

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

KAL MAZCO PUBLIC LIBRARY

MAY 1 1928

MONTHLY
LABOR REVIEW

VOLUME 26

NUMBER 4



APRIL, 1928

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1928

CERTIFICATE

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

ADDITIONAL COPIES

OF THIS PUBLICATION MAY BE PROCURED FROM
THE SUPERINTENDENT OF DOCUMENTS
U. S. GOVERNMENT PRINTING OFFICE
WASHINGTON, D. C.

AT

15 CENTS PER COPY

SUBSCRIPTION PRICE PER YEAR

UNITED STATES, CANADA, MEXICO, \$1.50; OTHER COUNTRIES, \$2.25

Contents

	Page
Special articles:	
Measures to combat unemployment in Europe.....	1-14
Health and recreation activities in industrial establishments.....	14-21
Unemployment conditions in the United States:	
Unemployment in the United States: Report of Secretary of Labor.....	22-31
Survey of unemployment in Baltimore, February, 1928.....	31-37
Public retirement systems:	
Retirement systems for municipal employees.....	38-43
Industrial relations and labor conditions:	
Present labor conditions in China, by S. K. Sheldon Tso.....	44-55
Shifting factory workers to new jobs.....	56-58
Inquiry into changes in economic currents in the United States.....	58, 59
Labor conditions in Western Australia.....	59
Labor treaty between Belgium and Luxemburg.....	60
Labor turnover:	
Labor turnover in American factories, 1927 and 1928.....	61, 62
Productivity of labor:	
Belgium—Production and per capita output in coal mines and coke ovens.....	63
Russia—Labor productivity.....	63, 64
Women in industry:	
France—Law regarding employment of women before and after child- birth.....	65
Germany—Regulation of work of women before and after childbirth.....	65
Massachusetts wage board for the electrical industry.....	66
Industrial accidents:	
Coal-mine fatalities in the United States in 1926.....	67-69
Indiana—Industrial accidents in 1927.....	69, 70
New York—Cost of infections in industry.....	70, 71
Ohio—Accidents in mines and quarries in 1926.....	71
Health and industrial hygiene:	
Mortality experience of International Typographical Union, 1927, by Frederick L. Hoffman.....	72-75
Health record of American and Canadian industrial populations in 1927.....	75-77
Workmen's compensation and social insurance:	
Legal aid and workmen's compensation.....	78, 79
Philippine Islands—Workmen's compensation act.....	79, 80
Great Britain—Statistics of workmen's compensation.....	81, 82
Greece—Bill for unemployment insurance introduced.....	82
Cooperation:	
Work of the Women's Cooperative Guild.....	83-85
Move toward formation of central consumers' organization of Pacific coast.....	85, 86
Agricultural cooperative associations in the United States.....	86, 87
Workers' education and training:	
Aims and methods in vocational guidance.....	88-90
Educational activities among the wives of trade-unionists.....	90, 91
Apprenticeship courses of the electrical workers' union.....	91, 92
Canada—Lecture course for fishermen.....	92, 93
Great Britain—Apprenticeship in industry.....	93, 94

	Page
Industrial disputes:	
Strikes and lockouts in the United States in February, 1928.....	95-98
Conciliation work of the Department of Labor in February, 1928..	99-101
Canada—Strikes and lockouts in 1927.....	102
India—Settlement of Bengal-Nagpur Railway strike.....	102, 103
Wages and hours of labor:	
Hours and earnings in slaughtering and meat packing, 1927.....	104-115
Entrance wage rates for common labor, January 1, 1928.....	115-118
New York—Average weekly earnings in factories, 1914 to 1927.....	118
Ohio—Wages and hours of labor in mines and quarries in 1926.....	119
Canada—Wages and hours of labor, 1926 and 1927.....	120-123
Germany—Wage rates in 1927.....	123, 124
Great Britain—	
Continuance of two-shift system for working women.....	124, 125
Miners' wages in Northumberland and Durham.....	125, 126
Great Britain and the hours convention.....	126, 127
Japan—Wages in November, 1927.....	127, 128
Poland—	
Wages in the cotton textile industry in Lodz.....	129
Wages in the metal industry.....	129
Spain—Hours of work and wages.....	129, 130
Venezuela—Wage rates in 1919 and 1927.....	130, 131
Trend of employment:	
Employment in selected manufacturing industries, February, 1928..	132-144
Employment on steam railroads in the United States.....	144, 145
Changes in employment and pay roll in various States.....	146-148
New York City Welfare Council's unemployment conference.....	148, 149
Canada—Employment situation, 1927.....	150
Wholesale and retail prices:	
Retail prices of food in the United States.....	151-163
Retail prices of coal in the United States.....	164-166
Index numbers of wholesale prices in February, 1928.....	167, 168
Comparison of retail-price changes in the United States and in foreign countries.....	169-171
Changes in meat-consumption habits in the United States.....	172
Cost of living:	
Canada—Changes in cost of family budget, 1921 to 1927.....	173, 174
Labor awards and decisions:	
Awards and decisions—	
Brotherhood of Locomotive Engineers—Southwestern railroads..	175, 176
Railroads—Train-service board of adjustment, Eastern.....	176, 177
Italy—Decision of Labor Court regarding seamen's wages.....	177
Immigration and emigration:	
Statistics of immigration for January, 1928.....	178, 179
Current notes of interest to labor:	
Harmon Foundation awards for industrial workers.....	180, 181
Retirement of California labor commissioner.....	181
Government pawnbroking establishment in Persia.....	181
Publications relating to labor:	
Official—United States.....	182, 183
Official—Foreign countries.....	183, 184
Unofficial.....	184-186

This Issue in Brief

The report of the Secretary of Labor on unemployment conditions in the United States, in response to a Senate resolution, explains that complete information is not available as regards the total number of persons out of work, and that no accurate statistics of this character can be obtained except by a comprehensive census. From existing data, however, the Commissioner of Labor Statistics estimates that between 1925 and January, 1928, there was a shrinkage of 1,874,050 in the number of employed wage earners and salaried workers in the United States. No attempt is made to estimate the number of unemployed in the base year, 1925, but it is pointed out that 1925 was a year in which there was no noticeable unemployment question (p. 22).

Measures to create work for the unemployed have been undertaken on a large scale by several European countries. The measures include not only the inauguration of public works, such as road building, but also financial help to various manufacturing and trade enterprises. Also, considerable attention has been devoted to the training of the unemployed of little or no skill to render them capable of filling more skilled and more responsible positions. An article (p. 1) describes some of the measures adopted in recent years in Great Britain, Germany, Hungary, and Estonia.

Municipal employee retirement systems of a comprehensive character are in effect in 9 large cities. In 5 of these 9 cases retirement is made compulsory at 70 (in one case 72), while 4 have no compulsory age. Six permit retirement at 60, 1 at 62, and 2 have no age requirement of any kind. Five, including 2 with no age qualifications, have service requirements, the required period ranging from 10 to 25 years. All but one of the cities require contributions from the employees. The systems vary considerably as to amount of allowance, method of calculation, retirement on allowance for disability, provision for dependents, and other points (p. 38).

There were 15,473 unemployed persons in the city of Baltimore in February, 1928, according to a survey made under the direction of the commissioner of labor and statistics of Maryland. The information was obtained through a house-to-house canvass by the police of the city. A striking feature of the report is the fact that most of the unemployed had been without work for a period of several months. The largest single group of unemployed was composed of unskilled labor (p. 31).

The ordinary wage earner in China averages not over \$160 per year, while the minimum standard of living calls for at least \$360 per year for a family. As a result, the women and children of the family must find work if possible. But work is very scarce in China, and the unskilled laborer's earnings serve merely to ward off starvation. His diet is maize in some form and salted turnips twice a day. His house is of sun-dried, unburned brick, with thatched roof, earth floor, and raised earth or brick beds. There are no sanitary arrangements (p. 44).

The average entrance wage rate for common labor was 43 cents per hour on January 1, 1928, according to a survey made by the Bureau of Labor Statistics. Great variations were found to exist between industries and between different sections of the country. The lowest rate reported was 15 cents per hour in general contracting in the South Atlantic division and the highest was \$1.12½, also in general contracting, in the Middle Atlantic division (p. 115).

Hourly earnings in the slaughtering and meat-packing industry in 1927 averaged 52 cents for male workers, as against 50.7 cents in 1925, and for female workers, 36.4 cents as against 35.9 cents in 1925. The average full-time hours per week in 1927 averaged 49.3 for males and 49.1 for females. These figures are from a preliminary report on the regular biennial survey of the Bureau of Labor Statistics (p. 104).

Improvement in health conditions among the industrial populations of the United States and Canada is shown by a report of the Metropolitan Life Insurance Co. on the mortality rates among the industrial policyholders of the company, comprising more than one-seventh of the total population of the two countries. The death rate in 1927 was 8.4 per 1,000 as compared with 8.9 in 1926, and 12.5 in 1911. Although the reduction between 1926 and 1927 was only a fraction of 1 per cent, when translated into actual savings of lives it is shown that there would have been 8,808 more deaths in 1927 than did actually occur if the 1926 rate had prevailed in that year (p. 75).

A summary of a bulletin on industrial personnel activities, recently issued by the Bureau of Labor Statistics, shows the wide range of these activities carried on by the 430 companies visited in connection with the survey. The personnel work of these firms includes in many cases complete and successful medical service, the provision of lunch rooms, recreation facilities which include all kinds of indoor and outdoor sports and clubs and clubhouses, educational work, and the maintenance of insurance features such as benefit associations and group insurance. This study, contrasted with a similar one 10 years ago, shows the lines of development of these features during the past decade (p. 14).

A workmen's compensation law has been enacted for the Philippine Islands. The law is compulsory, and applies to public as well as to private employment, and to occupational diseases as well as to accidents. The maximum award is 3,000 pesos (\$1,500) (p. 79).

When a worker is shifted to a new job, the transfer should meet his need as well as the need of the organization, in the opinion of a recent writer on the subject. Opportunity for transfer appeals strongly to the worker. It produces a sense of liberty of choice and a consequent satisfaction with himself and with the employing organization. When, however, an employee is transferred without having requested it, the reasons for such transfer should be clearly and painstakingly explained to him, for it must be remembered that "a man's job is his life" (p. 56).

MONTHLY
LABOR REVIEW
OF U. S. BUREAU OF LABOR STATISTICS

VOL. 26, NO. 4

WASHINGTON

APRIL, 1928

Measures to Combat Unemployment in Europe

By PETER A. SPECK

SINCE the World War, unemployment has been a very acute problem in most of the European countries. Measures of relief have taken numerous forms, one of the most widespread being unemployment insurance, which is now in operation in 19 foreign countries, covering about 45,000,000 wage earners. Insurance and other forms of money benefits, however, do not solve the basic problem. They prevent distress but they do not furnish work. To meet this difficulty, many of the countries affected have turned their attention to the task of finding or providing remunerative work for the unemployed. The present article reviews briefly some of the more significant relief measures which have been tried or are being tried in certain countries. The countries selected are Great Britain, Germany, Hungary, and Estonia—these being fairly representative of the different conditions in countries of different size and different industrial development.

GREAT BRITAIN¹

IN ORDER to relieve unemployment distress Great Britain has practiced and is still practicing the relief payment system, consisting of out-of-work donations, poor relief, and insurance benefits.

Temporary Measures to Provide Employment

REDISTRIBUTION of labor.—Attempts have been made to improve the distribution of labor and also, in some cases, to redistribute labor through labor exchanges. These exchanges try to find work for the unemployed, not only in their respective trades, but also in other trades, perhaps more flourishing, where more workers could be profitably employed; for instance, attempts have been made to divert a number of the unemployed factory workers to agriculture. These attempts have been attended with a certain limited success. During 1920 the labor exchanges placed on an average about 100 unemployed workers per day in agriculture.

¹ Data on which this section is based are from Ministry of Labor Gazette, London, monthly issues from 1918 to 1927, and January, 1928; International Labor Office, Studies and reports, series C (unemployment), No. 9, Unemployment in its National and International Aspects, Geneva, 1924; International Labor Review, Geneva, November-December, 1927, and January, 1928; Great Britain, Committee on Industry and Trade, Survey of Overseas Markets, London, 1925, and Survey of Industrial Relations, London, 1926.

Migration of the unemployed.—The empire settlement act of 1920 empowers the home Government to cooperate with other Governments or corresponding authorities of the Empire in assisting suitable persons in the United Kingdom who are willing to settle in any part of the Empire. Schemes for migration may consist of helping with passage, initial allowances for use overseas, training, or promotion of land colonization overseas. For this purpose the Government of the United Kingdom has provided a maximum of £3,000,000² annually for 15 years.

Up to 1926, 66,103 persons had been assisted in migration overseas for settlement in various dominions. Migration is especially resorted to by clerks and other nonmanual workers.

Short-time work.—The Ministry of Labor issued on December 31, 1920, a circular letter to other executive departments, local authorities, and private employers recommending that they adopt short-time work in order to relieve the unemployment situation; that is, instead of discharging workers on account of lack of work they keep them engaged for shorter periods of time. On October 23, 1922, there were 56,862 short-time workers in Great Britain.

Training of the unemployed.—A committee appointed on July 28, 1924, "to inquire into and report upon the conditions and prospects of British industry and commerce," investigated the personal circumstances and industrial history of nearly 11,000 claimants to unemployment benefits (about 1 per cent of the total number of unemployed in Great Britain). In regard to the apprenticeship and training of these claimants the committee reported as follows: Among the male unemployed 23.7 per cent had been apprenticed, 24.6 per cent trained, and 51.7 per cent neither apprenticed nor trained; while among the female unemployed 11.1 per cent had been apprenticed, 53.3 per cent claimed to have had some training, and 35.6 per cent had been neither apprenticed nor trained.

Training of the unemployed and especially of juvenile workers was taken up in practically all important industrial centers. The Minister of Labor stated in his annual report for 1925 that by December 31, 1925, more than 550 men had entered training at the Birmingham center, and more than 150 who had started the course on October 20 had left training in order to take up employment. In the House of Commons on November 25, 1926, the parliamentary secretary to the Ministry of Labor stated that up to the 10th of November of that year 1,646 unemployed men had completed a course of training, of whom 989 had found employment in Great Britain in 30 different occupations and 250 had proceeded overseas.

In 1920 a grant of £500,000³ to the central committee on women's training and employment had been made by the national relief fund for the purpose of training women whose earning capacity was seriously reduced by the unemployment situation. The training prepared for the handicrafts, teaching, massage, nursing, midwifery, cooking, and other domestic and outside work. About one-third of the expenses for such courses was paid by the Ministry of Labor. As it was difficult to find employment for such trained women their training ceased, and instead home-craft centers were opened for

² Pound sterling at par=\$4.8665; exchange rate in 1927 about par.

³ Pound sterling at par=\$4.8665; exchange rate in 1920=\$3.6643.

female unemployed workers between 16 and 35 years of age. About 2,000 women and girls were under training in 1924.

Training of juvenile workers was undertaken in 1918, after the armistice, when daytime education centers were opened for juvenile workers who were receiving unemployment benefits. Money advanced by the board of education made it possible to open about 200 such centers, but in 1920 the money support was withdrawn. Under the pressure of public opinion, however, financial support was renewed during the winter of 1922-23 on the basis of 75 per cent by State and 25 per cent by local governments, and about 100 centers were reopened under the administration of local educational boards, the Ministry of Labor and private organizations, especially the Young Men's Christian Association, cooperating.

Unemployed juvenile workers between 14 and 18, drawing unemployment benefits, were trained in practical handicrafts, such as dressmaking, patching and darning, dyeing, housewifery, cooking, and even domestic carpentry for girls, and household carpentry, wood and leather work, picture framing, bookbinding, etc., for boys. The program also included general education, such as English, arithmetic, history, singing, dancing, and various games. A number of such centers obtained substantial success.

In November, 1923, only 69 of the 100 reopened centers were operating, and not more than 25 per cent of the unemployed juvenile workers attended these training centers. According to the report of the Ministry of Labor over 80,000 unemployed juvenile workers between 14 and 18 years of age were registered, but it is believed that the actual number unemployed was much larger. On February 21, 1927, there were 33,091 unemployed boys and 35,974 girls, altogether nearly 70,000 juvenile workers between 14 and 18 years of age, on the register of labor exchanges.

Although the training of unemployed adult and juvenile workers does not create employment, it keeps them profitably busy working for self-development and makes it easier for them to find employment, as the official reports show. The Scottish committee on education and industry appointed by the Secretary of State in 1925 recommends in its report of November 29, 1926, that the juvenile unemployment centers be developed. This committee and a similar committee for England and Wales both advocated a permanent scheme for juvenile unemployment centers.

Vocational guidance.—Vocational guidance for young persons is given by the juvenile advisory committees (under the Ministry of Labor) in 130 districts and by the choice of employment committees (authorized by the education act of 1912) in 100 districts. Most of their expenses are borne by local authorities, though part is paid by the Ministries of Labor and Education.

Relief works.—The unemployment grant committee was established in 1920 for the purpose of aiding local authorities to finance approved schemes of work for the unemployed.

First among these approved schemes are the loan schemes, under which grants have been made of a percentage of the interest, or of the interest and sinking-fund charges, on loans raised by local authorities for approved nonrevenue-producing works, such as roads, paths, sewerage, parks, playgrounds, water supply, public institu-

tions, sea defense, sanitation, and miscellaneous to the amount of £45,656,087; and for approved revenue-producing works, such as docks, electricity and water undertakings, tramways, gas, sports fields, land development, cemeteries, conveniences, and miscellaneous, in the sum of £30,411,716—making total grants of £76,067,803 for all loan schemes up to June 24, 1926.

Second are grants on the basis of a percentage of the wage bill, the total amount granted on these up to the same date being £17,131,067. On these schemes about 130,000 unemployed were engaged during the fall of 1923.

To encourage the improvement of land, fisheries, and other branches connected with agriculture, the corresponding ministry, when it had approved a project, paid part of its cost. Up to the first half of 1923 it had approved projects having a cost of £800,000. Similarly, the forestry commission encouraged reforestation projects by making free grants of up to 60 per cent of the labor cost, in the total amount of £200,000 in 1921-22 and 1922-23. To this extent the ordinary program of reforestation was enlarged in order to give work for unemployed.

All the Government departmental offices, especially the Admiralty, War Department, and Post Office, increased their contract activities during the periods of severe depression in order to provide more work for the unemployed; for instance, during the winter of 1923-24 additional trunk telephone cables were laid at a cost of £500,000.

According to official reports about 200,000 unemployed skilled and unskilled workers were engaged on various relief works undertaken by local authorities and private concerns and encouraged and financially assisted by the State during the winter of 1923-24. On September 24, 1927, 13,094 unemployed skilled and unskilled workers found employment on 357 relief work schemes, under authority of the Ministry of Transport, and 11,931 workers were employed on 252 schemes under the authority of the unemployment grants committee.

As relief work ordinarily consists in makeshift undertakings, the wages paid are somewhat lower than those in normal work of the same kind. However, the wages in relief work have to be higher than the unemployment benefits. At the beginning of the relief work in Great Britain the Ministry of Health ordered that the wages for relief work were to be 25 per cent lower than the regular union rate of wages. This order caused some dissatisfaction among the unemployed, especially among the short-time workers (three days a week), and was followed by numerous local strikes. As a result the Government raised the relief work wages to 87.5 per cent of the regular union rate of wages. Lately, in many cases the same wages are paid for relief work as for regular work of the same type—a full day's wage for a full day's work.

Permanent or Preventive Measures

CLOSE attention has been and is being given to finding and inventing measures against recurrence of unemployment in the future. Some of the measures already applied to relieve the present unemployment situation by increasing the volume of employment appear to be at the same time of a preventive character against recurrence of unemployment, at least of such magnitude as at present.

The following are a few of such measures:

Stimulating production.—The trade facilities act passed in 1921 appropriated £25,000,000 for the purpose of guaranteeing payment of interest and principal of loans raised by any public authority or private concern to carry out productive undertakings in Great Britain and Ireland. In 1922 this act was amended and the appropriation increased to £50,000,000, and in 1924 it was raised to £65,000,000. Advantage had been taken of this guaranty appropriation to the extent of £16,000,000 by the end of May, 1922, and of £29,469,645 in September, 1923.

Encouragement of foreign trade.—The overseas trade act, passed in 1920, appropriated £26,000,000 for the purpose of granting credits and of undertaking insurance in order to reestablish and increase export trade. The guaranty might be as large as the total production cost of the goods for export. Within the limits of the appropriation for the purpose, the credits are revolving—credits released in one case are used for the guaranty in another case, etc. Advantage had been taken of the guaranty on September 10, 1923, to the extent of £11,249,394, leaving available £14,750,606.

Increase of efficiency.—In order to avoid waste in time, material, and human energy, the following measures have been recommended and are being applied in part: Reorganization of industries, renewal of machinery, a better training of labor forces, and putting industrial relations, especially those between employees and employers, on a conciliatory and cooperative basis through joint industrial and district councils and work or factory committees. These councils are to secure better utilization of the practical knowledge and experience of the workers; to secure for the workers a greater share in and responsibility for the determination and observance of labor conditions, including the methods of fixing, paying, and readjusting wages, and a share for workers in the increased prosperity of industries; to establish the greatest possible security of earnings and employment for the workers, without undue restriction upon change of occupation or employer; to develop technical education and training; to provide for industrial research and for the utilization of its results; to introduce improvements; to utilize inventions and to safeguard the rights of inventors and designers of improvements.

Preventing speculation.—For the purpose of stabilizing the price level and of preventing speculation, a policy of expansion and contraction of bank credit, and increase or decrease of rate of interest on credit, is being recommended and is beginning to be applied. This policy is intended to do away with or at least to diminish, the so-called "business cycles." Experience will show whether or not such measures are as effective as is hoped for.

Industrial research and investigation.—No other country has undertaken so deep and far-reaching industrial and trade research and investigation as has Great Britain during late years. Perhaps the most conspicuous are the surveys of overseas markets and of industrial relations undertaken by the committee on industry and trade. There have also been numerous conferences, national in scope, on unemployment, industrial education and training, efficiency, relations between employers and employees, and general economic problems.

GERMANY⁴

POSTWAR Germany has suffered acutely from unemployment, and has devised various plans to reduce the resulting distress.

Temporary Measures to Relieve Unemployment

UNEMPLOYMENT benefits.—In addition to voluntary and, later on, compulsory unemployment insurance benefits, Germany, like England, has put into extensive use benefit payments under various terms. At the beginning the benefits were paid entirely from the public treasury—one-half by the Federal Government, one-third by the State governments, and the remaining one-sixth by municipalities.

On November 1, 1925, the number of workers in receipt of relief benefits, including unemployment insurance benefits, regular and extended, was 363,961; on December 1 of the same year this number rose to 673,315; on January 1, 1926, to 1,498,681; and on March 1, 1926, to 2,055,928. From the date last named the number began to drop, falling to 1,314,086 on November 15, 1926, and to 1,002,243 on December 15, 1927.

Relief works.—An order was issued on January 26, 1920, authorizing the Government to grant subsidies and repayable loans to local authorities and private employers for relief work for unemployed workers. Such a loan was for one-half the cost of an undertaking and bore interest at 5½ per cent for public and 6 per cent for private undertakings, and the repayment of the principal was to be made by annual installments. The total amount of subsidies and loans was not limited, but when the Federal Government's grant in a single undertaking exceeded 5,000,000 marks⁵ the approval of the Ministries of Finance and Labor was required.

The local financing of relief works took various and sometimes, unusual forms. For instance, in the city of Harburg on the River Elbe, all classes of the population were called upon to contribute to the expenses of relief works. Manufacturers and artisans paid weekly 1 mark for each worker employed; wholesale traders 1 per cent of their total wages bill; retail traders from 20 to 100 marks a month; employed workers from one-half to 1 per cent of their wages, depending upon whether they were earning less or more than 300 marks a month; teachers, officials, etc., from one-half of 1 to 1 per cent of their salaries. These sums were supplemented by the money saved from unemployment benefits through substituting relief work. The municipality added 10,000 marks. In this way 1,700,000 marks was raised for relief work from September 15, 1920, to the end of April, 1921.

The subsidized work took the form first of "relief yards," consisting of any kind of useful work, especially of odd jobs, such as cleaning, painting, repairs, etc. It was later emphasized that relief of all kinds should be "productive"; as, for instance, work on means of communication, such as railways, waterways, highways, etc., the building of dwellings, barns, sheds, etc., especially in rural districts.

⁴Data on which this section is based are from Reichsarbeitsblatt, issues from 1925 to 1927, and Nos. 1-4, 1928; Albrecht, F., and Wilhelm, K., Die produktive Erwerbslosenfürsorge, Berlin, 1926; Schmeisser, Herbert, Handbuch der Erwerbslosenfürsorge, Leipzig, 1926; International Labor Review, Geneva, monthly issues from 1925 to 1927, and January, 1928; Ministry of Labor Gazette, London, issues for 1926 and 1927, and January, 1928.

⁵Mark at par=23.82 cents; exchange rate in 1920=1.751 cents.

From April, 1920, to February, 1921, 7,000 enterprises for the construction of highways and earthworks were subsidized, providing 26,000,000 days of work for 240,000 unemployed workers. At the same time repayable loans were advanced for 1,800 canal construction projects, 1,400 undertakings for electrical installations and cables, and 600 projects for the erection of buildings. Altogether up to August 20, 1922, 15,143 undertakings were subsidized by the governments, central and local, which provided 60,000,000 days of work for 542,000 unemployed workers. The total expenditures for these works were 1,300,000,000 marks.

Relief works are subject to the works council act of February 4, 1920, which requires that in all undertakings employing at least 20 workers a works council composed of workers is to be elected to represent the interests of the workers. The relief yards were put under the supervision of the labor exchanges.

The municipality of Altona introduced a system of relief works based on cooperative labor similar to the Russian labor *ortels*.⁶ The contract is auctioned to the cooperative groups of unemployed workers. These closely organized groups appoint their own foremen and specialists and make contracts with municipalities for certain work.

Unemployed workers for relief works are recruited through labor exchanges. The wages paid on relief works are somewhat higher than unemployment benefits and usually lower than wages in regular trades corresponding to the relief work.

Attempts have been made to provide work for unemployed workers by rotation of employment at regular intervals; that is, one group of unemployed workers on certain relief work for a certain number of days, then another group, etc.

The unemployed workers on these relief works remain upon the lists of the labor exchanges and must return to their normal trades as soon as they are offered steady work through the labor exchanges.

Later measures for relief works.—In the winter of 1925–26 the Federal Government took measures in the direction of finding and creating new relief work schemes. On January 5, 1926, a circular was issued stating the conditions under which such schemes were to be put into operation; for instance, unemployed workers on relief works should be periodically changed and no unemployed worker should be kept on such work longer than three months during the winter season. The schemes sanctioned should be of economic value and be consummated within a period of six months. Provision was made for additional subsidies proportionate to the savings on unemployment benefits through relief work. A credit of 100,000,000 marks was allocated as an aid to repair and construction work on State railways.

Since the depression which began in the fall of 1925 the various relief work schemes sanctioned and financed by the governments—Federal, State, and local—have provided 24,425,000 days' work with expenditure of 240,000,000 marks.⁷

On July 15, 1927, there were 126,958 unemployed workers engaged on various relief works, such as land reclamation, flood control, highway and street construction, water and electrical power plants,

⁶ A Tartar word meaning friendship, partnership; a sort of labor organization doing contract jobs, each member of which contributes an equal share of labor and receives an equal share of income.

⁷ Mark at par = 23.82 cents; exchange rate in 1927 about par.

gas plants, earthworks, and other similar undertakings, out of 674,056 unemployed workers receiving unemployment benefits, regular and crisis or panic benefits (*Hauptunterstützungsempfänger in der Krisenfürsorge*).⁸

Expansion of Regular Work

THE Government soon realized that various relief work schemes alone were not adequate to overcome the unemployment distress, and that in order to absorb the largest possible number of unemployed workers into their respective regular trades, measures should be undertaken to stimulate the regular industries, especially those serving as basic or "key" industries, upon which many other industries depend. The Reichstag adopted a program of measures for expansion of certain industries (*Arbeitsbeschaffungsprogramm*). The principal provisions of this program are as follows:

Railways.—A grant of 100,000,000 marks for State railway extensions and improvements, which would indirectly stimulate iron, steel, wire, and lumber industries. In addition, over 53,000,000 marks were appropriated for the completion of those new State railways construction of which had been stopped during the war.

Buildings.—In addition to the unexpended balance of 100,000,000 marks appropriated in 1926 for new post-office buildings and installations, an additional appropriation of 20,000,000 marks was made for new post-office buildings. Contracts given in October, 1926, greatly helped subsidiary industries, such as cable, electrical, iron and steel, mechanical engineering, motor, tire, and rubber industries.

Highway and canal construction.—New provisions were made for highway construction. The canal-making schemes already in progress were accelerated by an appropriation of 13,000,000 marks.

Housing.—On the basis of the law of March 26, 1926, the Federal Government advanced to the States the sum of 200,000,000 marks to guarantee mortgage loans on newly built small dwellings. The repayment of such loans was required within three years. In connection with the schemes for building small dwellings in rural districts, means were applied to encourage the migration of workers from densely populated cities and industrial centers to the rural districts, where unemployment was less severe.

The fact that when the unemployment distress was most keen, over 2,000,000 workers being unemployed, about 130,000 seasonal agricultural workers were admitted into Germany from foreign countries attracted much attention from the Government. Upon investigation it appeared that the housing of farm hands was not such as to encourage the replacement of foreign farm hands by German workers. Therefore, the construction of rural dwellings has been made a relief work scheme since 1920. Up to 1925 about 30,000 new small rural dwellings were built. In order further to accelerate this work, the Government advanced 30,000,000 marks for the construction of farm hands' dwellings on those estates the owners of which were able to provide work for their farm hands during the entire year, but were not able to provide them with adequate living quarters. The new credit plan provides for the building of 10,000 small dwellings annually for three years.

⁸ Reichsarbeitsblatt, No. 36, 1927, pp. ii, 467-470.

Other Measures

B*BREAKING up large landed estates.*—A provision has been made for breaking up certain landed estates in the eastern Provinces of Germany into small holdings or farms. It is expected that by this adjustment a considerable number of unemployed workers may be permanently settled on the land as small farmers. Further loan grants have been made for the continuation of rural highway construction, reclamation service, etc.

Financing export trade.—In February, 1926, the Government adopted a scheme by which the Federal and the State Governments were to guarantee, up to 60 per cent of the sale prices, long-term contracts for the export of German-made goods to Soviet Russia. Such contracts, financed principally by private banks, were concluded to the amount of over 300,000,000 marks, in which sum the Government guaranty amounted to 105,000,000 marks. In respect to export to other countries, the Government agreed to make good the losses caused by inability of the purchasers to pay for the goods delivered or caused by wars or revolutions or natural catastrophes. In this way the Government insured about 2,000 foreign contracts, having a total value of 25,000,000 marks. Provision was made for the guaranteeing of foreign contracts of a total value of 175,000,000 marks for 1927.

On all these trade-revival schemes the Government spent a total of 630,000,000 marks during 1926. The hope of the Government was to create by such measures as those above quoted industrial confidence for a real trade revival.

HUNGARY⁹

Measures Against Unemployment

H*HUNGARY* has no unemployment insurance. Practically the only unemployment benefits paid are those by labor unions. Benefits as a system of caring for unemployed workers have not been very widely practiced. Relief works of a makeshift character, under the term of "repair works," were undertaken to a certain extent at the beginning of the severe depression, namely, in 1923 and the first part of 1924.

The Government concentrated its main attention and efforts on the increase of the regular activities of industries, and especially building and engineering—first, because these industries were lagging most; second, they were connected with numerous other industries producing building equipment and materials; and, third, buildings, such as dwellings, plants, bridges, harbors, etc., had become worn out and dilapidated during the long-drawn-out war and the revolutions following in the wake of the war.

Reconstruction loans.—A reconstruction loan of 250,000,000 Swiss francs,¹⁰ sanctioned and assisted by the League of Nations, made

⁹ Data on which this section is based are from *Ungarisches Wirtschaft, Jahrbuch, 1927, Budapest, 1927*; *Budapest Chamber of Commerce and Industry, Hungarian Commerce and Industry in the Year 1926, Budapest, 1927*; *Budapest Commissar of Harbor Buildings, Die Regalierung des Soroksarer Donauarmes und der Budapester Handels- und Industrie- H Hofen, Budapest, 1927*; *International Labor Review, Geneva, monthly issues from 1925 to 1927.*

¹⁰ Swiss franc at par=19.3 cents; exchange rate in 1927 about par.

possible cheaper loans to building and engineering enterprises. There have been other loans made in the New York and London money markets, for instance, the Hungarian municipal loan of \$10,000,000 from a bank in New York City, in 1925; a second municipal loan of \$6,000,000 from the same banking firm in 1926; the Hungarian county loan of £2,500,000¹¹ from a banking house in London, in 1926; and other foreign loans in 1926 and 1927. For construction purposes about 100,000,000 gold crowns¹² were made available at once in 1924.

Stimulating industries.—In 1925 the sum of 52,000,000 gold crowns was set aside for the purpose of granting cheaper loans to industries. This measure considerably facilitated the renewing of machinery in factories, extension of railways, the buying of better tools and equipment, and the undertaking of drainage and irrigation works for agricultural purposes.

The private building and manufacturing concerns themselves, feeling the pressure and even the danger of unemployment to their very existence, applied measures to revive industries and increase their output.

The country's finances have been put in order, the budget is kept balanced, and the value of currency and exchange has been steadied. The gold reserve in the bank of issue has been gradually increased till it covers from 50 to 60 per cent of the note issue. To keep the foreign trade balance normal a policy of elastic protective tariff and export prohibition has been applied.

Highways.—During the monarchy about 437 miles of State roads were built between 1868 and 1890, and 132 miles per annum, on an average, were added between 1890 and 1914. During the war no new highway construction was undertaken, so that the present-day Hungary received a poor and worn-out network of highways as a war legacy from the monarchy.

Repair work on public highways was begun in 1921 and continued to the budget year of 1924–25. No new construction to any appreciable extent was undertaken until the budget year of 1925–26, when a "utility investment credit" was made available from the proceeds of the League of Nations' loan for roads. A total of 25,000,000 pengös¹³ were spent for highway construction in 1926–27. Local authorities secured a foreign loan of 44,000,000 pengös for the same purpose. Old roads have been repaired and some of them widened to facilitate rapidly developing motor traffic. About 480 miles of new roads have been built and there are now 1,553 miles of new roads under construction.

Power and harbor and waterway projects.—Quite a number of the unemployed workers have found regular employment on a project for developing power from the Danube River and the improvement of the harbor at Budapest. Below Budapest the great navigable Danube River divides into two branches, forming the island Czepel, one of the largest in the Hungarian Danube. The Eastern branch of the river, Soroksarer, was deepened by dredging along its entire length. At the upper end of the branch were built a lock and an

¹¹ Pound sterling at par = \$4.8665; exchange rate in 1926 about par.

¹² Gold crown at par = 20 cents.

¹³ Pengő = 17.49 cents; exchange rate in 1927 about par.

inlet sluice, and at the lower end a similar lock and outlet sluice, thus forming a fall at each place. Two power plants are planned. The transmission line will carry the energy to Budapest for lighting, traction, and other industrial uses. The project will be completed in 1929 or 1930. The harbors at the upper end of the branch have recently been enlarged and improved, and new warehouses and cranes have been added.

In addition, another large-scale project has been introduced by the Secretary of State in the Ministry of Labor and Public Welfare, namely, the building of a navigable canal between the Danube harbor at Budapest and the navigable Theiss River across the Great Hungarian Plain. This canal would provide an economically important water route and would make it possible to regulate the water flow in order to avoid floods, to drain water-logged areas of the plain, and to provide cheap electrical energy for industrial uses. The construction of this canal and other works connected with it would require thousands of workers for a number of years.

ESTONIA ¹⁴

ESTONIA also has suffered from unemployment, caused in part by the economic depression prevalent in Europe and in part by the seasonal character of certain industries, such as agriculture, lumbering and building, for Estonia is a northern country where such industries slow down during the winter.

On January 12, 1928, President Tõnisson called a State-wide conference of representatives of industries, city mayors, social workers, and economists to find means and methods for combating the unemployment evil in the Republic. In his call the President stressed the need for putting all the forces of the nation into productive motion for the purpose of overcoming unemployment.

During the last three years the appropriations for public works have been as follows: 1924-25, 820,000 crowns;¹⁵ 1925-26, 420,000 crowns; 1926-27, 530,000 crowns—a total of 1,770,000 crowns for the three years, of which sum the State Government contributed 85 per cent.

At the beginning of the unemployment distress Estonia adopted, among other measures, the benefit system. Later, measures to provide work were adopted.

Municipal Measures for Providing Work for Unemployed

HOW work for the unemployed is being found and how it is being organized and carried on in the city of Tartu, with a population of about 60,000 and about 1,800 unemployed this winter, is reported as follows:¹⁶

Needlework.—A sewing establishment has been organized under the control and direction of various local women's organizations and with financial aid from the city.

¹⁴ Data on which this section is based are from Parliamentary (*Piigikoju*) Stenographic Reports and State Budget for 1924 to 1927; Estonian Yearbook for 1927-28; Bank of Estonia Economic Bulletin, July 31, 1927; International Labor Review, Geneva, monthly issues from January to December, 1927; Postimees, Jan. 21, 1928; and Waba Maa, Jan. 9 and 14, 1928.

¹⁵ Crown at par = 26.8 cents.

¹⁶ Postimees, Jan. 21, 1928, p. 2: "An account of the inspection of public works by a committee consisting of city councilman, city consulting engineer, director of a labor exchange, and city street technician on Jan. 20, 1928."

Orders are received and work distributed, workshops being provided for those who can not take work home. The work is paid for at the established rates.

There are sewing, knitting, patching, cleaning, and pressing shops. All kinds of clothing for adults and children are designed, cut out and made, and worn and discarded socks, pants, blankets, and coats, are mended, cleaned, pressed, and in some cases even dyed. From military clothing material discarded by the quartermaster general all sorts of clothes for men and women are made.

Work is furnished for both unskilled and skilled men and women. If a needed skilled worker, for instance, a special designer, is not found among the unemployed, such a one is hired from the outside at the regular rate of pay or at a higher rate if necessary.

At first the principal customers were public institutions, such as schools, orphanages, correction houses, prisons. Later the general public was appealed to to patronize the establishment, so that orders are now coming in also from private persons.

Earthworks.—The banks of the Ema River, which flows through the city, are being raised as a protection against possible floods, earth being carted there from a hill near the city limits which is being lowered to the general street level in a project for new streets. In this work of raising the river banks 95 men and 262 women are engaged. Poorly clothed workers are given warm overcoats from the military stores, and hot tea is served at the work places at all times. Medical first aid is provided, and all workers are insured against accident and provided for in case of sickness by the city government. A number of low streets close to the river and often flooded in the spring are also being raised, providing work for 41 men and 28 women.

Housing investigation.—For the purpose of giving work to unemployed clerks and other nonmanual workers, the city has undertaken an investigation of the housing situation in the city, in which work 35 persons are engaged.

Public works.—There are 712 workers employed on public works within the city limits and 192 workers on public works outside the city limits—a total of 904 workers being given employment on such work. The city industries and individual employers have been appealed to to engage as many of the unemployed as possible, the city offering, if needed, to give them cheap credit or even a subsidy. These public works, however, have an aspect of charity, and some of the unemployed prefer to work in private establishments even though they receive a lower wage.

National Schemes to Combat Unemployment

REVIVING handicraft trades.—Handicraft trades are being revived throughout the country with considerable success in the effort to provide employment. The movement is organized and led by women's organizations, united in a National Women's League, substantially assisted by the Estonian Y. W. C. A., and financially supported, in part, by State and local governments. Work places, called "stations," have been opened in the cities and are soon to be opened also in the rural districts. The enterprise is organized as a regular business concern, a stock company having been formed for

the marketing of the goods, which advertises and sells the goods and organizes fairs and exhibitions at home and even abroad.

It has been found that applying certain modern ornamental features to ancient folk ornament greatly enhances the sale value of such goods, and consequently artists are employed as designers. The goods produced include wearing apparel, leather goods, wood carving, ceramic and metal goods, embroidery, etc. Experience has shown that well-to-do people are willing to pay more for hand-made than for factory-made articles. Still, the finding of a market for the goods produced is the greatest problem, and upon its satisfactory solution depends the final outcome of the whole enterprise.

At present the station at Tallinn, capital of the Republic, employs about 100 persons, mostly women, the wages paid being at the regular rate. At the same time the workers are being trained in their selected work.

Harbors and waterways.—A five-year project of improvement of harbors and interior waterways, started by the Ministry of Transportation of the Republic and involving an expenditure of 11,380,000 crowns, has been enlarged and its prosecution hastened under the pressure of the unemployment situation. The harbor at Parnu has been deepened, for which work 170,000 crowns has been expended, and during this year the lengthening of the breakwater will be finished, with an expenditure of 220,000 crowns. The navigable Ema River is being straightened at a number of places in order to shorten it for navigation, with an expenditure of about 1,500,000 crowns.

Highways.—The county authorities have undertaken improvement of the highways, such as straightening out sudden turns, leveling steep hills and filling deep depressions, rebuilding bridges, carting gravel upon roadbeds, etc. The improvement of the highways is especially necessary now because of the rapid development of cross-country bus lines and the increasing use of auto trucks and pleasure automobiles. The State has appropriated 1,350,000 crowns to be distributed among various counties in order to accelerate the highway improvements and at the same time relieve the unemployment pressure.

Although highway construction, like swamp drainage and other outdoor work, is somewhat retarded by severe weather in the winter, still the work is in progress most of the time.

Preventive measures.—While the above-noted measures for finding and creating work for the unemployed are largely of a temporary and often of a palliative nature, the Government is also giving attention to permanent and preventive measures against the recurrence of unemployment in the future. These measures, while needed for the normal economic development of the country, are being hastened by the pressure of the present unemployment distress.

General measures of a permanent nature.—The State budget is kept balanced, the currency has been stabilized, and foreign trade has been favorable. During 1927 Estonia was added to the countries whose currencies are on a gold exchange basis. Interest on bank credit was lowered and wages in the stronger industries were somewhat increased.

In order to reorganize the country's finances, to reorganize its industries—to replace worn-out machinery with that of modern type—

to increase shipping facilities, and to improve farming and fisheries, a loan of about \$7,000,000, under the auspices of the League of Nations, was successfully floated in the London and New York money markets, and the proceeds of the loan are being used for productive purposes.

Special measures of a permanent nature.—Among special measures, such as the building of new railways and electric power plants and the more adequate financing of shipping, there is one measure in which the Government seems to place great hopes for the combating of unemployment; namely, the reclaiming of land for new farms. The sum of 10,000,000 crowns has been set aside in the State Land Bank as a working colonization fund, out of which will be financed the reclamation of land, such as swamps by drainage. From this reclaimed land small farms will be given additional land in order to make them capable of sustaining a family, and new farms will be prepared on which the surplus farm hands can be settled as permanent farmers. As a result of the rapid mechanization of agriculture, the surplus of farm hands is becoming increasingly greater in the rural districts, especially in the winter. These farm hands flock to the cities in the fall there to compete with the factory workers for jobs, thus augmenting the ranks of the unemployed in the cities. A substantial number of these migrants succeed in establishing themselves as permanent city dwellers. The President of the Republic, in his call for the nation-wide conference on unemployment, points out that during the last five years the population of the cities of the Republic has grown from 279,073 to 301,994, an increase of 22,921.

The reclamation work, preparation of new farms (drainage, land clearing, road making, fences, farm buildings, etc.), and actual settlement on new farms, will absorb, the Government hopes, thousands of workers in the rural districts for a number of years to come, and thereby reduce at least the seasonal unemployment to the minimum.

Aside from extending the cultivated area of land, efforts are being made to increase dairy farming, for it is Estonian dairy products, exported principally to England and Germany, which are helping materially to keep a favorable foreign trade balance.

Health and Recreation Activities in Industrial Establishments

THE nature and scope of the various personnel features contributing to the health and general welfare of employees which are found in various types of industries formed the subject of a recent survey by the Bureau of Labor Statistics. Accounts of certain of these activities have appeared in various issues of the Labor Review during 1927 and the completed study is now available in bulletin ¹ form.

The survey included visits to establishments in different sections of the country, information being secured from 430 companies which were doing sufficient along personnel lines to warrant inclusion. As a similar study was made in 1916-17 covering practically the same

¹ U. S. Bureau of Labor Statistics Bul. No. 458: Health and recreation activities in industrial establishments, 1926. Washington, 1928, 94 pp.

number of companies, many of them identical, the present study affords an opportunity to observe the lines along which such work has developed in the past 10 years. The most decided changes were found in the extent of the provisions for the care of health, the extension of the vacation movement, and the increase in the number of companies carrying group insurance.

Medical and Hospital Service²

THE increased attention being paid to the maintenance of a healthy working force is shown by the fact that of the 375 plants which were reported in the 1916 study as having some provision for treatment of sick or injured employees, 110 had first-aid equipment only, consisting usually simply of a first-aid cabinet, while in the present study 373 companies had a dispensary or emergency hospital with one or more treatment rooms and only 34 had the limited first-aid equipment. The improvement is further shown in the number of doctors and nurses employed. Thus, in the present study, there were 311 establishments employing full-time or part-time doctors or surgeons and 332 employing trained nurses, as contrasted with 171 employing physicians and 181 having trained nurses at the time of the former study.

With the increase in the number of the trained personnel in the medical departments there has naturally been a broadening in the scope of the services rendered by these departments. Maintained at first largely in the hazardous industries as a result of the workmen's compensation laws, the benefits of medical care were so obvious that there has been a decided change in the type of service rendered by these hospitals. In extrahazardous industries the work of the hospitals is still directed more especially to the care of injuries, although many of them do a considerable amount of medical work, and in nonhazardous industries there is a quite general tendency to provide complete and effective health service.

In industries in which many accidents occur, the prevention of infection—a prolific cause of serious trouble—is stressed and employees are required to report to the hospital for the most trifling injury. Frequently severe penalties are imposed for any attempt by fellow employees to render first aid, such as removing foreign particles from eyes or binding up cuts or scratches. By following this method the time lost from infections has been greatly decreased in these plants and much suffering has been avoided. Preventive medical work is carried on in many industries and includes care of undernourished employees, periodic physical examinations, dental prophylaxis, eye examination, and curative treatment instituted for conditions shown by the examinations to be in need of special care. Visiting nurses follow up many cases of sickness, usually to see that the employee has proper care, though a number of companies provide free nursing service and in a number of instances sanatorium treatment is arranged for employees who contract tuberculosis. General hospitals are maintained by mining and other companies in the more isolated sections or in small towns, and frequently members of the families receive treatment in these hospitals. Employees of these

² For a detailed account see Labor Review, January, 1927, pp. 1-14.

companies are in nearly all cases charged a medical fee, varying from \$1 to \$2.50 per month, which is deducted from their pay, and members of employees' families are usually charged for major and sometimes for minor operations, although these charges are much below the usual rates.

When physical examinations were first introduced in industry there was much opposition to them on the part of the workers, who feared that such examinations would be used as the basis for discrimination. It has been shown, however, that the percentage of rejections as a result of the entrance examinations is not high unless the nature of the work is such that certain physical impairments entirely disqualify for employment, and very definite benefit is derived by the employees in many plants from the follow-up work done as a result of the entrance and periodic examinations. It is the policy of the medical departments of many firms to provide treatment for remediable conditions revealed by the physical examinations, to keep employees who have been ill under observation for a certain length of time, and to see that employees are properly placed from the standpoint of their physical condition.

Successful industrial medical work is, as a rule, found only in the larger plants, as the cost of really satisfactory service is prohibitive for small concerns. As the necessity for caring for the health of employees is just as urgent in the small establishments, the provision of adequate medical care presents a definite problem which might be solved, in cases where a group of industries is located near enough together to make this feasible, by sharing the services of an industrial physician or by providing a central hospital.

Sick Leave With Pay³

VERY little has been done as yet toward granting sick leave to workers paid on a piece or hourly basis, although it is quite generally granted to office workers. The provision for payment in case of sickness or nonindustrial accident is commonly through the benefit associations or in connection with the group insurance system. A definite plan for payments to manual and nonsalaried workers was reported by 14 companies and a number of others stated that cases are considered on their merits and that compensation is paid in certain cases. There is no uniformity in the plans, but the payments in the majority of cases amount to one-half wages for a period of four or six weeks which in some instances may be extended at a lower rate for a considerably longer period. In other cases the payments vary according to length of service from a stated minimum to full pay. In all cases a certain number of years' employment with the company, ranging from one to five years, is required before an employee is eligible to receive the sickness allowance.

Vacations With Pay⁴

THE past 10 years have seen a great extension in the practice of giving vacations with pay to factory workers. In 1916 only 16 companies reported that they gave vacations to the larger part of

³ For a detailed account see Labor Review, April, 1927, pp. 33, 34.

⁴ For a detailed account see Labor Review, May, 1926, pp. 1-7.

the shop or unsalaried force, while in 1926 it was found that 133 granted paid vacations. In both studies no companies which required more than two years' employment in order to be eligible for a vacation were included in the count, as it was considered that although many companies give vacations after periods of employment ranging from 5 to 25 years, such a waiting period is too long to have much interest for the majority of the workers.

The required service period of the 133 companies varied from a few months to two years. Sixty-six firms required less than 1 year, 56 required 1 year or more, and 10 required at least 2 years, while the 1 remaining company divided the employees into 5 groups, the length of the vacation being apportioned according to the service period of each group.

The usual vacation of factory employees on an hourly rate of pay is one week, although many firms increase the vacation after 10 or more years' employment as a recognition of continued service, and office workers and store employees are almost without exception given two weeks' vacation after their second year of employment.

Lunch Rooms ⁵

THE number of companies providing restaurant facilities had also increased during the 10-year period. At the time of the earlier study only a little more than half of the firms visited operated lunch rooms, while in 1926, 303, or about 70 per cent, provided one or more meals for their employees. The cafeteria is by far the most popular type of lunch room, both because the service is quicker than in the restaurants and because there is usually a greater variety of food served. Where space for a lunch room is lacking or the plant is very large, booths or stations may be installed at various points throughout the plant. The lunch rooms are managed either by the employer or a committee of the employees or, in a few cases, are turned over to an outsider to run, in which case the management expects to make a profit. When the employer manages the cafeteria, however, the lunch rooms, more often than not, are run at a deficit and in only four cases was it reported that there was any surplus in the operation of the lunch-room service. In general, it may be said that the lunch rooms are not looked upon as a potential money-making proposition by employers, but that the provision of appetizing and nourishing food at a reasonable cost is regarded as an important factor in maintaining the health and efficiency of the working force.

Recreation ⁶

THE activities of employers along recreational lines include among the indoor features the provision of recreation rooms, clubhouses and gymnasiums; assistance in the organization of clubs and musical and dramatic organizations; and the promotion of social activities among the personnel. The facilities for outdoor recreation include provision of athletic fields or baseball diamonds, tennis courts, golf courses, swimming pools, country clubs, etc., and promotion of the various sports and games.

⁵ For a detailed account see Labor Review, March, 1927, pp. 13-22.

⁶ For detailed accounts see Labor Review, May, 1927, pp. 1-16; and September, 1927, pp. 1-14.

Of the companies visited, 235 provided clubhouses, club or recreation rooms, rooms for different games such as billiards or pool, bowling alleys, and gymnasiums, and 316 companies provided lectures, moving pictures, and concerts, or assisted in the maintenance of bands, orchestras, or glee clubs. In the field of outdoor recreation, 319 companies provided facilities for the various sports, maintained country clubs or summer camps, or arranged for an annual picnic or other outings.

Very active clubs of various sorts and athletic associations are found in many plants and in nearly all cases recreational and athletic activities are organized and managed by the employees themselves, the employers assisting by providing rooms for meetings, fields, and equipment for sports, or prizes for different athletic events, or by cash donations. The general tendency, however, may be said to be one of cooperation on the part of the employer and willingness to offer any encouragement or assistance which the employees need or are willing to accept, but the policy is usually to let the demand for any particular activity come from the workers rather than to try to force it upon them.

Community recreation for adults, with which, in many cases, the industries are identified, has been one of the outstanding developments in the recreation movement during the past decade. A growing number of cities are realizing the advantages resulting from the provision of recreational facilities under trained leadership which are open to all members of the community. More than 20 communities having organized indoor and outdoor sports and social affairs were visited in connection with the present survey, and it was found that practically every type of activity was represented in many of these communities. It is evident that with the increasing concentration of the population in the cities, often in highly congested areas, the need for recreation facilities and for leadership capable of organizing and carrying through a recreation program is becoming more and more essential.

In company towns practically all the personnel work ⁷ is along community lines and covers the recreation of adults and children, as well as health services, education, and club work, and often all this work is grouped in community centers with a staff of trained workers to organize and supervise the different branches of the work.

