewerbeaufsichtsämter für das Jahr 1930. Darmstadt, 1931. 116 pp.*

Annual report on factory inspection in Hesse, Germany, for the year 1930, including trade agreements, industrial disputes, employment service, wages, labor hours, Sunday and night work, home labor, apprentices, industrial accidents and their prevention, public health, food, cost of living, welfare work, etc.

INTERNATIONAL LABOR OFFICE.—*Report of the Director to the International Labor Conference, fifteenth session, Geneva, 1931. Geneva, 1931. 92 and 374 pp.*

The first volume contains the report of the director, which deals mainly with the economic depression and unemployment, and the second volume contains the annual reports of the countries which are members of the International Labor Organization.

JAPAN.—Bureau of Social Affairs. *Labor protection laws in Japan. Tokyo, 1930. 98 pp.*

NETHERLANDS.—Departement van Arbeid, Handel en Nijverheid. *Leidraad voor veiligheidsmaatregelen in het bouwbedrijf. The Hague, 1931. 103 pp., charts, illus.*

Contains a report of the Commission on Safety Measures in Building Trades in the Netherlands from December 28, 1928, to May 3, 1930. In the supplements are given data on accidents, their number, causes, severity, duration, and measures undertaken for their prevention in the building trades.

NEW SOUTH WALES (AUSTRALIA).—Bureau of Statistics. *Official year book of New South Wales, 1929-30. Sydney, 1931. 787 pp.*

Contains data on old-age and invalidity pensions, family allowances, prices, rents, cost of living, employment, industrial arbitration, wages, etc.

ONTARIO (CANADA).—Department of Public Welfare. Mothers' Allowances Commission. *Tenth annual report, for the year 1929-30. Toronto, 1931. 29 pp.*

Reviewed in this issue.

— Minimum Wage Board. *Tenth annual report, 1930. Toronto, 1931. 40 pp.*

SCOTLAND.—Department of Health. *Second annual report, 1930. Edinburgh, 1931. xvi, 214 pp. (Cmd. 3860).*

This report covers the subjects of housing and town planning, general sanitation, morbidity and mortality statistics, social insurance, and poor relief.

TURKEY.—Office Central de Statistique. *Compte-rendu du recensement industriel de 1927. Angora, 1928. 140 pp.*

An industrial census in Turkey made in 1927 and covering the number of establishments and persons employed, a classification of establishments by type of motive power, and statistics of the value of the raw materials used in the different classes of industrial establishments in 1927, and the value of the animal production.



URUGUAY.—Dirección General de Estadística. *Anuario estadístico, 1928. Tomo XXXVII, parte 6. Montevideo, 1931. 69 pp.*

Comparative financial and industrial statistics are given in this section of the yearbook of Uruguay, covering specified years ending with 1928. Industrial accident statistics are summarized in this issue of the Review.

### Unofficial

COMITÉ CENTRAL DES HOUILLÈRES DE FRANCE. *Rapport présenté à l'assemblée générale ordinaire du 27 mars 1931. Paris, 35 rue Saint-Dominique, 1931. 18 pp., chart.*

COUNTS, GEORGE S. *The Soviet challenge to America. New York, John Day Co., 1931. 372 pp.*

Contains a description and an evaluation of the Russian 5-year plan and its significance in relation to western nations, particularly America. The author, who is associate director of the International Institute of Teachers College, Columbia University, and professor of education in the college, gathered the material for the present volume on two personal visits to Russia, one of which included a motor trip of 6,000 miles through the European part of that country.

DEUTSCH FOUNDATION CONFERENCE. *The care of the aged. Edited by I. M. Rubinow. Chicago, University of Chicago Press, 1931. xiii, 144 pp.*

Proceedings of the conference held in March, 1930, with an appendix containing a note on the care of the aged in Illinois and a digest of State laws on old-age security.

DOUGLAS, PAUL H., AND DIRECTOR, AARON. *The problem of unemployment. New York, Macmillan Co., 1931. 505 pp.*

A report made to the authorities of Swarthmore College and accepted as a program for additional research. The six parts of the volume deal, respectively, with the following subjects: The extent and costs of unemployment, seasonal unemployment, technological unemployment and the fear of the limited market, cyclical unemployment, the placement of labor, and unemployment insurance.

ELIOT, THOMAS D. *American standards and planes of living. Boston, Ginn & Co., 1931. 931 pp.*

A compilation of previously published works on standards and planes of living, offered for use as a textbook.

GILSON, MARY BARNETT. *Unemployment insurance in Great Britain. New York, Industrial Relations Counselors (Inc.), 1931. 560 pp., charts and tables.*

This is the second of a series of studies of unemployment insurance, the first, which dealt with unemployment benefits in the United States, having been published in 1930. An account is given of the origin and development of the British scheme, with a discussion of its present status, including its administration and finance. Plans outside of the scheme, established by some employers and trade-unions, are also described, and their importance, as distinct from their extent, is stressed. The problems which have developed in connection with the scheme, and the more serious charges brought against it, are carefully considered. Much of the criticism directed against the plan, it is pointed out, is negative; it makes no constructive suggestion, and fails to give credit for what the scheme has accomplished.

HANSOME, MARIUS. *World workers' educational movements: Their social significance. New York, Columbia University Press, 1931. 594 pp. (Columbia University studies in history, economics and public law No. 338.)*

In describing present-day workers' educational institutions, the author classifies them as follows, devoting a separate chapter to each class: Institutions with (1) a cooperative emphasis, (2) a trade-union emphasis, (3) a political emphasis, (4) a cultural emphasis, and (5) an integrative emphasis.