Group Life Insurance and Disability Funds ⁸

NO ONE feature in the field of industrial relations has had such a phenomenal growth as the provision of group insurance. This form of insurance was first written in 1911. At the end of 1926 more than 75 companies were writing group insurance, and it was estimated that the insurance in force amounted to more than five and a half billion dollars. Of the plants visited, 186 had group insurance plans in effect while 10 reported that the plan had been discontinued. The earlier group life insurance policies provided for the payment of a lump sum in case of death, but the trend during the past five or six years has been toward the contributory plan, usually with the addi-

⁷ For a detailed account see Labor Review, August, 1927, pp. 90-96.

⁸ For a detailed account see Labor Review, June, 1927, pp. 76-86; and July, 1927, pp. 20-26.

tion of insurance against disability from sickness or nonindustrial accident.

Mutual benefit associations also make provision against the contingency of sickness and death, although the payments are usually on a lower scale than those of the group insurance plan.

These associations are frequently maintained by the employees of an establishment without any assistance from the firm, but only those were included in the present study in which some material assistance was given by the company, either in the operation of the fund or in the payment of benefits. There were 214 such associations reported, and in 177 which reported on the membership 76 per cent of the total number of employees belonged to the association. This may be considered a high percentage in view of the fact that there is, in many cases, a waiting period varying from two weeks to a year after employment before an employee is eligible for membership. The dues in the majority of the associations range between 25 and 75 cents per month. The average yearly benefits paid by 94 associations reporting on this point amounted to \$40.93. Disability benefits in most cases cover both sickness and accident but usually exclude cases of sickness or injury which entitle the employee to payments under the workmen's compensation laws of the different States.

Education

OPPORTUNITY for advancement through further study is offered their employees by a number of firms. As a general rule the study courses provided follow the lines of the business and are designed to give ambitious employees the opportunity to progress in the business or industry. In several instances employers who do not find it feasible or advisable to furnish the instruction cooperate with the public schools or pay the tuition of employees who reach a certain standard in their studies or in their attendance at classes in other schools or colleges. There is great need for further education among industrial workers generally as large numbers enter industry with a minimum amount of schooling, so that without additional opportunity for study there is little prospect of advancement for many of them. In spite of the fact that many employers have taken an active interest in this work and offer in some cases very unusual opportunities for study it is probable that only a small percentage of the workers who stand in need of further education are reached. One hundred and fifty of the firms reported that educational work was carried on and 48 more that financial help was given to those taking work outside the plant. In addition to the instruction given in subjects relating more particularly to the industry, several companies organize classes in subjects having more of a cultural value, and classes in domestic science and handicrafts are frequently maintained for the woman employees. In cases where the technical and vocational work is an important feature of the company activities, it is in charge of an educational director or an educational committee. Libraries which form a valuable adjunct to the educational activities are reported by 127 establishments.

Encouragement of Thrift⁹

A VARIETY of plans are followed in encouraging employees to systematic saving. These include savings and loan funds, building funds, profit-sharing plans, sale of company stock to employees, vacation and Christmas savings funds, and cooperative buying and discounts on company goods.

One hundred and ninety-six companies reported that the maintenance of a savings fund among employees was encouraged or a systematic effort was made to get employees to put something in the bank each pay day. Loan funds were reported in 72 instances which were maintained either directly by the company or as a part of the savings plan, and 39 companies reported that there was a building and loan association.

Free legal advice is given employees who need assistance in personal, domestic, or business difficulties by a majority of the companies, although a number stated that employees were not encouraged to ask for it. Advice as to investments is also given in numerous instances.

Cooperative stores were found in only 21 instances, although a large proportion of the companies either promoted the cooperative buying of certain commodities or allowed a discount on their own products or on supplies bought by them, with the result that considerable savings were effected for the employees.

Administration of Personnel Work

AN IMPORTANT part of any personnel program is the way in which the work is administered, as the personality of the person who has it in charge, or the extent to which the employees participate in the management, determines largely the degree of success of such work. In 164 companies the personnel work was reported to be under the supervision of one person employed for this purpose, while the work was in charge of one of the company officials in 94 cases, in about the same number the employment manager directed the work of both the employment and personnel departments, and in several cases the work was in charge of the doctor or head nurse.

The cost of the personnel work was secured from 190 firms, but as no pay-roll data were available it was impossible to determine what percentage this was of the annual pay roll. The annual cost per employee was determined, however, and it appeared that in general it was not great enough to be prohibitive nor would it be important as an addition to wages. In the different industry groups the range was from \$13 to \$67, with an average for all industries of \$27 per employee, although in individual establishments in some cases the expenditures were very much higher.

Although definite measurements of the results of these policies are impossible, opinions from the firms were in quite general agreement that the effects were favorable on the stability of the force and on the time lost because of sickness and other causes. Several companies, on the other hand, were not convinced that stability and steady attendance were much affected, but thought that they depended more upon the wages paid than upon the personnel policies.

⁹ For a detailed account see Labor Review, October, 1927, pp. 78-82.

Conclusion

A REPORT of this kind necessarily has many limitations. In the first place so many subjects are covered that the question of time alone precludes a thorough study of some features, such as the insurance plans, which would repay a more detailed and critical consideration of their merits and demerits. What the report aims to show is the lines followed in so-called "welfare" activities and the features of the work most favored by employers and employees. It should not be assumed that because no criticism of any of these activities is voiced in the report that it is not recognized that there may be valid objections which could be brought forward concerning them. To discuss these activities from a critical standpoint, however, would necessitate approaching such a study from a different angle and, on subjects which are more or less controversial, it would not seem fair to raise a question as to whether or not these features are a desirable part of industrial operations without a thorough consideration of all the arguments for and against them. The study is then, frankly, a noncritical survey of employers' personnel activities and should be accepted as such by the reader.

UNEMPLOYMENT CONDITIONS IN THE UNITED STATES

Unemployment in the United States: Report of the Secretary of Labor

RESPONDING to a Senate resolution of March 6, 1928, the Secretary of Labor, on March 24, transmitted to the Senate a report regarding the number of unemployed wage and salary earners in the United States. The report explains that complete information is not available as regards the total number of persons out of work, and that no accurate information of this character can be obtained except by a very comprehensive census. From existing data, however, the Commissioner of Labor Statistics estimates that between 1925 and January, 1928, there was a shrinkage of 1,874,050 in the number of employed wage and salary workers. No attempt is made to estimate the number of unemployed in the base year, 1925, but it is pointed out that 1925 was a year in which there was no noticeable unemployment question.

The full report follows:

DEPARTMENT OF LABOR,
OFFICE OF THE SECRETARY,
Washington, March 24, 1928.

HON. CHARLES G. DAWES,
President of the Senate, Washington, D. C.

SIR: On March 6, 1928, the United States Senate, first session of the Seventieth Congress, passed Senate Resolution 147, as follows:

Resolved, That the Secretary of Labor is hereby directed (1) to investigate and compute the extent of unemployment and part-time employment in the United States and make report thereon to the Senate, and together therewith to report the methods and devices whereby the investigation and computation shall have been made; (2) to investigate the method whereby frequent periodic report of the number of unemployed and part-time employed in the United States and permanent statistics thereon may hereafter be had and made available, and make report thereon to the Senate.

In compliance with these requirements I immediately directed the United States Commissioner of Labor Statistics to make such report as was possible from available records upon the subject named in the resolution. I herewith transmit the report which the Commissioner of Labor Statistics has placed in my hands.

In reply to the clauses which introduce the resolution, I would call your attention first, to the fact that the volume of employment, as shown by the reports of the Bureau of Labor Statistics, published monthly, has tended downward, from April, 1927, up to and including January, 1928. The February report, just published, shows

however, an upward trend in employment. This fact the Department of Labor has done its utmost to make widely public, and thus has already fulfilled, so far as it had power to do so, the requirement of the Senate's resolution, namely, to call attention "to the proper timing for the inauguration of public works by the Federal Government and the encouragement of similar undertakings by the States."

Bearing on this action by the Department of Labor, I would respectfully submit that having had personal experience of former periods of unemployment, I do not recall an instance where there was "proper timing for the inauguration of public works," or other governmental, State, municipal or county effort to take up shrinkage of employment until after it was too late. In the present instance the Department of Labor has sounded such warning in ample time.

In reply to another clause in the preamble to the Senate's resolution, "that accurate and all-inclusive statistics of employment and unemployment be had at frequent intervals," I would call your attention to the fact that the resolution carries no appropriation for this purpose. I am informed by the Commissioner of Labor Statistics that to obtain such information and keep it current would require a very large addition to the amount of money appropriated for the Department of Labor. A statement of employment and unemployment that would "be accurate and all inclusive" would involve an individual census of the United States, a work physically impossible of performance at frequent intervals, and of heavy expense.

There is every reason to believe, however, that with a moderate increase in the annual appropriations for the Bureau of Labor Statistics, the bureau could materially extend its volume of employment and part-time employment information to include manufacturing establishments of smaller size, where its information now is obtained from the larger establishments alone. The bureau could also extend its work to include other industries than those now covered, and could tabulate its material not only, as now, by geographical divisions, but by States and principal cities instead. A very careful estimate submitted to me by Commissioner Stewart indicates that, for \$100,000 additional, the division of the bureau now handling this material could be increased to include a fair proportion of establishments employing as few as 50 persons, and that this material could be presented in detail by industries, States, and cities of 100,000 population.

In addition to this, \$20,000 should be added to the present appropriation for the employment service of the Department of Labor to enable it to extend its general nonstatistical reports of employment opportunities, by cities, to cover States not now included in its reports, and to increase the facilities for placing jobless men, especially in its farm-placement activities.

I herewith transmit the report on employment conditions which the Commissioner of Labor Statistics, with the facilities at hand, has submitted to me. It shows that the present slump in employment, while not so extensive or grave as the estimates which have been generally circulated, is nevertheless serious. The factors which have brought it about are many; among them, the floods in the Mississippi Valley, in New England, the tornado which swept Florida and its

attendant losses, the temporary closing of a part of certain major industrial plants, and a disturbance in the bituminous-coal fields which has lasted for many months. All these have temporarily decreased the opportunities for employment and have adversely affected employment conditions in other lines of industry.

These, and the other influences which have operated in the same direction, I believe to be passing phases of our economic life. There are, nevertheless, certain features of the problem which must be considered if approach to constructive remedial measures is to be made with proper intelligence. For example, in 1927 the total net immigration, both inside and outside the quota countries, amounted to 252,023. A considerable percentage of these were prospective laborers. In addition to these immigrants, admitted during a year when our own people were losing employment, there was the annual average influx of 205,000 from the farms to the cities. We, further, have practically 2,000,000 boys and girls in our own population who reach the working age each year.

I desire to call your attention also to a distinction which Commissioner Stewart makes in his report, to the effect that "employment as it exists at present is composed of two entirely different elements, namely, those temporarily out of work at their regular occupations, and, second, those displaced by changes in industrial and commercial methods"; or, as one might put it, those who are merely suspended, and those permanently released from their jobs.

Former labor depressions have been due almost wholly to the first group named, and, if public work is not furnished quickly enough to relieve them, they have no recourse but to wait until their own jobs are again available. Prompt relief for these is due from the Government's elaborate building program, from similar programs of States, municipalities, and counties, and from private building and construction.

For the second class of unemployed, Commissioner Stewart says: "It is not unreasonable to believe that a considerable percentage of the employment shrinkage shown in this report is due to new machines and new mechanical devices. Waiting for industrial developments is of no avail. Their jobs are gone. Inventive genius must devise new industries, commercial agencies must create new wants in order to create new occupations for these people, in so far as age permits them to learn new occupations or adapt themselves to new industries." This need for new industries and new occupations daily becomes more pressing. The Department of Labor is in constant receipt of reports of acute situations resulting from the introduction of new machines. It is believed in many quarters, moreover, and with good reason, that this mechanical development will probably proceed as rapidly in the immediate future as it has in the immediate past.

With all these forces tending to cause unemployment, the number at present unemployed has been found to constitute a very small percentage of those at work. The census of 1920 showed that 42,000,000 of our people as wage earners or otherwise are gainfully employed. Of these, 23,348,692 have been found to be at present employed on either a wage or a salary basis. By the most careful computation methods available Commissioner Stewart finds that the actual number now out of work is 1,874,050.

The attached report, compiled by Mr. Ethelbert Stewart, United States Commissioner of Labor Statistics, which contains these figures and the methods by which they are obtained, is the second such report which I have been called upon to submit to your body. Commissioner Stewart has been connected with the statistical work of the Bureau of Labor Statistics and of the Government for a period of 41 years, having been first appointed Commissioner of Labor Statistics by President Wilson, and continued in office by Presidents Harding and Coolidge. Mr. Stewart's ability and conscientiousness in this work are thoroughly established and recognized, and his former report, which I submitted in August, 1921, showing 5,735,000 fewer persons on the pay rolls of the country, proved to be accurate. I therefore submit this, his second report, with absolute confidence in its essential accuracy.

You will find this report of the Commissioner of Labor Statistics on Senate Resolution 147 accompanied by an appendix which gives the report of Dr. J. Knox Insley, Commissioner of Labor and Statistics of Maryland, dealing with the same subject and giving the details of a house-to-house canvass in the city of Baltimore. The results of this independent investigation are included as further confirming the accuracy of Commissioner Stewart's report.

Respectfully,

JAMES J. DAVIS, *Secretary of Labor.*

U. S. DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, March 24, 1928.

HON. JAMES J. DAVIS,
Secretary of Labor, Washington, D. C.

SIR: In accordance with your instructions of March 6, 1928, I have completed and transmit herewith a report concerning the volume of unemployment in the United States at this time and the amount of part-time employment so far as can be determined from the records in the possession of the Bureau of Labor Statistics.

The definition of unemployment as here used is as follows: Persons usually employed but at present out of employment and hunting for work. In other words, the first section of this report refers to persons now totally idle but who have until a reasonably recent period been employed and who are now seeking employment. This section does not include those employed part time nor does it include those who are unemployable and are and have been for a long period of time subject to what might be considered outdoor relief.

The second part of the report deals with such information as we have on part-time employment.

To this I have appended the recent report of the commissioner of labor and statistics of the State of Maryland, which in addition to being a very able and interesting document contains the result of the only actual house-to-house canvass made for the purpose of determining the actual number of unemployed that has been made in any city so far as I know.

Respectfully,

ETHELBERT STEWART,
Commissioner of Labor Statistics.

Report of Commissioner of Labor Statistics

On March 6, 1928, the United States Senate passed Resolution 147, which contains the following language:

Resolved, That the Secretary of Labor is hereby directed (1) to investigate and compute the extent of unemployment and part-time employment in the United States and make report thereon to the Senate, and together therewith to report the methods and devices whereby the investigation and computation shall have been made; (2) to investigate the method whereby frequent periodic report of the number of unemployed and part-time employed in the United States and permanent statistics thereof may hereafter be had and made available, and make report thereon to the Senate.

Responding to the requirements of the first part of the resolution quoted, the best estimate that can be made from all sources of information available at this time is that the shrinkage in the volume of wage earners, including manufacturing, transportation, mining, agriculture, trade, clerical, and domestic groups, figuring on a basis of those employed in 1925, is revealed to be 7.43 per cent. Applying this percentage to the total number of employees as of 1925, gives a shrinkage between the average of 1925 and January, 1928, of 1,874,050 persons.

The method of calculation employed in arriving at this figure is as follows: First, the census of 1925 is taken as a base, because the census of 1920 represents a boom year, and while there was a tremendous slump between that and the census of 1923, nevertheless between these periods there had been a recovery and the year 1923 brought an up-swing, which from the present point of view may be considered by some at least an incipient boom. Employment dropped again in 1924, advanced slightly in 1925, a little more in 1926, and dropped again through 1927. The year 1925 may therefore be accepted as an average recent year from which to take measurement, and it is herein made the base from which employment shrinkage has been computed. In making 1925 the base or 100, it is understood that whatever there may have been of unemployment in that year is ignored, and it is assumed that those who were let out of industry between 1923 and 1924 had by 1925 readjusted themselves. It may be said that 1925 was a year in which there was no noticeable unemployment question. It is also used as a base because it was a year in which the Census of Manufactures was taken.

The foundation of the estimate here submitted is the known figures for 1925 for (1) manufacturing wage earners, and (2) railroad employees. These, with the estimates as of January, 1928, are as follows:

Industry	Employed in 1925	Estimated employed January, 1928	Estimated shrinkage
Manufacturing.....	8,383,781	7,739,907	643,874
Railroads.....	1,752,589	¹ 1,643,356	109,233
Total.....	10,136,370	9,383,263	² 753,107

¹ December, 1927.

² Decrease of 7.43 per cent.

No figures are available for the groups—agriculture, mining, clerical workers, domestic service and trade—and it can only be assumed that they have been affected in like degree.

The change in manufacturing employment is determined from the change in the Bureau of Labor Statistics' index of employment in manufacturing industries. The railroad figures are exact for Class I railroads, omitting general and division officials. The number of employees in 1925 is estimated from the population census taken as of January, 1920, as recast in the July, 1923, issue of the Monthly Labor Review, and from the percentage of change in employment as known for manufacturing and railroads.

The number of employees in 1925 used in this calculation—that is, persons working for wages or salaries for others—is estimated at 25,222,742. This figure does not include any persons operating their own business or professions. The calculated number of employees as of January, 1928, upon the same basis, was 23,348,692, leaving a shrinkage between the two periods as indicated above of 1,874,050.

The table shown below, which gives the changes in employment from month to month, has been recast upon a basis of the average of 1925, to conform to the method adopted in the general estimate. However, it is important to show that most of this shrinkage took place in 1927, beginning practically in April, and continuing through January, 1928. The index for February, just issued, shows an upward trend as against January or December.

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES, BY GEOGRAPHIC DIVISIONS, 1925, 1926, 1927, AND JANUARY AND FEBRUARY, 1928

[Monthly average, 1925=100]

Year and month	New England	Mid-Atlantic	East North-Central	West North-Central	South-Atlantic	East South-Central	West South-Central	Mountain	Pacific	United States
1925										
January	101.9	99.4	94.6	98.8	97.7	99.6	101.0	94.0	94.8	98.7
February	102.9	101.2	96.1	100.1	100.2	100.9	102.5	94.3	96.3	100.4
March	103.2	101.7	98.4	99.6	101.5	100.7	101.2	95.5	95.1	101.2
April	102.0	100.8	99.8	98.4	101.6	100.7	101.1	98.7	97.8	101.0
May	100.5	99.6	100.6	97.6	98.7	98.3	96.9	101.7	101.0	99.7
June	98.0	98.8	98.7	99.5	97.7	98.1	97.4	103.9	104.8	98.8
July	95.6	97.6	98.2	100.0	96.0	95.7	98.1	104.8	101.8	97.9
August	96.9	97.0	99.8	101.2	97.7	98.9	98.9	102.9	101.5	98.6
September	96.7	99.2	101.4	101.3	99.5	100.2	100.2	101.1	104.4	99.7
October	100.5	100.6	104.4	101.9	101.6	101.7	100.3	100.5	103.9	101.2
November	101.2	101.1	104.4	100.8	103.0	102.8	100.6	99.0	101.8	101.4
December	100.5	102.4	103.0	100.4	104.6	102.4	101.6	103.0	98.5	101.5
Average for year	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1926										
January	101.2	102.0	103.0	98.9	103.8	100.9	99.8	98.6	96.5	101.2
February	102.6	102.5	104.6	99.1	104.7	101.5	100.5	96.0	96.6	102.3
March	103.2	102.3	105.4	98.4	106.0	100.9	100.1	94.4	97.8	102.7
April	101.0	101.1	103.9	98.3	104.3	100.7	100.7	94.9	101.7	101.8
May	99.0	100.0	101.9	98.2	102.4	98.2	100.3	98.1	105.0	100.5
June	97.3	99.4	101.7	99.5	101.9	96.8	101.9	101.8	103.9	100.1
July	92.6	97.6	100.2	99.0	100.7	97.0	102.0	99.3	103.3	98.5
August	94.3	97.8	102.1	100.6	101.4	97.9	103.5	98.5	103.6	99.5
September	97.9	99.9	102.7	101.3	104.5	96.9	102.6	102.1	103.2	101.1
October	99.5	100.7	101.9	101.8	105.4	95.7	102.3	101.5	103.4	101.4
November	99.4	99.9	98.0	99.8	105.4	95.4	101.5	101.0	102.0	100.2
December	98.3	99.1	95.8	97.6	105.3	95.4	101.1	99.2	99.2	99.7
Average for year	98.9	100.2	101.8	99.4	103.8	98.1	101.4	98.8	101.4	100.8

INDEX OF EMPLOYMENT IN MANUFACTURING INDUSTRIES, BY GEOGRAPHIC DIVISIONS, 1925, 1926, 1927, AND JANUARY AND FEBRUARY, 1928—Continued

Year and month	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	United States
1927										
January.....	97.5	97.0	94.7	95.7	104.5	93.1	99.3	96.4	95.4	98.0
February.....	98.7	98.0	99.1	96.2	106.0	94.1	99.9	93.0	95.6	99.8
March.....	98.2	98.0	100.7	96.0	106.9	93.6	98.8	91.9	98.3	100.2
April.....	96.9	96.3	100.8	95.9	107.1	92.9	97.6	93.1	99.5	99.3
May.....	95.7	94.8	100.6	96.7	105.4	91.5	96.0	96.2	101.3	98.4
June.....	94.2	94.2	99.4	98.9	104.8	91.2	96.1	97.8	103.1	97.7
July.....	93.0	92.7	96.1	98.0	103.7	89.5	94.4	99.5	102.1	95.7
August.....	92.4	92.7	97.4	98.3	103.2	90.6	95.2	98.1	102.4	95.8
September.....	94.4	93.8	96.2	98.3	105.7	90.8	96.6	97.0	102.1	96.5
October.....	94.1	93.6	95.5	97.6	105.4	91.4	94.9	95.4	101.7	96.1
November.....	92.8	92.0	92.2	94.3	104.7	90.2	93.4	96.4	99.1	94.2
December.....	90.9	90.8	93.1	92.7	103.8	90.3	92.0	92.3	95.8	93.3
Average for year..	94.9	94.5	97.2	96.6	105.1	91.6	96.2	95.6	99.7	97.1
1928										
January.....	90.4	88.9	94.9	92.0	102.0	89.2	90.4	87.5	91.7	92.3
February.....	91.0	89.4	99.5	94.9	102.3	90.3	90.6	88.1	92.3	93.7

It is also interesting to note that while the Bureau of Labor Statistics' figures are based upon 10,772 establishments employing in January, 1928, 2,907,700 employees, or an average of slightly over 271 employees each, the percentage of change from January, 1927, to January, 1928, corresponds exactly with the figures for the State of New York, which include a much larger proportion and take in very many smaller establishments.

The Bureau of Labor Statistics is working cooperatively with a number of States in this matter of employment record. In the beginning the bureau formed its own contacts with the original establishments and necessarily picked the older and larger establishments so as to get a more formidable number of employees for comparative purposes. Later on a number of States began this work, but secure information from a vastly larger number of establishments within each State, and the State bureaus furnish to the United States bureau schedules from such establishments as are agreed upon.

The figures of percentage of change in employment show a great variation in geographical districts, which the Bureau of Labor Statistics interprets to mean that unemployment is not universal nor in all places or industries is it acute, but that it is spotted by geographical sections and by industries, and that in actual numbers it is not more than one-third of the magnitude of the labor depression of 1921, which caused a shrinkage in the number on the pay roll according to the estimates of this bureau of 5,735,000, from the peak of 1920 to July, 1921.

The spottedness of the unemployment situation is brought out by a list showing the percentage of change in employment between a given month in 1928 and the same month in 1927, except in the

case of Wisconsin where December is used. These ranges in percentage are shown in the following table:

YEARLY CHANGES IN EMPLOYMENT

State	Period	Per cent of change in employment
U. S. Bureau of Labor Statistics.....	January, 1927-January, 1928.....	-5.8
Oklahoma.....	February, 1927-February, 1928.....	-19.7
Wisconsin (factory workers).....	December, 1926-December, 1927.....	-3.9
Illinois.....	February, 1927-February, 1928.....	-6.5
California.....	January, 1927-January, 1928.....	-7.8
New York.....	do.....	-5.8
Maryland.....	do.....	-7.8
Massachusetts.....	February, 1927-February, 1928.....	-9.7

As further indication of such spottedness, the employment report from the State of California indicates that the average of employment in all industries carried was 7.8 per cent lower in January, 1928, than in January, 1927. The details show the same spotted conditions there that have been noted elsewhere. For instance, canning and packing of fish has dropped off 67.8 per cent while other food products showed an increase of 19.3 per cent. Men's clothing dropped 11.3 per cent while millinery advanced 11.6 per cent. Iron foundries and machine shops fell off 16.6 per cent while glass advanced 18.7 per cent. Sugar fell off 21.6 per cent while agricultural implements advanced 30.1 per cent.

PART-TIME EMPLOYMENT

In the pamphlet on Employment in Selected Manufacturing Industries for January, 1928, percentage figures were given as to the number of establishments operating full-time or part-time and establishments idle. Such figures were based on the reports of establishments, without taking into consideration the size of the several establishments.

These percentage figures have since been recomputed and weighted by the number of employees. In other words, due weight has been given to the size of the establishment in computing the average per cent.

Reports on percentage of full-time employment were received from but 9,095 of the 10,772 establishments reporting other facts to the bureau in the pay period ending nearest January 15, 1928. Of these 78.8 per cent were working full time, 20.2 per cent were working part time and 1.1 per cent were working overtime.

Of the total number of employees reported, 1,876,367 employees (78.7 per cent) were working in establishments operating full time; 482,354 employees (20.2 per cent) were employed in establishments working part time; and 25,598 employees (1.1 per cent) were employed in establishments working above normal full time.

In the establishments reporting part time operation, the weighted time worked by the 482,354 employees was 80.7 per cent of full time. The weighted average per cent of time worked by the 25,598 employees in those plants operating in excess of normal full time was 111.3 per cent of full time.

The following table shows a classification of the employees by groups, according to per cent of normal full time worked.

NUMBER AND PER CENT OF EMPLOYEES IN ESTABLISHMENTS WORKING
EACH SPECIFIED PER CENT OF REGULAR FULL WORKING TIME

Per cent of employment	Persons in group		Per cent of employment	Persons in group	
	Number	Per cent		Number	Per cent
Over 100 per cent (overtime).....	25, 598	1. 1	73 per cent.....	33, 534	1. 4
100 per cent (regular full time)....	1, 876, 367	78. 7	72 to 61 per cent.....	37, 102	1. 5
99 to 93 per cent.....	56, 291	2. 4	60 per cent.....	23, 371	1. 0
92 per cent.....	88, 956	3. 7	59 to 51 per cent.....	10, 692	. 4
91 per cent.....	31, 697	1. 3	50 per cent.....	12, 744	. 5
90 to 84 per cent.....	31, 742	1. 3	49 to 25 per cent.....	6, 731	. 3
83 per cent.....	47, 509	2. 0	24 to 9 per cent.....	428	1. 0
82 per cent.....	54, 833	2. 3			
81 to 74 per cent.....	46, 724	2. 0	Total.....	2, 384, 319	100. 0

¹ Less than one-tenth of 1 per cent.

This tabulation shows that 79.8 per cent of all employees were in establishments that worked full time or over and that 87.2 per cent of all employees were in establishments that worked more than 90 per cent of full time, while less than 1 per cent of the employees were in establishments working half time or less.

In the great majority of establishments six days constitute a full week. In some of the iron and steel establishments seven days constitute a full week. Five and one-half days make a full week in a few establishments and five days in some others.

Employees working less than their regular full time may be roughly grouped as follows:

Idle over one-half day and under 1 day, 1.3 per cent.

Idle one day, 5.3 per cent.

Idle over one day and including one and one-half days, 3.4 per cent.

Idle over one and one-half days and under three days, 2.9 per cent.

Idle three days or more, 0.8 per cent.

In addition to the 9,095 establishments in operation that reported their per cent of full-time employment, 108 establishments definitely reported that they had recently become temporarily idle. These establishments were smaller than the average and several of them were in their slack season. When last operating they employed 14,126 persons. Thus, about six-tenths of 1 per cent of manufacturing industry employees became temporarily idle because of recent shutdown of plants in which employed.

In this statement of part-time employment the bureau confines its report strictly to the data in hand and does not apply the percentage obtained therefrom to manufacturing industries as a whole, for the reason that there is no information at hand upon which to base an opinion as to whether the same percentage found to exist in the establishments reporting to this bureau, which are admittedly larger than the average establishment, could fairly be applied to manufacturing industries as a whole. There is no material available upon which to base an opinion as to whether averages from the selected industries now reporting to the Bureau of Labor Statistics should be applied to clerical and domestic labor, or to any of those classes which are not covered in these reports.

It may not be out of place here to call attention to the fact that unemployment as it at present exists is composed of two entirely different elements, namely, those who are temporarily out of work at their regular occupation and in their regular industry, and second,

those who have been displaced by the changes in industrial and commercial methods—or as one might say, the suspended and the displaced. What proportion of those at present entirely idle applies to each one of these classes it is impossible to tell. The man who has been entirely displaced by a new method of doing work or a new machine must seek new contacts, it may be change his occupation and his industry entirely. In other words, in one class a man is waiting for his old job with reasonable assurance that the plant which is now idle will resume operation and he will be restored to his employment. In the other class the job is gone. The work formerly done by human energy is now performed by mechanical devices. The chances are that not only in the establishment from which he was dropped but in all other similar establishments he will face the same situation—that he must start anew. It is not unreasonable, as has been estimated by a writer in the *Annalist*, that one-half of the employment shrinkage shown in this report is due to new machines and new mechanical devices. All that is definitely known is that taking it for all in all the total displaced labor is largely of the unskilled type. The conveyor, the motor hoist truck, changes in placement of machines so that the process is continuous and the material goes from machine to machine by the force of gravity, are schemes that have displaced much labor, and this labor is mostly unskilled and common labor.

In conclusion I beg to submit as an appendix¹ to this report a statement recently issued by the Maryland Commissioner of Labor and Statistics, Dr. J. Knox Insley. This is interesting from several points of view. First, it is a striking comment on the value of estimates which are based upon nothing at all as to the number of unemployed. The Maryland State Federation of Labor made an estimate of 75,000 people out of work in Baltimore. The chamber of commerce of that city immediately replied with an estimate of 33,000. A house-to-house canvass made by the police department of Baltimore for the Maryland Commissioner of Labor and Statistics developed that there were 15,473 such unemployed persons.

Another exceedingly interesting feature of this Maryland report is a classified statement as to the length of time which the unemployment had lasted. It is interesting to note that there was little or no pick-up work and that in times of labor depression even no more severe than the present one the general opinion that a man can fill in with "odd jobs" is not found true in practice.

Survey of Unemployment in Baltimore, February, 1928

A SURVEY of the volume of unemployment in the city of Baltimore was made in February, 1928, by the Commissioner of Labor and Statistics of Maryland. His report on the results of this study reads as follows:

A study and survey of the facts obtained show that in Baltimore City there are at the present time approximately 15,500 unemployed

¹ See article immediately following.

persons who usually are engaged in some gainful occupation. These figures are based on information secured by a house-to-house canvass conducted by the members of the city police force, through the courtesy of their commissioner, upon the request of the commissioner of labor and statistics.

While this total number is smaller than any of the various and scattered estimates of the amount of unemployment in Baltimore, several factors must be taken into consideration before arriving at a conclusion of its general effect. In making the canvass, consideration was given only to those who usually work for wages or on their own account in some business and who are now entirely without gainful employment of any kind. No effort was made to secure information for the apparently large number of persons who are employed for only part time. This is a separate and distinct study in itself and must be approached, we believe, from a different angle and by a different method. In addition, every precaution was made to eliminate those men and women who either could not or would not work if employment were available for them. To have included either or both of these groups would have clouded our problem, and would, perhaps, have greatly increased our figures.

Thus, then, if we may legitimately assume that the number of those usually engaged in gainful occupations in Baltimore City has increased at the same rate as the estimated population, we find approximately 4 per cent of these men and women, who can work and who want to work, unable to secure employment at the present time. Of the 15,473 persons found unemployed, by far the larger group, 13,468 in fact, is composed of men. Only 2,005 women, of whom 1,279 are white and 726 are colored, are included. More than 10,000 of these unemployed are white.

While more than 25 per cent of these men and women have worked in connection with the various manufacturing industries, the individual industry in which the survey shows unemployment to be the most severe is building. Here alone we find about one-sixth of the total number of persons. The textile industry, involving mostly clothing, is the most outstanding of the manufacturing industries, with food products and iron and steel competing for second place.

In considering the regular occupations of those unemployed, we find that the largest single group is composed of unskilled labor. The second largest number are found in the semiskilled operatives and factory workers, but of the individual building and hand trades carpenters lead in actual numbers.

The individual reports submitted by the police department indicate that, through the unemployment of these 15,473 men and women, almost 13,000 of an approximate number of 175,000 families are involved, and that at least 64,000 individuals are either directly or indirectly affected, a situation the seriousness of which is not to be minimized.

The existence of a group of almost 15,500 totally unemployed persons who are usually gainfully employed in a city of Baltimore's size is in itself a serious problem. The situation in this city, however, has become acute in that a large proportion of these individuals have been without employment for relatively long periods of time. Generally speaking, the findings show periods of unemployment, not in

days or weeks as we might have reasonably expected, but rather in months. According to the results of the survey, less than 2,000 of the total number have been without employment of any kind for less than one month and almost two-thirds have been unemployed for periods varying between one and five months.

Herein lies the worst danger: the exhaustion of savings and family resources and credit to the point of reduced buying and spending, and in a great many cases of the entire depletion of all family resources so that actual want and misery enter in. Professional and business men and women begin to feel the pinch of the lost spending power on the part of the public and in their turn pass on restricted buying power to the larger enterprises and thus the depression is spread so that all classes of our people feel its baneful effects. The facts revealed by the survey, then, and the further possibility of an appreciable amount of part-time employment are, we believe, the basis of the unrest in regard to unemployment in general and are responsible for the reported increased work done by the various social organizations of the city.

Furthermore, analysis of the material shows that only a negligible number of individuals reported even pick-up jobs secured since they found it necessary to leave the irregular occupations, and we feel that we may conclude that employment has not been available for them.

The results of the survey would indicate that the three sections of the city in which unemployment is most severely felt are the central, southern, and eastern districts.

Unfortunately, there is no accurate basis of comparison of the present amount of unemployment in Baltimore City with that existent in previous years. We can, with a fair degree of certainty, state, however, that it is more severe than it was one year ago. While a report of employment can not be used legitimately as an exact measure of unemployment, it may, however, be used to indicate the trend. In support, then, of our statement that unemployment is more severe in Baltimore this year than last, we quote the following from the annual report of the commissioner of labor and statistics for 1927 (not ready yet for distribution):

Combined employment in manufacturing industries in Maryland decreased 7.8 per cent during the 12-month period from January, 1927, to January, 1928, while weekly pay-roll totals, for the same industries, decreased 10.9 per cent for the same period. * * * While practically all of the industries involved are subject to seasonal fluctuations, the general tendency of employment and combined weekly pay rolls for manufacturing industries in Maryland, taken month by month during the year 1927, has been unquestionably downward. * * * The manufacturing industries reported increased employment in only four months, February, April, August, and September. It is interesting to note, however, that the pay-roll increases for these months are larger than the employment increases. December showed a slight decrease of nine-tenths of 1 per cent as compared with November, but for the same month the combined pay-rolls increased eight-tenths of 1 per cent.

Maryland, it seems, is not at all unique in reporting decreased employment and pay rolls for a 12-month period covering the year 1927. According to an official report of the Bureau of Labor Statistics, United States Department of Labor, issued early in January, 1928, there was a decrease of 6.4 per cent in employment in manufacturing industries throughout the United States, and a decrease of 6.6 per cent in the combined pay rolls, in December 1927, as compared with December, 1926.

Each geographic division, according to this report "shows a falling off in employment from December, 1926, to December, 1927, the greatest decreases

being in the West, South Central, Middle Atlantic, and New England divisions and much the smallest decrease being in the South Atlantic States."

The following outline of the general facts revealed by the survey and the accompanying tables set forth in detail the distribution of the 15,473 unemployed persons in Baltimore according to sex, color, regular industry, regular occupation, and number of months during which they have been without gainful employment of any kind.

The total number of families in which one or more cases of unemployment were found, was 12,739: Number of private families, 12,217; number of boarding houses, 289; number of lodging houses, 170; number of unclassified families, 63. The total number of persons included in the 12,739 families was 64,306. The total number of persons who usually are engaged in gainful occupations in these 12,739 families, was 29,099.

TABLE 1.—NUMBER OF REGULARLY ENGAGED PERSONS IN BALTIMORE WHOLLY UNEMPLOYED, CLASSIFIED BY SEX, COLOR, AND REGULAR OCCUPATION

Regular occupation	Males			Females			Total unemployed
	White	Colored	Total	White	Colored	Total	
Apprentices in building and hand trades	132	22	154				154
Blacksmiths	39	1	40				40
Boilermakers	56		56				56
Brick and stone masons	209	9	218				218
Building industry	135	5	140				140
Other industries	5		5				5
Contractors	69	4	73				73
Carpenters	852	24	876				876
Building industry	588	17	605				605
Other industries	59	1	60				60
Contractors	205	6	211				211
Electricians	131		131				131
Building industry	25		25				25
Other industries	24		24				24
Contractors	82		82				82
Engineers (stationary) and cranimen	101	5	106				106
Building industry	19	1	20				20
Other industries	37		37				37
Contractors	45	4	49				49
Factory workers (not otherwise classified)	926	671	1,597	117	13	130	1,727
Food and kindred products	122	93	215	33	3	36	251
Textiles and their products	47	17	64	11	2	13	77
Iron and steel, not including machinery	165	87	252	22	1	23	275
Lumber and allied products	70	56	126	1		1	127
Leather and its manufactures	11	7	18	3		3	21
Rubber products	4		4				4
Paper and printing	12	7	19	1		1	20
Chemicals and allied products	47	111	158	7		7	165
Stone, clay, and glass products	37	81	118		1	1	119
Metal and metal products, other than iron and steel	42	42	84	2		2	86
Tobacco manufactures	4	2	6	3		3	9
Machinery, not including transportation equipment	95	35	130	1		1	131
Musical instruments	4		4				4
Transportation equipment	69	28	97				97
Railroad repair shops	20	5	25				25
Other industries	177	100	277	33	6	39	316
Firemen (not locomotive or fire department)	67	22	89				89
Laborers (not otherwise classified)	1,501	2,594	4,095				4,095
Building industry	204	882	1,086				1,086
Other laborers	1,297	1,712	3,009				3,009
Machinists	237	3	240				240
Mechanics (not otherwise classified)	89	9	98				98
Painters	451	33	484				484
Building industry	229	7	236				236
Other industries	22	12	34				34
Contractors	200	14	214				214
Paper hangers	78	8	86				86
Building industry	16	2	18				18
Contractors	62	6	68				68

TABLE 1.—NUMBER OF REGULARLY ENGAGED PERSONS IN BALTIMORE WHOLLY UNEMPLOYED, CLASSIFIED BY SEX, COLOR, AND REGULAR OCCUPATION—Con.

Regular occupation	Males			Females			Total unem- ployed
	White	Colored	Total	White	Colored	Total	
Plasterers and cement finishers.....	145	16	161				161
Building industry.....	84	9	93				93
Contractors.....	61	7	68				68
Plumbers, gas fitters, and steam fitters.....	305	7	312				312
Building industry.....	71		71				71
Other industries.....	48		48				48
Contractors.....	186	7	193				193
Semiskilled operatives (not otherwise classified).....	934	68	1,002	341	36	377	1,379
Food and kindred products.....	135	16	151	36	2	38	189
Textiles and their products.....	222	22	244	186	22	208	452
Iron and steel and their products (not including machinery).....	135	8	143	23		23	166
Lumber and allied products.....	76	1	77	10		10	87
Lumber and its manufactures.....	27	3	30	4		4	34
Rubber products.....	4		4	1		1	5
Paper and printing.....	118	1	119	18		18	137
Chemicals and allied products.....	9	2	11	1		1	12
Stone, clay and glass products.....	33	5	38	2	2	4	42
Metal and metal products, other than iron and steel.....	32	1	33	1		1	34
Tobacco manufactures.....	19		19	37	6	43	62
Machinery, not including transportation equipment.....	13		13				13
Musical instruments.....	6		6				6
Transportation equipment.....	33	2	35				35
Railroad repair shops.....	6		6				6
Other industries.....	66	7	73	22	4	26	99
Other manufacturing and mechanical occupations.....	618	29	647	61	15	76	723
Total, manufacturing and mechanical.....	6,871	3,521	10,392	519	64	583	10,975
Water transportation ¹	136	173	209				209
Sailors and deck hands.....	111	14	125				125
Stevedores.....	7	59	66				66
Others.....	18		18				18
Road and street transportation.....	506	289	795	1		1	796
Chauffeurs.....	426	239	665	1		1	666
Draymen, teamsters.....	73	47	120				120
Others.....	7	3	10				10
Railroad transportation.....	82	4	86				86
Brakemen.....	35		35				35
Others.....	47	4	51				51
Express, post, telegraph and telephone.....	15	1	16	36		36	52
Telephone operators.....	4	1	5	36		36	41
Others.....	11	1	12				12
Total, public utilities.....	739	367	1,106	37		37	1,143
Retail dealers.....	44	6	50				50
Salesmen.....	484	13	497	229	4	233	730
Others.....	81	4	85	30	2	32	117
Total, trade.....	609	23	632	259	6	265	897
Public service (policemen and firemen).....	9		9				9
Professional service.....	59	5	64	23	1	24	88
Servants.....	25	112	137	50	578	628	765
Other domestic and personal service.....	150	247	397	69	71	140	537
Total, domestic and personal service.....	175	359	534	119	649	768	1,302
Bookkeepers, cashiers, accountants.....	51	1	52	37	1	38	90
Clerks (office).....	240	3	243	110	1	111	354
Stenographers and typists.....	11	1	12	112	2	114	126
Other clerical occupations.....	157	16	173	27		27	200
Total, clerical occupations.....	459	21	480	286	4	290	770
Clerks, unclassified ²	66		66	14		14	80
Other occupations.....	165	20	185	22	2	24	209
Total, other occupations.....	231	20	251	36	2	38	289
All occupations.....	9,152	4,316	13,468	1,279	726	2,005	15,473

¹ Including 89 occupants of two seamen's lodging houses who may or may not be usual residents of Baltimore.² Unclassified as to whether sales or office clerks.

The statement below classifies the unemployed according to the length of time during which they have been entirely without employment of any kind:

Less than 1 month.....	1, 981
1 month and under 2 months.....	2, 373
2 and under 3 months.....	3, 041
3 and under 4 months.....	2, 643
4 and under 5 months.....	1, 657
5 and under 6 months.....	901
6 and under 7 months.....	1, 229
7 and under 8 months.....	275
8 and under 9 months.....	320
9 and under 10 months.....	122
10 and under 11 months.....	46
11 and under 12 months.....	26
12 months and over.....	778
Time not reported.....	81
Total.....	15, 473

TABLE 2.—DISTRIBUTION OF TOTALLY UNEMPLOYED IN BALTIMORE, BY SEX, COLOR, AND REGULAR INDUSTRY

Regular industry	Males			Females			Total unem- ployed
	White	Colored	Total	White	Colored	Total	
<i>Manufacturing</i>							
Food and kindred products.....	375	128	503	82	5	87	590
Beverages.....	19	6	25	5	-----	5	30
Bakery products.....	104	21	125	11	-----	11	136
Canning and preserving (fruits and vegetables).....	23	7	30	5	3	8	38
Canning and preserving (oysters and crabs).....	6	9	15	3	-----	3	18
Confectionery.....	50	7	57	39	-----	39	96
Ice cream.....	8	2	10	2	-----	2	12
Ice (manufactured).....	43	17	60	-----	-----	-----	60
Slaughtering and meat packing.....	64	17	81	6	1	7	88
Other food products.....	58	42	100	11	1	12	112
Textiles and their products.....	400	56	456	244	26	270	726
Clothing.....	324	47	371	195	23	218	589
Cotton goods.....	50	1	51	38	-----	38	89
Other textiles.....	26	8	34	11	3	14	48
Iron and steel and their products, not including machinery.....	405	107	512	49	-----	49	561
Iron foundries.....	100	39	139	-----	-----	-----	139
Plumbers' supplies.....	31	-----	31	2	-----	2	33
Steel works and rolling mills.....	75	44	119	1	-----	1	120
Tinware.....	169	14	183	45	-----	45	228
Other iron and steel products.....	30	10	40	1	-----	1	41
Lumber and allied products.....	216	66	282	14	-----	14	296
Boxes ¹	48	13	61	8	-----	8	69
Furniture.....	71	10	81	6	-----	6	87
Lumber, planing-mill products.....	52	38	90	-----	-----	-----	90
Other lumber products.....	45	5	50	-----	-----	-----	50
Leather and its manufacture.....	49	12	61	8	-----	8	69
Boots and shoes.....	38	10	48	5	-----	5	53
Other leather products.....	11	2	13	3	-----	3	16
Rubber products.....	7	8	15	1	-----	1	16
Paper and printing.....	159	13	172	28	-----	28	200
Boxes, paper ²	9	2	11	9	-----	9	20
Printing and publishing, job.....	99	4	103	10	-----	10	113
Printing and publishing, newspaper.....	17	1	18	-----	-----	-----	18
Other paper products and printing.....	34	6	40	9	-----	9	49
Chemicals and allied products.....	111	123	234	17	1	18	252
Fertilizers.....	8	66	74	1	-----	1	75
Oils.....	54	19	73	1	-----	1	74
Other chemicals.....	49	38	87	15	1	16	103
Stone, clay, and glass products.....	93	93	186	3	4	7	193
Bricks.....	8	36	44	-----	-----	-----	44
Glass products.....	59	24	83	2	4	6	89
Marble, slate, stone.....	14	25	39	-----	-----	-----	39
Other products.....	12	8	20	1	-----	1	21

¹ May include some paper boxes.

² Some of these may be included under wooden boxes.

UNEMPLOYMENT IN BALTIMORE

37

TABLE 2.—DISTRIBUTION OF TOTALLY UNEMPLOYED IN BALTIMORE, BY SEX, COLOR, AND REGULAR INDUSTRY—Continued

Regular industry	Males			Females			Total unem- ployed
	White	Colored	Total	White	Colored	Total	
<i>Manufacturing—Continued</i>							
Metal and metal products, other than iron and steel.....	108	46	154	3	-----	3	157
Brass, bronze and copper.....	48	40	88	-----	-----	-----	88
Stamped and enameled ware.....	29	3	32	2	-----	2	34
Other metal products.....	31	3	34	1	-----	1	35
Tobacco manufactures.....	27	3	30	45	6	51	81
Cigars and cigarettes.....	23	1	24	40	2	42	66
Other tobacco manufactures.....	4	2	6	5	4	9	15
Machinery, not including transportation equip- ment.....	153	7	160	1	-----	1	161
Musical instruments.....	25	-----	25	-----	-----	-----	25
Transportation equipment.....	305	44	349	-----	-----	-----	349
Motor vehicles (including repairs).....	134	15	149	-----	-----	-----	149
Shipbuilding.....	160	27	187	-----	-----	-----	187
Other transportation equipment.....	11	2	13	-----	-----	-----	13
Railroad repair shops (steam).....	57	4	61	-----	-----	-----	61
Other manufacturing industries.....	257	107	364	58	6	64	428
Brooms and brushes.....	32	2	34	1	-----	1	35
Umbrellas.....	11	-----	11	12	-----	12	23
Other manufacturing industries.....	214	105	319	45	6	51	370
Total, manufacturing industries.....	2,747	817	3,564	553	48	601	4,165
<i>Mechanical</i>							
Building.....	1,520	937	2,457	4	4	8	2,465
Laundries.....	14	14	28	9	19	28	56
Total, mechanical industries.....	1,534	951	2,485	13	23	36	2,521
<i>Mercantile</i>							
Wholesale establishments.....	75	19	94	8	1	9	103
Retail establishments.....	551	184	735	285	24	309	1,044
Department stores.....	169	28	197	199	3	202	399
Other retail stores.....	382	156	538	86	21	107	645
Other mercantile establishments.....	84	5	89	23	-----	23	112
Total, mercantile industries.....	710	208	918	316	25	341	1,259
<i>Public utilities</i>							
Busses and taxicabs.....	27	2	29	-----	-----	-----	29
Gas and electric supply.....	50	45	95	-----	-----	-----	95
Railways, electric.....	37	20	57	-----	-----	-----	57
Railroads, steam ³	265	139	404	2	-----	2	406
Telegraph.....	9	-----	9	1	-----	1	10
Telephone.....	8	3	11	37	-----	37	48
Water transportation ⁴	204	98	302	-----	2	2	304
Total, public utilities.....	600	307	907	40	2	42	949
Unclassified by industry ⁵	3,561	2,033	5,594	357	628	985	6,579
Total, all industries.....	9,152	4,316	13,468	1,279	726	2,005	15,473

³ Probably includes some who might be classified under "railroad repair shops."

⁴ Includes 89 occupants of two seamen's lodging houses, who may or may not be usual residents of Baltimore.

⁵ Includes laborers, contractors, professional, domestic and personal service, etc., not classified according to industry.

PUBLIC RETIREMENT SYSTEMS

Retirement Systems for Municipal Employees

AS A generalization it is probably safe to say that there is not a city in the United States which does not have a retirement system for at least some of its employees. Retirement systems for firemen and the police are practically universal, retirement systems for teachers are common, and in many cities it will be found that there are several other schemes, each covering a special group of employees. Within recent years, however, various cities have concluded that it is fairer and more effective to provide for the retirement of all city employees, and have established retirement systems of varying degrees of inclusiveness. Among the cities having a population of 400,000 or over there are nine with inclusive systems. These, with the date at which the comprehensive system went into effect, are as follows: Baltimore, 1926; Boston, 1923; Chicago, 1922; Detroit, 1923; Minneapolis, 1922; New York City, 1920; Philadelphia, 1915; Pittsburgh, 1915; San Francisco, 1922.

Ordinarily these systems are organized under State laws applying to all cities of a given class, in addition to which there may or may not be a city ordinance authorizing the establishment of a system under the terms of the law.

Scope of Systems

A COMMON method when introducing a municipal retirement system is to make it apply to all employees not covered by some existing pension scheme. The police and firemen almost universally have schemes of their own, which they often prefer to maintain, so that it is rather unusual to find them included in a general scheme. Teachers also frequently have their own established plans. In some cities it is optional with such employees to come into the general system or to remain under their own, so that there is considerable variation in the inclusiveness of the municipal systems. The Boston plan includes both police and firemen, and the Baltimore plan covers firemen, but elsewhere these two groups are outside of the general system. In Boston, Baltimore, and San Francisco the teachers have elected to come under the city plan, but in the other cities they either have their own retirement scheme or are included in a State system. The tendency is to make the municipal system as inclusive as possible, with the idea of substituting one efficient and well-managed plan for a number of small schemes covering limited groups and offering widely varying benefits to the different classes of city employees.

Ordinarily employees in the service at the time a system is adopted are given their choice of entering or remaining outside, but for those entering the service thereafter membership is compulsory.

Employee Representation in Management

SIX of the plans are administered by boards on which the employees are represented, the other members usually being city officials who hold the position *ex officio*. In the Boston plan one of the three board members is chosen by the other two from among the employees covered by the system. In Baltimore, Minneapolis, and Pittsburgh, two, and in Chicago, three of the five board members are employees elected by their fellows. In San Francisco, where the board consists of seven members, three are elected by the employees from their own number.

In the other three cities the employees have no direct representation, the system being administered in Detroit by the city controller and the civil-service commission, in New York City by the board of estimate and apportionment, and in Philadelphia by a board of five, of whom three are city officials and two are elected by the city councils from their membership.

Character of Plans and Source of Funds

OF THE nine cities, Detroit, Philadelphia, and Pittsburgh have cash disbursement and the others actuarial reserve schemes. Detroit stands alone in having a noncontributory system. In the other eight cities, the employees are required to make specified contributions, which are deducted from their salaries or wages. In Pittsburgh the contribution is 2.5 per cent of the salary, with a maximum of \$72 a year, in Philadelphia 4 per cent with a yearly maximum of \$48, and in Boston 4 per cent without any maximum. Elsewhere the contribution is calculated on a savings-bank basis to insure a certain annuity after specified conditions as to age and length of service have been fulfilled, and therefore varies with the age at entrance and, in some cases, with sex and kind of work done, the clerical group, for instance, having a lower rate of contribution than employees in more hazardous occupations. Minneapolis exempts from contribution all employees, mostly laborers, who do not earn as much as \$750 a year, classing these as noncontributing members, and making special provisions for their retirement allowances, period of service, and the like. Chicago has rather a complicated contribution plan. Any amount over \$3,000 a year is exempt, but on salary up to that amount the employee contributes 3.25 per cent for his own annuity, 1 per cent for his widow's annuity (female employees do not make this contribution), and one-tenth of 1 per cent for expenses of administration. In addition he contributes annually one-half of 1 per cent of two months' salary to provide his share of the allowance for ordinary disability.

The cities having cash disbursement systems appropriate such amounts as are required to maintain pension payments. As Detroit bears the whole cost of the allowances, appropriations have been made annually since the plan was started. Philadelphia did not consider any appropriation until 1924, when it devoted \$50,000 to the purpose, and Pittsburgh made its first appropriation in 1925, to cover a deficit in the 1924 operations. The cities having actuarial reserve systems make annual appropriations to cover their share of the liability for current service, and also to meet the accrued liability for

service before the plan went into effect. In general, the city bears the cost of extra benefits, such as special allowances for disability incurred in the performance of duty, and special provision for the widows and children of employees killed in the service.

In the actuarial reserve systems, interest on the accumulating contributions of the employees and the city forms an important part of the revenue. In the New York City system, for instance, the interest on the fund for the year 1926 was \$1,136,080, while from the establishment of the fund up to the end of 1926 it was \$3,354,600. In Minneapolis, which has comparatively a small system, covering 1,739 members as against the 31,000 to 32,000 of New York, interest for 1926 amounted to \$26,745, or very nearly one-fifth as much as the city's contribution.

Conditions for Retirement

MOST of the systems recognize at least three kinds of retirement on allowance: For service or superannuation, for ordinary disability, and for duty disability. For service retirement the two factors of age and length of service are frequently linked together. One purpose of a retirement system is to relieve the employing agency of employees too old to give the best service, so there is a tendency in the newer systems to fix an age at which retirement is compulsory. The following statement shows the conditions for service or superannuation retirement in the systems considered:

Conditions for Superannuation or Service Retirement

Baltimore: Optional at 60 years of age, compulsory at 70; no service requirement.

Boston: Optional at 60 years of age, compulsory at 70; no service requirement.

Chicago: No age requirement; at least 10 years' service required.

Detroit: No age requirement; 25 years' service required, unless employee reaches 70 first, when 15 suffice.

Minneapolis: Optional for women at 60, and for men at 62; compulsory for women at 70, and for men at 72; no service requirement.

New York City: Optional for clerks at 60; mechanics, 59; laborers, 58. Compulsory for all at 70, with possible extensions for 2-year periods; no service requirement.

Philadelphia: Optional at 60; no compulsory age; 20 years of service required.

Pittsburgh: Optional at 60; no compulsory age; 20 years' service required. Retirement may be permitted with less, in which case contributions must be continued to close of 20-year period.

San Francisco: Optional at 62 (at 60, after 30 years' service) and compulsory at 70; 10 years' service required.

It will be noticed that of the three cash disbursement systems, one ignores age altogether, and the other two, while setting a fairly early optional age, do not make retirement compulsory at any time. All three, however, have a definite service requirement—20 years in two cases, 25 in the third. Of the actuarial reserve systems, on the other hand, four make no service requirement, and the other two call for only 10 years of service. In an actuarial reserve system, of course, it is of no importance from a financial standpoint how early an employee retires. Each year the contributions he makes and the contributions the city makes on his behalf are credited to

his account, the interest they draw is also credited to the same account, and it is of no possible importance, financially, to anyone but himself whether he withdraws early and takes the small allowance his account would then purchase, or remains late and secures a larger allowance. But from the standpoint of the work to be done, it is important both that employees should not be leaving in the prime of life after they have served their full apprenticeship, and that they should not remain after they have become less efficient through age, so five of these six cities set an age below which employees may not retire on allowance and another beyond which they may not remain in the service at all. In general, 60 seems to be the accepted age for voluntary and 70 for compulsory retirement.

Conditions for Disability Retirement

ORDINARILY two kinds of disability retirement on allowance are permitted—retirement for ordinary disability which arises in the normal course of life and is not due to the sufferer's fault or wrong living, and retirement for duty or accident disability, arising from some condition or accident to which the employee was exposed in the actual performance of his duty. Medical examination and certification are required before retirement is permitted for either of these causes, and in many cases periodic reexaminations are required as long as the disability allowance is drawn.

The Detroit system makes no provision for disability retirement of any kind, and the Philadelphia and San Francisco systems provide simply for disability retirement, making no distinction between the two kinds. The other six cities permit retirement on allowance for duty disability without regard to age or length of service, the only essential being that the disability results from the direct performance of duty.

For ordinary disability retirement all the cities except Chicago have a service requirement, ranging from 5 years in Baltimore to 20 in Philadelphia. New York, Minneapolis, Pittsburgh, and San Francisco require 10 years of service. Chicago safeguards its lack of a service requirement by providing that for ordinary disability the allowance will be paid only for a period not longer than one-fourth the length of service, and not, in any case, exceeding five years.

Retirement Allowances

IN THE cash disbursement systems the allowance for service or superannuation retirement is very simply calculated. In Detroit it is one-half the annual salary received at the time of retirement, with a maximum of \$900 a year, and in Philadelphia and Pittsburgh, one-half the average annual salary received during the last five years of service, with a maximum of \$1,200 a year. Under the actuarial reserve systems the allowance consists of two parts—an annuity purchased by the retiree's accumulated contributions, and another, called a pension, purchased by the city's accumulated contributions to his credit. The contributions have been so calculated that for each year of service the allowance will be a specified fraction—the service fraction—of the average annual compensation received during either the last 5 or the last 10 years of service. The service

fraction may vary with the class to which the worker belongs. In the New York system, for instance, the service fraction for clerical workers is one-seventieth; for mechanics, one sixty-eighth; and for laborers, one sixty-sixth of the average final compensation. As a result the retirants from these groups receive an allowance of approximately one-half their average final compensation after terms of service of 35, 34, and 33 years, respectively. Under all the actuarial reserve systems the city pays the whole allowance for years of service rendered before the system was adopted.

The custom varies as to setting minimum and maximum limits. Minneapolis sets a maximum of \$500 a year for noncontributing members—i. e., those who have earned less than \$750 a year and have consequently been freed from the obligation to contribute to the retirement fund—but has no limits on allowances for contributing members. Baltimore and New York City have no limits, but Boston and San Francisco both provide that allowances may not be less than \$480 a year—in San Francisco this provision is confined to those, already in the service when the system was adopted, who are forced to retire on account of reaching the age of 70—and Chicago has a minimum of \$600. Boston provides that no retirant with credit for prior service may draw an allowance of more than one-half his average annual salary for the last five years, and Chicago sets a maximum of \$1,800, beyond which no allowance may go. With these exceptions the amount of the allowance is determined by the amount of the accumulated contributions to the retirant's credit, including the double contribution made by the city for his years of prior service, and by his age at retirement, the latter factor determining the amount of the annuity which the contributions will purchase.

Allowances for Disability Retirement

THERE is the same difference between the two kinds of systems concerning disability allowances as in regard to the allowances for service retirement, the cash disbursement systems paying a fixed amount, usually half of the last salary received, while under the actuarial reserve systems the allowance is made up of annuity and pension in varying proportions, the pension being enlarged to meet the needs of the situation. The following table shows the allowance for ordinary and for duty disability retirement under each of the city plans:

DISABILITY RETIREMENT ALLOWANCES

City	Ordinary disability	Duty disability
Baltimore.....	Annuity plus pension sufficient to bring allowance up to nine-tenths of what superannuation allowance would be; minimum, one-fourth of average final compensation.	Annuity, plus pension of two-thirds of retirant's average final compensation.
Boston.....	Annuity, plus pension of nine-tenths of what it would have been had retirant remained in service at same salary up to 60.	Annuity, plus pension sufficient to bring allowance up to three-fourths of salary during last year of service.
Chicago.....	One-half salary received at time of retirement, to be paid for period not longer than one-fourth retirant's length of service, but in no case for over 5 years.	Three-fourths of salary at time disability was incurred, with \$10 per month for each child under 18, total not to exceed 90 per cent of full salary.
Detroit.....	No allowance.	No allowance.
Minneapolis.....	Annuity, plus pension to bring allowance up to what contributions to retirant's credit would purchase if kept at compound interest until earliest date at which service retirement would be permissible.	Annuity, plus pension to bring allowance up to what it would be if employee's and city's contributions were continued up to earliest date at which service retirement would be permissible.

DISABILITY RETIREMENT ALLOWANCES—Continued

City	Ordinary disability	Duty disability
New York City...	Annuity, plus pension to bring allowance up to nine-tenths of service allowance at same date, with minimum, if retiree entered service under 40, of one-fourth of average final compensation.	Annuity, plus pension of three-fourths of average final compensation.
Philadelphia.....	One-half of average final compensation, with maximum of \$1,200 a year.	One-half of average final compensation with maximum of \$1,200 a year.
Pittsburgh.....	do.	Do.
San Francisco.....	1.25 per cent of average final compensation multiplied by number of years of service.	1.25 per cent of average final compensation multiplied by number of years of service.

Refunds

ALL of the systems considered make some provision for returning the employee's contributions in case he dies or leaves the service before retiring on allowance. Philadelphia and Pittsburgh return the contributions, without interest, to the employee or to his estate. The other cities return them with interest, usually 4 per cent, compounded annually. In the systems in which the employee is required to make specific contributions for expenses of administration or other nonannuity purposes, it is usually provided that only contributions intended to apply to the purchase of an annuity are to be returned.

Provision for Dependents

WITH the exception of Chicago, all the cities having actuarial reserve systems so arrange that on retirement an employee may either receive his straight allowance or may take one of several options under which he will receive a smaller allowance, but on his death it will be continued to a beneficiary he has named or some other benefit of similar actuarial value will be paid. If an employee on retirement does not choose to take one of these options, the city does not assume any responsibility for his dependents in case of his death. Chicago does not offer options, since under its system allowances are provided for the widows and in some cases for the minor children of employees. The cash disbursement systems do not make any provision for the dependents of a retired employee.

Upon the death of an employee before retirement, all the cities return to his heirs his contributions, usually with interest. If the death was due to normal causes, Baltimore, New York City, and San Francisco pay to the dependents a lump-sum benefit equal to the decedent's salary for the last six months of his life. If death was due to accident or injury incurred in the performance of duty, Boston, Baltimore, and New York City pay to the widow, the children under 18, or to dependent parents a pension of one-half the decedent's annual salary or one-half of his average final compensation, according to the city, while San Francisco pays whatever amount is due to the heirs under the State compensation law. Chicago, under the same circumstances, increases the pension paid by the city to the widow so as to bring her total allowance up to 60 per cent of the employee's salary at the time of death. Minneapolis pays a death benefit of \$150 to the heirs of a noncontributing member who dies before retirement, while Detroit, Philadelphia, and Pittsburgh make no provision for dependents.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS

Present Labor Conditions in China

By S. K. SHELDON TSO, LL. B., M. A., Ph. D.

SINCE western influences introduced the factory system into China, a great many industrial evils similar to those which existed a hundred years ago in the western countries have come into being. The present decade is witnessing the demise of the primitive system, forced as it is to compete with the cheaper goods of the Occident, produced by machinery. Naturally the hand worker can not meet the prices of machine-made commodities, and is gradually being forced out of business.

At the same time the cost of living continues to increase; many farmers are forced to join the urban movement, as farming can no longer support the teeming millions of unemployed, and they are crowding the slums of already overpopulated industrial cities. The whole social organization is thus disrupted. As a result of the over-supply of labor, a contract system is commonly in use, and employers, under the lure of greater profit, repeat the errors of the early manufacturers in western countries, including long hours, low wages, bad housing, and the extensive employment of women and children.

Classes of Labor

BROADLY speaking, Chinese laborers can be classified into four main divisions, as follows:

1. Independent laborers, i. e., those who work on a small scale for an independent livelihood, usually buying their own materials, manufacturing their own goods, and selling the finished products directly to the consumers. Sometimes masters or employers may furnish them with materials, but they have no definite employer, nor do they have definite working places. Their wages are calculated either on the time basis, or on piecework if under contract with an employer. The workmen in this class include masons, sawyers, carpenters, coppersmiths, firecracker makers, bean-cake makers, cloth weavers, tailors, brewers, tobacco planters, blacksmiths, stonemasons, and others.

2. Industrial laborers. Since the factory system in China is still in its infancy in contrast with that of the industrialized countries of the West, industrial workers are mainly machine operators in various industries and workers in textile mills.

3. Agricultural laborers. As China is primarily an agricultural country, this class of workers constitutes a great majority of the

working population. They are divided into four groups: (a) Farmers doing their own work on their own land and therefore receiving no direct wage; (b) husbandmen, so called because they have no fields of their own, but are tenants of a landlord to whom they ordinarily turn over two-thirds of the crop, reserving the remaining one-third for themselves; (c) "long-period" laborers with some experience in farming but possessing no land of their own, who sign an agreement with their employer to work for him for a period of one year or longer; (d) "short-period" laborers who have had no special training in farming and who sign no agreement with employers. To-day they may be hired by one master to hoe the fields and to-morrow another master may hire them to pound his rice. They earn their wage by the day and have no steady employment or definite habitation.

4. Coolie laborers. The word "coolie" in Chinese signifies "sweating." These laborers are mostly unskilled and earn a bare subsistence by very strenuous work. China is replete with this class of workers. They can be divided into three types: First, those who are gathered by employers at one definite place, such as mine workers, road builders and repairers; second, those who work under the contract system, such as haulers and carriers at jetties; third, those who have neither definite employers nor contracting foremen, such as jinrikisha and wheelbarrow coolies, sedan-chair bearers, and muleteers, and who wander about from one place to another seeking work.

Unemployment

THE most important problem that the Chinese laboring classes are facing is unemployment, which not only has been a burning question in industrial welfare, but recently has become a very serious social problem. Most western countries have already given much attention to the study of this vital problem, but it is an unfortunate fact that the Chinese public remains indifferent to it. Although accurate information on the extent of unemployment is not available, if the 400,000,000 people in China are classified and the groups carefully studied, it will be found that the extent of unemployment among the working classes is tremendous.

According to the report made by a group of Japanese statisticians who recently completed a census of the interior farming districts, agricultural workers constitute 20 per cent, or 80,000,000, of the whole population of China proper. Independent laborers, according to General Ma, chief of the Labor Bureau at Nanking, form 2 per cent, or 8,000,000, of the entire population. As to the industrial laborers, the number is comparatively easy to obtain. In 1914, the Ministry of Agriculture and Commerce made an investigation and put the figure at 630,000 persons. Now more than 10 years have elapsed, and considering the fact that during these 10 years there has been marked progress in the business of the factories, it can be seen that the number of industrial laborers has also been proportionately increased as a matter of course. After numerous calculations from the data obtained in 1914, the conclusion is reached that there are about 1,260,000 industrial laborers in China at the present time. Estimating the number of coolies is found to be a hard task. Since factories in China are poorly developed as compared with those in the western

countries, it is evident that the number of sweated laborers, or coolies, must be very great. According to an investigation made by Japanese statisticians, the Chinese coolies constitute 8 per cent of the whole population of China. Taking this percentage as a basis for calculation, there are about 32,000,000 laborers under the sweating system in China.

The following statement brings together the estimates of the number of workers in the four groups described:

Agricultural laborers.....	80,000,000
Independent laborers.....	8,000,000
Industrial laborers.....	1,260,000
Coolie laborers.....	32,000,000
Total.....	121,260,000

From these figures it will be seen that the number of Chinese laborers in employment to-day would not exceed 121,260,000 persons. General C. T. Ma estimates the total working population of China as 280,000,000, or 70 per cent of the total population of the country. On this basis the present number of unemployed would be greater than the number employed.

However, this proportion of unemployment, as maintained by General Ma, appears incredibly high. The error may lie in estimating 70 per cent of the population as members of the working classes. In Woytinsky's "Die Welt in Zahlen" it is shown that while in many countries probably 70 per cent of the gainfully engaged persons are wage workers, not more than one-half of the total population in most countries are engaged in gainful occupations. Even on the most conservative methods of estimating, however, the number of unemployed in China at present must run into the tens of millions.¹

Causes of Unemployment

FIRST and most important, the replacement of handicraft production by modern machines has deprived the handicraftsmen of their work. Second, the rapid growth of population is a fundamental factor contributing to the present oversupply of labor. Third, there is a lack of adequate facilities with which to fit workmen for modern methods of production, and the workmen, skilled in their handicraft alone, can not change their methods of work in a short period of time. Fourth, the increase of seasonal trade which the industrial system has brought with it requires a large number of workers at certain periods, after which they are discharged. This is a vital factor in producing unemployment, for under the old régime of production a worker often worked for the same employer all his life and the employer never discharged him unless the employee merited discharge. Fifth, civil wars have been a potent cause of unemployment. Since 1913 almost every year has witnessed the outbreak of

¹That there is such a huge proportion of persons out of work in China is, of course, astounding to the Western mind. But as one examines Chinese social conditions it will be found that the family system still prevails in China and is largely responsible for this tremendous proportion of the unemployed. For it is a common practice for one gainfully employed person to support 6 or 7, sometimes more, dependents of the family. The reason for this parasitism is due to scarcity of jobs. It is such a hard task to find a job that not only unskilled workers, but highly skilled laborers and even educated students graduated from American universities have to fall back upon nepotism to secure a poorly paid position.

a new war. As a result, not only has the progress of commerce and industry been halted again and again but also the devastation of the land has made the cultivation of crops impossible. Sixth, unstable economic conditions are inevitably followed by unemployment. Under the present foreign domination, the economic structure of China is most insecure. Foreign competition, made possible by the customs restriction, may bring about the collapse of national industry at any moment. Seventh, strikes, increasing in number each year, are a most significant factor. In a number of cases, recognizing the oversupply of labor, employers have discharged the strikers on the slightest pretense. In addition, there are many other factors, such as physical incapacity, laziness, lack of education, famine, and other natural causes.

In the main, Chinese industries have not developed in proportion to the decline of the old mode of living. Due to the fact that the customs are foreign controlled and the market is full of foreign goods, many of the unemployed have been forced into banditry and many others are compelled to travel hundreds of miles in pursuit of work, only to find themselves subjected to the exploitation of contractors and employers in the industrial centers. In some of the densely populated Provinces like Shangtung, streams of men depart into Chihli and Manchuria where industries are better developed. The contractors provide them with lodging and board but impose a heavy commission on them. Stricken by poverty, the workers are silenced with little more than their native villages offered, and are lodged in most insanitary slums and fed solely upon maize.

Woman and Child Labor

THE industrial development of China, like that of other countries, has brought to the fore the problem of the employment of women and children in factories. The burden imposed upon them has aroused considerable attention from humanitarians, yet nothing in the way of definite reform has been accomplished. The deplorable effects of the new régime are not as yet recognized by employers in China.

In the textile industry a large proportion of the operatives are women and children. A decade ago women were engaged largely in domestic production, such as silk-worm culture, spinning and weaving, needlework, the making of straw braid, and tea picking, and occasionally boating and fishing. Since the factory system was introduced, the silk reeling, spinning, cotton-textile work, and knitting has been done entirely by women. The long hours, low wages, and bad working conditions exceed those of England a century or more ago, for there is no organization among women to strengthen their bargaining power, and also the old Chinese family system binds them to one locality regardless of wages offered elsewhere.

The average wage received by women in the industrial cities like Shanghai, Wusih, Changsha, and Canton varies from 20 to 40 cents per day. According to an investigation made by the Ministry of

Agriculture and Commerce in 1915, daily wages in different sections of the country were as follows:²

	Maximum wage (cents)	Minimum wage (cents)
Chin Tsao (special district).....	9	7
Chihli.....	27	14
Mukden.....	15	13
Chilin.....	24	10
Shantung.....	24	14
Honan.....	20	9
Shangsi.....	11	7
Kiangsu.....	37	20
Anwei.....	22	12
Kiangsi.....	15	11
Fucianan.....	23	13
Chikiang.....	24	14
Hupei.....	20	10
Hunan.....	16	12
Shensi.....	13	6
Kansu.....	10	8
Sinkiang.....	20	16
Szechuan.....	13	14
Kwantung.....	25	14
Kwansi.....	27	15
Quachow.....	12	(?)

According to the above statement, the highest wages were paid in Kiangsu and the lowest in Chin Tsao. But more than 10 years have elapsed since this investigation and a number of strikes have occurred in the larger cities. As a result, the wage level has been raised from time to time, although the total increase is probably not more than 60 per cent. The length of the working-day for women varies in different localities and factories. As a rule, it consists of 12 hours, usually from 5 in the morning to 6 o'clock in the evening, with an hour's intermission at noon. They work seven days in the week.

These women react all too quickly to the excessively long hours and the relatively low wages, both of which tend to impair their physical well-being. In May, 1922, the woman workers in Shanghai submitted a petition to the Provincial Assembly of Kiangsu asking for a 10-hour working-day, an increase in wages of 5 cents per day, and an unconditional weekly and monthly bonus. The assembly referred the matter to the Chinese magistrate but no satisfactory settlement was reached, and as the number of workers increased, their discontent became more manifest.

In 1922, it was reported that there were 60,000 woman workers in Shanghai. Overcrowding, poor ventilation, excessive heat, and unsanitary conditions were the rule. Comfortable seats, dining rooms, first aid, and rest rooms were unheard of luxuries. On August 6, 1922, the first strike of woman workers was declared, 20,000 women of the Chapei filatures striking. They paraded the streets with banners and placards in order to win sympathy from the public, and particularly from the men. As martial law was then in force, some of the strikers were arrested. Meanwhile other women in industry staged demonstrations in the International Settlement, and they were likewise arrested and held for trial. After a week the strikers went

²The wage data in this article are given in Chinese silver currency, which is of half the value of the corresponding United States currency.

back to work under a promise of a wage increase, which did not materialize. Thus the first strike engineered by women was listed as a failure, whose only gain was experience.

The obstacles in the way of success were: (1) Loose organization, and therefore no concentrated power to meet the emergency; (2) lack of enlightened leadership; and (3) inexperience and ignorance of the labor movement.

Since that time various attempts have been made to form organizations of woman workers. In 1924, the United Silk and Cotton Women Workers' Association was started, with a threefold purpose—to establish friendship, to promote education, and to study the health conditions of the workers.

In surveying the field of women in industry, one can not escape a pessimistic outlook, because of the dearth of legislation protecting their interests. Their wants and desires have greatly multiplied, but their wages have become more and more disproportionate to meet these demands.

The employment of children is another evil effect of the industrial system. With the increasing cost of living, children are often prematurely placed in the factories in order that their scanty earnings may add to the family budget. In fact they are often sent to the factory as soon as they can be of use.

Although there are no accurate statistics to show the number of working children in China, recent information on those of Shanghai throws some light on the subject. According to the report of the Shanghai Municipal Council, 168,885 children are gainfully employed in the factories of that city.

Of this number, 44,173 boys and 103,241 girls (a total of 147,414) are below the age of 13, while 3,766 boys and 17,705 girls (a total of 21,471) are below the age of 12. Of the grand total of 168,885, 47,939 are boys and 120,946 are girls. These figures include factory workers only, the coolies working in the streets not being included. According to the census made by the Maritime Customs, the population of Shanghai is 1,500,000. Thus, the child workers in Shanghai represent considerably more than 10 per cent of the population, especially if the children who work outside of the factories be included. Aside from Shanghai, sections like Tientsin, Hankow, Wuchang, Changsuam Canton, Hong Kong, Hangchow, Soochow, Wusih, and Nantung are also well industrialized. The total number of child laborers in China is probably well over 1,000,000. Owing to the large size of Chinese families child workers are very easy to obtain.

The industries that commonly employ children are textile and tobacco mills, candy factories, straw-hat factories, toy shops, and bookbinding shops. Their wages are far below those of the adult workers, the maximum being 20 cents per day and the minimum being 6 cents, or an average daily wage of about 13 cents.

The reason for this unusually low wage is the limited amount of work which they can obtain, and the fact that they are forced to accept whatever the employers offer them. The number of hours that they work varies from 12 to 16 per day, and according to a report made by a commission appointed by the municipal council of Shanghai many children not more than 6 years of age work both day and night.

In one of the glass works it was found that children were working from 6 o'clock in the morning until 11 at night and under the most unsanitary conditions, exposed to fumes and high temperature, and were receiving only \$1 per month and their food. The commission made recommendations based upon these reports, but at the second meeting called for the purpose of considering them, there was not a quorum of the rate payers present. Since that time the conflict between the Chinese masses and the British police resulting from the dissension of May 30, 1925, has made further effort impossible.

A child-labor reform movement was started by Y. W. C. A. workers, who called on the governors of Kiangsu and neighboring Provinces, as well as upon the Minister of Agriculture and Commerce, and asked for regulations for the improvement of working conditions, but the lack of cooperation between the Chinese authorities and the municipal council of the International Settlement stood in the way of effective legislation. The recommendations presented by the Y. W. C. A. workers involved very reasonable and practicable principles: (1) No industrial employment of children under 12; (2) observance of one day of rest; and (3) safeguarding of the health of workers by shorter hours, sanitary improvements, and the installation of safety devices.

However, all attempts at application or adoption of these recommendations failed.

The factory regulations promoted by the Ministry of Agriculture and Commerce in March, 1923, are as yet merely provisional and have not the force of law, although the Peking Government has never relaxed its effort to make them effective. The greatest difficulty to their application is the question of jurisdiction over the foreign-owned industries. Since the latter possess special privileges which would exempt them from regulations, Chinese employers are unwilling to handicap themselves by regulations not applicable to foreign factories. In 1926, various Chinese employers' associations, particularly the Chinese Association of Cotton Spinners, addressed a request to the Peking Government that, in pursuance of section 2 of the regulations of March 29, 1923, the provisions thereof should be extended to foreign-owned factories.

In addition to the provisional factory regulations, there are in force certain decrees of 1923 relating to work in mines. Their enforcement seems more practicable for the mining industry in China is at present confined to a few districts, such as the coal mines of Kailan and Chingshang in the Province of Chihli, and of Chun-Yuan and the Peking syndicate in Honan, and the iron mines of Han-Yeh-Ping in Hupeh and Yu-Fan in Anhwei, other minerals being worked only on a very small scale. The information at hand suggests that these undertakings comply more or less closely with the mining regulations of 1923.

Hours of Labor

IN THE case of independent hand workers, such as tailors and blacksmiths, working hours per day range from 14 to 16. Industrial workers' hours differ in the various industries. Those employed in factories of the Chinese Government work from 9 to 12

hours and those employed in factories owned by private capitalists work from 10 to 16 hours per day. Agricultural workers also have long working hours, varying from 12 to 18 per day. Coolie laborers work as many as 18 hours per day.

Moreover, the evils of long hours are intensified by the night work common in textile factories. The workers in these factories work day and night by turns. Other leading industries in China, like tobacco, match, and silk works, also have adopted night work. The laborers on the day shift work from daybreak to evening and those on the night shift work from evening until dawn of the next day. The inevitable result is fatigue and many serious accidents.

In connection with working hours, attention should be directed to the hours for rest. In China there is no definite rule for lunch or rest. Generally speaking, only half an hour is allowed for each and in some of the factories the time allowed for lunch does not exceed 20 minutes. In many of the textile factories, women often bring meals into the factories for the workers, and the latter eat beside the machines.

Holidays are very few, especially in those industries owned by foreign capitalists. Strangely enough, these foreign capitalists forget their habit of observing Sunday, and no holiday is allowed. Among the factories owned by Chinese, the holidays for the New Year festival range from 12 to 15 days. Holidays of one or two days are also given for the Chinese spring-summer solstice, May 15 or dragon festival, mid year, mid autumn, September, double ten or national holiday, winter solstice, etc.

Wages¹

THE wage-payment systems in China are very complicated and no concrete statement can be made regarding them. Generally speaking, there are two kinds, namely, payment in goods and payment in money. In the less developed sections of China, the former method is in use, payments consisting of clothes, rice, and other commodities in place of money. In sections where modern means of communication are provided, this practice is rarely found except in the case of masters giving goods to apprentices in a few small shops in country villages. Wherever the method of payment in goods is used, the old harmonious spirit between employers and employees still prevails and there is as yet no labor problem.

Payment of wages in money is made on both a time-rate and a piece-rate basis. In industries like the silk, cloth-weaving, match, iron, and electric-light industries the time-rate system is in general use; in tanneries, coal mines, etc., the piece basis is used, while in other industries, such as tobacco factories, both piece and time rates are used.

Broadly speaking, wages, however paid, are exceedingly low, because of the oversupply of labor and the fact that these poverty-stricken wage earners have to accept whatever their employers offer them. In recent years the continuous rise in the cost of living has forced the raising of wages from time to time. Table 1 shows the average time and piece rates paid to the various classes of workers.

¹ The wage data are given in the silver Chinese dollar which is equivalent to 50 cents in American currency.

TABLE 1.—AVERAGE DAILY EARNINGS UNDER TIME AND PIECE RATES, BY VARIOUS CLASSES OF WORKERS IN CHINA

Class of workers	Time rates		Piece rates	
	Adults	Children and apprentices	Adults	Children and apprentices
Industrial workers.....	\$0.40-\$3.60	\$0.15-\$0.30	\$0.60-\$5.00	\$0.20-\$0.50
Independent workers.....	.20- 1.20	.06- .20	.30- 2.50	.10- .25
Coolie workers.....	.40- .80	.10- .40	.50- 1.00	.15- .60

The above table shows a comparatively high maximum in certain cases. This is due to the extraordinary conditions existing in China. In addition to the wide variations from one place to another, due to the lack of communication, even in the same factory it is often found that while a majority of workers get 40 cents a day, a minority of the "Lau Ta" or "headworkers" receive \$3.60 daily. The latter group of workers usually have worked in the factory longer than their fellow workers and have some knowledge of machinery. In most Chinese factories there is no machinist, and these "Lau Ta" often discharge his duties. To the western mind it may seem queer that an employer would attempt to run a factory without a machinist. The explanation is that the high-paid American engineers or machinists are beyond the reach of Chinese employers with small capital, and the Chinese students who have been educated in Europe and America often have only a book knowledge which is of no practical value.

Similar extreme variations may occur in the case of the wages of independent workers. Thus, it is often found in China that an automobile driver may get \$5 or \$6 a day, while the ordinary ricksha puller gets only 20 or 30 cents per day.

It is also to be observed that lack of communication in China causes a great variance in wages paid in different localities. For instance, in Canton, boys receive up to \$6 per month, according to their length of service, unskilled laborers \$8, skilled machine workers \$12, highly skilled splitters \$20, and women and unskilled casual laborers \$12. In Shansi, where copper currency is still largely used as a medium of payment, the monthly wages of skilled workers average only from \$7 to \$9; those of other classes of laborers, including carters, carpenters, bricklayers, from \$4 to \$8; those of unskilled workers from \$4 to \$6; and the boy workers get only from \$2 to \$3.

The worst-paid group is probably the rural coolie group near the interior cities. It is reported that men carry loads of wheat of over 170 pounds for 800 miles at a wage of 10 cents a day.

In connection with the question of wage payment, mention should be made of the bonus system, which has been in use in China since time immemorial. At the end of each year the workers receive a certain percentage of their wages, but it is understood that in a year of business depression no bonus can be expected. A reward or gratuity is also given (a) for obeying the rules and regulations of the establishment, (b) for increasing their productivity, (c) for producing goods of better quality, and (d) for continuous service over

a long period. Such rewards differ from the bonus in that they are given irrespective of the business condition of the factory.

When a laborer's work is found to be unsatisfactory, his wages for 1 day, 5 days, or even 10 days may be withheld by his employer. This practice often creates bad feeling among the wage earners. This may be done for such offenses as disobeying orders, creating a disturbance in the factory, starting strikes or kindred activities detrimental to the progress of work, playing truant or dawdling in factory or workshop, failing to observe the working hours assigned, breaking a machine, wasting raw materials, or violating rules or regulations.

Increase in Cost of Living

AS SHOWN in later tables, there have been very important increases in retail food prices in recent years. A factor accentuating the burden of higher prices upon the worker has been the depreciation in the copper money, widely used in the payment of wages.

An investigation of the rate of exchange, made by Mr. Meng, showed that in 1900 a dollar equaled 76.4 coppers; in 1908, 120 coppers; in 1915, 135 coppers; and from 1920 to 1926 the rate rose from 140 to 311 coppers. This was due to the fact that the central government failed to control the mints, which are in the hands of the provincial governments, and the latter, under the lure of profit, issued an unusual amount of additional and debased coins. This has caused a continuous rise in copper exchange, together with the depreciation and instability of the currency. Still another element in the rise of the price level is the civil wars. But the employers seem ignorant of these facts and object to the workers' demands for wage increases. Misunderstandings have developed into a state of irreconcilable conflict and have led to repeated strikes, and the question of the real wage has become uppermost.

Real Wages

AS COMMONLY understood, the real wage is the comparative amount of goods the workers are able to buy with what they receive for their labor. This is figured by dividing the index number for silver wages by the cost-of-living index number. Here another difficulty confronts us because of the fact that information is difficult to obtain, since wages vary in different districts and the value of the copper currency in which wages are paid also varies. Moreover, there is no common system of weights and measures. As a result, estimates of real wages can be attempted only for Peking, for which there is available the findings of Doctor Meng's investigation of wages.

Masons, carpenters, and sawyers have been chosen to represent the group of skilled workers, and coolies and other handworkers have been taken as representative of the unskilled workers. All of the men connected with these trades belong to guilds which determine wages for the workers. The investigation showed that the wages of the skilled men were 34.1 cents (silver) a day in 1900, 38.4 cents in 1911, and 37.2 cents in 1913; those of unskilled laborers, 23.6 cents a day in 1900, 23 cents in 1911, 22.4 cents in 1913, 26.1

cents in 1924, and 35 cents in 1925. From 1913 to the spring of 1924 the increase for skilled workers was 11 per cent and for the unskilled 17, but at the end of 1924 there was a great increase in wages, and as a result, the percentage of increase as compared with the wages of 1913 is 47 per cent for skilled and 34 per cent for unskilled.

Table 2 shows the money and real wages paid to skilled and to unskilled workers in China from 1900 to 1925. For purposes of comparison the index numbers of food prices in the United States as well as in Peking are given.

TABLE 2.—MONEY WAGES OF SKILLED AND UNSKILLED WORKERS IN CHINA AND INDEX NUMBERS OF MONEY AND REAL WAGES, 1900 TO 1925

Year	Index numbers of retail prices of food		Money wages (in silver)				Index numbers of real wages (1913=100)	
			Rate per day for—		Index numbers (1913=100)			
	United States	Peking	Skilled workers	Unskilled workers	Skilled workers	Unskilled workers	Skilled workers	Unskilled workers
			<i>Cents</i>	<i>Cents</i>				
1900.....	69	81	{ 34.1	23.6	92	105	114	130
1901.....	72	68	{ 40.1	30.3	¹ 109	¹ 135	¹ 135	¹ 167
1902.....	75	75	{ 36.8	27.2	99	121	145	177
1903.....	75	84	{ 35.2	26.2	95	117	124	154
1904.....	76	78	{ 33.6	25.0	90	112	108	133
1905.....	76	75	{ 32.1	23.8	86	106	111	136
1906.....	79	83	{ 31.8	23.6	86	105	114	140
1907.....	82	87	{ 31.6	23.4	85	104	103	122
1908.....	84	89	{ 28.3	21.0	85	94	88	108
1909.....	89	89	{ 30.6	20.6	76	92	92	103
1910.....	93	90	{ 28.8	19.4	82	87	88	98
1911.....	92	100	{ 28.2	19.1	78	85	85	95
1912.....	98	102	{ 38.4	23.0	76	103	103	103
1913.....	100	100	{ 36.9	22.1	103	99	97	95
1914.....	102	93	{ 37.2	22.4	100	100	100	100
1915.....	101	88	{ 37.9	22.7	102	102	110	109
1916.....	114	96	{ 36.9	22.1	99	99	112	111
1917.....	146	102	{ 37.6	22.6	101	101	106	105
1918.....	168	97	{ 40.3	24.2	108	108	106	105
1919.....	186	88	{ 37.3	22.4	100	100	103	103
1920.....	203	114	{ 36.2	21.8	97	97	111	111
1921.....	153	117	{ 42.5	28.4	114	127	100	111
1922.....	142	113	{ 39.4	26.2	106	117	91	100
1923.....	146	118	{ 37.6	25.4	101	113	89	100
1924.....	146	126	{ 38.6	25.0	104	112	88	95
1925.....	146	126	{ 41.2	26.1	111	117	91	95
			{ 55.0	30.0	¹ 147	¹ 134	¹ 106	¹ 96
			{ 60.0	35.0	161	156	112	108

¹ Fall of year.

The low prices of 1919 raised real wages, but famine prices and the beginning of the rapid increase in the copper exchange rate in 1920 reduced the real wages of the skilled workers 10 per cent although they meant an increase in copper wages. The next year real wages were lowered an additional 10 per cent and stood at 90.5. The 1920 increase in the wages of the unskilled workers was sufficient to offset the famine prices and the increase in copper exchange, and the real wage stood at 111, as in 1919. From 1920 to 1923, real wages dropped from 111 to 95, the wages of the unskilled being relatively higher than those of the skilled workers.

When, in the fall of 1924, the guilds fixed the wage rates in terms of silver, rather than copper, the skilled workers secured a 16 per cent increase in real wages. It was not until the spring of 1925 that

a similar increase was given the unskilled, and even at the end of 1924 the wages for skilled workers stood at 106, while those of the unskilled averaged only 95. If we use the wages of 1925, and the lowest available prices, those of December, 1924, we find real wages had increased in 1925 to 112 for skilled labor and 108 for the unskilled.

In Peking if prices, wages, and exchange are such that the workers can maintain their customary standard of living, no attempt is made to increase wages. Since the guilds include all those connected with the trade, both employers and employees, there is no group that is in a position to reduce wages if a decrease in prices gives the workers some increase in their real wages. However, if increasing prices bring the real wage down to the point where the customary standard of living is threatened, then the guild calls a meeting and raises wages. The close personal relations that exist between employers and employees make it possible for the former to recognize the needs of their men, and this explains the fact that there have been fewer strikes in Peking than in other sections, and that some of the most significant strikes have been due wholly to national feeling. This is not to say that laborers in Peking earn fair wages or receive just treatment, but only that the workers in Peking are more accustomed to and more satisfied with the above-described wage system based on real wages than with any other system of pay.

Average Annual Income in China

WHILE a statistical average is not possible owing to varying conditions, it is evident that the ordinary wage earner in China does not receive more than \$160 for a full year's work.

It is a puzzle to western observers how the wage-earning classes get along with such an exceedingly low income, especially when it is considered that the family system prevails among the working people in China, and the average breadwinner has to provide for a family of five persons. This requires approximately \$30 a month, the items of expenditure being about as follows:

	Amount	Per cent
Rent.....	\$6	20.0
Food.....	12	40.0
Fuel.....	2	6.7
Clothing.....	4	13.3
Miscellaneous.....	6	20.0
Total.....	30	100.0

Evidently, then, the average annual income of \$160 is far below the amount required for the subsistence of the family, and the women and children therefore have to find some work in order to help the family eke out a bare living. Unskilled workers' expenditures serve merely to ward off starvation. Their diet is maize in some form and salted turnips twice a day; their houses are built of sun-dried, unburned bricks with roofs thatched with the products of the peasants' land, earth floors, and raised earth or brick beds. There are no sanitary arrangements.

As already stated, the workers' position since 1914 has been rendered doubly hard by another factor which has disturbed the price level and has tended to depress even the meager income shown above. That factor is the depreciation of copper money.

Shifting Factory Workers to New Jobs

IN LARGE industrial organizations methods must be worked out for adjustment not only to the continuous change in amount, kind, and location of work done but also to the constant variations in the interest, ability, and effectiveness of the workers in their jobs. These and other matters concerning the transfer of rank and file workers are discussed by Franklin J. Meine in the February, 1928, issue of the Personnel Journal. Some of the findings in that article are given below.

In any attempt to understand the problem of transfer the following three viewpoints should be kept in mind: (1) Cost of labor turnover; (2) individual human viewpoint; (3) administrative considerations.

Reasons for Transfer

TO EMPHASIZE the importance of the problem under discussion, Mr. Meine gives figures showing that in a large factory employing some 2,000 persons the employees transferred in four years ranged from 22 to 45 per cent of the total force. Of the transfers about 23½ per cent were made for the purpose of advancing the employee, while about 30 per cent were made for purposes of training the worker transferred. An analysis of the transfer figures other than those for promotion indicates, as do also the records from other establishments, that "transfer functions primarily to meet the needs of the organization rather than the needs of the individual, i. e., as to the latter's ability or preference." At the same time, however, the individual benefits by not losing his job or through the opportunities afforded him in other jobs or departments where he frequently finds work for which he is better fitted and people with whom he may get along more harmoniously. A change in jobs also makes him more versatile and more valuable to his employers.

Problem of Unadaptability

ACCORDING to the writer, unadaptability should be considered from two angles, that of the job and that of the worker. Unadaptability to the job may mean the worker's unadaptability to the job itself, to the physical working conditions or to the social working conditions; that is, relations with the man above him or his fellow employees; or it may be the result of some outstanding defect in the worker's physical, mental, or trade equipment.

In many instances it is no easy matter to consider the worker apart from his work. When practicable, however, the two should be considered separately in order to determine the proper procedure—whether the conditions should be changed or whether the worker should be transferred. Unadaptability may be due to improper placement from the start or from changes in the job or in the worker. It is important to find the real cause.

The character of the work may change and call for higher skill and greater physical or mental effort. On the other hand, the worker's point of view, his liking for his job, and his ability may also change.

When the worker can not adapt himself to the job, his transfer is very much like the termination of employment and adds somewhat to the cost of turnover when the employee must be trained for new work. However, the transferred worker can be placed more intelligently than a new man. Furthermore, he is acquainted with the spirit and atmosphere of the establishment, and in some cases when put on another job is grateful and makes a great effort to do well. When the unadaptability is due chiefly to the employee's physical working conditions or to the persons under whom or with whom he has to work, the transfer does not mean an added expense if such employee can be put on a similar job in a different environment.

To the individual, unadaptability is a serious matter. It means constant worry. He is unhappy because he is not enjoying that satisfaction which comes from knowing that he is doing good work. He does not fit with the other employees and things are not "right." He, therefore, welcomes transfer to a job where he can be in a more harmonious relation.

Worker's Preference

A TRANSFER, the author holds, should meet the worker's need as well as the need of the organization. Opportunity for transfer appeals strongly to the worker. It produces a sense of liberty of choice and a consequent satisfaction with himself and the employing organization. The worker's consciousness that he can get a transfer if he so desires greatly decreases the number who leave without giving notice and increases the number of those who are satisfied with their jobs because they can change their work if they wish to do so.

The worker's privilege of transfer may be given publicity in the employee's handbook and in the plant paper, on bulletin boards, and through the works council. Opportunities for transfers should be announced. Available jobs may be listed on bulletin boards throughout the factory.

Transfer Procedure

THE ordinary routine in transferring is for the production department to notify the employment department that it needs more workers or that it desires to reduce its force. The employment department then finds out what workers can be transferred or what department requires help or would be willing to add to its staff. When "unadaptability" is given as a reason for changing a job, the application might come either from the worker as a grievance or through the foreman of the production department. "Request of employee" would come direct from the worker or from him through the foreman.

The employment department functions as an initiator and also as a clearing house and should not effect transfers without the consent of the production departments concerned. A production department should not attempt to transfer its workers to other departments without the consent and understanding of these other departments and of the employment department; nor should a department scout around the establishment seeking for workers and seizing them "without the consent and understanding of the other department chiefs." All changes should be made through the regular channels for transfer.

When a worker's services are required in another department, he should be informed as to the reasons for transfer. If not, he will probably conclude that he is "slipping" on the job and the company wishes to "lose" him. When a worker is no longer needed in a certain department, the situation should also be explained. When the worker is himself principally at fault he should, if possible, be led to acknowledge it.

The author emphasizes the importance of keeping in mind that "a man's job is his life; and fear of loss of job through any possibility of getting a 'bum job' or of failing in another job, and suspicion of management for the reason of the change are so strong that the employee should always be given clear and painstaking explanations just why the transfer was made."

In the case of transfers the pay-roll department should carefully keep a record of changes, and see that all the financial adjustments connected therewith are correctly entered on the books of the company.

Wages

AT TIMES the wage question becomes quite problematic with reference to transfers; and the practice in different companies is by no means uniform. Examples of these problems are: If a worker requests a transfer to a lower-paid job should he stand the loss? If the employer transfers a man to a lower-paid job in a department when he is needed should the man's wages be reduced? Should an employee with special ability who requests a transfer to a higher-paid job be at once paid the higher rate or should his raise be postponed until he has made good in his new work?

In transferring workers to other jobs due consideration must be given to individual differences and idiosyncrasies.

When an employee is transferred instead of being discharged, it tends to undermine the morale of the plant and "defeats the very purpose for which the transfer plan was established." In this connection Mr. Meine stresses the advisability of not losing sight of the production man's angle of vision.

Inquiry into Changes in Economic Currents in the United States¹

THE United States Secretary of Commerce has recently appointed a committee of experts in business and economics to supervise a wide-reaching investigation into the changes in economic currents in the United States. Funds have been subscribed by private individuals to pay the expenses of the New York Bureau of Economics which is "to make the fact-finding background" for the study.

The purpose of the inquiry is to determine facts regarding such matters as changes in methods of production in agriculture and industry and in distribution; fluctuations in employment; variations in relative price levels and profits; the trend of the business cycle;

¹ U. S. Department of Commerce. Press releases, Jan. 26 and Feb. 11, 1928.

changes in living standards; foreign trade and foreign credits; and other related questions involved in an understanding of the general business situation of the United States.

The personnel of the committee is as follows:

Chairman, Herbert Hoover, Secretary of Commerce, Washington, D. C.; Walter F. Brown, Assistant Secretary of Commerce, Washington, D. C.; William Green, president of American Federation of Labor, Washington, D. C.; John Lawrence, president of New England Council, Statler Building, Boston, Mass.; Max Mason, president of University of Chicago, Chicago, Ill.; Adolph C. Miller, vice governor of Federal Reserve Board, Washington, D. C.; Lewis E. Pierson, president of Chamber of Commerce of the United States, Washington, D. C.; John J. Raskob, vice president of General Motors Corporation, New York City; A. W. Shaw, president of A. W. Shaw Co., Chicago, Ill.; Louis J. Taber, master of the National Grange, Columbus, Ohio; Daniel Willard, president of Baltimore & Ohio Railroad, Baltimore, Md.; George McFadden, of George H. McFadden & Bro., Philadelphia, Pa.; Clarence M. Wooley, chairman of board of American Radiator Co., New York City; Owen D. Young, chairman of board of General Electric Co., New York City; secretary, Edward Eyre Hunt.

The first meeting of the committee was called for February 21, 1928, in New York City.

Labor Conditions in Western Australia

THE third annual report of the Western Australia Department of Labor, covering the year ending June 30, 1927, shows the prevalence of the 44-hour week in the Government service, as well as in industry generally. Of 16,553 Government employees, 1.1 per cent (mostly office cleaners) had a week of less than 44 hours, 84.8 per cent had the 44-hour week, 4.7 per cent had 48 hours, and 9.4 per cent had a week of over 48 hours or not definitely prescribed. This latter week was found mainly among the police, medical officers, employees in the railway and tramways department, and those engaged in the State shipping service, who had a 48-hour week in port and a 56-hour week at sea.

During the year 359 apprentices were registered in 22 different industries or trades. Tailoring took the largest single group of these, 72; engineering came next with 68, followed by furniture making with 43, carpentry with 42, and bootmaking with 21. In addition to those registered as entering the separate trades, 62 were registered by the commissioner of railways in various trades carried on in the railway workshops.

The figures concerning factories and factory employment show that small establishments predominate. Of 2,149 registered factories, 1,022 employed under 4 persons each, 696 employed 4 and under 10, and only 4 employed 300 and over. The average number employed in registered factories during 1926 was 24,936, an increase of 785 over the preceding year. This increase appeared mainly among the young workers. The number of girls under 18 was larger by 257 than in 1925, and the number of lads under 18 increased by 946. On the other hand, the number of girls aged 18 but under 21 decreased by 229, and the number of men over 21 by 336.

Labor Treaty Between Belgium and Luxemburg¹

A LAW was passed in Belgium, July 25, 1927, approving the labor treaty concluded between Belgium and Luxemburg October 20, 1926.

By the terms of the treaty the two Governments agree not to put any obstacle in the way of their nationals who wish to go to the other country to work and such workers and their families have the right to go freely from one country to the other for this purpose. It is provided, however, that when the state of the labor market during certain periods, in certain regions, or for certain occupations is such as to make the employment of immigrants inadvisable, the Government concerned will give the other country notice of the fact through diplomatic channels before any restrictive measures are put into effect.

Immigrant workers will receive pay equal to that of the same class of workers among the nationals of the country who are employed in the same enterprise, or in the same class of work in that region, and the Government of the country concerned undertakes to see that this rule is enforced. Immigrant workers in either of the two countries will also have the same advantages enjoyed by the nationals of the country in which they are employed in regard to legislation or customs governing working and living conditions. Any claims by workers regarding these conditions must be made through the diplomatic or consular representative of their country.

The workers have the right to acquire or sell property in the country in which they are employed, but they are not entitled to bonuses for the construction of cheap dwellings, war grants, etc., and they are excluded from certain zones or places which are reserved in the interest of national security.

Workers of the two countries are entitled to representation on committees of arbitration and conciliation and to any allowances paid because of unemployment. They are also assured equality of treatment regarding the application of present or future laws regulating working conditions and insuring the health and safety of the workers.

The treaty is to become effective upon ratification by the two countries and will be tacitly renewed from year to year unless it is denounced by one of the signatories not later than three months before its expiration.

¹ Belgium. *Ministère de l'Industrie et du Travail. *Revue du Travail*, January, 1928, pp. 131-133.

LABOR TURNOVER

Labor Turnover in American Factories, 1927 and 1928¹

THE following table shows the labor turnover in American factories during the year 1927 and the first two months of 1928, the table being based on the experience of more than 300 factories reporting to the Metropolitan Life Insurance Co. and local bodies associated in this project. Together, the reporting companies employ over 6½ per cent of the country's factory workers. Corresponding data, by months, for the year 1926 were published in the Labor Review for January, 1928.

AVERAGE TURNOVER RATES DURING 1927 AND 1928 IN SELECTED AMERICAN FACTORIES¹

[Each monthly rate is stated on an equivalent annual basis]

Month	Accession rate		Total separation rate ²		Voluntary quit rate		Lay-off rate		Discharge rate	
	1927	1928	1927	1928	1927	1928	1927	1928	1927	1928
January ³	36.3	33.4	40.8	27.8	23.1	15.9	12.3	8.3	5.4	3.6
February ³	41.7	30.5	36.9	26.5	21.8	13.6	9.6	8.6	5.5	4.3
March.....	43.2	-----	42.5	-----	29.8	-----	6.4	-----	6.3	-----
April.....	47.5	-----	48.3	-----	32.4	-----	9.7	-----	6.2	-----
May.....	48.0	-----	44.7	-----	31.9	-----	7.6	-----	5.2	-----
June.....	45.0	-----	43.9	-----	29.1	-----	8.0	-----	6.8	-----
July.....	37.8	-----	35.7	-----	24.4	-----	6.0	-----	5.3	-----
August.....	39.6	-----	36.4	-----	23.0	-----	8.5	-----	4.9	-----
September.....	43.6	-----	46.2	-----	33.8	-----	6.4	-----	6.0	-----
October.....	40.8	-----	39.6	-----	25.3	-----	8.5	-----	5.8	-----
November.....	31.6	-----	31.5	-----	18.0	-----	9.3	-----	4.2	-----
December.....	23.7	-----	27.2	-----	14.8	-----	8.6	-----	3.8	-----

¹ Now numbering over 300. The form of average used is the unweighted median of company rates, except for the total separation rate, which is the sum of the median rates for voluntary quits, lay offs and discharges.

² Arithmetic sum of voluntary quit, lay off, and discharge rates.

³ Preliminary figures for 1928 subject to revision.

Several new developments are reported by the various agencies cooperating with the Metropolitan Life Insurance Co. in the development of their joint project for currently measuring the labor-turnover experience of manufacturers. Altogether more than 500 employers of factory labor report each month, in a comparable form, to one or another of these agencies; the Metropolitan, however, has used for its national sample fewer than that number of returns (actually, a little over 300) in order to avoid the overweighting of particular sections of the country. Thus, the Bureau of Business Research at the University of Michigan now secures returns from about 100

¹ These quarterly reports on labor turnover appearing in the Labor Review are prepared by W. A. Beridge, economist, Metropolitan Life Insurance Co., for the policyholders' service bureau.

manufacturers in that State; of these, only a fraction can properly be used in constructing the national averages.