HOENIGER, HEINRICH, AND OTHERS. *Jahrbuch des Arbeitsrechts, 1930. Band XI. Berlin, J. Bensheimer, 1931. 448 pp.*

Contains a review of labor legislation in Germany, including laws related to organizations in connection with the German constitutional law, trade agreements, works councils, conciliation and arbitration, labor courts, labor hours, wages, and international labor legislation.

INSTITUT FÜR AUSLÄNDISCHES ÖFFENTLICHES RECHT UND VÖLKERRECHT IN BERLIN. *Beiträge, Heft 12: Der deutsche und der französische Reichswirtschaftsrat, von Friedrich Glum. Berlin, 1929. 188 pp.*

The monograph contains a description and analysis of the economic councils in Germany and France.

LINCOLN, LEROY A. *Practicability of unemployment insurance. [New York, Metropolitan Life Insurance Co., 1931.] 16 pp.*

A paper by the vice president of the Metropolitan Life Insurance Co., read at the round-table conference of the insurance department of the Chamber of Commerce of the United States, held at Atlantic City, April 29, 1931.

MANSON, GRACE E. *Occupational interests and personality requirements of women in business and the professions. Ann Arbor, University of Michigan, 1931. iv, 129 pp. (Michigan Business Studies, Vol. III, No. 3.)*

An attempt "first, to develop devices which will analyze quantitatively certain aspects of the work situation—the characteristic occupational interests and personality requirements of women in various occupations; second, to adapt these same devices for use in measuring the occupational interests and personality attributes of women active in these occupations." Based on a study of the attitudes of 13,752 women, mature and experienced, on the higher occupational levels throughout the country. Their attitudes and personality attributes are analyzed in great detail and set out in tabular form.

MARTIN, P. W. *The problem of maintaining purchasing power: A study of industrial depression and recovery. London, P. S. King & Son (Ltd.), 1931. 314 pp., diagrams.*

METROPOLITAN LIFE INSURANCE CO. *Health insurance. New York, 1931. 22 pp., charts.*

This monograph contains an analysis of the three principal sickness insurance plans in Europe representative of the compulsory and voluntary types of insurance systems, namely those of Germany, Great Britain, and Denmark. The charts show the scope, benefits, conditions for benefit, contributions, and administration of voluntary plans in five countries and compulsory plans in 10 countries.

— *Old age dependency: Some existing governmental plans for its relief or prevention. [New York City], 1931. 23 pp., charts.*

Contains brief descriptions of the plans of Germany, Great Britain, and Canada, a summary of the situation in the United States, and charts presenting a comparison of the old-age plans in operation in a number of foreign countries.

NATIONAL ASSOCIATION OF COTTON MANUFACTURERS. *Yearbook, 1930. Boston, 80 Federal Street, 1930. 245 pp.*

Includes data on wages in England, Japan, and New Bedford and Fall River. Also contains a section on legal working hours for women.

NATIONAL FEDERATION OF FEDERAL EMPLOYEES. *The Federal News, Vol. I, No. 1. Washington, D. C., June 20, 1931. 4 pp.*

The first issue of a weekly newspaper, published by the National Federation of Federal Employees in cooperation with the District of Columbia Federation of Federal Employees. Its aim, as stated in this first number, will be "to cover, from week to week, the chief happenings of particular interest to Government employees."

RANKIN, MARY THERESA. *Arbitration principles and the industrial court.* London, P. S. King & Son (Ltd.), 1931. 178 pp.

The author presents an analysis of the decisions of the industrial court for the period 1919 to 1929, in order "to exhibit the nature of the principles applied by the court in the determination of wages and to throw some light on the general question of arbitration principles in this connection."

SECRETARIAT DES PAYSANS SUISSES. *Publication No. 98: Les salaires et les conditions du travail dans l'agriculture suisse, enquête de 1929-30.* Brugg, 1930. 182 pp.

Reviewed in this issue.

SMITH, HILDA WORTHINGTON. *Women workers at the Bryn Mawr Summer School.* New York City, Affiliated Summer Schools for Women Workers in Industry and American Association for Adult Education [n. d.]. 346 pp.

Contains a description of the general plan of the summer school, its purpose, the curriculum, the extra-curriculum activities and the relation of the Bryn Mawr Summer School to workers' education.

TAYLOR, GEORGE W. *The full-fashioned hosiery worker: His changing economic status.* Philadelphia, University of Pennsylvania Press, 1931. 237 pp. (Wharton School of Finance and Commerce, industrial research department, research studies XIII.)

Reviewed in this issue.

TODD, JOHN A. *The fall of prices: A brief account of the facts, the probable causes, and possible cures.* London, Oxford University Press, 1931. 68 pp., charts.

VEILIGHEIDSMUSEUM. *Jaarverslag, 1930.* Amsterdam [1931?]. 66 pp., illus.

Annual report of the safety museum in Amsterdam, for the year of 1930.

VERBAND DER MALER, LACKIERER, ANSTREICHER, TÜNCHER UND WEISSBINDER DEUTSCHLANDS. *50 Jahre Kampf um das Bleiweissverbot, von Otto Streine.* Hamburg, 1931. 43 pp.

Contains a review of the 50-year struggle for the prohibition of white lead, presented at a meeting of the German Union of Painters, Varnishers, House Painters, and Whitewashers, held in Dresden, Germany, September 2, 1930.

VORSE, MARY HEATON. *Strike.* New York, Horace Liveright, 1930. 376 pp.

ZENTRALVERBAND DEUTSCHER KONSUMVEREINE. *Jahrbuch, 1931. Erster Teil.* Hamburg, 1931. 496 pp.; charts.

Data on the development of the consumers' cooperative movement in Germany in 1930, taken from this yearbook of the Central Union of German Consumers' Societies, are given in this issue of the Labor Review.