Other collecting agencies are likewise expanding the scope and improving the accuracy of their canvasses. The Connecticut Industrial Council is promoting and federating city-wide monthly surveys of several of its constituent bodies, located in Bridgeport, New Haven, Hartford, Meriden, Waterbury, Derby, etc. The Associated Industries of Massachusetts is contemplating a division of the State into six or eight labor-market areas, with separate turnover indexes for each as soon as the number of reporting manufacturers becomes adequate. Brown University is about to expand its activities in labor-turnover research.

The University of Pittsburgh is contemplating the inauguration of a local project for that labor market, analogous to those already being conducted by the University of Denver, the Employers' Association of Philadelphia in cooperation with the University of Pennsylvania, and Ohio State University.

The University of Michigan expects soon to hold its second annual conference of reporting companies, probably in May. The University of Chicago is about to enter the field of labor turnover investigation, working with the National Metal Trades Association.

A special census of length-of-service distributions in factory work forces is now being completed by some of the above-mentioned agencies, together with the New Jersey Bureau of Labor Statistics and the Wisconsin Industrial Commission. This rather unique project has the support of the committee on governmental labor statistics of the American Statistical Association. A summary of the results will probably be published in the near future.

Earlier data than those shown in the table (p. 61) were tabulated and charted in the Labor Review of March, 1927 (pp. 9-13), for the only variable thus far extended backward—namely, the voluntary quit rate. Computations for a similar extension of the four other variables back at least to 1923, and possibly to 1919, like the voluntary quit rate, are now in progress. A preliminary classification by industries, etc., from about 1926 on will also probably be ready for announcement by the policyholders' service bureau of the Metropolitan Life Insurance Co. at an early date.

PRODUCTIVITY OF LABOR

Production and Per Capita Output in Belgian Coal Mines and Coke Ovens

THE Revue du Travail (Brussels), January, 1928, contains data (pp. 33-35) concerning the operation and output of Belgian coal mines and coke ovens from which the following table is taken:

TOTAL PRODUCTION AND OUTPUT PER WORKER IN BELGIAN COAL MINES AND COKE OVENS, 1913 AND 1924 TO 1927

Year	Coal mines						Coke ovens			
	Average production per month	Average days of operation per month	Average days worked per month	Average number of workers per month ¹	Average output per day of—			Average production per month	Average number of workers per month	Average monthly output per worker
					Workers at the seam	Underground workers ²	Underground and surface workers			
	Tons ³				Tons ³	Tons ³	Tons ³			Tons ³
1913.....	2,098,184	24	3,622,402	146,084	3.48	0.81	0.58	323,613	4,292	75.4
1924.....	2,144,780	24	4,209,161	169,518	3.86	.74	.51	382,112	5,384	71.0
1925.....	2,124,970	24	4,027,654	161,808	3.96	.78	.53	377,370	5,345	70.6
1926.....	2,325,813	25	4,070,170	160,022	4.31	.83	.57	(4)	5,824	-----
1927.....	2,532,865	25	4,449,010	175,544	4.34	.82	.57	494,800	5,969	82.9

¹ Underground and surface.

² Including workers at the seam.

³ 2,000 pounds.

⁴ Figures given in the Revue are evidently incorrect.

Labor Productivity in Russia

THE Monthly Statistical Bulletin for April, 1927, published by the Higher Soviet of Peoples Economy of the Union of Socialist Soviet Republics, contains tables on the number of man-days for workers in the various industries during 19 months, beginning October 1, 1925, and on production for the important commodities of these industries during the same period. In addition, the average hours per day in certain of the basic industries were furnished by an official of the Amtorg Trading Corporation.

From the above data man-hour production has been computed for 10 basic commodities. The results are shown in the accompanying table. The table was prepared by multiplying the total number of man-days by the average number of hours worked daily, to obtain the total number of man-hours worked. Dividing the total production by the total man-hours resulted in the amount produced per man-hour.

The production was next converted to measurements as used in the United States, which were used in similar manner as for the Russian measurements to determine production per man-hour, and the total production was then divided by the total man-days to get the production per man-day.

PRODUCTION OF SELECTED COMMODITIES PER MAN-HOUR IN THE UNION OF SOCIALIST SOVIET REPUBLICS FROM OCTOBER 1, 1925, TO APRIL 30, 1927

[As used here Russian ton=2,232 pounds; United States ton=2,000 pounds, long ton=2,240 pounds; case=1,000 small boxes; centner=220.46 pounds; cubic meter=35.314 cubic feet]

Commodity	Total man-days worked (thousands)	Average hours worked per day	Production, in Russian measure			Production, in United States measure			
			Unit	Amount	Per man-hour	Unit	Amount	Per man-hour	Per man-day
Coal.....	80,974	7.4	Ton.....	42,926,000	0.072	Ton.....	47,905,416	0.080	0.59
Mineral oil.....	17,609	7.9	do.....	21,206,932	.152	do.....	23,666,936	.170	1.34
Salt.....	2,625	7.5	do.....	2,254,051	.114	do.....	2,515,521	.128	.96
Cement.....	7,690	7.5	do.....	2,136,475	.037	do.....	2,384,306	.041	.31
Pig iron and steel ingots.....	79,960	7.7	do.....	8,912,015	.014	Long ton...	8,880,186	.014	.11
Matches.....	6,282	7.5	Case.....	6,643,900	.141	Gross, boxes	46,138,194	.979	7.34
Vegetable oils.....	4,072	7.6	Centner..	3,856,644	.125	Hundred-weight.	8,502,357	.275	2.09
Beet sugar.....	8,374	7.6	Ton.....	858,815	.013	Ton.....	958,438	.015	.11
Lumber.....	17,925	7.6	Cubic meter.	9,847,407	.072	Board-feet..	4,173,015,970	30.632	232.80
Paper and cardboard.	13,002	7.7	Ton.....	443,943	.004	Ton.....	495,440	.005	.04

WOMEN IN INDUSTRY

French Law Regarding Employment of Women Before and After Childbirth¹

UNDER a French law of June, 1913, women were allowed to leave work for a period of four weeks before and four weeks after childbirth, during which period the employer could not break the employment contract. By a law dated January 4, 1928, this leave of absence is extended to 12 weeks in the period preceding and following confinement, and during this time the employer can not dismiss such workers under penalty of the payment of damages to the women concerned if he has been notified of the cause of absence. The leave of absence may be extended to 15 weeks in cases of incapacity resulting from confinement, duly attested by medical certificate.

Regulation of Work of Women Before and After Childbirth in Germany²

ALAW passed in Germany, July 16, 1927, which became effective the following month, regulates the employment before and after childbirth, of women subject to compulsory insurance against sickness. Women who are employed in agricultural, forestry, or fishing enterprises, or in related undertakings which do not employ more than three persons, and household servants are not covered by the law.

Pregnant women who can furnish a doctor's certificate that their confinement will take place within six weeks may refuse to work though under a labor contract, and they may not work during the six weeks following confinement. This period may be extended another six weeks if they can show by means of a medical certificate that as a result of their confinement they are unable to work. The employer is not required to pay such workers during the period of leave unless the labor contract expressly provides therefor. Mothers who nurse their babies are allowed to stop work for two half-hours or one hour a day for six months following confinement and the employer must pay such workers for this time.

An employer may not break the labor contract during the time a woman is on leave, up to a maximum of 18 weeks. The law provides for the payment of a fine in case a woman is dismissed and for a second offense within a period of three years the penalty is imprisonment for six months or longer.

¹ Comité Central des Houillères de France. Circulaire No. 5805, January, 1928.

² Belgium. Ministère de l'Industrie et du Travail. Revue du Travail, January, 1928, pp. 111-113.

Massachusetts Wage Board for the Electrical Industry

EARLY in January the Massachusetts Department of Labor and Industries announced the establishment of a board to recommend minimum wage scales for women and girls employed in the manufacture of electrical supplies and equipment. The board, which is composed of 15 members, 6 representing the employers, 6 the woman employees, and 3 the public, began its work on January 12, its field including the manufacture of such products as incandescent lamps, insulated wire, radio and radio parts, mica, signal and protective systems, and various kinds of electrical equipment and appliances for household and office use.

The establishment of this board follows an investigation into the wages of women and girls in the occupation, made by the minimum wage commission in 1925-26. This is the twentieth occupation to be brought within the scope of wage-board action.

INDUSTRIAL ACCIDENTS

Coal-Mine Fatalities in the United States in 1926

ALTHOUGH the number of men killed in the coal mines of the country in 1926 was greater by 280 (12.5 per cent) than in 1925, the fatality rate, as measured by the number of tons of coal produced, was 1.3 per cent less. In fact, the recent report on coal-mine fatalities in the United States in 1926, issued by the Bureau of Mines as its Bulletin No. 283, states that "the coal that was mined during the year cost less in human life than in any previous year" except 1923, 1920, and 1916.

With a production of 663,290,000 short tons, there were 2,514 men killed, giving a death rate of 3.79 per million tons as compared with a rate of 3.84 for the preceding year. Bituminous mines alone had a higher rate than in 1925, being 3.56 as against 3.53, but the anthracite mines reduced their rate from 6.47 to 5.33, thus affecting a reduction in the rate for all classes of coal mines. Owing to incomplete reports on number of men employed in the various mines of the country, the fatality rates based upon exposure are not included in this report.

Table 1 shows the number of workers, average days of operation, number of men killed, fatality rates per thousand 300-day workers, and production in coal mines, by five-year periods from 1906 to 1920, and by years from 1921 to 1926:

TABLE 1.—COAL-MINE FATALITIES AND PRODUCTION OF COAL, 1906 TO 1926

Year or period	Men employed		Average days of operation	Men killed		Production per death (short tons)	Average production per man		Deaths per million tons
	Actual number	Equivalent in 300-day workers		Number	Rate per 1,000 300-day workers		Tons per year	Tons per day	
1906-1910 ¹ (average).....	675, 067	484, 454	215	2, 658	5. 49	169, 719	668	3. 10	5. 89
1911-1915 (average).....	739, 169	541, 489	220	2, 517	4. 65	210, 253	716	3. 26	4. 76
1916-1920 (average).....	760, 381	599, 781	237	2, 419	4. 03	258, 944	824	3. 48	3. 86
1921.....	823, 253	474, 529	173	1, 995	4. 20	253, 832	615	3. 56	3. 94
1922.....	844, 807	405, 056	144	1, 984	4. 90	240, 399	565	3. 92	4. 16
1923.....	862, 536	560, 646	195	2, 462	4. 39	267, 223	763	3. 91	3. 74
1924.....	779, 613	499, 896	192	2, 402	4. 80	227, 974	733	3. 81	4. 20
1925.....	748, 805	480, 227	192	2, 234	4. 65	260, 461	777	4. 04	3. 84
1926.....	² 742, 000	-----	-----	2, 514	-----	³ 263, 943	894	-----	3. 79

¹ Figures for 1906-1909 included in the average relate only to States under inspection service, and figures for 1909 as to average days of operation were estimated by the Bureau of Mines.

² Number of employees based on estimates of State mine inspectors.

³ Estimated.

Fatalities and fatality rates per million tons mined in 1925 and 1926 are shown by cause in Table 2:

TABLE 2.—FATAL ACCIDENTS AND RATE PER MILLION TONS OF COAL PRODUCED, 1925 AND 1926, BY CAUSES

Cause	Number killed		Rate per million tons	
	1925	1926	1925	1926
Underground:				
Falls of roof or face.....	1,080	1,213	1.86	1.83
Mine cars and locomotives.....	361	431	.62	.65
Explosions of gas or coal dust—				
Local explosions.....	84	74	.14	.11
Major disasters.....	261	348	.45	.52
Explosives.....	102	96	.17	.15
Electricity.....	84	95	.14	.14
Mining machines.....	35	26	.06	.04
Mine fires.....	10	1	.02	(¹)
Miscellaneous.....	56	77	.10	.12
Total.....	2,073	2,361	3.56	3.56
Shaft.....	34	35	.06	.05
Surface:				
Haulage.....	40	50	.07	.08
Machinery.....	9	9	.02	.01
Miscellaneous.....	78	59	.13	.09
Total.....	127	118	.22	.18
Grand total.....	2,234	2,514	3.84	3.79

¹ Less than 0.005.

Death rates per million man-hours worked, 1911 to 1925, are shown by cause in Table 3. The rates for 1926 can not yet be computed.

TABLE 3.—DEATH RATES PER MILLION MAN-HOURS WORKED, 1911 TO 1925, BY CAUSES

Cause	Average, 1911-1920	1921	1922	1923	1924	1925
Underground:						
Falls of roof or coal.....	1.000	1.076	1.120	1.034	1.053	1.111
Haulage.....	.347	.358	.422	.369	.351	.372
Gas or dust explosion.....	.246	.133	.384	.331	.531	.355
Explosives.....	.125	.149	.114	.101	.098	.105
Electricity.....	.071	.084	.092	.067	.079	.086
All other underground.....	.101	.131	.095	.104	.103	.104
Total.....	1.890	1.931	2.227	2.006	2.215	2.133
Shaft.....	.049	.038	.051	.041	.029	.035
Surface.....	.720	.620	.803	.677	.694	.673
Grand total.....	1.716	1.740	2.019	1.813	1.989	1.925

Table 4 gives the fatality rates for each kind of mine by five-year periods from 1891 to 1925 and by years from 1921 to 1926. The 1926 rates are not complete and as given are subject to revision. This table affords a comparison of the hazards in bituminous and anthracite mines.

TABLE 4.—AVERAGE FATALITY RATES BY FIVE-YEAR PERIODS, 1891 TO 1925, AND BY YEARS, 1921 TO 1926, BY KIND OF MINE

Year or period	Average fatality rates in—								
	Bituminous mines			Anthracite mines			Both types of mines		
	Per 1,000 employed	Per 1,000 300-day workers	Per million tons mined	Per 1,000 employed	Per 1,000 300-day workers	Per million tons mined	Per 1,000 employed	Per 1,000 300-day workers	Per million tons mined
1891 to 1895.....	2.69	4.02	4.84	3.27	4.99	8.12	2.91	4.38	5.87
1896 to 1900.....	2.90	4.06	4.46	3.03	5.58	7.94	2.95	4.50	5.34
1901 to 1905.....	3.49	4.81	5.17	3.36	5.38	7.69	3.45	4.95	5.67
1906 to 1910.....	4.01	5.57	5.50	3.70	5.25	7.67	3.94	5.48	5.89
1911 to 1915.....	3.37	4.75	4.31	3.52	4.37	6.95	3.40	4.65	4.76
1916 to 1920.....	3.05	4.03	3.48	3.70	4.06	6.07	3.18	4.03	3.86
1921 to 1925.....	2.70	4.87	3.67	2.83	3.71	5.80	2.73	4.58	3.96
1921.....	2.18	4.38	3.48	3.43	3.80	6.05	2.42	4.20	3.94
1922.....	2.45	5.16	3.99	1.91	3.81	5.49	2.35	4.90	4.16
1923.....	2.77	4.65	3.46	3.23	3.62	5.45	2.85	4.39	3.74
1924.....	3.08	5.39	3.94	3.10	3.39	5.64	3.08	4.80	4.20
1925.....	3.12	4.79	3.53	2.50	4.12	6.47	2.98	4.65	3.84
1926.....	3.54			2.83			3.39		

Industrial Accidents in Indiana in 1927

ACCIDENT statistics and compensation adjustments are noted in the annual report of the Industrial Board of Indiana for the year ending September 30, 1927, but the data on these subjects are not correlated, so that it is impossible to show the amount of compensation by industry, by nature or cause of injury, by extent of disability, or by sex of worker.

During the year covered by the report 21,624 compensation adjustments were made by agreement, which under the law require approval by the industrial board. The contested cases heard and settled by the board numbered 2,475. The total compensation paid in cases closed during the year was \$2,706,887 and \$334,600 was paid in burial benefits in 3,346 cases.

A total of 40,539 industrial accidents are reported (2,599 or 6 per cent less than the preceding year), of which the largest number, 3,931 or 9.7 per cent including 75 fatalities, occurred in the mining industry. Considering all forms of contracting, however, this industry recorded 5,431 accidents, or 13.4 per cent of the whole. Next in order was automobile manufacturing, with 2,586 or 6.4 per cent.

Noting the causes of injury, we find 5,971 (14.7 per cent) accidents due to dropping and handling objects and 5,065 (12.5 per cent) due to falling objects. This situation is not unusual, as accidents reports generally disclose. Flying objects caused 7.3 per cent (2,976) and striking against sharp objects caused 6.1 per cent (2,461) of all accidents.

Of the workers injured, 6,057, or 14.9 per cent, suffered injuries on account of cuts, the parts involved in 2,507 of these cases being the fingers.

There were 266 fatalities reported, 658 dismemberments, and 2,821 (7 per cent) eye injuries. Among those injured, 306 minors and 1,794 females are included. Of the former, 26 were injured in telephone and telegraph operations, and of the females, 157 or 8.8 per cent were injured in dry goods or general merchandising estab-

ishments. Striking against objects produced 205 or 11.4 per cent of the injuries to women.

Cost of Infections in New York Industries

THE January, 1928, issue of the Industrial Bulletin, published by the New York Industrial Commissioner, shows that nearly 13.5 per cent of all industrial accidents reported in New York State during the fiscal year ending June 30, 1927, resulted in infections. There were 13,304 such cases, which are about twice as many as were reported during the year 1924, but this very great increase is ascribed chiefly to more complete descriptions of accidents in the reports submitted and to the fact that the waiting period was reduced from two weeks to one week under legislation adopted in 1925, thus adding many cases, lasting from one to two weeks, of disability from slight wounds that subsequently became infected.

The location of most of these infections was on hands and fingers (70.9 per cent), followed by legs and feet as the parts next most frequently involved (16.8 per cent). About 44 per cent of the infections resulted from wounds received in handling objects, with 74 per cent of these classified as "sharp and rough objects."

An indication of the cost of infections is given in a table classifying, by kind of object handled, the 4,355 cases of infection resulting from handling sharp and rough objects. This table shows that a total of \$820,020 in compensation was involved, or an average of \$188 per case, whereas the average cost of 2,010 cases of injury so caused but not infected was only \$93, the total compensation being \$187,793. The causes given in this table indicate the little things which may produce most serious results—slivers of wood, nails, wires and metal straps, slivers of metal, sheet metal, glass, and bones. The first-named heads the list, with 21.4 per cent of all infected cases.

The comparative severity of infected cases appears from a table showing, for both infected and noninfected cases, the average weeks lost in a selected group of causes resulting in injury to the hands and fingers only.

RELATIVE SEVERITY OF INFECTED HANDS AND FINGERS, BY CHIEF CAUSES

Cause	Death cases	Permanent partial disability		Temporary disability	
		Number of cases	Average weeks lost	Number of cases	Average weeks lost
Sewing machines:					
Infected.....		35	19.7	280	3.2
Noninfected.....		33	16.2	531	2.8
Striking against objects:					
Infected.....	2	101	38.6	668	2.9
Noninfected.....		91	18.3	466	2.3
Handling sharp and rough objects:					
Infected.....	18	813	36.9	3,273	3.0
Noninfected.....	2	223	19.3	1,513	2.3
Continued wear from handling, friction burns, blisters, etc.:					
Infected.....		42	44.1	318	2.8
Noninfected.....				31	2.8
Hand tools in hands of injured worker:					
Infected.....	8	223	34.3	1,045	3.1
Noninfected.....		548	22.2	2,071	2.5

There were 339 eye infections, this number being 2.5 per cent of all infection cases and 11.6 per cent of all eye injuries.

The tables presented in the report appear to indicate that infections occur mostly in simple injuries from the most ordinary causes, to which all workers are constantly exposed and which have had comparatively little attention in accident prevention.

Concluding, the report makes the following statement as to cost of this type of injury:

The 13,304 cases of infection for which awards were made in 1926-27 included 2,180 permanent partial disabilities and 94 deaths or permanent total disabilities. The awards in all these cases amounted to about \$3,000,000. Assuming that infection approximately doubles the cost of injuries, \$1,500,000 in compensation could have been saved if the infection could have been prevented.

Accidents in Mines and Quarries in Ohio in 1926

REPORT No. 14 of the division of labor statistics of the Ohio Department of Industrial Relations includes statistics of accidents in mines of the State during the year 1926, with particular reference, however, to coal mines. It is stated that there were 80 fatal accidents in that year, or 1 to every 524 men employed (based on the week of greatest employment, numbering 41,924), and 1 to every 350,489 tons of coal mined. Over 61 per cent of these fatalities was due to falls of roof, and 18.8 per cent was due to mine cars and motors. These percentages represent approximately the average of a series of years, for a table is presented showing the record from 1905 to 1926, in which falls of roof are shown to have caused 63.5 per cent of the total fatalities and mine cars and motors, 16.1 per cent. In addition to the 80 fatalities noted, there were 8 fatal accidents in clay mines and 1 fatality in a gypsum mine.

The average number of days worked in pick mines was 162; in machine mines, 151; and in stripping mines, 242. These figures compare with averages of 170, 162, and 178, respectively, in 1925.

HEALTH AND INDUSTRIAL HYGIENE

Mortality Experience of International Typographical Union, 1927

By FREDERICK L. HOFFMAN

IN CONTINUATION of the health survey of the printing trades, 1922-1927, the results of which were published by the Bureau of Labor Statistics in Bulletin No. 427, the following statistics for 1927 will be interesting to those concerned with health conditions in American industries. The experience for 1927 represents 989 tabulatable deaths from all causes. The following table shows the deaths from certain specific causes on a proportionate basis to the mortality from all causes by divisional periods of life for the three years, 1925-1927.

TABLE 1.—MORTALITY FROM SPECIFIED CAUSES AMONG MEMBERS OF THE INTERNATIONAL TYPOGRAPHICAL UNION, 1925 TO 1927, BY AGE GROUPS

Age group	Tuberculosis		Cancer, all forms		Pneumonia		Bright's disease		All causes
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	
<i>1925</i>									
15 to 19 years					1	100.0			1
20 to 24 years	3	37.5			2	25.0			8
25 to 29 years	11	47.8			1	4.3			23
30 to 34 years	11	35.5			2	6.5	3	9.7	31
35 to 39 years	12	26.1	2	4.3	5	10.9	2	4.3	46
40 to 44 years	7	14.0	5	10.0	3	6.0	1	2.0	50
45 to 49 years	10	13.5	4	5.4	2	2.7	4	5.4	74
50 to 54 years	12	13.0	5	5.4	10	10.9	6	6.5	92
55 to 59 years	10	7.4	14	10.3	14	10.3	3	2.2	136
60 to 64 years	7	6.0	9	7.7	10	8.5	10	8.5	117
65 to 69 years			9	8.2	12	10.9	11	10.0	110
70 to 74 years	2	2.2	8	8.9	7	7.8	7	7.8	90
75 to 79 years	2	3.5	5	8.8	1	1.8	6	10.5	57
80 to 84 years			2	7.4	2	7.4	1	3.7	27
85 to 89 years			2	18.2			1	9.1	11
90 years and over			1	25.0	1	25.0			4
All ages	87	10.1	66	7.5	73	8.3	55	6.3	877
<i>1926</i>									
15 to 19 years									
20 to 24 years	2	15.4	1	7.7	1	7.7			13
25 to 29 years	7	31.8	1	4.5	2	9.1	1	4.5	22
30 to 34 years	8	27.6			4	13.8			29
35 to 39 years	13	31.7	1	2.4	5	12.2	1	2.4	41
40 to 44 years	19	33.3	3	5.3	4	7.0			57
45 to 49 years	8	10.4	2	2.6	8	10.4	4	5.2	77
50 to 54 years	14	13.2	5	4.7	4	3.8	5	4.7	106
55 to 59 years	6	4.8	10	8.1	10	8.1	4	3.2	124
60 to 64 years	6	4.1	12	8.3	19	13.1	4	2.8	145
65 to 69 years	2	1.9	13	12.1	7	6.5	8	7.5	107
70 to 74 years	2	2.3	6	6.8	8	9.1	6	6.8	88
75 to 79 years			10	16.4	7	11.5	2	3.3	61
80 to 84 years					4	13.3	3	10.0	30
85 to 89 years									11
90 years and over									2
All ages	87	9.5	64	7.0	83	9.1	38	4.2	913

TABLE 1.—MORTALITY FROM SPECIFIED CAUSES AMONG MEMBERS OF THE INTERNATIONAL TYPOGRAPHICAL UNION, 1925 TO 1927, BY AGE GROUPS—Continued

Age group	Tuberculosis		Cancer, all forms		Pneumonia		Bright's disease		All causes
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	
<i>1927</i>									
15 to 19 years									1
20 to 24 years	3	21.4			2	14.3			14
25 to 29 years	3	14.3	2	9.5					21
30 to 34 years	6	17.6			4	11.8	3	8.8	34
35 to 39 years	19	34.5	2	3.6	2	3.6	3	5.5	55
40 to 44 years	3	6.4	1	2.1	7	14.9	1	2.1	47
45 to 49 years	4	6.3	5	7.8	5	7.8	7	10.9	64
50 to 54 years	6	4.9	13	10.6	17	13.8	7	5.7	123
55 to 59 years	5	3.9	16	12.5	7	5.5	6	4.7	128
60 to 64 years	3	2.0	19	12.7	16	10.7	5	3.3	150
65 to 69 years	3	2.4	20	15.3	9	6.9	5	3.8	131
70 to 74 years	1	.9	11	9.6	9	7.9	4	3.5	114
75 to 79 years			7	11.5	4	6.6	5	8.2	61
80 to 84 years					3	10.0			30
85 to 89 years							1	7.7	13
90 years and over									3
All ages	56	5.7	96	9.7	85	8.6	47	4.8	989

This table shows that the proportionate mortality from tuberculosis has diminished from 10.1 per cent in 1925 to 9.5 in 1926 and 5.7 in 1927. This extraordinary decline is primarily to be attributed to improved personnel generally, in that higher wages, shorter hours, and better shop conditions are the principal causes responsible for increased disease resistance.

The proportionate mortality from cancer was 7.5 per cent in 1925 and 7 per cent in 1926, but increased to 9.7 per cent in 1927. This proportionate increase in the mortality from cancer is consistent with the increase in cases throughout the general population and throughout practically the entire country.

The proportionate mortality from pneumonia was 8.3 per cent in 1925, increasing to 9.1 per cent in 1926, but diminishing to 8.6 per cent in 1927. This disease, therefore, practically remains stationary.

Bright's disease had a proportionate mortality of 6.3 per cent in 1925, decreasing to 4.2 per cent in 1926, slightly increasing, however, to 4.8 per cent in 1927. Mortality from Bright's disease can partly be controlled by periodic urinary examinations, which are now being made at a minimum cost by qualified laboratories throughout the country. Early and qualified treatment is of the first importance.

There were two deaths from chronic lead poisoning in 1927, and the same number in 1926. Chronic lead poisoning in fatal form is now of decidedly minor importance, but the potential risk in nonfatal form remains inherent in many of the processes inseparable from the printing trades, and demands at all times the utmost care in adequate protection of the workers.

TABLE 2.—MORTALITY EXPERIENCE OF INTERNATIONAL TYPOGRAPHICAL UNION, 1927, BY CAUSE AND AGE GROUP

International list number	Cause of death	All ages														
		20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over
1a	Typhoid fever.....	3	1		2											
5	Malaria.....	1		1												
10	Diphtheria.....	4	1				1		1		1					
11b	Influenza, without pulmonary complications specified.....	1			1											
16c	Dysentery, cause unspecified.....	1											1			
21	Erysipelas.....	3			1	1	1	1								
31	Tuberculosis of the respiratory system.....	56	3	3	6	19	3	4	6	5	3	3	1			
38	Syphilis.....	1								1						
41	Purulent infection, septicemia.....	7	1	2		2			1	1						
44	Cancer of the stomach or liver.....	8			1		1	1	2	1	2					
45	Cancer of the peritoneum, intestines, or rectum.....	2								1	1					
48	Cancer of the skin.....	3						2								
49	Cancer of other or unspecified organs.....	83		2		1	1	4	10	14	16	17	11	7		
50	Benign tumors and tumors not returned as malignant.....	2	1					1								
52	Chronic rheumatism, osteoarthritis, gout.....	1														
57	Diabetes mellitus.....	14				1	1	2	3	3	1	3				
58a	Pernicious anemia.....	6		1				2	1			2				
58b	Other anemias and chlorosis.....	2							1		1					
60b	Diseases of the thyroid gland other than exophthalmic goiter.....	4			1				1	1	1					
64	Diseases of the spleen.....	1		1												
65a	Leukemia.....	1							1							
65b	Hodgkin's disease.....	1				1										
66	Alcoholism (acute or chronic).....	1								1						
67a	Chronic lead poisoning.....	2				1			1							
70	Encephalitis.....	2	1			1				1						
71	Meningitis.....	7		2	1	1		2			1					
72	Tabes dorsalis (locomotor ataxia).....	2							1		1					
73	Other diseases of the spinal cord.....	3						1		1	1					
74	Cerebral hemorrhage, apoplexy.....	1	19			1		4	4	2	3	2	3			
74a	Cerebral hemorrhage.....	1	44	1		1	2	3	4	7	6	5	6	7	2	
74b	Cerebral embolism and thrombosis.....	3									1	1	1			
75a	Paralysis, hemiplegia.....	3				1		1								
75b	Paralysis, other.....	2	53		1	1	2	1	2	7	5	12	8	8	5	1
76	General paralysis of the insane.....	7			2	1	2	1	1	1			1			
79	Convulsions (nonpuerperal 5 years and over).....	1										1				
84	Diseases of the nervous system.....	5	1		1			1	1			1				
86	Diseases of the ear and of the mastoid process.....	1										1				
87	Pericarditis.....	1									1					
89	Angina pectoris.....	16		1			1	2	1	1	3	5		2		
90	Other diseases of the heart.....	1	164	1	4	2	4	4	21	20	31	27	26	12	8	4
91b	Arteriosclerosis.....	2	36					2	3	5	4	8	8		4	1
91c	Other diseases of the arteries.....	1						1								
92	Embolism and thrombosis.....	12						1	1	2		5	3			
96	Other diseases of the circulatory system.....	4			1		1	1		1		1				
99a	Bronchitis, acute.....	1														1
99b	Bronchitis, chronic.....	1								1						
100a	Bronchopneumonia.....	6						1				3		2		
101a	Pneumonia, lobar.....	2						1	1							
101b	Pneumonia, unspecified.....	83	2		4	2	7	5	16	6	16	9	9	4	3	
103	Congestion and hemorrhagic infarct of the lung.....	2											1	1		
105	Ashtma.....	5								3	2					
107	Other diseases of the respiratory system.....	1				1										
109	Diseases of the pharynx and tonsils.....	1				1										
111a	Ulcer of the stomach.....	4					2	1		1						
112	Other diseases of the stomach.....	10					1		3		3	1	1	1		
114	Diarrhea and enteritis (2 years and over).....	1						1								
117	Appendicitis and typhlitis.....	9	1	1	2	1		2	1	2						
118a	Hernia.....	3											1		1	
118b	Intestinal obstruction.....	2	5			1	2	1	1							
119	Other diseases of the intestines.....	3				1				1		1				
122b	Cirrhosis of the liver, not specified as alcoholic.....	8						1	2		3	1		1		
123	Biliary calculi.....	2						2								

¹ Not including 2 cases in which the age was not reported.² Not including 1 case in which the age was not reported.³ In age group 15 to 19.

TABLE 2.—MORTALITY EXPERIENCE OF INTERNATIONAL TYPOGRAPHICAL UNION, 1927, BY CAUSE AND AGE GROUP—Continued

International list number	Cause of death	All ages															
		20 to 24	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 to 74	75 to 79	80 to 84	85 to 89	90 and over	
125	Diseases of the pancreas.....	1							1								
126	Peritonitis without specified cause.....	9	1					2	2	3	1						
129	Chronic nephritis.....	47		3	3	1	7	7	6	5	5	4	5		1		
131	Other diseases of the kidneys and annexa.....	9		2				1	1	3		2					
133	Diseases of the bladder.....	4									1	1	2				
135	Diseases of the prostate.....	1												1			
151	Gangrene.....	5								2	1	2					
153	Acute abscess.....	3			2				1								
154	Other diseases of the skin and annexa.....	5			1			2			1		1				
164	Senility.....	16								2		2	2	5	5		
174	Suicides.....	1								1							
175	Poisoning by food.....	1									1						
181	Accidental absorption of irrespirable, irritating, or poisonous gas.....	6	2		1		2	1									
182	Accidental drowning.....	4	1				1	1	1								
188a	Accidental traumatism, railroad.....	1	1														
188c	Accidental traumatism, automobile.....	9		1		1	1			3	2	1					
201	Fracture (cause not specified).....	2			1												
202	Other external violence.....	18	1	3	2	2	1		2	5			2				
204	Sudden death.....	1											1				
205a	Cause of death ill-defined.....	70		4	4	8	6	3	13	9	10	7	2	2	1	1	
205b	Cause of death not specified or unknown.....	37		1	1	3	2	2	6	6	5	3	3	3	1	1	
	Total.....	989	15	21	34	55	47	64	123	128	150	131	114	61	30	13	3

² Not including 1 case in which the age was not reported.

⁴ Not including 13 cases in which the age was not reported.

⁵ Including 1 death in age group 15 to 19.

Health Record of American and Canadian Industrial Populations in 1927

HEALTH conditions among the industrial populations of the United States and Canada were better in 1927 than in any previous year according to a recent report of the Metropolitan Life Insurance Co. on the mortality rates among the more than 18,000,000 policyholders of that company.¹ As the number of industrial policyholders is so large, comprising more than one-seventh of the total population and more than one-quarter of the urban population of the two countries, the figures for this group are regarded as an accurate index of health conditions in the two countries.

The actual number of deaths occurring in 1927 among the industrial holders of policies at ages 1 year and over was 147,520 and the death rate was 8.4 per 1,000. The corresponding death rate for 1926 was 8.9 and for the years 1924 and 1925 it was 8.5, which represented the former minimum. When translated into actual savings of lives it is seen that this fractional reduction in the death rate stands for a great improvement, as there would have been 8,808 more deaths in 1927 than did actually occur if the 1926 rate had prevailed in that year. If the 1924 and 1925 rates had prevailed—a difference of only one-tenth of one point—the saving in lives would still have amounted to 1,782. In 1911 the death rate for the policyholders in both countries was 12.5 per 1,000 and the rate of 8.4 in

¹ Metropolitan Life Insurance Co. Statistical Bulletin, January, 1928, pp. 1-9: A new health record in American and Canadian industrial populations.

1927 amounts, therefore, to a reduction of 33 per cent in the 16-year period.

The latest comparable mortality data for the general population are for the year 1926. The death rate for persons in the same age range (1 to 74 years, inclusive) declined only 11.7 per cent from 1911 to 1926, while that for industrial policyholders for the same period was reduced 29.3 per cent. According to these figures there were 278,395 fewer deaths in the industrial group during the period than would have occurred had the mortality among them declined at the same rate that prevailed in the general population of the United States.

The expectation of life has increased considerably as a result of the improvement in the mortality figures. Among wage earners and their families the increase in the expectation of life amounts to 8.39 years over the average for the years 1911 and 1912, and for the general population there is an average increase in the expectation of life for the same period of 4.70 years.

The most important feature of the public health situation for 1927 was the great reduction in the mortality from tuberculosis to a new minimum for all time. The death rate from this disease in 1927 was 93.5 per 100,000, which was 4.8 per cent lower than the previous minimum of 98.2 established in 1925. Since 1911 the death rate has declined 58.4 per cent, the mortality rate in that year being 224.6 per 100,000. The improvement in the tuberculosis situation has been shown to have applied to all sections of the country and to all classes, but the greatest improvement has taken place among the industrial workers and their families in the cities where the tuberculosis situation has always been the worst. The gains which have been made in controlling the ravages of this disease indicate that in a relatively short period of years this scourge of early adult life and middle age should be placed among the minor causes of death.

In addition to the improvement in the death rate from tuberculosis there was marked improvement with respect to measles, scarlet fever, and whooping cough, and there was an unprecedentedly low mortality rate from pneumonia, an important factor in establishing the new minimum for pneumonia being a decided drop in the mortality from influenza. There was a slight increase in the mortality from diphtheria, due to the fact that during the year there was a marked increase in the prevalence of this disease which was quite general over the United States as well as in various other parts of the world. There was also an unusual prevalence of poliomyelitis in the United States which resulted in an above-average death rate for this disease.

In contrast to the great improvement shown in the tuberculosis situation the cancer rate continues to rise and while the rate for 1927 was only fractionally higher than for 1926 it sets a new maximum figure for this disease. Diabetes also shows no improvement in the mortality rate particularly among the colored policyholders, but the effect of the use of insulin is believed to be shown by the fact that the average age at death of diabetics has increased in recent years. Heart disease in 1927 was again the leading single cause of death among these insured wage earners, as it has been each year since 1922.

While there is marked improvement on the whole shown in the public health during the year, particularly in the preventable diseases, there has been no improvement in the field of public safety. The death rates for accidental burns, drownings, falls, and accidents on steam railroads have all been reduced but accidents on the streets and highways have increased. In 1927 there were 3,266 deaths from automobile accidents among the industrial policyholders, an increase of 9.4 per cent over the accidents from this cause in the preceding year. The toll is heaviest among the children, who for the most part are killed while at play in the streets or when crossing the streets. From 35 to 40 per cent of the automobile fatalities occur among children under 15 years of age and almost as many wage earners' children lost their lives from this cause in 1927 as from measles, scarlet fever, and whooping cough combined.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE

Legal Aid and Workmen's Compensation

INCREASING cooperation between legal-aid organizations and officials administering workmen's compensation law has become more evident during the past few months. Probably the most notable event representative of this growing cooperation is the decision of the Supreme Court of the United States rendered on February 20, 1928, in the case of Bountiful Brick Co. and United States Fidelity & Guaranty Co. *v.* Elizabeth W. Giles, as widow and as guardian, etc., and the Industrial Commission of Utah, upholding the award in favor of the widow as argued in the brief filed by Samuel B. Horovitz of the Boston Legal Aid Society. The progress and development making possible this cooperation are of interest in this connection.

The possibilities of cooperation between legal-aid organizations and workmen's-compensation bodies were first brought up at the 1924 meeting of the International Association of Industrial Accident Boards and Commissions, by John S. Bradway, secretary of the National Association of Legal Aid Organizations. That meeting immediately authorized the appointment of a committee to meet with a similar committee of the National Association of Legal Aid Organizations for the purpose of considering mutual problems. These committees held their first meeting in Washington, D. C., on February 19, 1925.

The committees have been continued from year to year since that time, and cooperation between the two organizations has been growing.

The report of the joint committees, presented to the 1926 meeting of the I. A. I. A. B. C. pointed out that the cooperation of the local organizations of the two associations could be helpful at four stages of a workmen's-compensation case—in the establishment of the first contact; in giving advice in cases without litigation; in cases going to litigation; and in the disposition of the funds awarded—and suggested that "some duly authorized representative of each legal aid society communicate and hold a meeting with representatives of the workmen's compensation bureau, board or commission, point out to them the points of contact, the sanction of cooperation given by the two national bodies and arrange a plan which shall be adequate for local needs."

At the 1927 meeting, the report of the joint committees, containing a table showing the number of cases handled by various legal-aid organizations in the field of workmen's compensation, recommended

that during the next year all legal-aid organizations and workmen's-compensation authorities be requested to keep more accurate records of cases of this kind, called attention to the plan of cooperation between the Massachusetts State Industrial Accident Board and the Boston Legal Aid Society and recommended that an early date a joint conference on the subject be arranged by the legal-aid organizations and workmen's-compensation authorities in the various States and that the results of these joint conferences be reported for further consideration.

One of the interesting developments of this cooperation was the retaining of Mr. Horovitz, of the Boston Legal Aid Society, to represent a widow, Mrs. Giles, and the Industrial Commission of Utah before the Supreme Court of the United States in the case above mentioned.

The husband, Giles, while crossing the tracks of a railroad company on his way to work on June 17, 1925, and after taking the shortest route over the land of a third person instead of following the public road, was struck and instantly killed by a train. This occurred before he had entered the premises of the employer. The Industrial Commission of Utah made an award to the dependents of the deceased. The case was taken to the Supreme Court of Utah, which affirmed the award on November 23, 1926 (251 Pac. 555). It was then taken to the Supreme Court of the United States on the ground that the act, as construed in this case, contravened the due process clause of the Federal Constitution. Counsel representing the employer and the insurer filed a brief. The chairman of the Industrial Commission of Utah communicated with Mr. Horovitz and the latter not only filed a brief, but argued the case. On February 20, 1928, Mr. Justice Sutherland delivered the opinion of the court affirming the judgment of the Supreme Court of Utah. The distinction between the case of an employee killed while on a public road crossing railroad tracks on his way to work, and the case of an employee killed while crossing railroad tracks on his way to work after taking a shorter route over the land of a third person, was not sustained. (*Bountiful Brick Co. et al. v. Giles et al.*, 48 Sup. Ct. Rep. 221. See also *Cudahy Co. v. Parramore*, 263 U. S. 418.)

The award of the Industrial Commission of Utah was also affirmed. The first workmen's-compensation case in the Supreme Court of the United States, argued by legal-aid counsel, has been won.

Philippine Workmen's Compensation Act

THE Philippine Legislature recently passed a workmen's compensation act (No. 3428) which was permitted to become a law without the signature of the Governor General in accordance with section 19 of the organic law of the Philippine Islands (39 U. S. Stat. L., p. 545).

The law is compulsory, applies to public as well as private employments, and appears to be very liberal in its coverage. Awards are based upon wages, and fairly large percentages are allowed. The maximum award is only 3,000 pesos (\$1,500), but this may be due to the lower scale of wages existing in the islands. Injuries covered include illness as well as those resulting from accidents. The Bureau

of Labor must be notified of accidents and certified copies of all agreements for compensation must be forwarded to the bureau for filing. The provisions as to the administration of the act, concerning security of the award by insurance, and the permitting of lump-sum settlement agreements freely could be improved upon.

The act is analyzed below, following the method used in previous articles and reports, permitting an easy comparison with other acts as well as presenting the substance of the law in convenient form.

Analysis of act

Date of enactment.—December 10, 1927; in effect June 10, 1928.

Injuries compensated.—Personal injury from any accident due to and in the pursuance of the employment, or any illness contracted and directly caused by such employment or resulting from the nature of such employment. Compensation shall not be allowed for injuries caused (1) by the voluntary intent of the employee to inflict such injury upon himself or another person; (2) by drunkenness on the part of the laborer who had the accident; or (3) by notorious negligence of the same.

Industries covered.—All exercised for gain, the gross income of which was not less than 40,000 pesos, except agriculture, charitable institutions, and domestic service.

Persons compensated.—All employees except those whose employment is purely casual or is not for the purposes of the occupation or business of the employer, or whose remuneration paid by any employer, exclusive of overtime pay, is in excess of 42 pesos a week. Public employees are covered, but public officers elected by popular vote and persons paid more than 800 pesos per year are not covered.

Compensation for death.—(a) Burial expenses not to exceed 100 pesos.

(b) Forty-five per cent of average weekly wages to dependent widow or widower; 50 per cent if one or two dependent children; 60 per cent if three or more. If there is no dependent widow or widower, 30 per cent to one or two orphans, with 10 per cent for each orphan over two up to maximum of 50 per cent. If no consort or child but other dependents, from 25 per cent to 40 per cent.

(c) Payments to widow cease on death or remarriage; to widower payable only during incapacity; to a son or daughter until 18 years of age; to a parent or grandparent, grandchild, brother or sister during dependency.

(d) No payment for more than 208 weeks. Average weekly wages, maximum 30 pesos, minimum 4 pesos. Aggregate compensation not to exceed 3,000 pesos.

Compensation for disability.—(a) Such medical, surgical, and hospital services and supplies as the nature of the injury may require.

(b) For total disability, excluding the first seven days, a weekly sum equal to 60 per cent of average weekly wages but not more than 18 pesos and in some cases not less than 4 pesos, for not more than 208 weeks nor in excess of 3,000 pesos.

(c) For partial disability, 50 per cent of the loss of earning capacity from the day of disability but for not more than 208 weeks, not more than 10 pesos per week, and not more than a total of 3,000 pesos.

(d) For permanent partial disability, 50 per cent of average weekly wages for the periods fixed in a schedule but in no case for more than 208 weeks or 3,000 pesos.

(e) For serious disfigurement, not exceeding 3,000 pesos or 50 per cent of loss of earning capacity for not longer than 208 weeks.

(f) Payments in lump sum allowed whenever the parties consider it most advantageous and convenient.

Insurance.—The employer may insure.

Security of payments.—Compensation has the same priority as wages. No claim is transferable and all compensation is exempt from creditors' claims.

Settlement of disputes.—On request the Bureau of Labor shall act as referee, and if its efforts fail it shall submit the claim to the proper court, but claimants may go directly into court without the previous intervention of the bureau.

Statistics of Workmen's Compensation in England

THE English Home Office annually issues a report on the proceedings under the workmen's compensation and the employers' liability acts, giving data concerning the workers in seven large groups of industries—mines, quarries, docks, railways, factories, construction work, and shipping. In the report for the year 1926,¹ which has recently appeared, attention is called to the fact that owing to the prolonged stoppage in the coal industry, conditions were abnormal throughout the greater part of the year, and that the statistical value of the figures concerning accidents and industrial disease has been much impaired thereby. It is perhaps on this account that the death and accident rates per 1,000 persons employed have been omitted, and only the number of fatal and nonfatal accidents given.

The aggregate number of persons coming within the provisions of the acts who were employed in 1926 in the seven industrial groups was 7,001,795, as compared with 7,541,014 in 1925 and 7,512,359 in 1924. The following table shows the number of fatal and nonfatal cases compensated, and the amount spent in compensation for each class for the period 1919 to 1926, inclusive:

NUMBER OF COMPENSATED CASES OF INDUSTRIAL ACCIDENTS IN GREAT BRITAIN AND PAYMENTS FOR COMPENSATION, 1919 TO 1926

[Pound at par=\$4.8665; average exchange rate for 1926 was \$4.858.]

Year	Number of cases			Payments for compensation		
	Fatal	Nonfatal	Total	Fatal	Nonfatal	Total
1919.....	3, 293	365, 176	368, 469	£687, 477	£3, 929, 246	£4, 616, 723
1920.....	3, 531	381, 986	385, 517	755, 657	5, 222, 352	5, 978, 009
1921.....	2, 385	283, 361	285, 746	518, 064	4, 991, 331	5, 509, 395
1922.....	2, 489	390, 423	392, 912	546, 889	5, 948, 839	6, 495, 728
1923.....	2, 657	477, 378	480, 035	591, 164	6, 542, 932	7, 134, 096
1924.....	2, 878	487, 442	490, 320	786, 444	5, 888, 594	6, 675, 038
1925.....	3, 030	473, 055	476, 085	864, 726	5, 778, 204	6, 642, 930
1926.....	2, 345	368, 563	370, 908	674, 611	5, 332, 310	6, 006, 921

The great reduction in 1926 in the number of cases and in the total amount of the compensation paid must be attributed to the coal stoppage, the number of cases in the mining industry alone falling from 214,405 in 1925 to 131,231 in 1926.

The total cost of compensation per person employed varies widely in the seven industries, ranging from 8s. 8d. per person in factories to 70s. 3d. in the mines, where, with an aggregate force of 772,883 persons, compensation to the amount of £2,716,279 was paid. This considers only the actual amount paid to workmen or their dependents as compensation, omitting the administrative expenses, medical and legal costs of employers, and the like. "It is estimated that if all the charges and expenses referred to above are taken into account, the total amount paid in the seven great industries in 1926 in respect of workmen's compensation was approximately £7,850,000."

Compensation amounting to £5,943 was paid in 27 cases in which death was due to industrial disease, and amounting to £599,393 in

¹ Great Britain. Home Office. Statistics of compensation and of proceedings under the workmen's compensation acts, and the employers' liability act, 1880, during the year 1926. London, 1928. [Cmd. 3005.]

14,751 disablement cases arising from disease. The 27 fatal cases included 9 of lead poisoning, 1 of anthrax, 1 of poisoning by nitrous fumes, 1 of dermatitis, 10 of epitheliomatous cancer, 4 of nystagmus, and 1 of beat knee.

As in previous years the bulk of the cases occurred in the mining industry, but as a result of the coal-mining stoppage, the number of cases in the mining industry fell from 15,782 in 1925 to 13,192 in 1926. The majority of the cases were due to miner's nystagmus, beat hand, and beat knee. These diseases, together with beat elbow and inflammation of the synovial lining of the wrist joint and tendon sheaths, numbered 13,270 or 89.8 per cent of the total number of cases. Of the remainder, 837 or 5.7 per cent were cases of dermatitis produced by dust or liquids, 346 or 2.3 per cent were cases of lead poisoning, and 227 or 1.5 per cent were cases of skin or other ulceration or cancer. The remaining 98 cases, or 0.7 per cent, included 43 cases of various forms of industrial poisoning and 30 cases of anthrax.

Bill for Unemployment Insurance Introduced in Greece

ACCORDING to a report from Consul Edwin A. Plitt, Athens, Greece, dated January 13, 1928, a bill has been introduced by the Minister of National Economy which provides for the insurance of workers against unemployment, and for the organization of employment offices throughout Greece.

The bill provides for the formation of a council under the direction of the Ministry of National Economy which will administer the law and organize the employment centers. The funds for immediate relief will be provided by a loan of 7,000,000 drachmas by the National Bank of Greece. Insurance in the unemployment fund is compulsory and workers will be entitled to 45 days' relief during the year but will lose the right to benefits if they refuse to accept employment provided by the employment offices. The amount of benefit will be determined annually but may not be less than one-third or greater than one-half of the basic wages of the insured.

COOPERATION

Work of the Women's Cooperative Guild

ALTHOUGH the consumers' cooperative movement as we know it to-day had its beginning in 1844, the organization of woman cooperators was not thought of until about 1883. A book recently issued¹ describes the foundation and growth of the women's organization, the Women's Cooperative Guild.

The organization is one of wives of workingmen, and many of them are themselves employed. The guild has been of particular significance in Great Britain, where formerly when the woman married the nation thereafter felt no responsibility for her personal welfare or the conditions under which she performed her tasks. "Without money of her own, with no right even to her housekeeping savings, without adequate protection against a husband's possible cruelty, with no legal position as a mother, with the conditions of maternity totally neglected, married women in the home had existed apart, voiceless and unseen."

Theoretically women have always been received as members into cooperative societies. In actual practice, the limitation found in some societies, admitting to membership only one member of a family, either husband or wife, tended to bar women from full participation as did also "the social and economic inequalities between men and women, which up to a very recent period existed as part of our social system." The men were asked to come to cooperative meetings, to criticize, vote, and participate in the management of the society, but the women were asked only to buy. Some of the women, however, felt that there were other ways in which they could help, and so, at a meeting in 1883 an association was organized whose purposes were to be the dissemination of knowledge of the advantages of cooperation, the stimulation of greater interest in the movement, and the improvement of the conditions of women generally.

It was emphasized by the leaders that this should be done quietly but in a practical manner, in order to avoid prejudicing the cause in the public mind. Even so, a good deal of tacit opposition had to be met from the husbands of the members and from the officials of societies. "Men who had themselves hitherto carried all the responsibility of public and social organization were a little dubious as to the possible results of women's active 'interference' in the management of concerns over which they had ruled so long."

Not the least of the difficulties, it is said, came from the women themselves, for most of them were "pathetically ignorant of business

¹ Webb, Catherine: *The Woman with the Basket—The history of the Women's Cooperative Guild, 1883-1927.* London, Women's Cooperative Guild, 1927.

methods, or of any ideas of cooperation beyond criticizing the cost of goods, and appreciating the 'divi.'" Also, the members of the new organization had few models to follow, but had to feel out their way, adapting to their needs what examples they could find. At that time practically the only form of meetings open to working women were the "mothers' meetings," whose programs usually consisted of "reading from some 'improving' book, and a short talk by a 'lady,' to which the 'mothers' listened dumbly while they sat round sewing."

As the membership grew and local branches began to be established various activities were undertaken at different places. "Help-in-need" funds were established in some places, one branch took steps to establish a sick fund; others took up such things as coal clubs, clothing clubs, visits to the sick, provision of maternity outfits, etc. Later, classes of various sorts were started, to teach not only the members but also the children the principles of cooperation. Progress was "continuous and gratifying," and by 1887, 29 branches had been formed with some 1,400 members. By the end of the first decade of existence of the guild it had 137 branches with 6,412 members. In 1927 its membership numbered 57,825.

Purpose of the Guild

THE aims and purposes for which the guild was formed are described in the report as follows:

We do not aim at merely passing improvements or reforms just on the surface. We aim at a fundamental reconstruction of the whole of our social and industrial life. The Guild's purpose is to help in building up through the cooperative movements an entirely new social order, from which profit making, with all its evils, has been abolished, and where there is that real equality between man and man, between man and woman, and between nation and nation, which is at once the result and the foundation of all true cooperation.

Work of the Guild

WITH the idea that the guild should represent primarily the married woman, voicing her needs and rights, the guild very early began to direct its meetings toward subjects of interest to the married woman, beginning with subjects dealing with the home and its problems and generally widening the scope to include social and economic subjects, including the industrial revolution, the duties of citizenship (though not at that time being able to exercise such duties), public health, etc. Gradually the attention of guildswomen was turned "more and more definitely toward specialized studies in practical social reforms, and gently, but persistently, pushing into the background the popular domestic subjects and occupations."

A central educational committee was set up. Bearing in mind that the members are both cooperators and married working women, and that in these two capacities they desire to secure reforms and participate in cooperative work and the work of the Nation, the committee selects for study a small number of special subjects on which it seems possible to take immediate action. Lecturers on these subjects are sent to the various districts and the members are informed, and the whole question is studied and discussed by the

membership. "When, for instance, the guild asks for maternity centers, it does so because 50,000 working women have studied the matter and are convinced that the reform is necessary."

One of the first campaigns of the guild was carried on to secure actual open membership and recognition of the right of women to hold office. Both of these have been attained, but the attaining of the office itself has not been so easy. "It is always said that there is equality of opportunity for men and women in the movement. Certainly most of the doors are open. But the seats are full, and possession is nine-tenths of the law, so that in reality the opportunity is not equal, and seats are hard to win." Some progress has nevertheless been made. Three sections of the Cooperative Union central board each have at least one woman member, one guildswoman is a member of the board of directors of the Cooperative Wholesale Society, and four members of the guild serve on advisory committees of the National Cooperative Publishing Society. In March, 1927, there were 337 women on the management committees of 194 societies, while some 675 guild members represent the guild on various public bodies.

The guild has done much to increase the sales of cooperatively made and union-made goods and to improve the conditions of employment of cooperative employees. The adoption of a minimum scale for the woman employees of the movement was the result of the guild representations. Equal suffrage, medical inspection of school children, legislation to prevent sweatshop conditions in factories, and the national maternity insurance bill are among the measures actively supported by the guild. The inclusion in the maternity insurance bill of a provision specifying that the benefits payable under the act should be paid to and be the property of the mother unless she expressly authorized the husband to receive it, was due, it is said, to the evidence and information presented to the parliamentary committee by the guild.

But the outstanding accomplishment of the organization is declared to be "the emergence of the married working woman from national obscurity into a position of national importance."

In the cooperative movement, the effect of the guild has been to give women their right place in the picture. The power of their revolutionary weapon—the market basket—has been made clear. Women have been transformed from buyers, ignorant of the economical results of their acts, into intelligent cooperators, conscious that they can undermine capitalism, and making good their right to share in the control of the movement.

Move Toward Formation of Central Consumers' Organization of the Pacific Coast

THE Cooperative Pyramid Builder (Superior, Wis.), in its issue of February, 1928, states that on January 8, 1928, a conference of representatives of various types of cooperative organizations on the northern Pacific coast was held at Astoria, Oreg. The meeting was called for the purpose of considering the formation of a central purchasing organization. Inasmuch as the discussion re-

vealed the need of such a society a committee of seven was elected to map out plans of organization, to undertake educational work in behalf of the proposed new society, and when the time is ripe to call another conference for the purpose of establishing the organization.

Agricultural Cooperative Associations in the United States

A REPORT just issued by the Bureau of Agricultural Economics¹ gives the latest data available as to the farmers' cooperative organizations, both marketing and purchasing. It is estimated that there are nearly 69,000 agricultural organizations in the United States, classified as follows:

	Number
Educational associations (fairs, exhibits, etc.).....	5, 000
Production associations (improvement associations, colonies, etc.).....	6, 000
Business associations:	
Credit.....	5, 065
Mutual insurance.....	2, 049
Public utility (telephones, light, power, etc.).....	40, 000
Marketing and purchasing.....	10, 803

During the 10-year period, 1915 to 1925, a "phenomenal development" occurred in several branches of the agricultural cooperative movement. The number of organizations practically doubled, the largest gain being made in the five East North Central States. The greatest gain in membership occurred in the South Central States, due almost entirely to the formation of large-scale associations for the marketing of tobacco and cotton. The membership of the 10,803 cooperative marketing and purchasing associations listed by the United States Department of Agriculture was estimated at 2,700,000 in 1925, although the total number of farmers served by these organizations is considerably smaller, due to the fact that many farmers belong to from one to four organizations.

The greatest number of members of cooperative marketing and purchasing societies occurs in the West North Central States (31.5 per cent of the total), followed by the East North Central States (21.3 per cent), East South Central States (10.9 per cent), and South Atlantic States (10.4 per cent). More than half the cooperators are found in the North Central States. Among the States, Minnesota leads in both membership (217,400, or 8 per cent of the total) and estimated annual business (\$223,980,000); on the latter point, however, California runs a close second, with \$223,960,000 business per year.

Prior to 1920 many associations were formed which carried on several types of business. Since that time, however, the tendency is toward organizations which serve but a single purpose.

¹United States. Department of Agriculture. Bureau of Agricultural Economics. Technical Bul. No. 40: Agricultural cooperative associations, marketing and purchasing, 1925, by R. H. Elsworth, Washington, 1928.

NUMBER, MEMBERSHIP, AND YEARLY BUSINESS, IN 1925, OF AGRICULTURAL MARKETING AND PURCHASING ASSOCIATIONS OF EACH TYPE, BY GEOGRAPHICAL DIVISION

Geographic division	Cotton and cotton products			Dairy products			Fruits and vegetables		
	Associa-tions	Mem-bers	Busi-ness (in thou-sands)	Associa-tions	Mem-bers	Busi-ness (in thou-sands)	Associa-tions	Mem-bers	Busi-ness (in thou-sands)
New England.....				80	36,360	\$52,100	45	2,470	\$6,470
Middle Atlantic.....				143	113,800	111,700	109	11,870	14,150
East North Central.....	1	30	\$70	906	130,500	165,180	153	14,800	19,350
West North Central.....	5	1,000	1,050	874	131,480	126,030	116	12,390	6,590
South Atlantic.....	25	102,600	37,110	23	7,220	10,650	162	24,540	60,370
East South Central.....	18	59,100	43,130	37	11,280	4,350	82	9,660	5,240
West South Central.....	68	136,700	65,300	8	770	940	147	13,020	8,530
Mountain.....	4	570	3,340	33	6,290	7,250	76	19,760	8,700
Pacific.....				93	22,300	56,800	347	71,490	150,600
United States.....	121	300,000	150,000	2,197	460,000	535,000	1,237	180,000	280,000
	Forage			Grain			Livestock		
New England.....				3	160	410	1	40	10
Middle Atlantic.....	2	200	160	7	1,290	2,200	3	450	4,000
East North Central.....				924	144,700	189,000	674	147,230	132,000
West North Central.....				2,090	302,560	463,000	1,005	236,650	164,800
South Atlantic.....	2	200	15	5	920	780	30	4,300	3,100
East South Central.....	2	450	110	3	170	240	22	4,600	2,240
West South Central.....	2	20	100	112	33,700	41,000	7	1,360	2,550
Mountain.....	3	500	1,055	132	31,030	35,870	21	2,670	3,220
Pacific.....	5	1,630	2,560	62	5,470	17,500	7	2,700	8,080
United States.....	16	3,000	4,000	3,338	520,000	750,000	1,770	400,000	320,000
	Nuts			Poultry and poultry products			Tobacco		
New England.....				3	800	630	3	5,040	7,250
Middle Atlantic.....				3	1,000	610	5	600	90
East North Central.....				5	3,100	730	6	13,000	3,150
West North Central.....				20	25,100	10,240			
South Atlantic.....	4	12,570	1,725	2	350	50	4	102,800	25,920
East South Central.....	1	200	200	8	7,000	80	5	178,500	53,580
West South Central.....	1	30	35	11	3,400	415	1	60	10
Mountain.....				8	3,150	1,930			
Pacific.....	33	7,200	14,040	11	12,400	25,315			
United States.....	39	20,000	16,000	71	50,000	40,000	24	300,000	90,000
	Wool and mohair			Miscellaneous selling			Miscellaneous buying		
New England.....	3	560	60	27	4,050	3,770	94	25,520	14,470
Middle Atlantic.....	40	2,400	470	45	7,400	3,750	165	20,990	15,950
East North Central.....	12	18,400	2,370	190	35,320	18,250	204	67,920	28,170
West North Central.....	13	19,700	940	203	40,530	26,100	499	80,590	37,880
South Atlantic.....	3	2,500	290	48	11,110	3,360	77	10,890	8,955
East South Central.....	7	1,800	230	65	16,920	3,150	27	11,620	4,720
West South Central.....				45	44,790	5,360	52	16,150	4,390
Mountain.....	10	610	2,660	42	7,390	4,760	34	3,030	2,165
Pacific.....	3	4,030	2,980	17	2,490	1,500	65	10,290	18,300
United States.....	91	50,000	10,000	682	170,000	70,000	1,217	247,000	135,000

WORKERS' EDUCATION AND TRAINING

Aims and Methods in Vocational Guidance ¹

ONE OF the sections of the annual convention of the American Vocational Association at Los Angeles last December was devoted to the discussion of vocational guidance. The contributions to that section were from experts in their line and frequently epitomized conclusions resulting from valuable first-hand experience in pioneer fields.

L. H. Dennis, deputy superintendent of schools of Pennsylvania, stressed the fact that the "square peg and square hole" theory is on the wane, and many feel that each person is capable of being moderately successful in a great variety of different positions.

Vierling Kersey, assistant superintendent of schools of Los Angeles, declared that the part-time pupil has no interest in school, and if his interest in academic things is to be aroused the school must begin with his actual interests and show their values and relationships with academic subjects. The pupil's "most accessible major interest" is his job. The part-time schools of Los Angeles have, therefore, decided to take "a very definite interest in the pupil's job." According to this plan the pupil's method of getting his job is discussed first and then he is led to judge his own job and also other jobs. In this way he finds that "he is really marketing his ability and services," which logically leads to the improvement of his ability and service, so that they will be in greater demand in the market, attention being directed to methods of increasing earning ability on the specific job held. Furthermore, considerable attention is given to "job manners."

This procedure may lead the pupil to think of changing his job. In this connection the local community is considered.

The Los Angeles part-time schools have prepared a set of 150 photographs of boys and girls from the part-time school group. All of these photographs were taken on the job and not in the school. The pictures were selected because they illustrated jobs which required reasonably extensive education. These pictures have been made into lantern slides and have been arranged into groups illustrating related types of jobs. They show to the inquiring mind of youth a wide distribution of opportunities which the community offers for juvenile workers.

The pupil is then induced to make an administrative chart of the establishment by which he is employed, showing his own work in relation to the whole undertaking. The teacher helps him to analyze his own job, bringing out its advantages and drawbacks. He also makes an analysis of the next job to which he may reasonably hope to be promoted. He then submits the chart to his employer or foreman and after adapting it to the foreman's point of view obtains that officer's signature. The introductory vocational guidance program is

¹ The Vocational Guidance Magazine, Cambridge, Mass., February, 1928, pp. 194-217.

thus completed and the school feels that the pupil is prepared "for related vocational instruction."

William J. Cooper, superintendent of schools of California, also insisted on the need in vocational education of cultivating "the work atmosphere as distinguished from the school atmosphere."

Miss Pickett, of the San Diego Board of Education, stated that in that city an effort is being made to create the impression that part-time school is "a privilege or an extension of education and not an enforcement."

The individual work plan of the Manhattan Trade School was described by Miss Florence Marshall. Under the scheme girls may enter the school whenever they wish, "they progress according to their ability and leave school when they finish." No diploma is given by the school until after a girl has proved herself successful in trade, when she receives a diploma at the regular annual graduating exercises.

In the judgment of Dr. E. K. Strong, professor of psychology at Stanford University, the pressure brought to bear to make vocational courses more general and more cultural is vitiating the vocational character of the curriculum. He suggested the possibility and desirability of classifying vocations into 6, 20, or 30 groups relatively distinct from one another so that the occupations in any given group "will require and will offer openings for individuals of certain definitely understood characteristics." It was reported in this connection by Doctor Bennett, of the University of Southern California, that that institution was making an attempt to classify 600 occupations into a reasonable number of groups.

A complaint was made by Frederick Horridge that in most of the junior high schools of the United States shop work is still in its earliest stage, in which the purpose is only manipulative skill, and shop teachers are so burdened with duties that they find no time to attend group conferences, to keep in touch with outside matters, for cooperative work with the other members of the teaching staff, for individual counseling, or indeed even for an adequate amount of advisable individualized shop instruction. He also reminded that "the function of the try-out courses is not only to determine which courses the pupil should pursue but also to determine those he should not pursue."

A report was made by Herbert F. Clark, assistant director of vocational education of Los Angeles, on the monthly observation trips made by Los Angeles pupils under the auspices of the Vocational Guidance Association of Southern California. These trips included some of the outstanding industrial establishments of California.

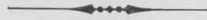
One of the factors for vocational guidance that the junior high school provides is the occupations class, ordinarily held in the ninth grade. Miss Edythe K. Bryant, counselor of the McKinley Junior High School of Pasadena, declared that "at no other point in the junior high school curriculum is there such rich opportunity to present the student with information which will stimulate his thinking along vocational lines."

We see vocational guidance in these years as a necessary part of a deeper, more basic thing—guidance for the development of the individual that he may be able to make vocational choices; not that he will merely have had the information furnished him, but that he will achieve within himself the power to make decisions.

Virgil E. Dickson, director of bureau of research and guidance, Berkeley, Calif., stated his belief that "the most outstanding principle of modern philosophy in secondary education" is that "education must adapt itself to individual differences and individual needs of adolescent pupils." While nearly all junior high schools and senior high schools of any importance in the United States have some scheme of guidance for their students, such schemes vary greatly, some being good, others indifferent, and others actually bad. Ignorance and haphazard methods are dangerous.

Scientific procedures have already been developed which are of tremendous importance in securing greater safety in guidance. The pressing need to-day is to have these procedures better known and better used by those who are counseling. While other helpful means are being rapidly perfected by scientific study, we can well afford to spend our efforts in spreading the effective use of the good tools we already possess.

After a brief review of various kinds of tests being used or developed for vocational guidance, Mr. Dickson concluded that the most important fact for vocational guides is the emphasis placed "on the necessity of scientific cumulative records for each child. * * * Facts rather than opinions are needed if one is to predict a safe step ahead, and this is the function of vocational guidance."



Educational Activities Among the Wives of Trade-Unionists

A NEW experiment in workers' education is described by Grace B. Klueg, chairman of the educational committee of the Ladies' Auxiliary of the International Association of Machinists, in the February, 1928, issue of *The American Federationist*. This auxiliary, the writer reports, was so strongly convinced that trade-unionists' wives should play a significant part in the promotion and encouragement of trade-union principles that it undertook to educate its own members to perform this function.

A modest program was inaugurated including the publication of a pamphlet giving the history of the machinists' union and a primer on trade-unionism. The auxiliary also distributed reprints of certain articles which it was thought would be of interest to wage-earners' wives.

These efforts were so successful that the organization decided to follow them up with a one-week institute in July, 1927, at Brookwood Labor College. Among the subjects discussed at this educational conference were:

The worker's wife as purchasing agent for the home, the source and amount of her income, its distribution, the housing program in the cities; the use of electricity, what it means to the workers in terms of cost for the services of public utilities and leisure for the worker's wife; the problem of the children in the home; the story of the International Association of Machinists and other unions represented at the institute, the labor movement as a whole, the American Federation of Labor, what the movement means to the workers, how the auxiliaries can help; women workers in industry, how they affect men workers, how they can be organized; the ladies' auxiliaries, how they can be more effective.

Twenty-five women were in attendance from seven organizations, including the ladies' auxiliaries of the international unions of ma-

chinists, printers, lithographers, carpenters, and post-office clerks. Ten States and Canada were represented.

Upon the return of the delegates to their homes a movement was started for the formation of classes among various local auxiliaries, the educational department of the machinists' auxiliary assisting them in securing suitable instructors to treat the selected subjects from the trade-union point of view. A California auxiliary carrying on a class on the question, "Why are trade-unions necessary in present-day society?" had originally intended to have one lecture per month but later decided to give two evenings a month to the educational program.

Some of the local auxiliaries are becoming greatly interested in the subject of public schools and what they are doing for the workers' children and are supplementing the information sent them by the educational department by studying local conditions.

Classes in parliamentary law have also been organized to meet the needs of members who desire training in conducting their own activities.

While at the outset the work of the educational department of the ladies' auxiliary of the machinists' union was intended for the wives of the members of that organization, the auxiliaries of other unions are now being aided by the department in the development of their educational programs.

According to Mrs. Klueg it has been "demonstrated conclusively that women can be interested in the labor movement and can be educated to work constructively for the advancement of the welfare of the workers." The educational department of the auxiliary of the machinists' union hopes to become increasingly useful not only to its own international union but to the labor movement as a whole.

Apprenticeship Courses of the Electrical Workers' Union¹

CONVINCED that all schools established to develop knowledge and skill in the crafts alone fail to include a very significant subject in their curricula, Electrical Workers' Union No. 98 of Philadelphia and the Labor College of that city have inaugurated an apprenticeship night course along new lines. The classes are being attended by 50 young students who wish to become electrical workers.

None of the many other trade-union organizations which offer instructions to apprentices goes beyond training the boys in craft skill. While realizing clearly that skill and intelligence in applying one's self to a chosen craft are of immense importance, the initiators of this recent experiment in education hold that "knowledge about the labor movement, the economic factors of present-day society, and the social significance of labor as a leading force toward progress is just as necessary if these young men entering the movement to-day are to do their part in the future. * * * In other words, the young apprentice learning to become a better mechanic should also

¹ The Journal of Electrical Workers and Operators, Washington, February, 1928, p. 68.

be given an opportunity of learning how to become a better informed and more intelligent trade-unionist."

The preservation of the entity of this class of apprentices under the direction and supervision of its own union will, the educational committee of Local No. 98 believes, make these coming recruits to the ranks of labor always mindful of trade-union affiliations—a result which would not be so easy to bring about in a regular technical or vocational school.

As 50 students are too many to instruct satisfactorily at one time they have been divided into two groups, each meeting once a week.

The educational procedure is rather informal. The education committee of Local No. 98 and the labor instructor are slowly developing a course especially adapted to the needs of the class. The regular instructions are given by an electrical engineer who has had years of practical experience in his work combined with a theoretical knowledge of the subject. Simple laboratory work is already under way and it is hoped later on to have a real workshop. Plans are being made to have the students take trips to electrical plants.

The classes are given periodic talks on labor, its history and problems, and a representative of the American Federation of Labor explains the purpose and functions of that body and the details of its organization. In brief, "the apprentices are growing into the labor movement as well as into their craft."

This year this course is compulsory for first-year apprentices only, because those in charge felt that not enough about proper method and procedure was known to include the apprentices of all four years. Second, third, and fourth year apprentices, however, are given the privilege of attending these classes if they so desire. Many have taken this privilege. If it should prove successful, and from present indications there can be no doubt about its results, the other groups of apprentices will be included under the compulsory feature in subsequent years.

Lecture Course for Canadian Fishermen ¹

AN INSTRUCTION course for bona fide fishermen, the first ever carried on in Canada, was conducted at the fisheries experimental station at Halifax. The daily lectures, which began January 18, 1928, and covered a period of 6 weeks, were attended by 20 fisherman students, ranging in age from 17 to 35 years.

Besides the instructions and demonstrations by the director and members of the experimental station staff, lectures were given on cooperation and marketing by Professor Longley, of the Agricultural College; on navigation by Captain O'Hara, of the Nova Scotian Technical College; on economics by Professor Walker, of King's College; and on other pertinent subjects by other professors. Lectures on boat engines and demonstrations were also given.

Complete demonstrations in fish curing were held, fresh fish being brought to the station and under expert direction and supervision put through the curing processes by the fisherman students, so that they would have practical illustration of the success of the curing methods taught. The students were also taught fish salting, drying, pickling, boneless preparation, etc.

¹ Canadian Labor Gazette, Ottawa, Feb., 1928, pp. 170, 171.

The students are reported to have followed this novel course with "the most striking attention."

Apprenticeship in English Industries

IN 1925 and 1926 the English Ministry of Labor made a series of investigations into methods of apprenticeship and training for the skilled occupations in Great Britain and Northern Ireland, and the results of these inquiries are now appearing in successive reports. The Ministry of Labor Gazette, in its issue for February, 1928, gives a summary of the latest volumes published, dealing with conditions in the building, woodworking and allied industries, and in mining, quarrying, metal extraction, and chemical, glass, pottery, and allied industries.

The summary shows that a condition familiar in this country prevails also in England, in that while there is much complaint of trade-union restrictions upon the number of apprentices, employers are failing to use even the number permitted by these restrictions. In the group of building, woodworking, and allied industries a considerable number of employers reported that they employed neither apprentices, learners, nor improvers. The largest proportionate use of trainees was found in the electrical trades, where 77 per cent of the 514 firms reporting had either apprentices or learners or both. Of 360 firms in the furniture and allied trades, 54.4 per cent had trainees. In building and public works construction, returns were received from "nearly 7,500 employers, of whom, however, three-fifths were employing neither apprentices nor improvers." In vehicle building replies were secured from 115 firms, of whom 32.2 per cent employed trainees, and in sawmilling, machine joinery, and the manufacture of wooden boxes and packing cases from 531 firms, of whom only 91 (17.1 per cent) had any apprentices or learners.

The details given concerning the building and construction industries show a tendency on the part both of the large cities and of the large employers to get their skilled workers already trained, instead of developing their own apprentice systems.

In London only 15.7 per cent of the employers making returns had any boys in training, either as apprentices or as improvers, as against 63.5 per cent in Scotland and nearly 60 per cent in the northern counties of England. Again, in London 53 per cent of the trainees were improvers, as against 3.9 per cent in Scotland and the northern counties, 3.4 per cent in Northern Ireland, and an average of 18.1 per cent for all districts. London has only 1 apprentice to every 15 journeymen, and only 1 trainee to every 7 journeymen, as compared with 1 to 2.7 and 1 to 2.4, respectively, in the northern counties. London, in fact, tends to recruit her building trades from among improvers and young journeymen trained in the Provinces, or to employ only fully skilled craftsmen.

Among firms taking apprentices it is the smaller firms which, in proportion to their size, do most in the way of training boys for the skilled occupations.

In the building trades the age for beginning apprenticeship ranges from 14 to 16, inclusive, and the usual period of apprenticeship is five years. This, however, varies according to trade and locality, periods of six and seven years being common. Wages in the first year of apprenticeship range from 8s. to 15s. per week, the commonest rate being 10s. In the last year the range is from 20s. to 47s. 8d. per week.

The majority of the employers, it was reported, gave active encouragement to their apprentices to attend technical classes, though 12 per cent reported that there were no local facilities for this purpose. Many employers allowed time off for attending such classes, paying wages for this time as well as any necessary fees. Most classes of this kind, however, are held in the evening, although in some of the large towns there are part-time day classes. In the electrical trades, "attendance at technical schools is frequently a condition of apprenticeship, and it is a common practice for employers to allow time off for attendance at day classes."

Apprenticeship is unusual in mining and quarrying operations. Boys may be assigned to work with an experienced miner or quarryman, or they may be kept at various jobs about the place until they reach a suitable age and are looked upon as having enough general knowledge of the processes to commence hewing or quarrying, themselves. In the maintenance operations connected with mines and quarries apprenticeship is more common, but is usually of an informal nature, verbal agreements rather than indentures being the customary method.

The productive processes of iron and steel manufacture do not lend themselves to the apprentice system. The work is apt to be too heavy for immature employees, and though workers under 21 may be employed as assistants and general helpers, they have no certainty of advancement. "There is no systematic course of training, and progress depends on the speed at which they 'pick up' the various jobs of the department to which they have been assigned."

In the manufacture of glass, apprenticeship is common, and it is estimated that of those from 16 to 20, inclusive, in the industry about 23 per cent are apprentices. Employment of boys under 16 on night work is illegal, and as the processes are as a rule continuous this prohibition restricts their employment in skilled occupations.

In pottery making, apprenticeship is common in North Staffordshire, but not so usual elsewhere. The age for beginning ranges from 14 to 18, and the length of apprenticeship varies according to the occupation, 5 years being the commonest for boys and 7 years for girls. Wages vary with the period of apprenticeship.

The wage agreements for apprentices provide, in many cases, for an initial period of payment at a fixed time rate, followed by a period of payment at so much of the full journeyman's or journeywoman's rate. This is particularly the case with girl apprentices, of whom two-fifths are pieceworkers in the first year, as compared with four-fifths in the last year of apprenticeship.

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in February, 1928

DATA regarding industrial disputes in the United States for February, 1928, with comparable data for preceding months are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

The bureau has no machinery for the prompt and full reporting of strikes and lockouts. Many of the important industrial disputes come to the attention of the Conciliation Service of the Department of Labor, and through its courtesy, this bureau has access to all such reports. Otherwise, the bureau must depend largely upon newspapers, trade journals, and labor periodicals for preliminary reports of disputes. These preliminary reports are followed up by correspondence with the various parties concerned and when necessary by personal visits of representatives of the Conciliation Service or of the Bureau of Labor Statistics.

For these reasons, the data here presented do not pretend to be absolutely complete or fully accurate. It is believed, however, that practically all the more significant strikes or lockouts are recorded and that the information submitted is sufficiently accurate to give a fair presentation of the situation in the United States in the matter of strikes and lockouts.

Table 1 is a summary table showing for each of the months—June, 1927, to February, 1928, inclusive—the number of disputes which began in these months, the number in effect at the end of each month, and the number of workers involved. It also shows, in the last column, the economic loss (in man-days) involved. The number of workdays lost 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. It is to be noted that the figures given include only those disputes which have been verified by the bureau.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JUNE, 1927, TO JANUARY, 1928

Month and year	Number of disputes		Number of workers involved in dispute		Number of man-days lost during month
	Beginning in month	In effect at end of month	Beginning in month	In effect at end of month	
June, 1927.....	75	82	18, 585	196, 047	4, 859, 468
July, 1927.....	62	62	33, 763	199, 087	5, 307, 089
August, 1927.....	53	50	8, 066	198, 367	4, 998, 596
September, 1927.....	46	49	12, 514	197, 588	4, 960, 249
October, 1927.....	48	56	12, 695	81, 766	2, 722, 110
November, 1927.....	26	50	4, 089	82, 207	2, 031, 740
December, 1927.....	26	52	4, 243	81, 191	2, 128, 721
January, 1928 ¹	40	61	20, 287	82, 652	2, 130, 916
February, 1928 ¹	31	64	34, 115	110, 510	2, 207, 044

¹ Preliminary figures subject to revision.

Occurrence of Industrial Disputes, by Industries

TABLE 2 gives by industry the number of strikes beginning in December, 1927, and in January and February, 1928, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN DECEMBER, 1927, JANUARY AND FEBRUARY, 1928

Industry	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	December	January	February	December	January	February
Bakers.....		1	1		62	8
Barbers.....	1			21		
Building trades.....	2	5	1	850	83	200
Chauffeurs and teamsters.....	1			150		
Clothing workers.....	4	8	12	303	13,435	28,256
Electrical and gas supply workers.....	1			93		
Furniture.....	4	1		161	19	
Iron and steel workers.....			1			7
Leather workers.....		1			71	
Longshoremen and freight handlers.....	1			600		
Metal trades.....	3	8		51	266	
Mine workers.....	4	3	2	1,500	2,720	2,425
Motion picture and theatrical workers.....			1			65
Oil and chemical workers.....	1			200		
Paper and paper goods workers.....			1			1,500
Printing and publishing.....	2			125		
Slaughtering and meat packing.....		1	2		700	31
Stationary engineers and firemen.....		1			28	
Street railway employees.....		1			200	
Textile workers.....	2	8	7	189	2,297	1,458
Miscellaneous.....		2	3		406	165
Total.....	26	40	31	4,243	20,287	34,115

Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in February, classified by number of workers and by industries:

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN FEBRUARY, 1928, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIES

Industry	Number of disputes beginning in February, 1928, 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	5,000 workers and over
Bakers.....	1					
Building trades.....			1			
Clothing workers.....	2	3	2	4		1
Iron and steel workers.....	1					
Mine workers.....			1		1	
Motion-picture and theatrical workers.....		1				
Paper and paper-goods workers.....					1	
Slaughtering and meat packing.....	1	1				
Textile workers.....	2	1	4			
Miscellaneous.....	2		1			
Total.....	9	6	9	4	2	1

In Table 4 are shown the number of industrial disputes ending in February, by industries and classified duration:

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN FEBRUARY, 1928, BY INDUSTRIES AND CLASSIFIED DURATION

Industry	Classified duration of strikes ending in February, 1928							
	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	4 months and less than 5 months	5 months and less than 6 months	8 months and less than 9 months
Carpenters.....								1
Clothing workers.....	5	1	1					
Furniture workers.....							1	
Iron and steel workers.....	1							
Leather workers.....						1		
Metal trades.....			6					
Miners.....	1				1			
Slaughtering and meat packing.....	1	1						
Textile workers.....	3	1		1	1			
Miscellaneous.....	1							
Total.....	12	3	7	1	2	1	1	1

Principal Strikes and Lockouts Beginning in February, 1928

CLEANING and dyeing, New York.—A strike was begun on February 20, fostered by the Allied Council of Cleaners and Dyers, which centered principally in the five boroughs of New York City, but also included some adjacent districts. About 25,000 workers of both sexes were reported as involved, also 15,000 retail and 90 wholesale plants. The strike was inaugurated for purposes of "organization, to end cutthroat competition, and stabilize the industry." This strike was reported as partially successful by March 5, but as still in effect against those wholesalers and retailers who had not settled on the terms demanded.

Peaceful relations were restored and the strike was about over, it is understood, by March 10, through the signing of an agreement by several large groups in the cleaners and dyers' trade, establishing conditions satisfactory to employees.

Paper box makers, New York.—Members of the Paper Box Makers Union in New York City, numbering about 1,500, struck on February 29 for union recognition and the establishment of a fixed weekly wage scale, which, it was claimed, does not now exist in the industry. The demands as reported in the press included—

1. Recognition of the union and none but union workers to be employed.

2. Time and a half for overtime and all legal holidays to be considered overtime.

3. A minimum scale of wages. Males: Drivers, \$32; chauffeurs, \$35; scorers, \$46.50; glue table men, setters up, enders, \$37.50; finishers, \$36; tiers up, \$29. Females: Strippers, \$26; top labelers, finishers, \$27; turners in, \$18.

By March 2 it was reported that a number of manufacturers had made settlements with the union on the terms demanded.

Clothing workers, New York.—Workers in the washable sailor-suit industry of New York City, numbering about 900, of both sexes, conducted a successful strike from February 15 to February 24, against 55 contractors, for the registration of contractors and the sending of all work to union shops, the purpose, as reported, being to protect wage standards and working conditions.

Coal miners, Pennsylvania.—The Susquehanna Collieries Co., Wilkes-Barre, was affected by a strike of 2,300 miners on February 23, because of working conditions. The trouble grew out of a miner's objection "to work his chamber in accordance with orders of the officials" and is reported to have ended on February 24, with conditions as formerly.

Principal Strikes and Lockouts Continuing into February, 1928

BITUMINOUS coal strike.—A strike condition still continues in certain States as explained in former issues of the Review.

The Senate Committee on Interstate Commerce began its hearings on March 7, under Senate Resolution 105, on conditions in the bituminous coal fields of Pennsylvania, Ohio, and West Virginia.

John L. Lewis, president of the United Mine Workers of America, appeared as the first witness. In presenting the case of the striking miners he suggested a program of reform, which was about as follows:

(1) That Congress take steps to correct alleged "abuses" in the issuance of injunctions in the Federal courts in labor disputes.

(2) That Congress amend the interstate commerce act so as to prevent railroads from practicing methods said to be designed to exploit the bituminous industry, further depress wages, and destroy the miners' unions.

(3) That stabilization of the bituminous industry be encouraged through substantial consolidations of operating units, along the lines recommended in the report of the United States Coal Commission, in pursuance of economic laws and without harassment under the Sherman Act.

(4) That constitutional rights of citizens in the nonunion fields, such as freedom of speech and of gathering, be restored by the elimination of "private government rule," and that the right of the miners to organize be recognized.

Unsuccessful conferences have been held between representatives of the operators and miners in Iowa, Indiana, and the southwestern district with a view to reaching an agreement to become effective April 1, following the termination of the present so-called truce agreements in those States.

The subcommittee of the Senate Interstate Commerce Committee, which had been appointed to investigate the coal fields around Pittsburgh and in central Pennsylvania, submitted its report to the full committee on March 10.

Conciliation Work of the Department of Labor in February, 1928

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 28 labor disputes during February, 1928. These disputes affected a known total of 18,359 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 March 1, 1928, there were 45 strikes before the department for settlement, and, in addition, 15 controversies which had not reached the strike stage. The total number of cases pending was 60.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS CONCILIATION SERVICE, FEBRUARY, 1928

Company or industry and location	Nature of controversy	Craft concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
Hawkeye Button Co., Keokuk, Iowa.	Threatened strike.	Button makers.....	Wages and conditions.....	Adjusted. After 30-day test prices were fixed satisfactorily.	1928 Jan. 28	1928 Feb. 8	48	4
Arlington Underwear Co., New York City.	Strike.....	Underwear makers.....	Asked union recognition; working conditions.	Unable to adjust. Open shop effective; further conferences refused.	Jan. 13	Feb. 1	100	-----
Building trades, Iowa City, Iowa..	Threatened strike.	Plumbers, lathers, sheet-metal workers, plasterers.	Nonunion labor employed...	Adjusted. Remain at work pending arbitration.	Feb. 1	Feb. 17	61	-----
Phillips & Jones Shirt Factory, Pottsville, Pa.	Lockout.....	Shirt and pajama makers.	Lack of work.....	Adjusted. Company agreed to take workers back when convenient.	Jan. 24	Feb. 3	55	-----
Eagle Construction Co., Knoxville, Tenn.	Strike.....	Steel workers.....	Asked 20 cents per hour increase—\$1 per hour.	Unclassified. Part returned without increase; others employed elsewhere before arrival of commissioner.	Jan. 28	Jan. 31	12	-----
[798] Penn Upholstered Furniture Co., Philadelphia, Pa.	.....do.....	Employees.....	Working conditions.....	Unable to adjust. Cooperative operation effective.	Feb. 7	Feb. 28	22	10
Ladies' garment workers, Boston, Mass.	Threatened strike.	Garment workers...	Wage increase asked; renewal of agreement.	Adjusted. Terms arranged; general strike averted.	Feb. 3	Feb. 18	3,000	-----
Phillips & Buttorff, Nashville, Tenn.	Strike.....	Molders.....	Wage cuts.....	Unable to adjust. Nothing could be done by commissioners.	Jan. 15	Feb. 15	127	84
Gray & Dudley Co., Nashville, Tenn.	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....	.....do.....	47	20
Pioneer Waist Co., Philadelphia, Pa.	.....do.....	Waist makers.....	Asked recognition of waist makers' union.	Adjusted. Recognition of union allowed.	Jan. 29	Feb. 6	30	5
Thos. Kay Woolen Mills, Salem, Oreg.	.....do.....	Weavers.....	Wage cut.....	Unclassified. Accepted 5 per cent cut before arrival of commissioner.	Feb. 1	Feb. 2	45	-----
Miesch Manufacturing Co., Paterson, N. J.	.....do.....	Silk workers.....	Proposed wage cut of \$4 to \$5 per week.	Pending.....	Jan. 2	-----	16	400
Press telegraphers, Kansas City, Mo.	Controversy	Telegraphers (press).	Working conditions.....	Pending. Commissioner acting as arbitrator.	Feb. 9	-----	(1)	-----
Peace Dale Mills, South Kingston, R. I.	Strike.....	Weavers.....	Hours and overtime pay.....	Adjusted. Concluded agreement on overtime pay; 48-hour week in effect.	Feb. 10	Mar. 7	500	-----
Painters and decorators, Chattanooga, Tenn.	.....do.....	Painters, decorators.	Nonunion painters employed.	Adjusted. All union employees....	Feb. 11	Feb. 13	6	-----
May Hosiery Mills, Nashville, Tenn.	.....do.....	Knitters.....	Changed working conditions.	Adjusted. Conditions restored; all satisfied.	Feb. 1	Feb. 16	26	200

Allen A. Knitting Co., Kenosha, Wis.	Lockout	Hosiery	Working conditions; question of operating 2 machines.	Pending	Feb. 15		325	1,200
Hendee Motor Cycle Co., Springfield, Mass.	do	Metal polishers	(¹)	do	Feb. 18		(¹)	
Duttenhofer Sons (Inc.), Buffalo, N. Y.	Strike	Shoe workers	Changed working conditions.	Adjusted. New conditions accepted; some increase in wages.	Feb. 3	Feb. 15	50	300
Phil. H. Quinto (Inc.) (also six other firms), New York City.	Control- versy.	Ladies' garment makers.	Unorganized labor on contracts.	Unclassified. Companies agreed to comply with contract before arrival of commissioner.	Feb. 7	Feb. 11	500	
Building trades, Seattle, Wash.	do	Building crafts	Asked increase and 5-day week for carpenters.	Pending	Feb. 17		7,000	
Shamokin Packing Co., Tharptown, Pa.	Strike	Packing-house workers	Payment of union dues	do	Feb. 20		21	
Sanitary Plumbing Co., Linfield, Pa.	do	Molders and laborers.	Wage cut of 10 per cent	Unclassified. Accepted cut and returned before arrival of commissioner.	Feb. 7	Feb. 20	85	65
Susquehanna Coal Co., Nanticoke, Pa.	do	Coal miners	Employment considered dangerous to 1 miner.	Adjusted. Returned; foreman and miner to decide issue.	Feb. 23	Feb. 23	2,400	25
Nature's Rival Co., Chicago, Ill.	Lockout	Garment workers	Organization and alleged discrimination.	Adjusted. Organization allowed; other terms fixed later.	Feb. 24	Feb. 29	50	700
Main Cloak Co., Passaic, N. J.	Strike	Cloak makers	Union dispute	Pending	Feb. 23		40	
Golden Rule Bakery, Seattle, Wash.	Control- versy.	Bakers and salesmen	Asked union recognition	do	Feb. 15		80	
Cloak makers, Boston, Mass.	Strike	Cloak makers	Asked 42-hour week	Adjusted. Allowed 42-hour week	Feb. 27	Mar. 1	700	
Total							15,346	3,013

¹ Not reported.

[739]

Strikes and Lockouts in Canada, 1927

THE statistical record given below of strikes and lockouts in Canada from 1913 to 1927 is taken from the Canadian Labor Gazette, February, 1928 (p. 121):

STRIKES AND LOCKOUTS IN CANADA, 1913 TO 1927

Year	Number of disputes		Disputes in progress during year		
	In progress each year	Beginning in each year	Employers involved	Employees involved	Time loss in working-days
1913.....	113	106	1,015	39,536	1,287,678
1914.....	44	40	205	8,678	430,054
1915.....	43	38	96	9,140	106,149
1916.....	75	74	271	21,157	208,277
1917.....	148	141	714	48,329	1,134,970
1918.....	196	191	766	68,489	763,341
1919.....	298	290	1,913	138,988	3,942,189
1920.....	285	272	1,273	52,150	886,754
1921.....	145	138	907	22,930	956,461
1922.....	85	70	569	41,050	1,975,276
1923.....	91	77	419	32,868	768,494
1924.....	73	63	415	32,494	1,770,825
1925.....	83	81	510	25,796	1,743,996
1926.....	77	73	598	24,142	296,811
1927.....	79	72	652	22,683	165,288

The above table shows that in 1927 the time lost in lockouts and strikes in Canada was less than in any year listed except 1915, and the number of employees involved was less than in any year since 1916. There were no strikes in 1927 involving more than 5,000 employees or causing over 50,000 days' loss of time. A relatively high number of disputes occurred, however, in the building trades for the first time since 1921. There were also many brief mining strikes in 1927.

Settlement of Bengal-Nagpur Railway Strike

THE Bombay Labor Gazette, in its issue for December, 1927, gives an account of the settlement of a railway strike which attracted considerable attention, both because of its extent and because of the methods adopted.

Throughout the year 1926 there was much unrest among the staff of the Bengal-Nagpur Railway, the men feeling that the management ignored their grievances, and in February, 1927, a strike broke out in the railway workshops, which soon extended to the railway generally. The management was able to carry on its passenger and freight service, but not without some dislocation and delay. The trouble was finally settled on March 10, but apparently left an aftermath of bitterness and suspicion.

Early in June a report became current that the railroad had discharged 200 men of the Kharagpur workshops in pursuance of a policy of victimization because of the strike. The railway authorities denied any such policy, but stated that the road was overstaffed, that it was necessary to reduce the number of workers, and that the

company was doing this by weeding out the less desirable employees and those for whom there was no work. In August they followed this with a notice that further reductions were necessary, and that special bonuses would be given those who would resign voluntarily before September 7. Some 300 men resigned, but as this was insufficient, notices of discharge were served on about 1,250 men on September 7. The next day the employees went to their places as usual, but for the most part merely remained there, doing no work. This policy, they notified the management, they would keep up until the discharge notices were withdrawn. To this the management replied by ordering a general lockout, effective September 12, to be continued until the "men's leaders" should give an assurance that the men were willing to work.

The lockout continued for a month, and then the shops were reopened. The men again came in and continued in their places, not working, so the shops were closed the next day. Both sides issued manifestoes, and the Government of India, after a consultation with the agent of the Bengal-Nagpur Railway, gave out a statement containing figures to prove that the reduction of force was necessary, and had no connection with a policy of victimization. As to the discharges which had taken place, about 850 of the 1,250 on whom notices had been served had accepted the situation and left for their homes, so that only about 400 were now concerned. The management promised an inquiry into any cases among these concerning which the men were dissatisfied, and since the charge of victimization had been made, a representative of the Government would be associated with the inquiry. Moreover, the Government would depute two officers to examine into schemes of reduction which might be likely to take effect in the near future, including those contemplated at Kharagpur.

The men were not satisfied with these concessions, demanding among other things, that all who had been locked out should receive their wages for the entire period of the lockout and that all necessary facilities should be given them to present their case through their union before the promised commission of inquiry. They also demanded the reinstatement of those who had not accepted their discharge.

There were various negotiations, with threats on the men's side of a possible general strike on the railways, but a compromise was finally reached. The demand for the reinstatement of the discharged men was dropped, the demand for representation before the commission of inquiry was granted, and after some misunderstandings, the request as to wages was conditionally agreed to.

The Government of India has now decided that on certain conditions the full pay for the period of the closure of the workshops should be given in place of the subsistence allowance referred to by the agent in his communique. These conditions are that the men resume work not later than December 13, and show by their conduct and behavior for a period of two months that they accept the action taken by the Government and the railway administration as the final settlement of this dispute.

In view of this concession the labor leaders advised the men to resume work forthwith. Accordingly, on December 8, 1927, after a stoppage of almost three months, normal working was begun again in the workshops of the Bengal-Nagpur Railway.

WAGES AND HOURS OF LABOR

Hours and Earnings in Slaughtering and Meat Packing, 1927

THIS article presents summaries for 1927 of averages of hours and earnings by occupations and departments for 50,207 males and 7,146 females of 86 slaughtering and meat-packing plants in the United States.¹ The data were collected from the pay rolls and other records of representative establishments for a representative weekly pay period in October, November, or December, 1927. The averages are therefore as of those months, and cover every operation in each of the 13 departments included in the study. The work in these departments begins with the driving of live cattle, hogs, and sheep from the local stockyards, covers all operations and processes necessary to convert the animals into the various meat products and by-products, and ends with the loading of the finished products into delivery trucks and refrigerator cars for distribution. The departments included in the present study are as follows: Cattle killing, hog killing, sheep and calf killing, offal, hide, casing, cutting and trimming of fresh beef, cutting and trimming of fresh pork, lard and oleo oil, sausage, cured meat, canning, and maintenance and repair. No figures are shown for officials, office clerks, salesmen, power-house employees, nonworking foremen, employees of departments or shops in which tubs, tierces, cans, boxes, or brushes are manufactured, nor for employees of butterine, mincemeat, produce, extract, soap, curled hair, wool, bone, and fertilizer departments.

Summary data of hours and earnings are shown in Table 1 for males and females separately and for the industry as a whole for 1921, 1923, 1925, and 1927. Average earnings per hour are shown for 1917, but as a considerable number of plants included in the 1917 study had no regular schedule of working hours per week full-time earnings per week could not be computed for that year. It is seen in the table that the average hourly earnings for the industry as a whole were higher in 1927 (50.1 cents) than in any of the previous years. The hourly earnings of the male workers were higher in 1927 than in any other year, but those of the women workers were slightly higher in 1921 than in 1927.

An approximate 8-hour day, or 48-hour week, was established in 1918. In July, 1922, the hours were increased to a 9-hour day, or 54-hour week, by many of the plants that were included in the 1921 study. Since then, however, a considerable number of plants have returned to the 8-hour day and 48-hour week. The average full-time hours in the industry in 1927 were 49.3 per week, as compared with 50.1 in 1925.

Full-time weekly earnings in the industry in 1927 averaged \$24.70. This also was a higher figure than those for previous years.

¹ These figures in detail will be available later in bulletin form.

TABLE 1.—AVERAGE HOURS AND EARNINGS, ALL OCCUPATIONS, 1917, 1921, 1923, 1925 AND 1927, BY SEX AND YEAR

Sex and year	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
MALES					
1917	66	55,089		\$0.271	
1921	34	30,075	48.4	.511	\$24.39
1923	38	45,083	52.2	.499	25.42
1925	86	52,702	50.2	.507	25.45
1927	86	50,207	49.3	.520	25.64
FEMALES					
1917	51	6,576		.178	
1921	31	3,329	48.3	.365	17.48
1923	37	6,112	52.8	.361	18.80
1925	78	6,595	49.4	.359	17.73
1927	78	7,146	49.1	.364	17.87
MALES AND FEMALES					
1917	66	61,665		.262	
1921	34	33,404	48.4	.497	23.67
1923	38	51,195	52.3	.484	24.63
1925	86	59,297	50.1	.492	24.65
1927	86	57,353	49.3	.501	24.70

Guaranteed Hours of Pay

OF THE 86 plants covered in the 1927 study, the employees in all occupations in 45 plants and those in some of the occupations in 16 plants operate under a plan whereby they are guaranteed their pay for a specified number of hours per day or week. This assures to these employees pay at their regular rate for the specified number of hours whenever the hours of work are less than the guaranteed hours of pay. To be entitled to pay, it is necessary for the employee to report for duty and work all the hours the plant or department operates on each day or in each week. A guaranty of 40 hours' pay per week is made by 57 plants, a few of which guarantee $6\frac{2}{3}$ hours' pay for each day the employee reports for duty and does any work. One plant gives a guaranty of 35 hours, one of $37\frac{1}{2}$, one of 45, and one of 48 hours per week. There is no guaranty, however, in 25 of the 86 plants included in the study.

Overtime

OVERTIME is generally understood to mean any time worked by employees on any regular workday or in any full week in excess of the regular or customary full-time hours per day or per week as determined by the regular time of beginning work on each day, minus the regular time taken for lunch. Of the 86 plants covered in 1927, 52 pay time and a half for all overtime. One plant pays time and one-fourth for overtime to employees in the maintenance and repair department only. The regular rate is paid for overtime in 33 plants.

Work on Sunday and Holidays

IN THIS industry work on Sunday and holidays is limited to a very small per cent of the employees of a plant and usually to only a small per cent of the mechanics in the maintenance and repair depart-

ment who repair buildings and equipment. Work on holidays is not frequent. Provision is made for payment of double the regular rate for this work by 32 of the plants covered, of one and one-half times the regular rate by 21 plants, and for payment of the regular rate by 33 plants.

Statistics of Wages and Hours

AVERAGES of full-time hours per week, earnings per hour, and full-time earnings per week are shown in Table 2, by occupation, for the various occupations of the cattle-killing, hog-killing, casing, sausage, and canning departments, for all occupations combined in each department, and for a group of "miscellaneous employees" of all departments.

In 1925 the average earnings per hour of males ranged from 41.7 cents for washing and painting machine tenders in the canning department to 96.3 cents for head holders in the cattle-killing department; those of females ranged from 30.1 cents for wipers of filled cans in the canning department to 41.2 cents for cooks in the sausage department. In 1927 hourly earnings of males ranged from 39.1 cents for passers and pilers of cans in the canning department to \$1.06 for head holders in the cattle-killing department; those of females ranged from 30.2 cents for wipers of filled cans in the canning department to 43.9 cents for stuffers in the sausage department. The average earnings per hour for laborers (male) in the casing department was 43.3 cents in 1925 as compared with 45.4 cents in 1927; for splitters (male) in the cattle-killing department, 85.5 cents in 1925 as compared with 87.6 cents in 1927; for kidney pullers, etc. (female), in the hog-killing department was 34.3 cents in 1925, compared with 35.8 cents in 1927; and for stuffers (female) in the sausage department, 37.9 cents in 1925 as compared with 43.9 cents in 1927.

TABLE 2.—HOURS AND EARNINGS, 1925 AND 1927, BY DEPARTMENT, SEX, AND OCCUPATION

Cattle-killing department

Sex and occupation	Year	Number of establishments	Number of employees	Average earnings per hour	Average hours per week	Average full-time earnings per week
MALES						
Drivers and penners.....	1925	58	178	\$0.473	51.7	\$24.45
	1927	57	194	.491	51.4	25.24
Knockers.....	1925	53	79	.537	49.2	26.42
	1927	59	80	.542	49.3	26.72
Shacklers or slingers.....	1925	41	90	.543	49.7	26.99
	1927	37	64	.535	49.7	25.59
Head holders.....	1925	3	3	.963	48.0	46.22
	1927	3	3	1.054	48.0	50.59
Stickers.....	1925	25	33	.591	50.7	29.96
	1927	28	37	.733	48.6	35.62
Headers.....	1925	51	120	.641	50.0	32.05
	1927	51	119	.662	49.0	32.44
Droppers and pritchers up.....	1925	40	75	.512	50.0	25.60
	1927	38	78	.517	48.8	25.23
Foot skinners.....	1925	44	117	.515	49.6	25.54
	1927	45	111	.535	48.9	26.16
Leg breakers.....	1925	55	181	.558	49.9	27.84
	1927	55	152	.556	49.1	27.30
Rippers-open.....	1925	9	17	.559	49.8	27.84
	1927	11	13	.558	48.5	27.06
Gullet raisers.....	1925	14	21	.491	49.4	24.26
	1927	10	15	.476	48.1	22.90

TABLE 2.—HOURS AND EARNINGS, 1925 AND 1927, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Cattle-killing department—Continued

Sex and occupation	Year	Number of establishments	Number of employees	Average earnings per hour	Average hours per week	Average full-time earnings per week
MALES—continued						
Caul pullers.....	1925	32	55	\$0.545	49.7	\$27.00
	1927	28	48	.569	49.2	27.90
Floormen or siders.....	1925	62	272	.856	49.9	42.71
	1927	65	280	.877	49.2	43.15
Breast or brisket breakers and sawyers.....	1925	40	74	.534	49.7	26.54
	1927	42	61	.552	49.6	26.54
Crotch breakers.....	1925	20	28	.524	49.7	26.04
	1927	22	36	.530	48.3	25.60
Hoisters.....	1925	40	158	.494	49.4	24.40
	1927	33	91	.525	48.5	25.46
Tail rippers and pullers.....	1925	29	48	.531	49.8	26.44
	1927	32	45	.540	48.8	26.35
Rumpers.....	1925	49	97	.749	50.1	37.52
	1927	57	100	.761	49.6	37.75
Fell cutters.....	1925	31	94	.598	49.5	29.60
	1927	31	87	.637	48.6	30.96
Fell pullers and beaters.....	1925	24	65	.488	49.1	23.96
	1927	23	51	.501	49.0	24.55
Backers.....	1925	51	108	.782	49.8	38.94
	1927	54	115	.800	48.9	39.12
Gutters and bung droppers.....	1925	55	121	.575	50.1	28.81
	1927	63	125	.587	49.0	28.76
Shank skinners.....	1925	17	34	.532	49.3	26.23
	1927	11	25	.538	49.4	26.58
Hide droppers.....	1925	54	139	.655	49.8	32.62
	1927	58	134	.684	49.3	33.72
Tail sawyers.....	1925	46	114	.547	50.2	27.46
	1927	48	94	.592	49.2	29.13
Splitters.....	1925	57	149	.855	50.0	42.75
	1927	65	150	.876	49.1	43.01
Chuck splitters.....	1925	38	63	.563	50.0	29.65
	1927	43	66	.608	49.9	30.94
Scribers.....	1925	36	42	.521	49.0	26.00
	1927	39	51	.520	49.2	25.58
Trimmers (bruises, rounds, skirts, and tails).....	1925	35	152	.496	49.5	24.55
	1927	40	161	.509	48.8	24.84
Utility men.....	1925	46	147	.604	52.5	31.71
	1927	48	137	.598	51.6	30.86
Washers and wipeis.....	1925	61	264	.440	50.1	22.04
	1927	58	230	.459	48.8	22.40
Tonguers.....	1925	34	53	.509	49.9	25.40
	1927	28	29	.533	50.0	26.65
Laborers.....	1925	63	949	.442	50.2	22.19
	1927	74	874	.451	49.4	22.28
Truckers.....	1925	45	121	.455	50.4	22.93
	1927	34	90	.476	49.5	23.56
FEMALES						
Carcass wipers, bruise and tail trimmers, neck rag inserters, and laborers.....	1925	4	25	.348	49.2	17.12
	1927	8	23	.357	48.3	17.24

Hog-killing department

MALES						
Laborers ¹	1925	65	829	\$0.433	51.7	\$22.39
	1927	68	818	.442	51.0	22.54
Shacklers.....	1925	63	143	.548	52.0	28.50
	1927	59	142	.557	50.2	27.96
Stickers.....	1925	65	79	.627	51.8	32.48
	1927	61	68	.631	50.3	31.74
Scalders ²	1925	68	304	.514	51.9	26.68
	1927	65	291	.521	50.5	26.31
Hookers-on ³	1925	59	214	.470	51.6	24.25
	1927	55	159	.493	50.6	24.95
Shavers and scrapers.....	1925	66	705	.523	51.4	26.88
	1927	65	567	.535	50.6	27.07
Headers.....	1925	61	102	.592	52.0	30.78
	1927	60	105	.594	50.2	29.82

¹ Includes drivers, penners, steamers, singers, washers, and aitch-bone breakers.² Includes tubmen, droppers, gamb cutters, polemen, and duckers.³ Includes hookers-off, hangers-off, straighteners, and chain feeders.

TABLE 2.—HOURS AND EARNINGS, 1925 AND 1927, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Hog-killing department—Continued

Sex and occupation	Year	Number of establishments	Number of employees	Average earnings per hour	Average hours per week	Average full-time earnings per week
MALES—continued						
Gutters ⁴	1925	64	242	\$0.590	51.9	\$30.62
	1927	65	219	.589	50.4	29.69
Ham facers.....	1925	52	68	.581	51.4	29.86
	1927	49	65	.589	49.5	29.16
Splitters.....	1925	68	170	.635	51.5	32.70
	1927	63	169	.630	50.1	31.56
Leaf-lard pullers.....	1925	57	101	.512	51.9	26.57
	1927	59	100	.509	50.8	25.86
Leaf-lard scrapers.....	1925	36	62	.451	51.6	23.27
	1927	26	39	.449	51.0	22.90
Bruise trimmers, head removers, and kidney pullers.....	1925	50	135	.494	51.6	25.49
	1927	52	118	.513	50.7	26.01
Utility men.....	1925	54	200	.575	51.7	29.73
	1927	52	193	.588	50.7	29.81
Truckers.....	1925	35	109	.436	52.4	22.85
	1927	23	79	.426	50.9	21.68
FEMALES						
Kidney pullers, shavers, singers, neck brushes, and spreaders.....	1925	17	88	.343	50.5	17.32
	1927	12	49	.358	51.4	18.40

Casing department

MALES						
Casing pullers or runners.....	1925	69	620	\$0.521	50.1	\$26.10
	1927	67	609	.542	49.4	26.77
Strippers.....	1925	55	270	.499	50.3	25.10
	1927	53	279	.505	49.2	24.85
Fatters and slimers.....	1925	61	558	.556	50.0	27.80
	1927	61	626	.556	48.8	27.13
Turners.....	1925	44	173	.490	49.9	24.45
	1927	47	143	.505	48.9	24.69
Blowers, graders, and inspectors.....	1925	45	164	.489	49.8	24.35
	1927	51	182	.537	48.7	26.15
Measurers and bunchers.....	1925	42	100	.519	50.3	26.11
	1927	37	81	.528	49.0	25.87
Salters and packers.....	1925	51	219	.501	49.9	25.00
	1927	45	197	.530	48.8	25.86
Trimmers of casings.....	1925	55	240	.511	50.1	25.60
	1927	51	233	.539	49.0	26.41
Blowers and tiers of bladders and weasands.....	1925	14	34	.496	49.1	24.35
	1927	21	29	.468	48.7	22.79
Cleaners of casings.....	1927	49	204	.490	49.9	24.45
General workers.....	1925	63	377	.505	50.9	25.70
	1927	39	92	.564	49.7	28.03
Laborers.....	1925	41	217	.433	49.7	21.52
	1927	33	133	.454	49.1	22.29
Truckers.....	1925	28	59	.446	50.2	22.39
	1927	18	46	.485	48.2	23.38
FEMALES						
Casing pullers or runners.....	1925	10	75	.386	51.0	19.69
	1927	14	59	.391	49.4	19.32
Strippers.....	1925	8	18	.375	50.8	19.05
	1927	6	18	.392	48.3	18.93
Turners.....	1925	6	30	.329	48.5	15.96
	1927	2	4	.426	51.0	21.73
Blowers, graders, and inspectors.....	1925	29	197	.364	49.2	17.91
	1927	27	221	.384	48.3	18.55
Measurers and bunchers.....	1925	17	62	.382	49.1	18.76
	1927	14	57	.336	48.1	16.16
Salters and packers.....	1925	10	22	.396	49.6	19.64
	1927	8	22	.376	48.8	18.35
Trimmers of casings.....	1925	15	75	.386	50.3	19.42
	1927	14	40	.406	48.8	19.81
Blowers and tiers of bladders and weasands.....	1925	9	34	.405	48.7	19.72
	1927	8	18	.400	48.3	19.32
General workers.....	1925	20	143	.361	49.9	18.01
	1927	25	204	.373	49.7	18.54

⁴ Includes bung droppers and rippers open.

TABLE 2.—HOURS AND EARNINGS, 1925 AND 1927, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Sausage department

Sex and occupation	Year	Number of establishments	Number of employees	Average earnings per hour	Average hours per week	Average full-time earnings per week
MALES						
Truckers and forkers.....	1925	46	300	\$0.421	50.6	\$21.30
	1927	38	194	.440	49.7	21.87
Machine tenders (choppers, grinders, mixers, curers, feeders, and cutters).....	1925	75	418	.510	50.5	25.76
	1927	76	402	.513	49.6	25.44
Casing workers (washers, turners, returners, measurers, cutters, tiers, and fatters).....	1925	32	107	.450	49.5	22.28
	1927	36	77	.454	49.6	22.52
Stuffers.....	1925	74	406	.566	50.8	28.75
	1927	77	417	.565	49.5	27.97
Linkers, twisters, tiers, and hangers.....	1925	25	172	.467	51.2	23.91
	1927	22	132	.465	51.1	23.76
Ropers, wrappers, and tiers.....	1925	14	20	.428	49.5	21.19
	1927	8	24	.500	49.0	24.50
Laborers ⁵	1925	72	989	.425	50.2	21.34
	1927	75	995	.439	49.4	21.69
Cooks.....	1925	65	168	.499	50.8	25.35
	1927	68	196	.494	50.3	24.85
Smokers.....	1925	68	170	.517	51.2	26.47
	1927	69	165	.532	51.5	27.40
Inspectors, packers, scalers, shippers, and nailers.....	1925	65	418	.454	50.5	22.93
	1927	62	405	.482	49.5	23.86
Utility men, assistant foremen, straw bosses, sub-foremen, handy men, small-order men, and all-round men.....	1925	55	166	.534	50.5	26.97
	1927	55	169	.539	49.9	26.90
FEMALES						
Machine tenders (choppers, grinders, mixers, curers, feeders, and cutters).....	1925	18	22	.350	49.5	17.33
	1927	28	32	.338	48.8	16.49
Casing workers (washers, turners, returners, measurers, cutters, tiers, and fatters).....	1925	57	360	.348	49.9	17.37
	1927	55	382	.358	48.5	17.36
Stuffers.....	1925	18	61	.379	51.7	19.59
	1927	11	41	.439	48.5	21.29
Linkers, twisters, tiers, and hangers.....	1925	75	1,105	.372	49.9	18.56
	1927	75	1,175	.364	49.2	17.91
Ropers, wrappers, and tiers.....	1925	29	183	.352	49.9	17.56
	1927	24	221	.388	48.0	18.62
Cooks.....	1925	3	3	.412	52.0	21.42
	1927	3	5	.375	48.0	18.00
Packers (wrappers, inspectors, labelers, taggers, tiers, and packers' helpers).....	1925	56	616	.319	49.4	15.76
	1927	57	549	.336	48.8	16.40
General workers (box makers, labelers, laborers, sorters, and utility workers).....	1925	38	170	.329	49.2	16.19
	1927	35	185	.359	49.2	17.66

Canning department

MALES						
Cooks.....	1925	9	20	\$0.449	49.2	\$22.09
	1927	12	26	.488	47.5	23.18
Steam tenders, process men, and retort men.....	1925	9	25	.468	48.5	22.70
	1927	10	37	.477	48.6	23.18
Passers and pilers, cans.....	1925	8	40	.467	47.5	22.18
	1927	4	10	.391	48.0	18.77
Trimmers, meat (by hand).....	1925	5	8	.462	49.1	22.68
	1927	4	7	.445	50.6	22.52
Machine tenders (preparing and stuffing meat into cans).....	1925	27	112	.476	49.2	23.42
	1927	39	137	.493	49.0	24.16
Stuffers (meat into cans, by hand).....	1925	7	19	.473	50.2	23.74
	1927	8	24	.460	50.3	23.14
Packers and nailers.....	1925	13	74	.467	48.7	22.74
	1927	15	83	.442	48.3	21.35
Cappers.....	1925	16	69	.466	49.7	23.16
	1927	15	58	.461	47.6	21.94

⁵ Including roustabouts, ham-cylinder washers, cleaners up, ham pressers, hangers, cooks' helpers, and smokers' helpers.

TABLE 2.—HOURS AND EARNINGS, 1925 AND 1927, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

Canning department—Continued

Sex and occupation	Year	Number of establishments	Number of employees	Average earnings per hour	Average hours per week	Average full-time earnings per week
MALES—continued						
Machine tenders, washing, and painting.....	1925	5	15	\$0.417	48.4	\$20.18
	1927	3	7	.488	47.6	23.23
General workers.....	1925	9	38	.547	47.7	26.09
	1927	19	96	.505	47.6	24.04
Inspectors.....	1925	8	63	.491	47.2	23.18
	1927	7	29	.495	48.2	23.86
Truckers.....	1925	13	238	.447	47.6	21.28
	1927	17	115	.438	47.8	20.94
Laborers.....	1925	13	196	.443	49.6	21.97
	1927	22	398	.442	48.1	21.26
FEMALES						
Machine tenders (preparing and stuffing meat into cans).....	1925	10	62	.355	46.5	16.51
	1927	17	49	.369	48.4	17.86
Stuffers (meat into cans, by hand).....	1925	6	62	.311	51.2	15.92
	1927	5	55	.348	46.6	16.22
Packers (sliced bacon and chipped dried beef into cans, glass jars, or cartons, by hand).....	1925	31	387	.337	49.3	16.61
	1927	43	849	.351	49.3	17.30
Cappers.....	1925	6	41	.350	46.3	16.21
	1927	9	23	.365	47.7	17.41
Labelers and wrappers.....	1925	13	145	.386	47.9	18.49
	1927	14	134	.385	46.3	17.83
Weighers (filled cans).....	1925	17	101	.358	47.8	17.11
	1927	12	33	.332	49.9	16.57
Wipers (filled cans).....	1925	4	11	.301	47.2	14.21
	1927	3	7	.302	48.0	14.50
Cap setters.....	1925	4	7	.311	48.9	15.21
	1927	2	9	.338	50.0	16.90
Washers of empty cans.....	1927	5	90	.335	46.3	15.51
Passers and pilers, cans.....	1925	4	20	.389	48.0	18.67
	1927	6	61	.381	47.3	18.02
Trimmers, meat (by hand).....	1925	5	64	.368	48.2	17.74
	1927	8	62	.369	48.0	17.71
General workers.....	1925	18	252	.350	47.7	16.70

All occupations combined

Cattle-killing department:						
Males.....	1925	72	4,261	\$0.557	50.1	\$27.91
	1927	74	3,946	.578	49.4	28.55
Females.....	1925	4	25	.348	49.2	17.12
	1927	8	23	.357	48.3	17.24
Hog-killing department:						
Males.....	1925	71	3,463	.512	51.7	26.47
	1927	71	3,132	.521	50.6	26.36
Females.....	1925	17	88	.343	50.5	17.32
	1927	12	49	.358	51.4	18.40
Sheep-killing department:						
Males.....	1925	41	1,429	.536	49.2	26.37
	1927	49	1,266	.568	48.9	27.78
Offal department (other than hides and casings):						
Males.....	1925	89	3,176	.499	49.9	24.90
	1927	81	3,007	.512	49.6	25.40
Females.....	1925	35	344	.341	50.7	17.29
	1927	35	330	.364	50.0	18.20
Hide department:						
Males.....	1925	67	1,404	.470	49.8	23.41
	1927	71	1,331	.497	49.3	24.40
Casing department:						
Males.....	1925	78	3,031	.510	50.1	25.55
	1927	76	2,854	.529	49.1	25.97
Females.....	1925	41	656	.373	49.7	18.54
	1927	46	643	.379	48.9	18.53
Cutting or fresh beef department:						
Males.....	1925	75	5,430	.514	50.0	25.70
	1927	72	5,326	.516	48.8	25.18
Females.....	1925	9	36	.335	52.2	17.49
	1927	7	40	.330	49.7	16.40

TABLE 2.—HOURS AND EARNINGS, 1925 AND 1927, BY DEPARTMENT, SEX, AND OCCUPATION—Continued

All occupations combined—Continued

Sex and occupation	Year	Number of establishments	Number of employees	Average earnings per hour	Average hours per week	Average full-time earnings per week
Cutting or fresh pork department:						
Males.....	1925	76	5,290	\$0.503	50.8	\$25.55
	1927	75	4,821	.509	49.8	25.35
Females.....	1925	43	887	.424	50.2	21.28
	1927	46	902	.418	49.5	20.69
Lard and oleo oil department:						
Males.....	1925	83	2,561	.463	50.4	23.34
	1927	81	2,299	.468	49.8	23.31
Females.....	1925	42	255	.314	49.4	15.51
	1927	40	220	.325	49.3	16.02
Sausage department:						
Males.....	1925	78	3,334	.474	50.5	23.94
	1927	79	3,176	.487	49.8	24.25
Females.....	1925	75	2,520	.351	49.8	17.48
	1927	77	2,590	.359	48.9	17.56
Cured-meat department:						
Males.....	1925	81	7,463	.467	50.7	23.68
	1927	80	7,184	.472	49.8	23.51
Females.....	1925	57	647	.335	49.6	16.62
	1927	58	697	.339	50.0	16.95
Canning department:						
Males.....	1925	34	917	.462	48.6	22.45
	1927	44	1,027	.460	48.2	22.17
Females.....	1925	32	1,038	.349	47.3	16.51
	1927	43	1,486	.355	48.6	17.25
Maintenance and repair department:						
Males.....	1925	86	8,445	.568	49.1	27.89
	1927	86	8,867	.571	49.1	28.04
Miscellaneous employees, except maintenance and repair:						
Males.....	1925	84	2,498	.448	50.5	22.62
	1927	83	1,971	.458	49.6	22.72
Females.....	1925	34	99	.342	49.4	16.89
	1927	34	166	.354	48.9	17.31
Total, all departments:						
Males.....	1925	86	52,702	.507	50.2	25.45
	1927	86	50,207	.520	49.3	25.64
Females.....	1925	78	6,595	.359	49.4	17.73
	1927	78	7,146	.364	49.1	17.87
Grand total, males and females.....						
	1925	86	59,297	.492	50.1	24.65
	1927	86	57,353	.501	49.3	24.70

Table 3 shows 1927 averages, by department and district, for four of the representative occupations in the cattle-killing, hog-killing, casing, and sausage departments, and for two of the representative occupations in the canning department. The districts are 8 in number, as follows:

District 1 includes 11 plants in Chicago.

District 2 includes 16 plants in Kansas City, Omaha, St. Joseph, East St. Louis, and St. Louis.

District 3 includes 16 plants in Kansas, Iowa, Minnesota, South Dakota, and Wisconsin.

District 4 includes 7 plants in Oklahoma and Texas.

District 5 includes 13 plants in Indiana, Michigan, Ohio, western New York, and western Pennsylvania.

District 6 includes 9 plants in Connecticut, Massachusetts, eastern New York, and eastern Pennsylvania.

District 7 includes 5 plants in Florida, Georgia, and Maryland.

District 8 includes 9 plants in California, Colorado, Oregon, and Washington.

TABLE 3.—AVERAGE FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, 1927, BY DEPARTMENT, SEX, OCCUPATION, AND DISTRICT

Cattle-killing department

District	Leg breakers, males					Floormen or siders, males				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
District 1.....	6	26	49.4	\$0.535	\$26.43	8	58	48.4	\$0.864	\$41.82
District 2.....	14	51	48.8	.537	26.21	15	100	49.5	.874	43.26
District 3.....	12	32	49.1	.557	27.35	13	45	49.6	.847	42.01
District 4.....	4	14	48.0	.547	26.26	5	23	48.8	.850	41.48
District 5.....	8	13	49.9	.626	31.24	9	20	50.3	.852	42.86
District 6.....	2	5	48.0	.883	42.38	3	13	48.0	1.482	71.14
District 7.....	2	2	57.5	.395	22.71	3	4	56.3	.673	37.89
District 8.....	7	9	49.7	.567	28.18	9	17	48.4	.825	39.93
Total.....	55	152	49.1	.556	27.30	65	280	49.2	.877	43.15
	Splitters, males					Laborers, males				
District 1.....	8	32	48.5	\$0.844	\$40.93	8	162	48.3	\$0.462	\$22.31
District 2.....	15	48	49.2	.862	42.41	15	329	49.5	.466	23.07
District 3.....	14	25	49.2	.862	42.41	15	139	49.0	.456	22.34
District 4.....	5	13	48.5	.850	41.23	7	92	49.2	.396	19.48
District 5.....	8	10	50.3	.824	41.45	12	73	51.3	.430	22.06
District 6.....	3	10	48.0	1.473	70.70	3	28	49.3	.605	29.83
District 7.....	3	3	56.7	.644	36.51	5	20	56.3	.292	16.44
District 8.....	9	9	48.3	.852	41.15	9	31	48.7	.460	22.40
Total.....	65	150	49.1	.876	43.01	74	874	49.4	.451	22.28

Hog-killing department

District	Laborers, males					Shavers and scrapers, males				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
District 1.....	6	58	50.1	\$0.474	\$23.75	6	47	49.3	\$0.560	\$27.61
District 2.....	16	197	48.6	.453	22.02	15	91	49.0	.528	25.87
District 3.....	16	260	50.4	.428	21.57	16	175	49.8	.512	25.50
District 4.....	4	33	52.9	.307	16.24	4	9	48.0	.593	28.46
District 5.....	13	159	52.8	.440	23.23	11	152	51.9	.532	27.01
District 6.....	6	84	54.6	.493	26.92	5	55	52.9	.559	29.57
District 7.....	2	14	56.4	.361	20.36	2	12	56.3	.507	28.54
District 8.....	5	13	49.6	.444	22.02	6	26	48.8	.615	30.01
Total.....	68	818	51.0	.442	22.54	65	567	50.6	.535	27.07
	Gutters, males					Splitters, males				
District 1.....	6	26	49.6	\$0.584	\$28.97	6	26	48.6	\$0.644	\$31.30
District 2.....	14	39	48.5	.576	27.94	15	42	49.1	.639	31.37
District 3.....	16	75	49.7	.566	28.13	16	49	50.1	.623	31.21
District 4.....	4	5	48.0	.612	29.38	3	3	48.0	.642	30.82
District 5.....	12	41	52.0	.623	32.40	12	32	51.6	.618	31.89
District 6.....	5	22	54.3	.581	31.55	5	11	54.0	.588	31.75
District 7.....	2	3	58.3	.567	33.06	2	2	57.5	.621	35.71
District 8.....	6	8	49.4	.692	34.18	4	4	47.3	.736	34.81
Total.....	65	219	50.4	.589	29.69	63	169	50.1	.630	31.56

TABLE 3.—AVERAGE FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, 1927, BY DEPARTMENT, SEX, OCCUPATION, AND DISTRICT—Continued

Casing department

District	Casing pullers, males					Strippers, males				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
District 1	5	92	48.2	\$0.548	\$26.41	3	59	48.0	\$0.481	\$23.09
District 2	16	161	48.9	.551	26.94	13	81	49.3	.512	25.24
District 3	14	161	49.7	.530	26.34	8	59	49.8	.538	26.79
District 4	5	35	48.2	.495	23.86	6	21	48.6	.456	22.16
District 5	8	47	50.4	.530	26.71	6	20	49.9	.486	24.25
District 6	8	79	51.3	.570	29.24	8	26	50.8	.499	25.35
District 7	2	6	55.0	.576	31.68	1	1	(1)	(1)	(1)
District 8	9	28	48.5	.544	26.38	8	12	48.0	.513	24.62
Total	67	609	49.4	.542	26.77	53	279	49.2	.505	24.85
District	Fatters and slimers, males					Blowers, graders, and inspectors, females				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
District 1	4	131	48.0	\$0.544	\$26.11	3	71	48.0	\$0.397	\$19.06
District 2	15	242	49.2	.564	27.75	9	73	48.6	.375	18.23
District 3	12	89	48.5	.551	26.72	7	59	48.3	.383	18.50
District 4	6	41	48.3	.528	25.50					
District 5	7	37	49.8	.528	26.29	1	1	(1)	(1)	(1)
District 6	7	59	49.2	.595	29.27	2	11	48.0	.352	16.90
District 7	1	3	(1)	(1)	(1)					
District 8	9	24	48.0	.577	27.70	5	6	47.5	.379	18.00
Total	61	626	48.8	.556	27.13	27	221	48.3	.384	18.55

Sausage department

District	Machine tenders, males					Stuffers, males				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
District 1	8	56	47.9	\$0.522	\$25.00	8	79	47.6	\$0.572	\$27.23
District 2	15	104	48.5	.513	24.88	15	112	48.5	.587	28.47
District 3	15	96	49.4	.488	24.11	16	75	49.3	.534	26.33
District 4	7	33	48.7	.488	23.77	7	17	49.4	.616	30.43
District 5	13	55	50.6	.538	27.22	13	61	50.7	.570	28.90
District 6	6	29	54.2	.541	29.32	6	41	54.1	.550	29.76
District 7	3	10	57.0	.464	26.45	2	9	55.0	.484	26.62
District 8	9	19	48.6	.579	28.14	9	23	48.7	.565	27.52
Total	76	402	49.6	.513	25.44	77	417	49.5	.565	27.97
District	Linkers, males					Linkers, females				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
District 1	2	7	48.0	\$0.447	\$21.46	8	192	47.7	\$0.398	\$18.98
District 2	2	24	48.0	.453	21.74	14	268	48.1	.412	19.82
District 3	7	30	50.0	.426	21.30	16	247	49.4	.344	16.99
District 4						7	88	49.8	.361	17.98
District 5	5	20	48.8	.541	26.40	13	183	49.1	.328	16.10
District 6	5	50	54.6	.464	25.33	5	73	49.5	.327	16.19
District 7						3	58	58.9	.297	17.49
District 8	1	1	(1)	(1)	(1)	9	66	48.3	.372	17.97
Total	22	132	51.1	.465	23.76	75	1,175	49.2	.364	17.91

¹ Data included in total.

TABLE 3.—AVERAGE FULL-TIME HOURS PER WEEK, AVERAGE EARNINGS PER HOUR, AND AVERAGE FULL-TIME WEEKLY EARNINGS, 1927, BY DEPARTMENT, SEX, OCCUPATION, AND DISTRICT—Continued

Canning department

District	Packers, females					Labelers and wrappers, females				
	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time weekly earnings
District 1.....	4	176	47.8	\$0.411	\$19.65	4	101	45.8	\$0.405	\$18.55
District 2.....	6	211	50.4	.367	18.50	1	2	(1)	(1)	(1)
District 3.....	13	154	50.3	.324	16.30	2	14	48.0	.280	13.44
District 4.....	5	98	48.2	.298	14.36	3	5	48.0	.324	15.55
District 5.....	9	109	50.0	.317	15.85	2	8	48.0	.373	17.90
District 6.....	3	68	49.5	.316	15.64	-----	-----	-----	-----	-----
District 8.....	3	23	48.0	.346	16.61	2	4	48.0	.341	16.37
Total.....	43	849	49.3	.351	17.30	14	134	46.3	.385	17.83

¹ Data included in total.

Table 4 presents 1925 and 1927 averages for all males and females separately, and for both sexes combined, for each State and for all States or the industry as a whole.

The average full-time hours per week in 1927 for males in all States are 49.3 and for females 49.1. The averages by States for males range from 47.6 to 58.8, and for females range from 46.8 to 56.8.

The average earnings per hour in 1927 for males in all States is 52 cents and for females 36.4 cents. The average by States for males range from 34.4 cents to 60.2 cents, and for females from 28.1 cents to 41.2 cents per hour.

Average full-time earnings per week in 1927 for males in all States are \$25.64 and for females \$17.87. Full-time earnings per week by States for males range from \$20.23 to \$30.22 and for females from \$13.54 to \$20.68.

TABLE 4.—AVERAGE HOURS AND EARNINGS, 1925 AND 1927, BY SEX AND STATE

Sex and State	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time weekly earnings	
	1925	1927	1925	1927	1925	1927	1925	1927	1925	1927
MALES										
California.....	3	3	591	668	47.5	47.6	\$0.575	\$0.569	\$27.31	\$27.08
Colorado.....	2	2	423	396	50.9	48.4	.496	.528	25.25	25.56
Connecticut and Massachusetts ¹	4	4	1,591	1,668	55.7	54.8	.486	.494	27.07	27.07
Florida and Georgia.....	2	3	² 70	³ 161	² 57.5	³ 58.8	² .325	³ .344	² 18.69	³ 20.23
Illinois.....	16	14	14,594	14,448	49.3	48.1	.518	.527	25.54	25.35
Indiana.....	2	2	2,476	1,870	48.0	48.5	.453	.461	21.74	22.36
Iowa.....	7	7	4,929	4,888	50.8	51.9	.468	.472	23.77	24.50
Kansas.....	8	8	6,735	6,046	50.7	49.4	.505	.514	25.60	25.39
Maryland.....	3	2	636	510	55.3	54.9	.497	.501	27.48	27.50
Michigan.....	3	3	878	847	60.0	54.9	.557	.544	33.42	29.87
Minnesota and South Dakota ¹	4	4	5,107	4,341	48.0	48.0	.518	.525	24.86	25.20
Missouri.....	4	4	2,932	2,434	48.9	49.4	.499	.508	24.40	25.10
Nebraska.....	3	4	2,953	3,195	48.1	48.2	.503	.525	24.19	26.31
New York.....	7	7	2,516	2,558	51.7	50.2	.553	.602	28.59	30.22

¹ Shown together to avoid presenting data for 1 plant in 1 State.

² Florida.

³ Florida and Georgia.

ENTRANCE WAGE RATES FOR COMMON LABOR

TABLE 4.—AVERAGE HOURS AND EARNINGS, 1925 AND 1927, BY SEX AND STATE—
Continued

Sex and State	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time weekly earnings	
	1925	1927	1925	1927	1925	1927	1925	1927	1925	1927
MALES—continued										
Ohio.....	3	3	675	801	50.8	51.3	\$0.523	\$0.510	\$26.57	\$26.16
Oklahoma.....	2	2	826	899	48.1	48.0	.468	.479	22.51	22.99
Oregon and Washington.....	4	4	666	706	50.0	50.4	.534	.570	26.70	28.73
Pennsylvania.....	3	3	695	712	52.5	51.0	.560	.510	29.40	26.01
Texas.....	4	5	1,949	1,849	49.1	50.0	.468	.485	22.98	24.25
Wisconsin.....	2	2	1,460	1,210	51.6	48.2	.549	.555	28.33	26.75
Total.....	86	86	52,702	50,207	50.2	49.3	.507	.520	25.45	25.64
FEMALES										
California.....	3	3	94	122	47.8	47.9	.353	.378	16.87	18.11
Colorado.....	2	2	63	73	48.0	48.0	.296	.339	14.21	16.27
Connecticut and Massachusetts.....	3	3	243	264	49.3	49.4	.311	.316	15.33	15.61
Florida, Georgia, and Maryland.....	4	4	114	138	55.4	56.8	.300	.281	16.62	15.96
Illinois.....	12	11	1,976	2,050	48.9	47.6	.382	.396	18.68	18.85
Indiana.....	2	2	330	289	48.0	48.0	.282	.282	13.54	13.54
Iowa.....	7	7	638	708	50.7	52.3	.325	.320	16.48	16.74
Kansas.....	8	8	813	924	51.1	49.8	.380	.383	19.42	19.07
Michigan.....	3	3	211	220	54.0	54.0	.359	.342	19.39	18.47
Minnesota and South Dakota ¹	4	4	603	564	48.0	48.0	.358	.374	17.18	17.95
Missouri.....	4	4	203	234	49.8	50.2	.385	.412	19.17	20.68
Nebraska.....	3	4	376	502	48.0	48.1	.366	.382	17.57	18.37
New York.....	5	4	220	241	52.1	47.8	.347	.358	18.08	17.11
Ohio.....	3	3	77	110	48.4	50.1	.369	.352	17.86	17.64
Oklahoma.....	2	2	109	131	48.0	48.0	.302	.298	14.50	14.30
Oregon and Washington ¹	4	4	70	71	49.8	48.3	.353	.350	17.58	16.91
Pennsylvania.....	3	3	62	63	49.3	46.8	.360	.354	17.75	16.57
Texas.....	4	5	248	289	48.8	49.5	.321	.311	15.66	15.39
Wisconsin.....	2	2	145	153	51.2	48.0	.446	.373	22.84	17.90
Total.....	78	78	6,595	7,146	49.5	49.1	.359	.364	17.77	17.87
MALES AND FEMALES										
California.....	3	3	685	790	47.6	47.7	.546	.541	25.99	25.81
Colorado.....	2	2	486	469	50.4	48.3	.472	.502	23.79	24.25
Connecticut and Massachusetts ¹	4	4	1,834	1,932	54.8	54.1	.465	.470	25.48	25.43
Florida and Georgia.....	2	2	279	317	57.8	58.9	.311	.339	17.98	19.97
Illinois.....	16	14	16,570	16,498	49.3	48.0	.503	.512	24.80	24.58
Indiana.....	2	2	2,806	2,159	48.0	48.4	.433	.439	20.78	21.25
Iowa.....	7	7	5,567	5,596	50.8	52.0	.453	.454	23.01	23.61
Kansas.....	8	8	7,548	6,970	50.7	49.5	.492	.498	24.94	24.65
Maryland.....	3	2	741	637	55.3	55.2	.473	.458	26.16	25.28
Michigan.....	3	3	1,089	1,067	58.8	54.8	.524	.507	30.81	27.78
Minnesota and South Dakota ¹	4	4	5,710	4,905	48.0	48.0	.502	.509	24.10	24.43
Missouri.....	4	4	3,135	2,668	49.0	49.4	.492	.500	24.11	24.70
Nebraska.....	3	4	3,329	3,697	48.1	48.2	.489	.508	23.52	24.49
New York.....	7	7	2,736	2,799	51.8	50.0	.537	.581	27.82	29.05
Ohio.....	3	3	752	911	50.6	51.2	.510	.492	25.81	25.19
Oklahoma.....	2	2	935	1,030	48.1	48.0	.450	.458	21.65	21.98
Oregon and Washington ¹	4	4	736	777	50.0	50.2	.518	.552	25.90	27.71
Pennsylvania.....	3	3	757	775	52.3	50.7	.545	.499	28.50	25.30
Texas.....	4	5	2,197	2,138	49.1	49.9	.452	.464	22.19	23.15
Wisconsin.....	2	2	1,605	1,363	51.6	48.2	.541	.536	27.92	25.84
Total.....	86	86	59,297	57,353	50.1	49.3	.492	.501	24.20	24.70

¹ Shown together to avoid presenting data for 1 plant in 1 State.

² Florida.

³ Florida and Georgia.

Entrance Wage Rates for Common Labor, January 1, 1928

IN ORDER that a report may be made of strictly comparable common labor wage rates the data here presented are limited to common labor entrance rates alone, that is, they are based on rates of pay per hour given unskilled adult male common laborers when first hired.

As in previous reports on common labor wage rates this survey is restricted to 13 important industries, which require considerable numbers of common laborers.

Some establishments have reported two rates—for example, one for the 10-hour day and one for the 8-hour day, or one for white and one for colored or Mexican workers, but these distinctions have not been maintained in the tabulation, although it is apparent that the lowest rates are shown for those geographic divisions where there are large numbers of colored or Mexican workers, while the highest rates are shown for localities where an 8-hour day is more or less prevalent.

The industries included in this survey and the number of common laborers in the establishments reporting in each specified industry, employed at entrance rates, January 1, 1928, are as follows:

Automobiles.....	8, 298
Brick, tile, and terra cotta.....	2, 775
Cement.....	1, 839
Electrical machinery, apparatus, and supplies.....	3, 052
Foundry and machine-shop products.....	8, 262
Iron and steel.....	18, 455
Leather.....	3, 015
Lumber (sawmills).....	12, 199
Paper and pulp.....	8, 278
Petroleum refining.....	2, 956
Slaughtering and meat packing.....	9, 686
Public utilities.....	9, 667
General contracting.....	32, 358
Total.....	120, 840

The number of common laborers in the establishments reporting, in each of the nine geographic divisions of the United States, employed at entrance rates on January 1, 1928, was:

New England.....	7, 850
Middle Atlantic.....	27, 021
East North Central.....	33, 940
West North Central.....	11, 111
South Atlantic.....	11, 798
East South Central.....	6, 799
West South Central.....	7, 256
Mountain.....	3, 572
Pacific.....	11, 493
Total.....	120, 840

The weighted average hourly common-labor entrance rate for the several industries combined on January 1, 1928, was 43 cents. Both the highest and lowest rates reported were in general contracting, the lowest, 15 cents, in the South Atlantic division, and the highest, \$1.12½, in the Middle Atlantic division. The lowest rate, 15 cents, was also reported in both the leather and sawmill industries from the South Atlantic division.

The highest average rate per hour for any industry, 50.5 cents, appears in the automobile industry, followed by 48.2 cents, in general contracting, and more than 44 cents each in the electrical machinery, petroleum refining, and paper and pulp industries; the lowest average rate, 31 cents, appears in the sawmill industry.

The highest average rate in any geographic division, 48.7 cents, appears in the Middle Atlantic division, followed fairly closely by

the East North Central, New England, and Pacific divisions; the lowest average rate, 26.7 cents, appears in the East South Central division.

The weighted average entrance rates per hour for all industries covered, including general contracting, have been as follows: July 1, 1926, 42.8 cents; October 1, 1926, 43.4 cents; January 1, 1927, 43.2 cents; July 1, 1927, 42.6 cents; January 1, 1928, 43 cents.

Omitting the data for general contracting, which was first included in these compilations on July 1, 1926, average entrance rates per hour for the periods studied were: January 1, 1926, 40.2 cents; April 1, 1926, 40.5 cents; July 1, 1926, 40.9 cents; October 1, 1926, 40.9 cents; January 1, 1927, 41 cents; July 1, 1927, 40.4 cents; January 1, 1928, 41.1 cents.

The table following shows, for each industry included, the high, low, and average common-labor entrance rates per hour in each geographic division and in the United States as a whole.

HOURLY WAGE RATES PAID FOR COMMON LABOR, JANUARY 1, 1928

[The rates on which this table is based are entrance rates paid for adult male common labor]

Industry	Geographic division									
	United States	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Automobiles:										
Low	33.3		40.0	35.0	33.3					50.0
High	62.5		62.5	62.5	62.5					55.0
Average	50.5		42.8	51.3	39.2					52.5
Brick, tile, and terra cotta:										
Low	17.5	40.0	33.3	30.0	27.0	17.5	17.5	22.5	38.5	40.0
High	60.0	50.0	58.3	50.0	40.0	40.0	36.0	37.5	40.0	60.0
Average	38.0	44.1	46.5	38.6	31.1	27.4	25.0	28.4	39.2	44.1
Cement:										
Low	25.0		35.0	35.0	35.0		26.0	25.0		34.0
High	51.0		45.0	44.0	51.0		40.0	28.0		50.0
Average	38.3		43.9	38.4	36.6		31.3	27.3		45.4
Electrical machinery, apparatus, and supplies:										
Low	35.0	35.0	38.0	40.0	35.0	40.0				
High	51.0	48.0	51.0	50.0	40.0	40.0				
Average	44.9	44.9	43.2	48.2	36.2	40.0				
Foundry and machine-shop products:										
Low	17.5	27.0	30.0	35.0	33.0	17.5	25.0	20.0	35.0	44.0
High	56.0	55.0	55.0	50.0	50.0	43.8	37.5	31.3	42.0	56.0
Average	38.1	39.4	40.4	42.3	40.3	26.5	29.6	28.4	39.1	49.8
Iron and steel:										
Low	20.0	40.0	30.0	35.0	35.0	20.0	22.5		41.0	42.5
High	50.0	45.0	50.0	50.0	40.0	44.0	31.0		49.0	50.0
Average	42.6	41.4	42.4	44.1	37.4	36.8	27.4		48.8	46.0
Leather:										
Low	15.0	47.9	33.3	35.0		15.0	25.0			48.8
High	54.2	54.2	50.3	52.0		40.0	33.0			50.0
Average	42.1	50.5	45.5	42.9		32.2	29.7			49.9
Lumber (sawmills):										
Low	15.0	33.3	30.0	27.5	32.5	15.0	19.5	20.0	25.0	31.0
High	62.5	36.0	40.0	62.5	35.0	35.0	25.0	32.5	42.5	50.0
Average	31.0	34.4	37.1	37.6	34.3	21.6	22.7	23.7	37.1	42.6
Paper and pulp:										
Low	22.5	36.0	35.0	32.5	35.0	30.0	22.5			40.0
High	55.0	50.0	50.0	55.0	45.0	38.3	30.0			51.3
Average	44.2	47.0	41.9	44.8	39.3	36.4	25.8			42.1
Petroleum refining:										
Low	30.0		37.0	50.0	50.0	30.0		30.0	40.0	53.1
High	62.0		53.0	50.0	50.0	50.0		51.0	56.5	62.0
Average	44.5		45.9	50.0	50.0	44.2		38.1	55.9	58.2
Slaughtering and meat-packing:										
Low	35.0	38.0	40.0	35.0	37.5	40.0		37.5	40.0	40.0
High	50.0	50.0	45.0	45.0	45.0	40.0		37.5	40.0	45.0
Average	41.8	42.6	41.9	41.9	42.1	40.0		37.5	40.0	42.4

HOURLY WAGE RATES PAID FOR COMMON LABOR, JANUARY 1, 1928—Continued

Industry	United States	Geographic division								
		New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Public utilities: ¹	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Low.....	20.0	35.0	30.0	32.5	30.0	20.0	25.0	28.0	35.0	33.0
High.....	75.0	59.5	60.0	75.0	40.0	45.0	40.0	35.0	40.0	59.4
Average.....	41.2	47.6	47.0	47.7	35.7	31.6	28.8	29.6	37.6	50.3
General contracting: ²	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Low.....	15.0	40.0	30.0	35.0	30.0	15.0	17.5	20.0	35.0	31.0
High.....	112.5	79.0	112.5	92.5	100.0	75.0	35.0	50.0	62.5	75.0
Average.....	48.2	53.8	61.9	54.8	42.5	29.8	28.2	32.9	46.5	48.3
Total: Low.....	15.0	27.0	30.0	27.5	27.0	15.0	17.5	20.0	25.0	31.0
High.....	112.5	79.0	112.5	92.5	100.0	75.0	40.0	51.0	62.5	75.0
Average.....	43.0	47.3	48.7	47.4	41.1	29.4	26.7	30.9	43.7	46.6

¹ Including street railways, gas works, waterworks, and electric power and light plants.

² Including building, highway, public works, and railroad construction.

Average Weekly Earnings in New York State Factories, 1914 to 1927

THE following table showing the average weekly earnings in New York State factories is taken from the January, 1928, number of the Industrial Bulletin, Albany, N. Y.

AVERAGE WEEKLY EARNINGS IN REPRESENTATIVE NEW YORK STATE FACTORIES, 1914 TO 1927

[Includes all employees in both office and shop. The average weekly earnings are obtained by dividing the total weekly pay roll by the total number of employees on the pay roll for the given week. Reports cover the week including the 15th of the month.]

Month	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
January.....		\$12.44	\$13.53	\$15.28	\$16.81	\$23.03	\$26.52	\$27.61	\$24.43	\$26.21	\$27.81	\$28.30	\$29.05	\$29.52
February.....		12.41	13.77	15.31	17.66	22.07	26.47	26.77	24.17	25.87	27.73	27.96	28.61	29.39
March.....		12.65	13.96	15.79	18.71	22.20	27.87	26.97	24.57	26.92	28.16	28.45	29.04	29.78
April.....		12.54	14.15	15.50	19.25	22.11	27.80	26.20	24.15	27.00	27.70	27.67	28.85	29.17
May.....		12.74	14.24	16.08	19.91	22.23	28.45	25.86	24.59	27.63	27.56	28.07	28.69	29.18
June.....	\$12.70	12.81	14.41	16.20	20.44	22.51	28.77	25.71	24.91	27.87	27.21	27.94	28.99	29.17
July.....	12.54	12.66	14.11	16.17	20.78	23.10	28.49	25.26	24.77	27.54	27.06	27.98	28.81	28.95
August.....	12.53	12.89	14.44	16.44	21.23	23.85	28.71	25.43	25.10	27.12	27.40	28.16	28.86	29.29
September.....	12.48	12.86	14.87	16.97	22.31	24.83	28.73	25.07	25.71	27.41	28.05	28.33	29.31	29.57
October.....	12.26	13.30	14.95	17.33	22.34	24.41	28.93	24.53	25.61	27.72	27.53	28.57	29.35	29.28
November.....	12.32	13.45	15.16	17.69	21.60	25.37	28.70	24.32	26.04	27.64	27.66	28.67	29.15	28.75
December.....	12.56	13.49	15.51	17.71	23.18	26.32	28.35	24.91	26.39	27.98	28.25	29.05	29.47	29.57
Average.....	12.48	12.85	14.43	16.37	20.35	23.50	28.15	25.72	25.04	27.24	27.68	28.26	29.02	29.30

It will be noted that the average weekly earnings for the calendar year 1927 were higher than in any of the 14 years presented, 134.8 per cent above the average for the 6 months of 1914, and 13.9 per cent above the average for 1921. While the average weekly earnings in 1927 were higher than in 1926 in every month except October and November, the average for the 12 months in 1927 was only about 1 per cent higher than the average for the 12 months of 1926.

Wages and Hours of Labor in Mines and Quarries in Ohio in 1926

THE table below presents the number of wage earners in Ohio mines and quarries receiving each classified weekly wage during the year 1926, as given in report No. 14 of the division of labor statistics of the Ohio Department of Industrial Relations. The 876 mines reported an aggregate pay roll of \$42,791,878, of which \$41,182,024 went to the wage earners. From this table it is seen that the wage classes in which the largest number of wage earners were found in each of the various classes of mines or quarries were as follows: Limestone quarries, \$20 and under \$25 (39.9 per cent); sandstone quarries, \$25 and under \$30 (45.2 per cent); fire-clay mines, \$30 and under \$35 (27.7 per cent); gypsum mines, \$35 and under \$40 (33.7 per cent); and coal mines, \$40 and under \$45 (28.3 per cent).

NUMBER OF EMPLOYEES IN MINES AND QUARRIES OF OHIO RECEIVING EACH CLASSIFIED WEEKLY WAGE IN 1926

Item	Under \$5	\$5 but under \$10	\$10 but under \$12	\$12 but under \$15	\$15 but under \$20	\$20 but under \$25	\$25 but under \$30	\$30 but under \$35	\$35 but under \$40	\$40 but under \$50	\$50 and over	Total
Coal mines:												
Pick miners.....	2	26	100	291	471	545	289	183	294	104	2,305	
Machine runners and helpers.....	18	16	54	93	103	241	314	909	1,445	3,183		
Loaders (including drillers and shooters).....	13	22	65	250	1,137	2,433	2,853	4,016	5,234	5,436	24,285	
Inside day employees.....	3	7	81	319	292	516	1,312	3,370	1,075	6,975		
Outside day employees.....	11	39	126	387	460	483	853	1,796	752	4,907		
Office employees.....	3	14	5	17	14	22	33	38	46	45	269	
Fire-clay mines:												
Wage earners, inside.....	5	4	56	234	293	463	217	158	46	1,476		
Wage earners, outside.....	1	3	26	156	154	84	46	22	7	499		
Office employees.....	1	1	1	9	39	2	1	1	1	6		
Gypsum mines.....												
Limestone quarries:												
Wage earners.....	4	5	36	365	1,982	1,125	770	355	241	80	4,963	
Office employees.....	2	4	3	6	13	21	35	45	16	23	201	
Sandstone quarries:												
Wage earners.....	3	15	4	31	129	570	1,002	209	77	80	2,217	
Office employees.....	3	1	1	5	6	11	7	1	2	17	54	
Total.....	21	64	138	510	2,298	6,703	6,944	7,248	8,740	12,420	6,530	51,616

The maximum and minimum employment reported in the middle of each month by the various mines of Ohio, also the average number of hours worked per week by the largest number of mines or quarries, and the percentage of the plants working such hours are shown in the following summary, compiled from the report:

MAXIMUM AND MINIMUM EMPLOYMENT, PREDOMINANT HOURS OF LABOR PER WEEK, AND PROPORTION OF PLANTS WORKING SUCH HOURS, 1926

Mine or quarry	Number of employees		Predominant weekly hours	Per cent working predominant hours
	Maximum	Minimum		
Coal mines.....	¹ 36,819	1 20,702	(²)	(²)
Fire-clay mines.....	1,754	1,560	48	59.6
Gypsum mines.....	281	222	³ 54	(²)
Limestone quarries.....	4,397	3,134	60	54.6
Sandstone quarries.....	2,075	1,530	54	34.1

¹ Reported by 879 of the 935 coal mines.

² Data not available.

³ Average hours for all mines.

Wages and Hours of Labor in Canada, 1926 and 1927 ^a

THE following statistics are taken from a report on wages and hours of labor in Canada, 1920 to 1927, published as a supplement to the January, 1928, issue of the Canadian Labor Gazette:

TABLE 1.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1926 AND 1927

Occupation	Quebec		Montreal		Ottawa	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
<i>Building trades</i>						
Bricklayers:						
1926.....	\$0.90	54	\$1.00	50	\$1.10	44
1927.....	.90	54	1.12½	50	1.20	44
Carpenters:						
1926.....	0.45 - .55	54 - 60	0.65 - .75	44-60	.75	44
1927.....	.45 - .55	54 - 60	.65 - .75	44-60	.85	44
Electrical workers:						
1926.....	.45 - .55	54	.60 - .70	44-46½	.80	44
1927.....	.45 - .55	54	.65 - .75	44-46½	.80	44
Painters:						
1926.....	.40 - .60	48 - 54	.60 - .70	44-49½	.65	44
1927.....	.40 - .60	48 - 54	.60 - .75	44-49½	.65	44
Plasterers:						
1926.....	.85	54	1.00 - 1.12½	44-49½	.90	44
1927.....	.85	54	1.00 - 1.12½	44-49½	1.00	44
Plumbers:						
1926.....	.45 - .60	54 - 60	.65 - .80	44-49½	.85	44
1927.....	.45 - .60	54 - 60	.65 - .80	44-49½	.90	44
Stonemasons:						
1926.....	.45 - .60	54	.75	44	1.00	44
1927.....	.45 - .60	48 - 54	.75	44	1.00	44
Laborers:						
1926.....	.30 - .40	54 - 60	.30 - .40	50-60	.45- .50	44-54
1927.....	.30 - .40	54 - 60	.30 - .40	50-60	.45- .50	44-54
<i>Metal trades</i>						
Blacksmiths:						
1926.....	.50 - .60	50 - 54	.52½ - .70	44-58	.51- .65	44-50
1927.....	.50 - .60	50 - 54	.55 - .70	44-58	.51- .65	50
Boilermakers:						
1926.....	.40 - .55	49½	.50 - .75	47-58	.61- .75	50
1927.....	.40 - .55	49½	.50 - .75	47-58	.61- .75	50
Machinists:						
1926.....	.40 - .55	45 - 54	.50 - .75	44-60	.50- .65	44-50
1927.....	.40 - .55	50 - 54	.50 - .75	44-60	.55- .65	44-50
Iron molders:						
1926.....	.37½ - .57	60	.60 - .75	40-55	.50- .65	44-50
1927.....	.37½ - .57	60	.60 - .75	40-55	.55- .65	44-50
Sheet-metal workers:						
1926.....	.45 - .55	54	.70	44-50	.83	44
1927.....	.45 - .55	54	.70	44-50	.85	44
<i>Street railways</i>						
Conductors and motormen:						
1926.....	.45	60	.51	70	2.50	54
1927.....	.45	60	.51	70	2.50	54
Linemen:						
1926.....	.43 - .45	60	.51	60	.50	54
1927.....	.43 - .45	55	.51	60	.50	54
Shed men:						
1926.....	.30 - .53	53½-77	.34 - .52	63-70	.39- .51	54
1927.....	.30 - .53	53½-70	.34 - .52	63-70	.39- .51	54
Electricians:						
1926.....	.43 - .48	53½	.51 - .63	50	.52	54
1927.....	.43 - .48	53½	.51 - .63	50	.55	54
Trackmen and laborers:						
1926.....	.30	53½	.35	60	.44- .46	54
1927.....	.35	60	.35	60	.39- .46	54

¹ Maximum rates.

² One-man car operators, 5 cents extra per hour.

^a Index numbers of rates of wages for various classes of labor in Canada were published in the March, 1928, issue of the Labor Review.

TABLE 1.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1926 AND 1927—Continued

Occupation	Quebec		Montreal		Ottawa	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
<i>Printing trades</i>						
Compositors, machine and hand, newspaper:						
1926	\$29.00	48	\$38.00-42.00	48	\$42.00	46½
1927	29.00	48	38.00-42.00	48	43.00	46½
Compositors, machine and hand, job:						
1926	29.00	48	36.00	44-48	35.00-40.00	44-48
1927	29.00	48	36.00	44-48	35.00-40.00	44-48
Pressmen, newspaper:						
1926	28.00	48	36.00	48	40.00	48
1927	28.00	48	36.00	48	41.00	48
Pressmen, job:						
1926	27.00	48	36.00	48	35.00-38.00	44-48
1927	27.00	48	36.00	48	35.00-40.00	44-48
Bookbinders:						
1926	26.50	48	36.00	48	34.00	48
1927	26.50	48	36.00	48	34.00	48
Bindery girls:						
1926	8.00	48	15.00	48	13.50	48
1927	8.00	48	15.00	48	13.50	48

Occupation	Toronto		Winnipeg		Vancouver	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
<i>Building trades</i>						
Bricklayers:						
1926	\$1.12½	44	\$1.35	44	\$1.12½	44
1927	1.25	44	1.35	44	1.25	40
Carpenters:						
1926	0.80-.90	44	1.00	44	.93¾	44
1927	.90	44	1.00	44	.93¾	44
Electrical workers:						
1926	.80	44	1.00	44	.90 -1.00	44
1927	.90	44	1.00	44	1.00	44
Painters:						
1926	.65-.75	44	.85	44	.87½	44
1927	.65-.80	44	.85	44	.87½	44
Plasterers:						
1926	1.25	44	1.25	44	1.18¾	40
1927	1.25	44	1.25	44	1.25	40
Plumbers:						
1926	1.00	44	1.12½	44	1.05	40-44
1927	1.00	44	1.12½	44	1.12½	40-44
Stonecutters:						
1926	1.00	44	1.10 -1.12½	44	1.00	40-44
1927	1.12½	44	1.10 -1.12½	44	1.00 -1.12½	40-44
Laborers:						
1926	.35-.65	44-60	.40 -.50	50-60	.45 -.56¾	44
1927	.35-.65	44-60	.40 -.50	50-60	.50 -.62½	44
<i>Metal trades</i>						
Blacksmiths:						
1926	.50-.65	44-50	.60 -.80	44-50	.75 -.87½	44
1927	.55-.65	44-50	.60 -.80	44-50	.75 -.82½	44
Boiler makers:						
1926	.60-.75	44-48	.60 -.72	50	.75 -.87½	44
1927	.60-.75	44-48	.60 -.72	50	.75 -.82½	44
Machinists:						
1926	.50-.70	44-54	.60 -.70	44-50	.75 -.81¾	44
1927	.50-.70	44-54	.60 -.70	44-50	.75 -.81¾	44
Iron molders:						
1926	.50-.70	45-54	.55 -.70	45-50	.75 -.81¾	44
1927	.55-.70	44-54	.55 -.70	45-50	.75 -.81¾	44
Sheet-metal workers:						
1926	.85	44	.90	44	1.00	44
1927	.90	44	.90	44	1.00	44

TABLE 1.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN VARIOUS OCCUPATIONS IN SPECIFIED CANADIAN CITIES, 1926 AND 1927—Continued

Occupation	Toronto		Winnipeg		Vancouver	
	Wages per hour	Hours per week	Wages per hour	Hours per week	Wages per hour	Hours per week
<i>Street railways</i>						
Conductors and motormen:						
1926 ¹	\$0.60	48	³ \$0.57	50	⁴ \$0.62	48
1927 ¹.....	.60	48	³ .58	50	⁴ .62	48
Linemen:						
1926.....	0.72-.78	44	.89	44	.93 ³ / ₄	44
1927.....	.72-.78	44	.90	44	.93 ³ / ₄	44
Shed men:						
1926.....	.54-.56	48	.50 ¹ / ₂ -.58	40	.55-.65	44-48
1927.....	.54-.56	48	.51 ¹ / ₂ -.59	40	.55-.65	44-48
Electricians:						
1926.....	.55-.60	44	.60	40	.74	44
1927.....	.55-.60	44	.61	40	.74	44
Trackmen and laborers:						
1926.....	.45-.59	48	.35-.50	44	.51 ¹ / ₂ -.56	44
1927.....	.45-.55	48	.36-.51	44	.51 ¹ / ₂ -.56	44
<i>Printing trades</i>						
Compositors, machine and hand, newspaper:	<i>Per week</i>		<i>Per week</i>		<i>Per week</i>	
1926.....	42.50	46 ¹ / ₂	44.00	46	45.00	45
1927.....	43.50	46 ¹ / ₂	45.00	46	48.00	45
Compositors, machine and hand, job:						
1926.....	35.20-36.00	44-48	39.60	44-48	42.00	44-48
1927.....	35.20-36.00	44-48	39.60	44-48	42.00	44-48
Pressmen, newspaper:						
1926.....	41.50	48	43.75	48	45.00	48
1927.....	42.50	48	43.75	48	48.00	48
Pressmen, job:						
1926.....	36.00	48	39.60	44-48	42.00	44-48
1927.....	36.00	48	39.60	44-48	42.00	44-48
Bookbinders:						
1926.....	36.00	48	35.20-42.00	44-48	42.00	44-48
1927.....	36.00	48	35.20-42.00	44-48	42.00	44-48
Bindery girls:						
1926.....	16.80	48	12.00-18.00	44-48	21.00	44-48
1927.....	16.80	48	12.00-18.00	44-48	21.00	44-48

¹ Maximum rates.³ One-man car operators 5¹/₂ cents extra per hour.⁴ One-man car operators, 6 cents extra per hour.

TABLE 2.—RATES OF WAGES FOR CANADIAN STEAM RAILROAD EMPLOYEES, 1926 AND 1927

Occupation	Train service (cents per mile)		Occupation	Engine service (cents per mile)	
	1926	1927		1926	1927
Conductors:			Locomotive engineers:		
Passenger.....	4.27	4.47	Passenger.....	5.92	6.16
Freight.....	5.80	6.16	Freight.....	6.48	6.84
Brakemen:			Locomotive firemen:		
Passenger.....	2.93	3.13	Passenger.....	4.32	4.56
Freight.....	4.48	4.84	Freight.....	4.64	5.00

WAGE RATES IN GERMANY

123

TABLE 3.—WAGES AND HOURS OF LABOR OF EMPLOYEES IN COAL MINING IN CANADA IN SEPTEMBER, 1926 AND 1927¹

Occupation	September, 1926		September, 1927	
	Daily wages	Hours per day ²	Daily wages	Hours per day ²
<i>Nova Scotia</i>				
Contract miners.....	³ \$6.25	8	³ \$6.62	8
Hand miners.....	⁴ 4.15	8	⁴ 4.15	8
Hoisting engineers.....	4.15	8	4.15	8
Drivers.....	3.60	8	3.60	8
Bratticemen.....	3.65	8	3.65	8
Pumpmen.....	3.90	8	3.90	8
Laborers, underground.....	3.35	8	3.35	8
Laborers, surface.....	3.25	8½	3.25	8½
Machinists.....	4.15	8½	4.15	8½
Carpenters.....	3.85	8½	3.85	8
Blacksmiths.....	4.00	8½	4.00	8
<i>Alberta⁴</i>				
Contract miners.....	³ 7.10	8	³ 7.74	8
Machine miners.....	⁴ 5.65-7.00	8	⁴ 5.65-7.00	8
Hand miners.....	⁴ 5.00-5.57	8	⁴ 5.00-5.57	8
Hoisting engineers.....	5.50-6.00	8	5.50-6.00	8
Drivers.....	4.70-5.25	8	4.70-5.25	8
Bratticemen.....	5.20-5.57	8	5.20-5.57	8
Pumpmen.....	4.25-4.75	8	4.25-4.75	8
Laborers, underground.....	4.25-4.67	8	4.25-4.67	8
Laborers, surface.....	4.00-4.20	8	4.00-4.20	8
Machinists.....	4.70-5.71	8	4.70-5.71	8
Carpenters.....	5.30-5.77	8	5.30-5.77	8
Blacksmiths.....	5.30-5.77	8	5.30-5.77	8
<i>Vancouver Island⁶</i>				
Contract miners.....	³ 6.99	8	³ 6.76	8
Machine miners.....	⁴ 4.81	8	⁴ 4.81	8
Hand miners.....	⁴ 4.52	8	⁴ 4.52	8
Hoisting engineers.....	5.39	8	5.39	8
Drivers.....	4.13	8	4.13	8
Bratticemen.....	4.35	8	4.35	8
Pumpmen.....	3.96	8	3.96	8
Laborers, underground.....	3.97	8	3.97	8
Laborers, surface.....	3.76	8	3.76	8
Machinists.....	5.40	8	5.40	8
Carpenters.....	4.83	8	4.83	8
Blacksmiths.....	5.11	8	5.11	8

¹ In some cases these figures differ from estimates published in the April, 1927, Labor Review (p. 108).
² Some engineers, pumpmen, firemen, etc., work 7 days per week.
³ Average earnings per day on contract, per ton, etc.
⁴ Minimum rate per day when not working on contract, per ton, yard, etc.
⁵ Including also 3 mines in Southeastern British Columbia.
⁶ No figure for Chinese employees included.

Wage Rates in Germany in 1927¹

A TABLE presented in the German official organ, *Wirtschaft und Statistik*, shows an increase in wages during 1927 in 12 of the principal industries. The information given is based on wage rates fixed by collective agreement and includes family allowances paid in mining, metal, textile, and chemical industries, and by the Federal railways.

¹ Germany. Statistisches Reichsamt. *Wirtschaft und Statistik*, Berlin, Dec. 15, 1927, p. 1024.

WAGES OF SKILLED AND UNSKILLED WORKERS IN GERMANY, JANUARY 1 AND DECEMBER 1, 1927

[At par, mark=23.8 cents, pfennig=0.238 cent; exchange rate was about par in 1927]

Industry	Skilled workers				Unskilled workers			
	Average hourly wage		Average weekly wage		Average hourly wage		Average weekly wage	
	Jan. 1, 1927	Dec. 1, 1927	Jan. 1, 1927	Dec. 1, 1927	Jan. 1, 1927	Dec. 1, 1927	Jan. 1, 1927	Dec. 1, 1927
	<i>Pfennigs</i>	<i>Pfennigs</i>	<i>Marks</i>	<i>Marks</i>	<i>Pfennigs</i>	<i>Pfennigs</i>	<i>Marks</i>	<i>Marks</i>
Mining.....	106.3	112.5	51.00	54.00	60.9	69.7	36.18	38.04
Metal.....	91.4	98.3	45.58	48.13	62.3	68.3	31.09	33.44
Chemical.....	85.2	92.3	40.90	44.30	72.0	77.8	34.56	37.34
Building.....	115.2	123.8	55.03	59.13	93.4	101.3	44.62	48.37
Woodworking.....	97.1	107.4	46.14	51.04	84.4	92.7	40.15	44.03
Paper manufacturing.....	68.1	75.3	32.69	36.14	61.3	67.7	29.42	32.50
Textile (males).....	66.3	73.4	31.82	35.23	55.5	60.9	26.64	29.23
Textile (females).....	51.5	57.9	24.72	27.79	41.0	45.1	19.68	21.65
Brewing.....	103.5	114.7	49.69	55.04	90.9	101.4	43.65	48.68
Baking and confectionery.....	84.9	90.8	40.75	43.58	73.3	78.4	35.18	37.63
Printing.....	95.9	104.9	46.05	50.36	83.7	91.3	40.16	43.84
Cardboard box making (males).....	77.4	84.3	37.15	40.46	65.8	71.6	31.58	34.37
Cardboard box making (females).....	50.9	55.8	24.43	26.78	42.0	46.2	20.16	22.18
Federal railways.....	82.2	90.8	44.39	46.68	64.9	73.2	35.05	37.62
Average (weighted).....	94.9	102.1	46.36	49.42	66.7	73.9	34.46	37.01

The average hourly wage for skilled workers December 1 was 102.1 pfennigs and for unskilled, 73.9 pfennigs. The average weekly wage was 49.42 marks and 37.01 marks, respectively. Compared with January 1, 1927, hourly wages have increased 7.6 per cent for skilled and 10.8 per cent for unskilled workers. The year before the increase was only 0.9 per cent and 1.1 per cent, respectively.

Continuance of Two-Shift System for English Working Women

UNDER an English law passed in 1920 (see Labor Review, April, 1921, p. 92), it is possible, under certain conditions, to employ women and young persons aged 16 and upward in factories and workshops at any time between 6 a. m. and 10 p. m. (2 p. m. on Saturday). This permission was to be operative for only five years, but it has been continued by successive enactments. The provision was embodied in the so-called "expiring laws continuance bill," and came up for discussion in the House of Commons on December 13, 1927. An amendment to the bill was proposed, striking out this provision. The arguments against continuing the permissive clause were that it had been enacted as an emergency measure to facilitate the working of the two-shift system in the period of readjustment, that there was now no need for such an extension of the hours within which these classes might be employed, that though the time of employment remained only eight hours a day, there was real hardship involved for one shift in beginning so early and for the other in ending so late, and that although the permission to use the system could be granted only at the joint request of workers and employers, the workers were sometimes, and might always be, coerced by the employers into signing the request.

The Home Secretary resisted the amendment. He said that 680 orders authorizing the use of the two-shift system for women and young persons had been made since the act went into effect, that these had been granted only after full and careful inquiry, that he had evidence that the workers really desired these orders, and that he saw no reason for refusing the use of the plan where it was needed. The hardship of beginning early was, of course, compensated by the advantage of getting through early, and those who worked on the late shift had the day to themselves up to 2 p. m. Wherever an order for the use of the two shifts had been granted, full welfare conditions were imposed, and where necessary employers were required to provide transportation so as to meet any difficulty about reaching the place of work or returning to the home at unusual hours.

The motion to strike out the permission was lost without a division, so that the law remains unchanged for another year.

Miners' Wages in Northumberland and Durham

UNDER the agreements which terminated the coal stoppage of 1926, wages in the different coal fields might be reviewed from time to time, and adjusted according to the ascertained proceeds of the industry. In Northumberland and Durham reviews of this kind took place early in February, 1928, and resulted in serious reductions in wage rates. In Durham the minimum percentage addition to the base rates is cut down to 65, as against the 89 prevailing since the stoppage, and the subsistence allowance for day workers is reduced from 6s. 8½d. to 6s. 6½d. per shift.¹ In Northumberland the subsistence allowance remains unchanged at 6s. 9½d. per shift, but the minimum percentage addition to base rates is cut down to 40 as against 80 since the resumption of work in 1926. The new rates were to become effective March 1.

The severity of these cuts is apparent when the new rates are contrasted with earlier standards. In Northumberland the percentage addition to base rates was 50 in 1914, and 100 before the stoppage of 1926, and has been 80 since then. In other words, the wages of skilled coal miners, even if they have steady employment, will now be lower than in 1914, although the cost-of-living index is 66 points higher than it was then. Expressed in money, the hewers' wages will now average 7s. 8d. a shift, and out of this the men must pay for their explosives. In Durham the minimum percentage addition is less than 5 per cent above the standard for July, 1914. At the same time the men are working longer hours than they were then.

The data published by the Mines Department show that, taking these fields as a whole, there will be no profits for the owners, and may be losses, even with these reductions in force. At the same time it is admitted that the wages which will be earned under the new rates are entirely insufficient. The London Economist sums up the situation:

The position is tragic from all aspects, since apart from the inadequacy of the future earnings of the 165,000 miners employed in these two districts, there is reason to fear that one effect of the awards may be to bring so many hewers down to the level of the "subsistence allowance" minimum that there will be

¹ At par shilling=24.3 cents and penny=2.03 cents; exchange rate about par.

lessened incentive to maintain output, while the complete breakdown in coal mining of the system of "proportionate division of proceeds" as a method of securing a fair wage may tend to discredit in the eyes of labor at large a principle of wage regulation which has so much to commend it for wide application.

Great Britain and the Hours Convention

ON FEBRUARY 2, 1928, the Governing Body of the International Labor Organization, meeting at Geneva, devoted the whole day to the discussion of the Washington hours convention. The British representative of the workers had appealed to the British Government representative, Mr. Betterton, to give some assurance of a speedy ratification of the eight-hour convention, and Mr. Betterton in his reply gave warning that the Government did not intend to ratify at all unless the form of the convention were changed.

Mr. Betterton's speech was sensational, because his proposal, made on behalf of the British Government, was that the question of revision of the hours convention should be included in the agenda of the International Labor Conference of 1929, and the motives for the proposal made it quite clear that the British Government no longer considers ratification of the convention in its present form as a possibility. Mr. Betterton said that the British Government prefers as a solution of the problem "the framing of a new text rather than to still further attempt to settle this vital question on the basis of the old text overlaid with a mass of glosses [clauses] and interpretations." * * *

Mr. Betterton finally withdrew his own proposal for an immediate decision on the revision of the Washington convention at the 1929 conference, and agreed to a resolution, proposed by the French Government delegate, that the governing body at its April session should fix general rules for the revision of conventions, and thereupon consider whether revision of the Washington convention in 1929 is desirable.¹

The proposition was strongly criticized and condemned by the workers' representatives from France, Great Britain, Canada, Holland, and Germany, but was supported by the representatives of the employers.

It will be recalled that the disputed convention was drawn up in Washington in 1919, fixing the hours of work at 8 per day and 48 per week, with provision for exceptions under certain conditions, and that on instructions from the British Government the British delegates participating in the conference voted in favor of it. Since then, however, Great Britain has postponed ratifying the convention, and her failure to act has led to delay or a qualified acceptance on the part of other countries. In 1924 the Labor Ministers of Belgium, France, Germany, and Great Britain, meeting at Bern, considered in what way the common adoption of the convention by their countries could best be facilitated, and for a time the prospects of united action seemed good. The political overturn in Great Britain of that year, however, delayed matters, and the new Government hesitated to sign, mainly on the ground that the agreement under which the English railways were operating did not conform literally to the terms of the convention, and that consequently there were difficulties in the way of its adoption.

In 1925, however, the prolonged depression brought the question of hours to the front again, and the Minister of Labor declared that

¹ Manchester (England) Guardian, Feb. 3, p. 6.

"it was very vital * * * that we should aim at getting hours of work to decent length, and really endeavor to get similar hours of work adopted in those countries which competed against us." In pursuance of this policy, early in 1926 a conference was called of the Labor Ministers of France, Belgium, Germany, and Italy to discuss with the English Ministry some of the difficulties in the way of adopting the convention. This conference closed upon an optimistic note. The five countries, it was announced, had come to an agreement upon the interpretation of the convention, and it was supposed that it would therefore be adopted. For a long time, however, Great Britain was too much preoccupied with the coal controversy to take any steps toward ratification, and when at last that difficulty was out of the way, she appointed a committee to consider the situation once more.

Meanwhile, Belgium has ratified the convention unconditionally, Germany is considering legislation embodying clauses to carry it out, and France has ratified conditionally upon similar action being taken by Great Britain and Germany. Italy had ratified it provisionally some time previously.

Wages in Japan, November, 1927

THE Imperial Department of Commerce and Industries has published a preliminary report showing the average wages prevailing at the close of November, 1927, in the 13 principal cities of that empire. The following figures from that report were transmitted under date of January 20, 1928, by J. W. Ballantine, United States Consul at Tokyo:

AVERAGE DAILY WAGES IN JAPAN IN NOVEMBER, 1927, AND INDEX NUMBERS FOR NOVEMBER, 1926, AND NOVEMBER, 1927

[Yen at par=49.85 cents; exchange rate for November, 1927=45.98 cents]

Industry and occupation	Average daily wages, November, 1927		Index numbers (average for 1921-1923=100)	
	Yen	United States currency	November, 1926	November, 1927
Textile industry:				
Filature operatives, female.....	0.92	\$0.42	99	90
Spinning-mill operatives, female.....	1.15	.53	114	106
Silk throwing operatives, female.....	.87	.40	106	98
Cotton power weaving operatives, female.....	1.03	.47	106	106
Silk hand weaving operatives, female.....	1.15	.53	100	102
Knitting-mill operatives, male.....	1.72	.79	104	103
Knitting-mill operatives, female.....	.90	.41	94	104
Average.....			103	101
Metal industry:				
Lathe workers.....	2.31	1.06	101	100
Finishers.....	2.36	1.09	101	101
Founders.....	2.33	1.07	102	104
Blacksmiths.....	2.32	1.07	101	106
Wooden-mold workers.....	2.44	1.12	106	105
Average.....			102	103
Ceramic industry:				
Potters.....	2.03	.93	106	101
Glass workers.....	2.09	.96	107	108
Cement workers.....	1.99	.92	98	97
Brickmakers.....	1.79	.82	101	111
Tile makers.....	1.94	.89	96	95
Average.....			102	102

AVERAGE DAILY WAGES IN JAPAN IN NOVEMBER, 1927, AND INDEX NUMBERS FOR NOVEMBER, 1926, AND NOVEMBER, 1927—Continued

Industry and occupation	Average daily wages, November, 1927		Index numbers (average for 1921-1923=100)	
	Yen	United States currency	November, 1926	November, 1927
Chemical industry:				
Drug makers.....	1.55	\$0.71	117	108
Matchmakers, male.....	1.43	.66	88	84
Matchmakers, female.....	.67	.31	78	86
Oil pressers.....	1.86	.86	105	98
Makers of Japanese paper.....	1.51	.69	106	106
Makers of foreign style paper.....	1.66	.76	101	103
Leather makers.....	2.03	.93	97	91
Average.....			98	97
Food industry:				
Flour-mill workers.....	1.90	.87	108	115
Sake makers.....	1.90	.87	97	97
Soy makers.....	1.80	.83	121	112
Sugar-mill workers.....	1.98	.91	118	114
Confectionery makers.....	1.62	.74	101	99
Canners.....	1.68	.77	97	90
Average.....			107	105
Wearing-apparel industry:				
Tailors.....	2.57	1.18	100	104
Cobblers.....	2.32	1.07	106	105
Clogmakers.....	1.80	.83	94	94
Average.....			100	101
Building industry:				
Carpenters.....	2.89	1.33	102	102
Plasterers.....	3.16	1.45	107	106
Stonemasons.....	3.40	1.56	102	101
Bricklayers.....	3.21	1.48	99	98
Tile layers.....	3.35	1.54	102	100
Painters.....	2.76	1.27	110	107
Average.....			104	102
Woodworking industry:				
Sawyers.....	2.33	1.07	100	100
Joiners.....	2.38	1.09	97	98
Lacquer workers.....	2.06	.95	102	104
Bamboo-net makers.....	1.68	.77	110	121
Mat makers.....	2.59	1.19	105	107
Average.....			103	106
Printing industry:				
Type makers.....	2.27	1.04	107	106
Bookbinders.....	2.03	.93	103	103
Average.....			105	105
Day laborers:				
Stevedores.....	2.45	1.13	96	97
Day laborers, male.....	1.98	.91	98	94
Day laborers, female.....	1.04	.48	101	95
Average.....			98	95
Fishermen.....	1.67	.77	91	102
Domestic service:				
House servants, male.....	¹ 16.54	¹ 7.61	103	103
House servants, female.....	¹ 12.27	¹ 5.64	108	104
Average.....			106	104
General average.....			102	102

¹ Per month, including food and lodging.

Wages in the Cotton Textile Industry in Lodz, Poland¹

WAGE rates, as established by collective agreement, for certain occupations in the cotton textile industry of Lodz, Poland, are presented in the following table, for December, 1926, and October, 1927:

DAILY WAGE RATES IN THE COTTON TEXTILE INDUSTRY IN LODZ

[Zloty at par=19.3 cents; exchange rate for October, 1927=11.2 cents]

Occupation	December, 1926 (zloty)	October, 1927		Index numbers, October, 1927. (December, 1926=100)
		Zloty	United States currency	
Cotton weavers.....	6.73	7.20	\$0.81	107.0
Cotton spinners, male.....	7.26	7.77	.93	107.0
Cotton spinners, female.....	4.33	4.81	.54	108.8
Helpers.....	3.44	3.85	.43	111.9

Wages in the Metal Industry of Poland

DAILY wage rates fixed by collective bargaining in the metal industry in three districts of Poland, as of December, 1926, and October, 1927, are shown in the following table:²

DAILY WAGE RATES IN THE METAL INDUSTRY OF WARSAW, POSEN, AND UPPER SILESIA ON THE LAST DAY OF DECEMBER, 1926, AND OF OCTOBER, 1927

[Zloty at par=19.3 cents; exchange rate for October, 1927=11.2 cents]

Locality and class of worker	December, 1926 (zloty)	October, 1927		
		Zloty	United States currency (cents)	Index number (December, 1926=100)
Warsaw:				
Skilled.....	8.50	7.68	86.0	90.4
Semiskilled.....	5.04	5.68	63.6	112.7
Unskilled.....	4.40	5.04	56.4	114.5
Posen:				
Skilled.....	6.40	7.04	78.8	110.0
Semiskilled.....	4.80	5.28	59.1	110.0
Unskilled.....	4.64	5.12	57.3	110.3
Upper Silesia:				
Skilled.....	6.08	7.08	79.3	116.4
Semiskilled.....	5.28	6.18	69.2	117.0
Unskilled.....	4.40	4.90	54.9	111.4

Hours of Work and Wages in Spain

THE Spanish Department of Labor recently published the results of an official investigation concerning wages and working hours in Spain.³

The following table, compiled from this report, shows the number and percentage of workers employed 42, 48, 54, 60, and 66 hours a

¹ Germany. [Reichswirtschaftsministerium.] Statistisches Reichsamt. Wirtschaft und Statistik, Berlin, Jan. 1, 1928, p. 30.

² Germany. Statistisches Reichsamt. Wirtschaft und Statistik, Berlin, Jan. 1, 1928, p. 30.

³ Spain. Ministerio de Trabajo, Comercio e Industria. Estadística de los Salarios y Jornadas de Trabajo, referida al periodo 1914-1925. Madrid, 1927.

week, respectively, during the years 1914, 1920, and 1925. A comparison of the figures for 1920 and 1925 shows that there is a marked tendency toward the spread of the eight-hour day. In 1920 the eight-hour day was worked by 85.92 per cent of the employees; in 1925 the percentage had risen to 94.11.

NUMBER AND PER CENT OF WORKERS HAVING EACH SPECIFIED WEEKLY HOURS,
1914, 1920, AND 1925

[Percentages are based on those whose hours are reported]

Year	42 hours		48 hours		54 hours		60 hours		66 hours		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
1914.....	602	0.06	152,549	14.75	114,105	11.03	715,352	69.18	51,480	4.98	1,034,088	100
1920.....	41,738	3.17	1,131,828	85.92	79,928	6.07	56,546	4.29	7,258	.55	1,317,298	100
1925.....	38,711	2.95	1,236,080	94.11	17,301	1.32	19,992	1.52	1,289	.10	1,313,373	100

A table showing the average hourly wages of skilled workers in certain specified industries, for the years 1914, 1920, and 1925, is reproduced below:

AVERAGE HOURLY WAGES OF SKILLED WORKERS IN SPECIFIED INDUSTRIES,
1914, 1920, AND 1925

[Peseta at par=19.3 cents; average exchange rate in 1920 was 15.94 cents, and in 1925, 14.34 cents]

Industry	1914 (pe- setas)	1920 (pe- setas)	1925		Industry	1914 (pe- setas)	1920 (pe- setas)	1925	
			Pe- setas	United States cur- rency				Pe- setas	United States cur- rency
Mines and quarries.....	0.41	0.76	0.87	\$0.12	Book.....	0.52	0.90	1.15	\$0.16
Metallurgical.....	.54	.95	1.11	.16	Paper, box, etc.....	.37	.84	.94	.13
Iron and other metals.....	.47	.84	.98	.14	Clothing.....	.40	.71	.85	.12
Chemical.....	.41	.76	.89	.13	Hides and leather.....	.41	.69	.84	.12
Textile.....	.37	.69	.79	.11	Lumber.....	.47	.87	1.00	.14
Forestry and agricul- tural.....	.40	.57	.76	.11	Transportation.....	.48	.86	1.03	.15
Construction.....	.42	.79	.98	.14	Furniture.....	.49	.87	1.11	.16
Electrical.....	.44	.81	.96	.14	Decorative arts.....	.46	.85	1.05	.15
Food.....	.41	.75	.86	.12	Pottery.....	.37	.69	.84	.12
					Glass.....	.56	1.02	1.28	.18

Wage Rates in Venezuela, 1919 and 1927

THE prevailing wage rates for a selected list of occupations in Venezuela in November, 1927, compared with those paid eight years ago, are given in a communication from the American Minister, Willis C. Cook, at Caracas, dated November 23, 1927. The following table was taken from this report:

WAGE RATES IN VENEZUELA

131

DAILY WAGES IN SPECIFIED OCCUPATIONS IN VENEZUELA, 1919 AND NOVEMBER, 1927

[Bolivar at par=19.3 cents; average exchange rate in November, 1927=19.2 cents]

Occupation	Daily wages—		
	1919 (bolivars)	November, 1927	
		Bolivars	United States currency
Masons and bricklayers, foremen.....	10	25-36	\$4.80-\$6.91
Masons and bricklayers.....	7	16	3.07
Laborers, brickyard.....	4	7-8	1.34-1.54
Carpenters, foremen.....	12	25-30	4.80-5.76
Carpenters.....	8	16	3.07
Plumbers, foremen.....	10	20-25	3.84-4.80
Plumbers.....	6	16	3.07
Painters, foremen.....	10	20	3.84
Painters.....	6	14	2.69

TREND OF EMPLOYMENT

Employment in Selected Manufacturing Industries in February, 1928

EMPLOYMENT in manufacturing industries *increased* 1.5 per cent in February, 1928, as compared with January, 1928, and pay-roll totals *increased* 4.9 per cent.

These increases more than overcame the decreases in both items reported in January, which were due mainly to inventory taking and repairs, so that employment in February stood at a higher level than it had since November while pay-roll totals were greater than at any time since October.

The Bureau of Labor Statistics' weighted index of employment for February, 1928, is 85.5, as compared with 84.2 for January, 1928, 85.1 for December, 1927, and 91.0 for February, 1927; the weighted index of pay-roll totals for February, 1928, is 90, as compared with 85.8 for January, 1928, 89.3 for December, 1927, and 96.4 for February, 1927.

Employment and pay-roll totals in February, 1928, were 6 per cent and 6.6 per cent lower, respectively, than in February, 1927.

The data for February, 1928, are based on reports from 10,807 establishments in 54 of the chief manufacturing industries of the United States. These establishments in February had 2,984,424 employees, whose combined earnings in one week were \$80,904,364.

Comparison of Employment and Pay-Roll Totals in January and February, 1928

THIRTY-NINE of the 54 separate industries had more employees in February than in January and 39 industries reported increased pay-roll totals, although the two lists of industries were not in every instance identical.

Notable increases in employment were 9.5 per cent in the automobile industry, 3.3 per cent in iron and steel, 16.5 per cent in fertilizers, 13.8 per cent in stoves, and 4.1 per cent in automobile tires. Other industries showing marked improvement in employment were slaughtering and meat packing, sugar refining, silk goods, clothing, foundry and machine-shop products, pottery, stamped ware, carriages, agricultural implements, and pianos.

Decreases in employment were not of great size in any industry. Cotton and woolen goods both fell off slightly as did sawmills, paper and pulp, cement, and electrical machinery and supplies. Shipbuilding showed a decrease of over 5 per cent.

Substantial gains in employment were shown in February in 9 of the 12 groups of industries, the vehicle group leading with a gain of 4.4 per cent; the lumber group showed no change, the paper group a slight decrease, and the group of miscellaneous industries a loss of 1.6 per cent.

The vehicle and iron and steel groups of industries reported gains in pay-roll totals of 13.8 per cent and 9.6 per cent, respectively.

Each of the nine geographic divisions reported both increased employment and increased pay-roll totals in February. The increases were especially marked in both the East North Central and the West North Central divisions and also in the East South Central division.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN JANUARY AND FEBRUARY, 1928

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		January, 1928	February, 1928		January, 1928	February, 1928	
Food and kindred products	1,705	218,398	221,372	(1)	\$5,594,559	\$5,708,337	(1)
Slaughtering and meat pack- ing.....	190	85,090	87,327	+2.6	2,205,350	2,289,697	+3.8
Confectionery.....	311	34,048	34,207	+0.5	621,531	628,735	+1.2
Ice cream.....	223	8,572	8,599	+0.3	292,015	286,200	-2.0
Flour.....	344	15,674	15,710	+0.2	425,323	417,318	-1.9
Baking.....	621	65,303	65,304	(2)	1,758,763	1,776,857	+1.0
Sugar refining, cane.....	16	9,711	10,225	+5.3	291,577	309,530	+6.2
Textiles and their products	1,886	603,939	607,970	(1)	11,754,628	12,021,624	(1)
Cotton goods.....	470	229,596	227,060	-1.1	3,566,731	3,506,325	-1.7
Hosiery and knit goods.....	247	80,605	81,679	+1.3	1,520,881	1,555,554	+2.3
Silk goods.....	192	55,584	57,574	+3.6	1,141,797	1,261,832	+10.5
Woolen and worsted goods.....	188	64,005	63,524	-0.8	1,432,339	1,425,305	-0.5
Carpets and rugs.....	29	24,057	24,342	+1.2	635,514	628,018	-1.2
Dyeing and finishing textiles.....	101	32,562	32,953	+1.2	776,716	815,901	+5.0
Shirts, men's.....	288	65,413	64,840	+2.3	1,529,002	1,580,607	+4.0
Shirts and collars.....	96	20,590	20,541	-0.2	320,168	332,534	+3.9
Clothing, women's.....	201	22,047	23,171	+5.1	573,890	619,281	+7.9
Millinery and lace goods.....	74	11,480	12,286	+7.0	257,650	286,267	+11.1
Iron and steel and their prod- ucts	1,770	611,188	628,633	(1)	17,461,145	19,151,355	(1)
Iron and steel.....	199	252,261	260,609	+3.3	7,430,652	8,312,582	+11.9
Cast-iron pipe.....	37	11,818	11,522	-2.5	241,394	270,333	+12.0
Structural ironwork.....	161	23,902	24,010	+0.5	682,060	712,256	+4.4
Foundry and machine-shop products.....	950	216,968	222,420	+2.5	6,218,129	6,647,302	+6.9
Hardware.....	72	31,513	31,827	+1.0	759,623	826,565	+8.8
Machine tools.....	148	27,763	28,497	+2.6	853,249	907,610	+6.4
Steam fittings and steam and hot-water heating appara- tus.....	107	33,277	34,169	+2.7	911,952	1,025,180	+12.4
Stoves.....	96	13,686	15,579	+13.8	364,086	449,527	+23.5
Lumber and its products	1,152	204,391	204,499	(1)	4,300,956	4,510,755	(1)
Lumber, sawmills.....	460	112,435	111,883	-0.5	2,188,369	2,252,251	+2.9
Lumber, millwork.....	264	20,633	20,754	+0.4	663,822	705,055	+6.2
Furniture.....	428	62,323	62,862	+0.9	1,448,795	1,553,449	+7.2
Leather and its products	355	120,403	122,461	(1)	2,714,424	2,883,790	(1)
Leather.....	132	28,880	29,024	+0.7	718,946	733,391	+2.0
Boots and shoes.....	223	91,573	93,437	+2.0	1,995,478	2,150,399	+7.8
Paper and printing	917	175,778	174,860	(1)	5,731,099	5,695,851	(1)
Paper and pulp.....	215	57,584	56,992	-1.0	1,528,160	1,542,492	+0.9
Paper boxes.....	184	19,415	19,108	-1.6	433,438	424,111	-2.2
Printing, book and job.....	310	49,889	49,959	+0.1	1,761,440	1,724,583	-2.1
Printing, newspapers.....	208	48,890	48,801	-0.2	2,008,061	2,004,665	-0.2

(See footnotes at end of table)

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS, IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK EACH IN JANUARY AND FEBRUARY, 1928—Continued

Industry	Establishments	Number on pay roll		Per cent of change	Amount of pay roll		Per cent of change
		January, 1928	February, 1928		January, 1928	February, 1928	
Chemicals and allied products.	361	87,121	9,771	(¹)	\$2,552,553	\$2,591,926	(¹)
Chemicals.....	127	31,227	32,091	+2.8	865,959	889,049	+2.8
Fertilizers.....	177	11,362	13,233	+16.5	216,185	237,688	+9.9
Petroleum refining.....	57	44,532	44,447	-0.2	1,470,409	1,464,289	-0.4
Stone, clay, and glass products.	647	99,887	100,304	(¹)	2,575,446	2,621,762	(¹)
Cement.....	94	22,310	21,784	-2.4	653,024	619,185	-5.2
Brick, tile, and terra cotta.....	369	27,570	27,456	-0.4	678,335	680,163	+0.3
Pottery.....	69	13,813	14,473	+4.8	352,354	384,546	+9.1
Glass.....	115	36,194	36,591	+1.1	891,733	937,868	+5.2
Metal products, other than iron and steel.	222	47,946	50,050	(¹)	1,271,468	1,380,229	(¹)
Stamped and enameled ware.....	69	17,345	18,716	+7.9	402,366	481,807	+19.7
Brass, bronze, and copper products.....	153	30,601	31,334	+2.4	869,102	898,422	+3.4
Tobacco products.	172	42,581	44,351	(¹)	734,636	736,920	(¹)
Chewing and smoking tobacco and snuff.....	28	8,600	8,776	+2.0	136,829	141,124	+3.1
Cigars and cigarettes.....	144	33,981	35,575	+4.7	597,807	595,796	-0.3
Vehicles for land transportation.	1,215	470,004	499,907	(¹)	13,985,873	16,572,909	(¹)
Automobiles.....	202	313,581	343,490	+9.5	9,442,665	11,883,079	+25.8
Carriages and wagons.....	59	1,376	1,541	+12.0	29,905	34,653	+15.9
Car building and repairing, electric-railroad.....	394	25,560	25,603	+0.2	793,029	780,582	-1.6
Car building and repairing, steam-railroad.....	560	129,487	129,273	-0.2	3,720,274	3,874,595	+4.1
Miscellaneous industries.	405	240,073	240,246	(¹)	6,945,920	7,028,906	(¹)
Agricultural implements.....	93	27,641	28,600	+3.5	806,053	852,937	+5.8
Electrical machinery, apparatus, and supplies.....	168	108,964	107,700	-1.2	3,101,977	3,100,319	-0.1
Pianos and organs.....	39	6,365	6,560	+3.1	179,639	181,473	+1.0
Rubber boots and shoes.....	12	20,247	19,787	-2.3	509,037	476,790	-6.3
Automobile tires.....	55	51,598	53,692	+4.1	1,592,387	1,740,636	+9.3
Shipbuilding.....	38	25,258	23,907	-5.3	756,827	676,751	-10.6
All industries.....	10,807	2,921,709	2,984,424	(¹)	75,622,737	80,904,364	(¹)

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION							
New England.....	1,397	397,057	399,843	+0.7	\$9,552,961	\$9,704,575	+1.6
Middle Atlantic.....	2,533	804,826	810,803	+0.7	22,330,066	23,116,504	+3.5
East North Central.....	2,905	959,125	1,005,000	+4.8	27,298,651	30,982,807	+13.5
West North Central.....	991	150,873	155,610	+3.1	3,745,884	3,971,924	+6.0
South Atlantic.....	1,176	282,973	283,713	+0.3	5,254,739	5,439,410	+3.5
East South Central.....	530	112,094	113,603	+1.3	2,030,660	2,165,820	+6.7
West South Central.....	443	82,643	82,857	+0.3	1,778,144	1,789,675	+0.6
Mountain.....	185	24,896	25,059	+0.7	688,428	695,351	+1.0
Pacific.....	647	107,222	107,936	+0.7	2,943,204	3,038,298	+3.2
All divisions.....	10,807	2,921,709	2,984,424	(¹)	75,622,737	80,904,364	(¹)

¹ 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.

² Less than one-tenth of 1 per cent.

TABLE 2.—PER CENTS OF CHANGE, JANUARY TO FEBRUARY, 1928—12 GROUPS OF INDUSTRIES AND TOTAL OF ALL INDUSTRIES

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

Group	Per cent of changes, January, 1928, to February, 1928		Group	Per cent of changes, January, 1928, to February, 1928	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products.....	+1.2	+2.0	Metal products, other than iron and steel.....	+4.0	+7.2
Textiles and their products.....	+1.3	+3.2	Tobacco products.....	+4.2	+0.3
Iron and steel and their prod- ucts.....	+2.9	+9.6	Vehicles for land transporta- tion.....	+4.4	+13.8
Lumber and its products.....	(1)	+4.3	Miscellaneous industries.....	-1.6	-3.3
Leather and its products.....	+1.6	+5.9	All industries.....	+1.5	+4.9
Paper and printing.....	-0.5	-0.7			
Chemicals and allied products.....	+4.1	+2.5			
Stone, clay, and glass products.....	+0.7	+3.0			

¹ No change.**Comparison of Employment and Pay-roll Totals in February, 1928, and February, 1927**

THE level of employment in manufacturing industries in February, 1928, was 6 per cent below the level of employment in February, 1927, and pay-roll totals were 6.6 per cent lower.

Comparing conditions in February, 1928, with February, 1927, decreased employment is shown in each of the 12 groups of industries. The outstanding decreases occurred in the miscellaneous, iron and steel, stone-clay-glass, and lumber groups, and the smallest decreases in the food, paper, tobacco, textile, and vehicle groups.

The food group of industries, as a whole, reported an increase of 1.7 per cent in pay-roll totals, but the remaining 11 groups reported decreased pay-roll totals ranging from 0.3 per cent in the paper group to 15.8 per cent in the group of miscellaneous industries.

The notable increases in separate industries over this 12-month period again were made in the automobile industry—6.4 per cent in employment and 14.1 per cent in pay-roll totals—followed by agricultural implements, rubber tires, rubber boots and shoes, fertilizers, flour, slaughtering and meat packing, and silk goods, with substantial though smaller increases.

The pronounced decreases in employment from February, 1927, to February, 1928, appeared in the shipbuilding (29 per cent), petroleum refining (18 per cent), piano, steam-railroad car building and repairing, cast-iron pipe, foundry and machine-shop products, steam fittings, and stove (10.6 per cent) industries. The iron and steel industry had dropped 6.9 per cent of its employees, and woolen and worsted goods and sawmills each had 8.3 per cent fewer employees.

The East North Central geographic division showed a slight increase in employment over this 12-month period, but the remaining 8 divisions had fewer employees at the end of the period than at the beginning, the losses having been greatest in the West South Central, Middle Atlantic, and New England divisions and smallest in the West North Central, South Atlantic, and Pacific divisions.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS, FEBRUARY, 1928, WITH FEBRUARY, 1927

[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 February, 1928, compared with February, 1927		Industry	Per cent of change February, 1928, compared with February, 1927	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products.	-0.2	+1.7	Chemicals and allied products.	-6.4	-7.4
Slaughtering and meat packing.....	+1.5	+6.1	Chemicals.....	-0.6	+0.4
Confectionery.....	-2.3	-3.8	Fertilizers.....	+3.3	+0.6
Ice cream.....	-5.7	-3.5	Petroleum refining.....	-18.2	-18.5
Flour.....	+2.0	+3.5	Stone, clay, and glass products.		
Baking.....	-0.6	-0.8	Cement.....	-7.8	-8.8
Sugar refining, cane.....	-2.6	-0.3	Brick, tile, and terra cotta.....	-7.0	-7.2
Textiles and their products.	-2.9	-6.3	Pottery.....	-9.2	-14.9
Cotton goods.....	-3.7	-10.8	Glass.....	-3.9	-3.0
Hosiery and knit goods.....	-1.3	-2.5		-8.1	-6.9
Silk goods.....	+1.3	+1.5	Metal products other than iron and steel.	-6.2	-5.8
Woolen and worsted goods.....	-8.3	-9.7	Stamped and enameled ware.....	-4.6	-2.8
Carpets and rugs.....	-1.1	-8.6	Brass, bronze, and copper products.....	-6.7	-6.8
Dyeing and finishing textiles.....	+1.7	-0.7	Tobacco products.	-2.6	-1.6
Clothing, men's.....	-4.7	-8.3	Chewing and smoking tobacco and snuff.....	+0.4	-0.5
Shirts and collars.....	-0.6	-2.0	Cigars and cigarettes.....	-3.1	-1.8
Clothing, women's.....	-2.9	-4.8	Vehicles for land transportation.	-3.0	-0.6
Millinery and lace goods.....	-1.7	-4.6	Automobiles.....	+6.4	+14.1
Iron and steel and their products.	-9.2	-8.8	Carriages and wagons.....	-8.4	-7.0
Iron and steel.....	-6.9	-4.9	Car building and repairing, electric-railroad.....	-2.2	-1.9
Cast-iron pipe.....	-14.6	-16.9	Car building and repairing, steam-railroad.....	-11.2	-12.4
Structural ironwork.....	-4.9	-3.2	Miscellaneous industries.	-14.4	-15.8
Foundry and machine-shop products.....	-11.1	-13.1	Agricultural implements.....	+5.8	+8.0
Hardware.....	-7.3	-7.1	Electrical machinery, apparatus, and supplies.....	-7.3	-6.7
Machine tools.....	-9.4	-5.6	Pianos and organs.....	-15.4	-18.8
Steam fittings and steam and hot-water heating apparatus.....	-12.5	-12.8	Rubber boots and shoes.....	+3.9	+1.6
Stoves.....	-10.6	-12.6	Automobile tires.....	+4.9	+5.9
Lumber and its products.	-7.5	-7.2	Shipbuilding.....	-28.9	-29.2
Lumber, sawmills.....	-8.3	-7.9	All industries.	-6.0	-6.6
Lumber, millwork.....	-7.8	-7.1			
Furniture.....	-4.6	-5.5			
Leather and its products.	-4.8	-6.7			
Leather.....	-3.8	-4.2			
Boots and shoes.....	-5.1	-7.9			
Paper and printing.	-1.1	-0.3			
Paper and pulp.....	-4.3	-3.8			
Paper boxes.....	-2.8	-2.0			
Printing, book and job.....	+0.6	-0.5			
Printing, newspapers.....	+0.7	+3.2			

Recapitulation by Geographic Divisions

GEOGRAPHIC DIVISION					
New England.....	-7.7	-9.6	East South Central.....	-4.1	-5.8
Middle Atlantic.....	-8.8	-9.6	West South Central.....	-9.3	-7.4
East North Central.....	+0.4	+3.3	Mountain.....	-5.3	-6.5
West North Central.....	-1.4	-0.7	Pacific.....	-3.5	-2.6
South Atlantic.....	-3.5	-5.2	All divisions.	-6.0	-6.6

Per Capita Earnings

PER CAPITA earnings in February, 1928, for the 54 industries combined were 3.3 per cent higher than in January, 1928, and 0.6 per cent lower than in February, 1927.

Increases in per capita earnings in February, 1928, as compared with January, 1928, appeared in 39 industries, and there was no change in one other industry. The outstanding increases—nearly 15 per cent each—were in the automobile and the cast-iron pipe industries. The greatest decrease in per capita earnings in February—5.6 per cent—was in the fertilizer industry, which was approaching its peak season and had employed a large number of common laborers.

Employees in 25 industries were averaging greater earnings in February, 1928, than in February, 1927, the automobile industry leading with an advance of 7.4 per cent. The greatest falling off in per capita earnings also was 7.4 per cent—in the cotton goods industry.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS, FEBRUARY, 1928, WITH JANUARY, 1928, AND FEBRUARY, 1927

Industry	Per cent of change February, 1928, compared with—		Industry	Per cent of change February, 1928, compared with—	
	January, 1928	February, 1927		January, 1928	February, 1927
Automobiles.....	+14.9	+7.4	Slaughtering and meat packing...	+1.2	+4.5
Cast-iron pipe.....	+14.8	-2.6	Cheewing and smoking tobacco and snuff.....	+1.1	-1.2
Stamped and enameled ware.....	+10.9	+1.8	Electrical machinery, apparatus and supplies.....	+1.1	+0.4
Steam fittings and steam and hot-water heating apparatus.....	+9.5	-0.4	Baking.....	+1.0	(2)
Stoves.....	+8.5	-2.2	Brass, bronze, and copper products.....	+1.0	-0.4
Iron and steel.....	+8.3	+2.4	Hosiery and knit goods.....	+0.9	-1.2
Hardware.....	+7.7	+0.2	Sugar refining, cane.....	+0.8	+2.2
Silk goods.....	+6.7	+0.1	Brick, tile, and terra cotta.....	+0.7	-6.5
Furniture.....	+6.3	-0.7	Confectionery.....	+0.7	-1.6
Lumber, millwork.....	+5.8	+0.7	Woolen and worsted goods.....	+0.3	-1.4
Boots and shoes.....	+5.6	-2.8	Printing, newspapers.....	(1)	+2.7
Automobile tires.....	+5.1	+1.1	Chemicals.....	(2)	+1.0
Car building and repairing, steam-railroad.....	+4.3	-1.1	Petroleum refining.....	-0.2	-0.7
Foundry and machine-shop products.....	+4.3	-2.4	Paper boxes.....	-0.5	+0.7
Pottery.....	+4.2	+1.1	Cotton goods.....	-0.6	-7.4
Shirts and collars.....	+4.1	-0.9	Car building and repairing, electric-railroad.....	-1.7	+0.4
Glass.....	+4.0	+1.3	Pianos and organs.....	-2.0	-4.2
Structural ironwork.....	+3.9	+1.8	Flour.....	-2.1	+1.7
Dyeing and finishing textiles.....	+3.8	-2.3	Printing, book and job.....	-2.2	-0.9
Millinery and lace goods.....	+3.8	-3.0	Carpets and rugs.....	-2.3	-7.3
Machine tools.....	+3.6	+4.3	Ice cream.....	-2.3	+2.3
Carriages and wagons.....	+3.5	+1.4	Cement.....	-2.9	-0.2
Lumber, sawmills.....	+3.4	+0.6	Rubber boots and shoes.....	-4.1	-2.3
Clothing, women's.....	+2.7	-2.0	Cigars and cigarettes.....	-4.8	+1.3
Agricultural implements.....	+2.3	+2.0	Shipbuilding.....	-5.5	-0.5
Paper and pulp.....	+2.0	+0.4	Fertilizers.....	-5.6	-2.6
Clothing, men's.....	+1.7	-4.0			
Leather.....	+1.3	-0.6			

¹ Less than one-tenth of 1 per cent.

²No change.

Wage Changes

DURING the month ending February 15, 1928, 28 establishments in 15 industries reported wage-rate increases. These increases averaged 10 per cent each and affected 1,260 employees, or 16 per cent of the total employees in the establishments concerned.

During the same period 62 establishments in 19 industries reported wage-rate decreases. These decreases averaged 8.8 per cent each and affected 18,102 employees, or 86 per cent of the total employees in the establishments concerned.

Thirty-four of the 62 establishments reporting wage-rate decreases were in 7 textile industries, and their decreases affected more than 15,000 of the 18,102 affected by all wage-rate decreases reported.

TABLE 5.—WAGE ADJUSTMENTS OCCURRING BETWEEN JANUARY 15 AND FEBRUARY 15, 1928

Industry	Establishments		Per cent of increase or decrease in wage rates		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
Increases							
Confectionery.....	311	1	7.8	7.8	18	8	(1)
Baking.....	621	1	7.0	7.0	51	8	(1)
Silk goods.....	192	2	5.0-10.0	5.1	42	6	(1)
Foundry and machine-shop products.....	950	2	4.5-25.0	13.6	135	15	(1)
Steam fittings and steam and hot-water apparatus.....	107	1	5.0	5.0	60	47	(1)
Lumber, millwork.....	264	1	10.0	10.0	46	50	(1)
Boots and shoes.....	223	1	25.0	25.0	193	100	(1)
Paper boxes.....	184	1	10.0	10.0	8	6	(1)
Printing, book and job.....	310	5	1.8-11.0	4.3	164	19	(1)
Printing, newspapers.....	208	5	2.0-5.0	3.5	175	14	(1)
Chemicals.....	127	3	5.0-11.0	7.7	163	8	1
Fertilizers.....	177	1	11.0	11.0	6	8	(1)
Stamped and enameled ware.....	69	2	10.0-21.0	14.5	100	56	1
Car building and repairing, electric-railroad.....	394	1	2.0	2.0	65	29	(1)
Electrical machinery, apparatus, and supplies.....	168	1	5.0	5.0	34	8	(1)
Decreases							
Confectionery.....	311	1	10.0	10.0	50	76	(1)
Baking.....	621	2	5.0-8.0	7.6	50	48	(1)
Cotton goods.....	470	9	10.0	10.0	4,887	100	2
Hosiery and knit goods.....	247	7	2.5-10.0	7.8	4,706	92	6
Silk goods.....	192	5	6.7-10.0	9.7	1,191	81	2
Woolen and worsted goods.....	188	3	5.0-10.0	5.8	837	100	1
Carpets and rugs.....	29	7	10.0	10.0	3,033	99	12
Dyeing and finishing textiles.....	101	2	10.0-15.0	10.4	677	100	2
Clothing, men's.....	288	1	5.0-10.0	7.5	80	84	(1)
Iron and steel.....	199	5	2.4-20.0	5.2	735	34	(1)
Cast-iron pipe.....	37	2	10.0	10.0	145	76	1
Foundry and machine-shop products.....	950	2	5.0-10.0	7.1	260	85	(1)
Stoves.....	96	1	10.0	10.0	43	51	(1)
Lumber, sawmills.....	460	4	5.0-10.0	6.0	604	89	1
Furniture.....	428	5	5.0-10.0	8.5	424	57	1
Fertilizers.....	177	1	12.5	12.5	28	68	(1)
Brick, tile, and terra cotta.....	369	3	7.0-13.0	8.1	140	67	1
Cigars and cigarettes.....	144	1	5.0	5.0	27	69	(1)
Automobile tires.....	55	1	8.0	8.0	185	100	(1)

¹ Less than one-half of 1 per cent.

Indexes of Employment and Pay-roll Totals in Manufacturing Industries

INDEX numbers for February and January, 1928, and for December and February, 1927, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in Table 6.

The general index of employment for February, 1928, is 85.5, this number being 1.5 per cent higher than the index for January, 1928, 0.5 per cent higher than the index for December, 1927, and 6 per cent lower than the index for February, 1927. The general index of pay-roll totals for February, 1928, is 90, this number being 4.9 per cent higher than the index for January, 1928, 0.8 per cent higher than the index for December, 1927, and 6.6 per cent lower than the index for February, 1927.

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—FEBRUARY AND DECEMBER, 1927, AND JANUARY AND FEBRUARY, 1928

[Monthly average, 1923=100]

Industry	Employment				Pay-roll totals			
	1927		1928		1927		1928	
	February	December	January	February	February	December	January	February
General index	91.0	85.1	84.2	85.5	96.4	89.3	85.8	90.0
Food and kindred products	88.1	89.9	86.9	87.9	92.1	94.6	91.9	93.7
Slaughtering and meat packing.....	82.7	82.4	81.7	83.9	84.0	86.8	85.8	89.1
Confectionery.....	81.4	89.5	79.1	79.5	90.6	100.6	86.1	87.2
Ice cream.....	80.9	78.0	76.1	76.3	86.0	84.5	84.7	83.0
Flour.....	85.8	87.2	87.3	87.5	87.4	92.0	92.3	90.5
Baking.....	100.0	101.8	99.4	99.4	106.2	106.4	104.3	105.4
Sugar refining, cane.....	84.3	84.7	78.0	82.1	87.7	86.1	82.3	87.4
Textiles and their products	89.7	86.6	86.0	87.1	94.0	87.9	85.4	88.1
Cotton goods.....	87.4	86.2	85.1	84.2	89.0	86.0	80.8	79.4
Hosiery and knit goods.....	98.3	97.8	95.7	97.0	115.1	115.9	109.7	112.2
Silk goods.....	99.4	98.2	97.2	100.7	109.5	107.8	100.5	111.1
Woolen and worsted goods.....	85.2	80.1	78.7	78.1	85.6	80.5	77.7	77.3
Carpets and rugs.....	98.4	97.7	96.2	97.3	99.4	97.4	92.0	90.9
Dyeing and finishing textiles.....	99.4	100.7	99.9	101.1	106.4	105.4	100.7	105.7
Clothing, men's.....	86.7	79.6	80.7	82.6	84.1	71.5	74.2	77.1
Shirts and collars.....	82.2	82.8	81.8	81.7	83.4	86.2	78.6	81.7
Clothing, women's.....	90.2	81.7	83.4	87.6	99.9	84.1	88.1	95.1
Millinery and lace goods.....	74.7	67.9	68.6	73.4	80.2	70.3	68.8	76.5
Iron and steel and their products	89.8	79.7	79.2	81.5	96.4	82.8	80.2	87.9
Iron and steel.....	94.4	84.7	85.1	87.9	100.9	86.9	85.8	96.0
Cast-iron pipe.....	96.6	87.3	84.6	82.5	96.6	84.1	71.7	80.3
Structural ironwork.....	94.1	90.6	89.0	89.5	100.5	100.9	93.2	97.3
Foundry and machine-shop products.....	86.2	74.9	74.8	76.6	91.6	76.7	74.4	79.6
Hardware.....	84.7	78.6	77.8	78.5	96.0	85.5	82.0	89.2
Machine tools.....	102.0	90.2	90.0	92.4	112.7	101.8	100.0	106.4
Steam fittings and steam and hot-water heating apparatus.....	91.9	80.7	78.2	80.4	99.3	81.8	77.0	86.6
Stoves.....	80.0	75.4	62.8	71.5	83.1	75.8	88.8	72.6
Lumber and its products	83.2	79.8	77.0	77.0	89.3	88.0	79.5	82.9
Lumber, sawmills.....	78.1	74.6	71.9	71.6	83.7	82.9	75.0	77.1
Lumber, millwork.....	88.8	82.9	81.5	81.9	91.7	88.2	80.2	85.2
Furniture.....	97.3	96.2	92.0	92.8	107.3	105.7	94.6	101.4
Leather and its products	92.1	82.9	86.3	87.7	92.3	76.5	81.3	86.1
Leather.....	94.7	88.8	90.4	91.1	97.2	91.4	91.3	93.1
Boots and shoes.....	91.3	81.0	84.9	86.6	90.4	70.5	77.3	83.3

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES—FEBRUARY AND DECEMBER, 1927, AND JANUARY AND FEBRUARY, 1928—Continued

[Monthly average, 1923=100]

Industry	Employment				Pay-roll totals			
	1927		1928		1927		1928	
	February	December	January	February	February	December	January	February
Paper and printing	104.4	105.4	103.8	103.3	113.3	117.0	113.8	113.0
Paper and pulp.....	94.5	92.3	91.3	90.4	102.1	99.9	97.4	98.2
Paper boxes.....	97.0	100.6	95.8	94.3	106.3	113.3	106.6	104.2
Printing, book and job.....	105.9	107.2	106.4	106.5	117.8	122.1	119.8	117.2
Printing, newspapers.....	115.8	118.3	116.9	116.6	121.5	129.2	125.7	125.4
Chemicals and allied products	100.0	90.4	89.9	93.6	106.0	98.2	95.8	98.2
Chemicals.....	96.3	95.5	93.1	95.7	107.9	111.3	105.3	108.3
Fertilizers.....	105.7	89.0	93.7	109.2	110.6	99.1	101.3	111.3
Petroleum.....	102.4	84.1	84.0	83.8	102.6	83.6	83.9	83.6
Stone, clay, and glass products	91.1	88.8	83.4	84.0	98.2	94.7	87.0	89.6
Cement.....	80.1	80.8	76.4	74.5	81.5	83.5	79.8	75.6
Brick, tile, and terra cotta.....	84.5	84.3	77.0	76.7	89.7	85.8	76.1	76.3
Pottery.....	109.2	103.9	100.1	104.9	122.9	117.3	109.3	119.2
Glass.....	94.7	90.4	86.0	87.0	103.7	99.0	91.7	96.5
Metal products, other than iron and steel	92.5	86.0	83.5	86.8	95.2	87.1	83.7	89.7
Stamped and enameled ware.....	86.1	81.8	76.1	82.1	86.4	79.4	70.2	84.0
Brass, bronze, and copper products.....	95.4	87.9	86.9	89.0	98.5	90.0	88.7	91.8
Tobacco products	83.6	84.5	78.1	81.4	80.6	87.9	79.1	79.3
Chewing and smoking tobacco and snuff.....	98.9	94.2	97.3	99.3	105.1	97.2	101.5	104.6
Cigars and cigarettes.....	81.6	83.3	75.6	79.1	77.7	86.8	76.5	76.3
Vehicles for land transportation	85.3	77.5	79.2	82.7	88.8	80.8	77.6	88.3
Automobiles.....	101.7	91.0	98.8	108.2	102.9	93.8	93.3	117.4
Carriages and wagons.....	73.4	74.8	60.0	67.2	77.0	75.0	61.8	71.6
Car building and repairing, electric-railroad.....	89.1	88.4	86.9	87.1	90.6	93.4	90.3	88.9
Car building and repairing, steam-railroad.....	75.0	68.2	66.8	66.6	80.0	71.9	67.3	70.1
Miscellaneous industries	102.5	90.4	89.1	87.7	109.2	99.8	95.1	92.0
Agricultural implements.....	96.6	94.7	98.7	102.2	112.2	110.1	114.6	121.2
Electrical machinery, apparatus, and supplies.....	95.1	92.0	89.3	88.2	100.1	98.2	93.5	93.4
Pianos and organs.....	90.2	85.0	74.0	76.3	93.7	97.3	75.3	76.1
Rubber boots and shoes.....	89.4	98.6	95.1	92.9	100.0	111.8	108.4	101.6
Automobile tires.....	104.3	99.7	105.1	109.4	112.2	103.6	108.7	118.8
Shipbuilding.....	109.6	85.1	82.3	77.9	113.2	97.5	89.6	80.1

Table 7 shows the general index of employment in manufacturing industries and the general index of pay-roll totals, by months, from January, 1923, to February, 1928.

Following Table 7 is a chart representing the 54 industries combined and shows, by months, the course of pay-roll totals as well as the course of employment. It includes the years 1924, 1925, and 1926, as well as 1927, and January and February, 1928.

EMPLOYMENT IN SELECTED INDUSTRIES

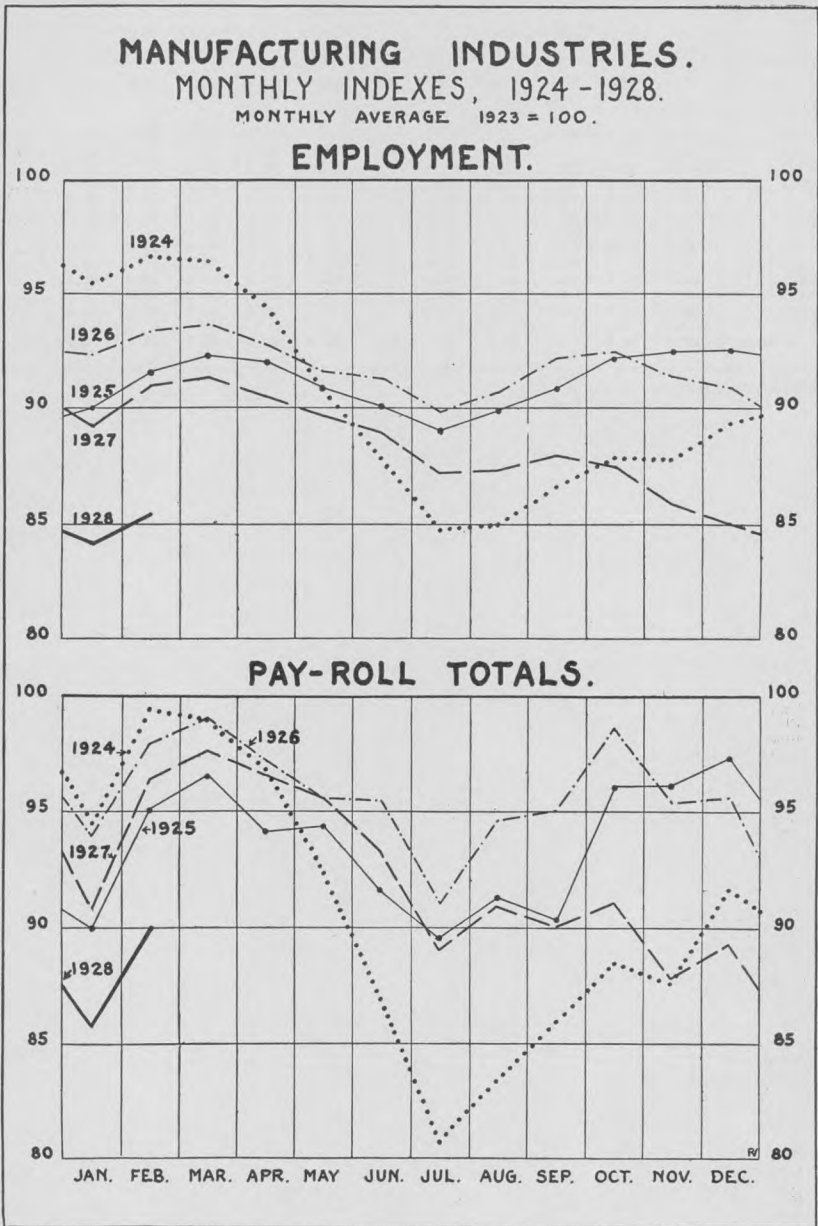
141

TABLE 7.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES JANUARY, 1923, TO FEBRUARY, 1928

[Monthly average, 1923=100]

Month	Employment						Pay-roll totals					
	1923	1924	1925	1926	1927	1928	1923	1924	1925	1926	1927	1928
January.....	98.0	95.4	90.0	92.3	89.4	84.2	91.8	94.5	90.0	93.9	90.9	85.8
February.....	99.6	96.6	91.6	93.3	91.0	85.5	95.2	99.4	95.1	97.9	96.4	90.0
March.....	101.8	96.4	92.3	93.7	91.4	-----	100.3	99.0	96.6	99.1	97.7	-----
April.....	101.8	94.5	92.1	92.8	90.6	-----	101.3	96.9	94.2	97.2	96.6	-----
May.....	101.8	90.8	90.9	91.7	89.7	-----	104.8	92.4	94.4	95.6	95.6	-----
June.....	101.9	87.9	90.1	91.3	89.1	-----	104.7	87.0	91.7	95.5	93.3	-----
July.....	100.4	84.8	89.3	89.8	87.3	-----	99.9	80.8	89.6	91.2	89.1	-----
August.....	99.7	85.0	89.9	90.7	87.4	-----	99.3	83.5	91.4	94.6	91.0	-----
September.....	99.8	86.7	90.9	92.2	88.0	-----	100.0	86.0	90.4	95.1	90.1	-----
October.....	99.3	87.9	92.3	92.5	87.6	-----	102.3	88.5	96.2	98.6	91.2	-----
November.....	98.7	87.8	92.5	91.4	85.9	-----	101.0	87.6	96.2	95.4	87.8	-----
December.....	96.9	89.4	92.6	90.9	85.1	-----	98.9	91.7	97.3	95.6	89.3	-----
Average.	100.0	90.3	91.2	91.9	88.5	¹84.9	100.0	90.6	93.6	95.8	92.4	¹87.9

¹ Average for 2 months.



Proportion of Time Worked and Force Employed in Manufacturing Industries in February, 1928

REPORTS from 9,463 establishments in February show that 1 per cent of these establishments were idle, 78 per cent were operating on a full-time schedule, and 21 per cent on a part-time schedule; 31 per cent had a normal full force of employees and 69 per cent were operating with reduced forces.

The establishments in operation were employing an average of 85 per cent of a normal full force of employees and were operating an average of 96 per cent of full time. The percentage of full time operated is unchanged since the January report, while the percentage of full force employed indicates an increase in employment of 1.2 per cent.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN FEBRUARY, 1928

Industry	Establishments reporting		Operating establishments only					Average per cent of normal full force employed by establishments operating
			Per cent of establishments in which employees worked—		Average per cent of full time operated in establishments operating	Per cent of establishments operating with—		
			Full time	Part time		Full normal force	Part normal force	
Food and kindred products	1,478	(¹)	82	18	96	38	62	87
Slaughtering and meat packing.....	149		93	7	99	61	39	94
Confectionery.....	264		68	32	94	13	87	74
Ice cream.....	172	1	94	5	99	5	95	62
Flour.....	306	(¹)	70	29	90	39	60	90
Baking.....	574		89	11	98	53	47	91
Sugar refining, cane.....	13		77	23	91	8	92	86
Textiles and their products	1,547	1	79	20	96	35	64	90
Cotton goods.....	403	1	66	33	93	32	68	91
Hosiery and knit goods.....	192	1	82	17	97	32	67	89
Silk goods.....	166		87	13	99	43	57	94
Woolen and worsted goods.....	171	2	77	22	95	28	70	83
Carpets and rugs.....	24		88	13	96	38	63	98
Dyeing and finishing textiles.....	95	1	69	29	94	40	59	93
Clothing, men's.....	222	(¹)	85	15	97	36	64	89
Shirts and collars.....	76	1	82	17	97	43	55	93
Clothing, women's.....	142		92	8	99	43	57	92
Milinery and lace goods.....	56	2	89	9	99	25	73	88
Iron and steel and their products	1,649	(¹)	68	32	94	21	78	82
Iron and steel.....	175	2	77	21	94	19	79	84
Cast-iron pipe.....	31		52	48	85	23	77	76
Structural ironwork.....	153		74	26	96	18	82	82
Foundry and machine-shop products.....	891	(¹)	67	33	95	20	80	79
Hardware.....	58		57	43	92	14	86	83
Machine tools.....	142		77	23	97	25	75	84
Steam fittings and steam and hot-water heating apparatus.....	106		63	37	94	26	74	81
Stoves.....	93	1	60	39	90	33	66	84
Lumber and its products	1,016	2	72	25	96	25	72	81
Lumber, sawmills.....	410	4	83	13	97	23	72	78
Lumber, millwork.....	226	2	53	46	93	15	83	75
Furniture.....	380	1	73	26	96	33	66	89
Leather and its products	324		83	17	98	35	65	90
Leather.....	115		91	9	98	35	65	88
Boots and shoes.....	209		78	22	97	35	65	91

¹ Less than one-half of 1 per cent.

TABLE 8.—ESTABLISHMENTS WORKING FULL AND PART TIME AND EMPLOYING FULL AND PART WORKING FORCE IN FEBRUARY, 1928—Continued

Industry	Establishments reporting		Operating establishments only					
			Per cent of establishments in which employees worked—		Average per cent of full time operated in establishments operating	Per cent of establishments operating with—		Average per cent of normal full force employed by establishments operating
			Full time	Part time		Full normal force	Part normal force	
Paper and printing	792	(1)	89	11	98	45	55	96
Paper and pulp.....	179	1	89	10	98	35	64	93
Paper boxes.....	168		72	28	96	29	71	86
Printing, book and job.....	297		92	8	99	42	58	100
Printing, newspapers.....	148		100		100	81	19	101
Chemicals and allied products	319	1	84	15	98	32	67	81
Chemicals.....	109	2	92	6	99	56	42	93
Fertilizers.....	170	1	76	24	96	20	79	68
Petroleum refining.....	40		98	3	100	15	85	79
Stone, clay, and glass products	505	5	75	20	96	20	75	81
Cement.....	81	2	83	15	97	19	79	75
Brick, tile, and terra cotta.....	261	7	66	28	94	13	81	76
Pottery.....	66	2	80	18	97	41	58	94
Glass.....	97	5	89	6	98	27	68	83
Metal products, other than iron and steel	207		77	23	97	27	73	85
Stamped and enameled ware.....	67		81	19	98	28	72	85
Brass, bronze, and copper products.....	140		75	25	96	26	74	85
Tobacco products	158	1	66	33	94	27	72	90
Chewing and smoking tobacco and snuff.....	27		89	11	99	48	52	97
Cigars and cigarettes.....	131	2	61	37	93	23	76	89
Vehicles for land transportation	1,112		88	12	98	29	71	82
Automobiles.....	170		78	22	97	19	81	84
Carriages and wagons.....	56		71	29	95	13	88	69
Car building and repairing, electric-railroad.....	363		96	4	100	48	52	94
Car building and repairing, steam-railroad.....	523		88	12	98	21	79	78
Miscellaneous industries	356		73	27	95	27	73	84
Agricultural implements.....	86		70	30	95	27	73	92
Electrical machinery, apparatus, and supplies.....	144		77	23	97	31	69	82
Pianos and organs.....	35		51	49	91	20	80	75
Rubber boots and shoes.....	11		55	45	93	45	55	98
Automobile tires.....	53		75	25	94	19	81	90
Shipbuilding.....	27		89	11	99	22	78	66
All industries	9,463	1	78	21	96	31	69	85

¹Less than one-half of 1 per cent.

Employment on Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to January, 1928, 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 1923 as 100.

TABLE 1.—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO JANUARY, 1928

[Monthly average, 1923=100]

Month	1923	1924	1925	1926	1927	1928
January.....	94.6	93.1	91.9	92.1	91.8	85.8
February.....	94.8	93.2	91.7	92.3	91.6	.....
March.....	96.6	93.6	91.5	92.9	92.1	.....
April.....	98.0	95.0	92.8	95.0	93.6	.....
May.....	100.9	95.3	94.0	96.3	95.5	.....
June.....	102.9	94.2	94.8	97.6	97.0	.....
July.....	104.0	94.3	95.5	98.9	97.1	.....
August.....	105.1	95.1	95.8	98.7	95.6	.....
September.....	103.6	95.8	96.0	98.8	95.2	.....
October.....	103.1	96.9	96.8	99.4	95.0	.....
November.....	101.1	95.1	95.2	97.3	92.0	.....
December.....	95.5	92.3	93.3	94.4	88.3	.....
Average.....	100.0	94.5	94.1	96.1	93.7	(1)

1 month only.

Table 2 shows the total number of employees on Class I railroads on the 15th day, each, of January, 1928, December, 1927, and January, 1927, and the pay-roll totals for each of the months considered, by principal occupational groups and various important occupations.

In these tabulations the data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND TOTAL MONTHLY EARNINGS OF RAILROAD EMPLOYEES—JANUARY AND DECEMBER, 1927, AND JANUARY, 1928

[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		
	January, 1927	December, 1927	January, 1928	January, 1927	December, 1927	January, 1928
Professional, clerical, and general.....	283,344	275,361	272,741	\$39,055,220	\$39,605,470	\$38,954,987
Clerks.....	165,421	158,632	156,743	21,523,476	21,645,341	21,174,452
Stenographers and typists.....	25,497	24,914	24,790	3,147,162	3,207,228	3,166,143
Maintenance of way and structures....	351,591	358,153	332,969	33,199,584	33,667,019	31,743,591
Laborers, extra gang and work train.....	46,464	48,752	38,390	3,393,083	3,596,744	2,818,080
Laborers, track and roadway section.....	176,376	180,058	171,153	12,896,077	12,987,233	12,372,249
Maintenance of equipment and stores..	509,664	474,711	468,198	68,043,506	61,803,788	61,883,093
Carmen.....	108,756	101,140	99,667	16,320,993	14,733,986	14,805,143
Machinists.....	60,255	57,701	56,800	9,841,972	8,953,477	8,988,056
Skilled trades helpers.....	112,400	104,281	102,514	12,829,071	11,445,419	11,482,658
Laborers (shops, engine houses, power plants and stores).....	43,555	40,054	39,764	4,240,771	3,895,493	3,872,979
Common laborers (shops, engine houses, power plants, and stores).....	59,413	53,617	52,905	4,836,072	4,252,780	4,265,244
Transportation, other than train, engine, and yard.....	203,952	199,707	194,697	25,060,017	25,199,984	24,417,919
Station agents.....	30,557	30,182	30,125	4,743,074	4,838,971	4,757,963
Telegraphers, telephoners, and towermen.....	25,479	23,912	23,746	3,923,962	3,762,122	3,733,406
Truckers (stations, warehouses, and platforms).....	35,802	35,329	32,068	3,204,940	3,315,330	2,951,807
Crossing and bridge flagmen and gatemen.....	22,023	21,539	21,477	1,681,483	1,664,516	1,655,763
Transportation (yardmasters, switch tenders, and hostlers).....	24,279	22,725	22,520	4,588,563	4,462,203	4,422,128
Transportation, train and engine....	334,442	312,699	306,133	66,995,202	62,938,399	61,709,214
Road conductors.....	37,243	35,238	34,636	8,975,822	8,390,996	8,220,925
Road brakemen and flagmen.....	75,862	70,617	69,409	13,187,721	12,125,488	11,814,469
Yard brakemen and yard helpers.....	56,173	52,357	50,779	9,898,638	9,324,802	9,148,164
Road engineers and motormen.....	44,953	42,021	41,405	11,927,062	11,218,273	11,019,304
Road firemen and helpers.....	46,086	43,272	42,689	8,868,894	8,419,264	8,255,132
Total.....	1,707,272	1,643,356	1,597,258	236,942,092	227,676,863	223,130,932

[843]

Changes in Employment and Pay Roll in Various States

THE following data as to changes in employment and pay roll have been compiled from reports received from the State labor offices:

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLL IN SPECIFIED STATES

Monthly period

State and industry group	Per cent of change, December, 1927, to January, 1928		State and industry group	Employment—index numbers (1919-1927=100)	
	Employment	Pay roll		January, 1928	February, 1928
Illinois			Massachusetts		
Stone, clay, and glass products.....	-6.7	-5.6	Boots and shoes.....	68.9	73.2
Metals, machinery, and conveyances.....	-2.4	-5.4	Bread and other bakery products.....	98.1	99.2
Wood products.....	-8.2	-15.9	Cars and general shop construction and repairs, steam railroads.....	75.1	75.2
Furs and leather goods.....	+2.7	+6	Clothing, men's and women's.....	92.7	96.6
Chemicals, oils, paints, etc.....	-1	-4.5	Confectionery.....	80.3	76.8
Printing and paper goods.....	-7	-14.2	Cotton goods.....	65.3	68.5
Textiles.....	+1	-7.4	Dyeing and finishing textiles.....	102.9	102.5
Clothing, millinery, and laundering.....	+1.6	+5.4	Electrical machinery, apparatus, and supplies.....	103.7	102.6
Food, beverages, and tobacco.....	-2.9	-3.0	Foundry and machine shop products.....	64.8	64.6
All manufacturing industries.....	-2.1	-5.6	Furniture.....	106.1	105.4
Trade—wholesale and retail.....	-11.0	-10.9	Hosiery and knit goods.....	88.6	89.6
Public utilities.....	-3	+3	Jewelry.....	102.2	100.9
Coal mining.....	+5.7	-2	Leather, tanned, curried, and finished.....	87.8	88.8
Building and contracting.....	-17.3	-5.2	Paper and wood pulp.....	92.6	93.1
All industries.....	-2.2	-4.1	Printing and publishing.....	103.6	104.0
			Rubber footwear.....	108.0	104.9
			Rubber goods, tires and tubes.....	97.2	95.1
			Silk goods.....	115.5	115.9
			Textile machinery and parts.....	62.1	62.1
			Woolen and worsted goods.....	86.2	82.6
			All industries.....	82.3	83.3
Iowa			Per cent of change, December, 1927, to January, 1928		
Food and kindred products.....	+2.9		Employment	Pay roll	
Textiles.....	+1.5				
Iron and steel works.....	+1.9				
Lumber products.....	+5.2				
Leather products.....	+4.0				
Paper products, printing, and publishing.....	-5.7				
Patent medicines, chemicals, and compounds.....	-2.2				
Stone and clay products.....	-6.7				
Tobacco and cigars.....	-3.3				
Railway car shops.....	-8				
Various industries.....	.0				
All industries.....	+9				
Maryland			New Jersey		
Food products.....	+9.0	+3.3	Food and kindred products.....	-4.2	-2.3
Textiles.....	+1.6	+7.4	Textiles and their products.....	-1.8	-2.7
Iron and steel and their products.....	+1.2	+9	Iron and steel and their products.....	-4.2	-6.3
Lumber and its products.....	-5.1	-1.7	Lumber and its products.....	-5.9	-10.7
Leather and its products.....	+9.3	+5.1	Leather and its products.....	+3.6	+7.0
Rubber ties.....	+1.4	+91.9	Tobacco products.....	-11.0	-12.7
Paper and printing.....	+3.9	+1.1	Paper and printing.....	-5.7	-16.3
Chemicals and allied products.....	+4.0	+4.2	Chemicals and allied products.....	-4	+1.1
Stone, clay, and glass.....	+6.5	+3.5	Stone, clay, and glass products.....	-3.3	-4.5
Metal products other than iron and steel.....	.4	+4.9	Metal products other than iron and steel.....	-.9	-4.2
Tobacco products.....	+14.4	+11.4	Vehicles for land transportation.....	+8	-1.3
Machinery (not including transportation equipment).....	-1.3	-1.0	Miscellaneous.....	-1.2	-8.9
Transportation equipment.....	-2.9	+3.7	All industries.....	-2.3	-4.7
Miscellaneous.....	-1.7	-10.4			
All industries.....	+2.3	+7.7	New York		
			Stone, clay, and glass.....	-5.3	-4.4
			Metals and machinery.....	-2.7	-4.7
			Wood manufactures.....	-5.1	-9.7

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLL IN SPECIFIED STATES—
Continued

Monthly period—Continued

State and industry group	Per cent of change, December, 1927, to January, 1928		State and industry group	Per cent of change, January to February, 1928	
	Employment	Pay roll		Employment	Pay roll
New York—Continued			Pennsylvania—Continued		
Furs, leather, and rubber goods.....	-1.0	-2.6	Lumber products.....	+3.4	+7.6
Chemicals, oils, paints, etc.....	-1.1	-1.7	Chemical products.....	+4	+8.4
Paper.....	+1.6	-9	Leather and rubber products.....	+1.1	+0
Printing and paper goods.....	-1.3	-8	Paper and printing.....	-1.4	+1.8
Textiles.....	-2.0	-5.7	Construction and contracting.....	-15.5	-4.6
Clothing and millinery.....	+1.3	+3.4			
Food and tobacco.....	-5.1	-4.2	All industries.....	+1.8	+8.3
Water, light, and power.....	-1.1	-2.7			
All industries.....	-2.1	-3.3			
Oklahoma			November to December, 1927		
Cottonseed oil mills.....	+35.6	+19.8	Wisconsin		
Food production:			<i>Manual</i>		
Bakeries.....	-8.1	+6.8	Agriculture.....	-27.6	-35.3
Confections.....	-68.1	-68.8	Logging.....	-3	-3.2
Creameries and dairies.....	-13.3	-23.0	Mining.....	-3.3	-4.2
Flour mills.....	+18.0	+17.7	Stone crushing and quarrying.....	-31.1	-50.1
Ice and ice cream.....	+81.0	+78.0	Manufacturing:		
Meat and poultry.....	-6.2	-5.5	Stone and allied industries.....	-8.4	-20.1
Lead and zinc:			Metal.....	+1.0	+1.9
Mines and mills.....	+11.4	+7.4	Wood.....	-2.3	-8.2
Smelters.....	-4.6	-24.2	Rubber.....	+1.3	+1.8
Metals and machinery:			Leather.....	+2	+3.4
Auto repairs, etc.....	-1.9	-44.3	Paper.....	-1.5	-3.5
Machine shops and foundries.....	+48.5	+39.0	Textiles.....	+2.6	+4.9
Tank construction and erection.....	-22.7	-5.9	Foods.....	-2.8	-3.6
Oil industry:			Light and power.....	-1.3	-2.9
Producing and gasoline manufacture.....	-1.5	+5.4	Printing and publishing.....	+4	+9
Refineries.....	-15.5	-4.1	Laundering, cleaning, and dyeing.....	-1.4	+7
Printing: Job work.....	+15.2	+17.1	Chemical (including soap, glue, and explosives).....	-4.5	-7.8
Public utilities:			All manufacturing.....	-3	-9
Steam railway shops.....	-8.2	-6.6	Construction:		
Street railways.....	+6.0	-3.4	Building.....	-18.6	-24.9
Water, light, and power.....	-7.3	-1.4	Highway.....	-42.4	-42.4
Stone, clay, and glass:			Railroad.....	-20.8	-21.3
Brick and tile.....	-71.3	-78.0	Marine, dredging, sewer digging.....	-14.6	-16.1
Cement and plaster.....	-3.1	+7.3	Communication:		
Crushed stone.....	-9.6	+16.9	Steam railways.....	-4.8	-5.0
Glass manufacture.....	+6.8	+4.6	Electric railways.....	+8.0	+5.1
Textiles and cleaning:			Express, telephone, and telegraph.....	+5.1	+4.9
Textile manufacture.....	-8	-20.7	Wholesale trade.....	-2.2	-6.0
Laundries, etc.....	-11.0	-15.4	Hotels and restaurants.....	-1.8	
Woodworking:					
Sawmills.....	+41.6	+30.7	<i>Nonmanual</i>		
Millwork, etc.....	+4.3	+1.9	Manufacturing, mines, and quarries.....	-2	+1.5
All industries.....	-4.7	+1.7	Construction.....	-3.8	-2.2
			Communication.....	-1.8	-3.1
January to February, 1928			Wholesale trade.....	+4	-8.0
Pennsylvania			Retail trade—Sales force only.....	+15.2	+11.9
Metal products.....	-1	+11.3	Miscellaneous professional services.....	+2	+8
Transportation equipment.....	+2.8	+11.8	Hotels and restaurants.....	-1.5	
Textile products.....	+0	+5.2			
Foods and tobacco.....	+3.3	+7.6			
Stone, clay and glass products.....	-1.7	+1.1			

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLL IN SPECIFIED STATES—Continued

Yearly period

State and industry group	Per cent of change January, 1927, to January, 1928		State and industry group	Per cent of change January, 1927, to January, 1928	
	Em- p- loy- ment	Pay roll		Em- p- loy- ment	Pay roll
California			New York		
Stone, clay, and glass products.....	-5.1	-1.4	Stone, clay, and glass.....	-9.4	-8.7
Metals, machinery, and conveyances.....	-10.0	-8.9	Metals and machinery.....	-8.2	-10.0
Wood manufactures.....	-2.1	-3.4	Wood manufactures.....	-12.6	-15.3
Leather and rubber goods.....	-4.0	+1.1	Furs, leather, and rubber goods.....	-3.6	-7.2
Chemicals, oils, paints, etc.....	-23.0	-20.9	Chemicals, oils, paints, etc.....	-1.7	-1
Printing and paper goods.....	-1.6	+1.3	Paper.....	-9	-6
Textiles.....	-3.3	-5.8	Printing and paper goods.....	-2.6	-1.1
Clothing, millinery, and laundering.....	-3	-4.3	Textiles.....	-4.5	-5.8
Foods, beverages, and tobacco.....	-9.8	-4.2	Clothing and millinery.....	-5.2	-4.7
Water, light, and power.....	+3	-3	Food and tobacco.....	-2.9	-2.7
Miscellaneous.....	-17.9	-12.7	Water, light, and power.....	-1	+4
All industries.....	-7.8	-6.7	All industries.....	-5.8	-6.8

New York City Welfare Council's Unemployment Conference

THE gradual decline in the volume of employment has placed a heavier burden on the welfare agencies of New York City. The weight of this additional responsibility has pressed particularly on the city Welfare Council's sections on family service, seamen, and employment and vocational guidance. These three member agencies of the council decided, therefore, to call a conference on unemployment, which was held on February 7, 1928, and was attended by the 166 persons representing 73 agencies.

A brief review of the general industrial situation and a summary of unemployment conditions in New York City were presented at this meeting.¹

In discussing the decrease in registrations of applicants for jobs at State employment offices in 1927 as compared with 1926 such decrease was explained by the fact that in periods of severe unemployment men swarm around the employment offices but when they find there is no chance for a job they do not register. When the labor market conditions are fair and some jobs are available a higher percentage of men who call at the office make formal registration. The highest proportion of registrants is noted when there are numerous jobs obtainable since the workers take advantage of the favorable labor market and try to secure better positions. Moreover, space in one of the New York City offices is so circumscribed that when it becomes very crowded many would-be applicants turn away at once, which still further reduces the number of registrations.

Among the suggestions made at the conference were the following:

1. Call upon the mayor to ask the respective chambers of commerce and representatives of all industry in New York to agree to find ways and means to

¹ The Welfare Council of New York City. A brief summary of the meeting on unemployment called by the family service, seamen, and employment and vocational guidance sections of the Welfare Council, Feb. 7, 1928. (Mimeographed.)

increase employment in the industries of New York City by 5 per cent during the next two months as a suitable charge upon the consumers represented by these industries.

2. Call upon the mayor to advance immediately and with great energy the public construction work for which appropriations are already made.

3. Call upon the mayor and board of estimate and apportionment to consider making available at once a sum of not less than \$1,000,000 to undertake street improvements not now contemplated that can be immediately started; 16 cents per capita.

4. Call upon the legislature and the governor to prepare plans for permanent measures of prevention including strengthening the present inadequately supported employment bureaus and the consideration of the practicability of employment compensation in New York State.

5. Call upon the private citizens of New York to increase by 10 per cent the volume of donations to family welfare organizations and other social service organizations dealing in any way with relief problems affecting present increased load placed upon them.

6. Consideration of facts on employment by all social agencies affected and joint action in devising both remedial and preventive measures.

7. Protest against the Johnson Deportation Bill now before Congress which will prevent alien seamen from being legally employed during their 60 days on shore and thus throw the burden of their support on the welfare agencies.

8. Continuous study over a long period of time of unemployment and planning to prevent it. Trouble is that no thought is given to problem between periods of depression and we are always unprepared for crisis.

9. In a period of depression do not set up new machinery to deal with problem; utilize existing agencies and coordinate their efforts.

10. Enforce child labor laws and reduce number of cases where children 14 and 15 are permitted to enter industry and compete with older people for such jobs as are available.

11. Encourage instruction for working people in supplemental trades so that when seasonal occupations cease, another trade can be followed.

12. Since unemployment is partly due to scientific management and the increased use of machinery which are beneficial to employers, urge upon them obligation to consider ways and means of safeguarding rights of employees and methods which will prevent their being thrown out of employment. Make industry partly responsible through a system of unemployment insurance.

13. Urge industry to keep on more men than are actually needed rather than contribute to relief funds.

14. Social agencies might well put a certain number of men to work in public parks, etc., and pay their wages. This is to some extent a present practice of the A. I. C. P.

15. Push public works during periods of declining employment.

A motion was carried that a permanent committee representative of New York City's private and public agencies as represented in the sections of the Welfare Council be appointed by that council to study further the existing unemployment conditions, to formulate programs for "action to relieve the present emergency situation, to cooperate with the New York State Commissioner of Labor, to consider any other steps recommended at this meeting, and to take steps of prevention for future similar situations."

The conference also approved the Jones Bill (S. 2475) introduced in the United States Congress January 11, 1928, creating a prosperity reserve of \$150,000,000 to be available for public work in times of depression and unemployment.

Employment Situation in Canada, 1927¹

THERE was a greater volume of employment in Canada, as a whole, in 1927 than in any other year since 1920, according to the combined reports of Dominion employers in manufacturing, logging, mining, communication, transportation, construction and maintenance, services, and trade. The large-scale expansion was almost uninterrupted from the first part of January, 1927, up to the first of September when the index number reached the peak—109.7. On January 1, 1928, the index was 99.5.

It will be noted in the table that in each month of 1927 the index number of volume of employment was higher than in the corresponding month of 1926. Moreover, the monthly indexes of 1926 were considerably above those of the corresponding months of 1925.

The percentage of unemployment in trade-unions does not indicate such a striking improvement in 1927 over 1926 in the organized labor market as is shown by the volume of employment indexes. In only six months of 1927 (January, February, March, April, June, and September) was the percentage of unemployment in trade-unions less than in the corresponding months in 1926. On the other hand, in 1926 the percentage of trade-union unemployment was lower each month than in the same month in 1925.

INDEX NUMBERS OF EMPLOYMENT ON THE 1ST OF EACH MONTH AND PER CENT OF UNEMPLOYMENT IN TRADE-UNIONS AT END OF EACH MONTH, 1925 TO 1927

Month	Index numbers of employment (1920=100)			Per cent of trade-unions members unemployed		
	1925	1926	1927	1925	1926	1927
January.....	83.9	89.6	94.8	10.2	8.1	6.4
February.....	86.1	90.7	95.4	9.5	8.1	6.5
March.....	87.0	91.5	96.3	8.5	7.3	5.7
April.....	87.2	91.4	96.2	8.7	7.3	6.0
May.....	90.8	94.3	100.6	7.0	4.9	5.2
June.....	94.5	101.0	105.9	6.1	4.1	3.2
July.....	96.8	103.7	108.4	5.2	2.3	3.3
August.....	96.3	104.2	109.2	4.4	2.5	3.7
September.....	96.6	104.9	109.7	5.7	3.3	3.1
October.....	98.3	105.2	109.0	5.1	2.6	3.9
November.....	97.1	102.8	107.5	5.7	4.7	5.2
December.....	95.3	101.1	106.8	7.9	5.9	6.6

¹ Labor Gazette, Ottawa, January, 1928, pp. 58, 59, and February, 1928, pp. 184, 189.

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in the United States

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

Table 1 shows for the United States retail prices of food on February 15, 1927, and January 15 and February 15, 1928, as well as the percentage changes in the year and in the month. For example, the retail price per dozen of strictly fresh eggs was 44.2 cents on February 15, 1927; 55.9 cents on January 15, 1928; and 43.1 cents on February 15, 1928. These figures show decreases of 2 per cent in the year and 23 per cent in the month.

The cost of the various articles of food combined shows a decrease of 2.8 per cent on February 15, 1928, as compared with February 15, 1927, and a decrease of 2.2 per cent on February 15, 1928, as compared with January 15, 1928.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, FEBRUARY 15, 1928, COMPARED WITH JANUARY 15, 1928, AND FEBRUARY 15, 1927

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

Article	Unit	Average retail price on—			Per cent increase (+) or decrease (–) Feb. 15, 1928, compared with—	
		Feb. 15, 1927	Jan. 15, 1928	Feb. 15, 1928	Feb. 15, 1927	Jan. 15, 1928
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak.....	Pound.....	40.9	44.4	44.8	+10	+1
Round steak.....	do.....	35.4	38.6	38.9	+10	+1
Rib roast.....	do.....	30.4	32.7	33.1	+9	+1
Chuck roast.....	do.....	22.7	25.4	25.7	+13	+1
Plate beef.....	do.....	14.9	17.2	17.5	+17	+2
Pork chops.....	do.....	35.9	31.3	29.5	-18	-6
Bacon.....	do.....	48.5	44.6	43.7	-10	-2
Ham.....	do.....	56.7	51.7	51.2	-10	-1
Lamb, leg o.....	do.....	37.3	37.4	37.5	+1	+0.3
Hens.....	do.....	38.5	36.8	37.2	-3	+1
Salmon, canned.....	do.....	33.2	35.3	35.4	+7	+0.3
Milk, fresh.....	Quart.....	14.1	14.3	14.3	+1	
Milk, evaporated.....	15-16 oz. can.....	11.4	11.5	11.5	+1	0
Butter.....	Pound.....	58.8	57.8	56.3	-4	-3
Oleomargarine (all butter substitutes.).....	do.....	29.0	27.6	27.6	-5	0
Cheese.....	do.....	37.6	39.2	39.2	+4	0
Lard.....	do.....	19.6	18.9	18.3	-7	-3
Vegetable lard substitute.....	do.....	25.2	25.0	24.9	-1	-0.4
Eggs, strictly fresh.....	Dozen.....	44.2	55.9	43.1	-2	-23
Eggs, storage.....	do.....	37.7	44.7	41.4	+10	-7
Bread.....	Pound.....	9.4	9.2	9.2	-2	0
Flour.....	do.....	5.6	5.3	5.3	-5	0
Corn meal.....	do.....	5.1	5.2	5.2	+2	0
Rolled oats.....	do.....	9.1	9.0	9.0	-1	0
Corn flakes.....	8-oz. pkg.....	10.9	9.7	9.7	-11	0

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

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE, FEBRUARY 15, 1928, COMPARED WITH JANUARY 15, 1928, AND FEBRUARY 15, 1927—Continued

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

Article	Unit	Average retail price on—			Per cent increase (+) or decrease (–) Feb. 15, 1928, compared with—	
		Feb. 15, 1927	Jan. 15, 1928	Feb. 15, 1928	Feb. 15, 1927	Jan. 15, 1928
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Wheat cereal.....	28-oz. pkg.....	25.4	25.6	25.6	+1	0
Macaroni.....	Pound.....	20.1	20.0	20.0	-0.4	0
Rice.....	do.....	10.8	10.2	10.2	-6	0
Beans, navy.....	do.....	9.2	9.5	10.1	+10	+6
Potatoes.....	do.....	3.8	3.0	3.0	-21	0
Onions.....	do.....	5.7	5.1	5.2	-9	+2
Cabbage.....	do.....	4.9	4.2	4.5	-8	+7
Beans, baked.....	No. 2 can.....	11.7	11.4	11.3	-3	-1
Corn, canned.....	do.....	16.1	15.8	15.8	-2	0
Peas, canned.....	do.....	17.1	16.8	16.8	-2	0
Tomatoes, canned.....	do.....	12.2	11.7	11.8	-3	+1
Sugar.....	Pound.....	7.5	7.1	7.1	-5	0
Tea.....	do.....	77.4	77.4	77.3	-0.1	-0.1
Coffee.....	do.....	49.9	48.5	48.6	-3	+0.2
Prunes.....	do.....	15.8	13.6	13.6	-14	0
Raisins.....	do.....	14.4	13.7	13.6	-6	-1
Bananas.....	Dozen.....	34.7	34.6	34.8	+0.3	+1
Oranges.....	do.....	47.1	51.0	51.0	+8	0
Weighted food index.....	.....	.....	.....	.....	-2.8	-2.2

Table 2 shows for the United States average retail prices of specified food articles on February 15, 1913, and on February 15 of each year from 1922 to 1928, together with percentage changes in February of each of these specified years, compared with February, 1913. For example, the retail price per pound of butter was 41.2 cents in February, 1913; 45.9 cents in February, 1922; 57.7 cents in February, 1923; 60.2 cents in February, 1924; 50.6 cents in February, 1925; 54.5 cents in February, 1926; 58.8 cents in February, 1927; and 56.3 cents in February, 1928.

As compared with February, 1913, these figures show increases of 11 per cent in February, 1922; 40 per cent in February, 1923; 46 per cent in February, 1924; 23 per cent in February, 1925; 32 per cent in February, 1926; 43 per cent in February, 1927; and 37 per cent in February, 1928.

The cost of the various articles of food combined showed an increase of 56.5 per cent in February, 1928, as compared with February, 1913.

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

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

Article	Unit	Average retail price on Feb. 15—									Per cent of increase Feb. 15 of each specified year compared with Feb. 15, 1913							
		1913	1922	1923	1924	1925	1926	1927	1928	1922	1923	1924	1925	1926	1927	1928		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.									
Sirloin steak	Pound	23.9	35.2	37.1	38.7	38.5	40.6	40.9	44.8	47	55	62	61	70	71	87		
Round steak	do.	20.6	30.2	31.5	33.0	32.7	34.8	35.4	38.9	47	53	60	59	69	72	89		
Rib roast	do.	18.8	26.5	27.5	28.3	28.4	29.3	30.4	33.1	41	46	51	51	56	62	76		
Chuck roast	do.	14.9	18.9	19.5	20.4	20.4	22.1	22.7	25.7	27	31	37	37	48	52	72		
Plate beef	do.	11.3	12.8	12.8	13.3	13.2	14.6	14.9	17.5	13	13	18	17	29	32	55		
Pork chops	do.	18.9	29.3	28.7	26.7	30.3	36.3	35.9	29.5	55	52	41	60	92	90	56		
Bacon	do.	25.5	37.9	39.4	36.6	40.6	48.9	48.5	43.7	49	55	44	59	92	90	71		
Ham	do.	25.4	46.5	45.0	44.4	48.1	53.6	56.7	75.2	83	77	75	89	111	123	102		
Lamb, leg of	do.	18.5	35.4	36.0	35.7	38.3	38.4	37.3	37.5	91	95	93	107	108	102	108		
Hens	do.	20.7	36.9	35.5	35.1	36.1	38.9	38.5	37.2	78	71	70	74	88	86	80		
Salmon, canned, red	do.		32.9	31.3	31.2	31.4	37.6	33.2	23.5	44								
Milk, fresh	Quart	8.9	13.2	13.7	14.0	13.9	14.2	14.1	14.3	48	54	57	56	60	58	61		
Milk, evaporated	(1)		11.6	12.1	12.1	11.1	21.6	11.4	11.5									
Butter	Pound	41.2	45.9	57.7	60.2	50.6	54.5	58.8	56.3	11	40	46	23	32	43	37		
Oleomargarine (all butter substitutes)	do.		27.9	27.8	29.8	30.2	31.2	29.0	27.6									
Cheese	do.	22.2	32.9	37.5	37.2	36.4	37.5	37.6	39.2	48	69	68	64	69	69	77		
Lard	do.	15.4	15.9	17.4	18.0	22.8	22.2	19.6	18.3	3	13	17	48	44	27	19		
Vegetable lard substitute	do.		21.7	22.4	24.5	25.8	25.6	25.2	24.9									
Eggs, strictly fresh	Dozen	31.5	48.4	46.2	49.8	53.4	43.8	44.2	43.1	54	47	58	70	39	40	37		
Eggs, storage	do.	23.5	39.1	42.4	39.3	50.3	34.6	37.7	41.4	66	80	67	114	47	60	76		
Bread	Pound	5.6	8.6	8.7	8.7	9.5	9.4	9.4	9.2	54	55	55	70	68	68	64		
Flour	do.	3.3	5.1	4.9	4.6	6.4	6.3	5.6	5.3	55	48	39	94	91	70	61		
Corn meal	do.	2.9	3.9	4.0	4.4	5.5	5.2	5.1	5.2	34	38	52	90	79	76	79		
Rolled oats	do.		8.9	8.7	8.8	9.2	9.1	9.1	9.0									
Corn flakes	(2)		10.3	9.7	9.7	11.0	11.0	10.9	9.7									
Wheat cereal	(3)		26.2	24.8	24.3	24.6	25.4	25.4	25.6									
Macaroni	Pound		20.2	19.8	19.6	20.3	20.3	20.1	20.0									
Rice	do.	8.6	9.3	9.4	9.8	10.8	11.6	10.8	10.2	8	9	14	26	35	26	19		
Beans, navy	do.		8.3	11.3	10.0	10.4	9.6	9.2	10.1									
Potatoes	do.	1.5	3.3	2.1	2.8	2.6	5.7	3.8	3.0	120	40	87	73	280	153	100		
Onions	do.		10.9	5.3	6.0	6.3	5.9	5.7	5.2									
Cabbage	do.		5.7	4.7	5.4	5.0	6.4	4.9	4.5									
Beans, baked	(4)		13.3	13.1	12.9	12.6	12.2	11.7	11.3									
Corn, canned	(4)		15.9	15.4	15.7	17.7	16.7	16.1	15.8									
Peas, canned	(4)		17.8	17.4	17.9	18.5	17.7	17.1	16.8									
Tomatoes, canned	(4)		13.4	12.8	12.9	13.8	12.3	12.2	11.8									
Sugar, granulated	Pound	5.5	6.4	8.7	10.3	7.7	6.7	7.5	7.1	16	58	87	40	22	36	29		
Tea	do.	54.3	67.8	68.9	70.8	74.8	76.1	77.4	77.3	25	27	30	38	40	43	42		
Coffee	do.	29.8	35.6	37.5	38.8	52.1	51.3	49.9	48.6	19	26	30	75	72	67	63		
Prunes	do.		18.8	19.9	17.8	17.1	17.2	15.8	13.6									
Raisins	do.		24.8	18.7	15.8	14.6	14.5	14.4	13.6									
Bananas	Dozen		36.8	36.9	38.1	36.8	35.7	34.7	34.8									
Oranges	do.		48.5	47.1	39.5	44.7	46.5	47.1	51.0									
Weighted food index ⁵										46.2	46.9	52.1	56.4	66.8	61.1	56.5		

¹ 15-16 ounce can.
² 8-ounce package.
³ 28-ounce package.
⁴ No. 2 can.

⁵ 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

Index Numbers of Retail Prices of Food in the United States

IN TABLE 3 index numbers are given which show the changes in the retail prices of specified food articles, by years, from 1913 to 1927,² and by months for 1927 and January and February, 1928. 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 1926 was 162.6, which means that the average money price for the year 1926 was 62.6 per cent higher than the average money price for the year 1913. As compared with the relative price, 159.8 in 1925, the figures for 1926 show an increase of nearly 3 points, but an increase of 1.75 per cent in the year.

In the last column of Table 3 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 Review of March, 1921, p. 25.) Although prior to January, 1921, the number of food articles has varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100.0 are 155.1 for January, and 151.6 for February, 1928.

The curve shown in the chart on page 155 pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

TABLE 3.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD, BY YEARS, 1913, 1920 TO 1927, AND BY MONTHS FOR 1927 AND JANUARY AND FEBRUARY, 1928

[Average for year 1913=100.0]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Hens	Milk	Butter	Cheese
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	151.2	201.4	193.7	206.3	209.9	187.6	183.0	188.2
1921.....	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	186.4	164.0	135.0	153.9
1922.....	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	169.0	147.2	125.1	148.9
1923.....	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	164.3	155.1	144.7	167.0
1924.....	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	165.7	155.1	135.0	159.7
1925.....	159.8	155.6	149.5	135.0	114.1	174.3	173.0	195.5	171.8	157.3	143.1	166.1
1926.....	162.6	159.6	153.0	140.6	120.7	188.1	186.3	213.4	182.2	157.3	138.6	165.6
1927.....	167.7	166.4	158.1	148.1	127.3	175.2	174.8	204.5	173.2	158.4	145.2	170.1
1927: January...	160.6	158.3	153.0	141.9	124.0	174.3	181.1	211.2	180.8	158.4	152.5	170.1
February...	161.0	158.7	153.5	141.9	123.1	171.0	179.6	210.8	180.8	158.4	153.5	170.1
March.....	161.8	159.6	153.5	142.5	123.1	174.3	179.3	210.0	181.7	158.4	154.6	168.8
April.....	164.6	163.2	156.1	145.6	125.6	175.7	178.2	210.8	182.6	157.3	152.5	167.9
May.....	166.5	165.5	157.6	146.9	125.6	173.3	176.3	209.3	180.3	156.2	139.4	167.4
June.....	166.9	165.9	157.1	146.9	125.6	165.2	174.4	206.3	170.4	156.2	135.2	167.4
July.....	171.7	170.0	160.1	149.4	126.4	166.2	172.6	203.0	167.1	157.3	134.2	167.4
August.....	172.0	170.9	160.1	149.4	126.4	179.5	172.2	201.9	166.2	158.4	134.2	167.4
September...	172.4	170.9	160.6	150.0	128.1	193.8	172.2	200.0	166.2	158.4	139.4	170.6
October.....	172.0	170.0	161.1	151.9	130.6	197.6	172.6	199.3	167.6	159.6	145.4	173.3
November...	171.3	169.5	161.1	153.1	133.9	172.9	171.5	197.0	167.1	159.6	147.3	174.7
December...	172.8	171.3	163.6	156.9	138.0	156.2	167.8	192.9	167.6	160.7	152.5	176.5
1928: January...	174.8	173.1	165.2	158.8	142.1	149.0	165.2	192.2	172.8	160.7	150.9	177.4
February...	176.4	174.4	167.2	160.6	144.6	140.5	161.9	190.3	174.6	160.7	147.0	177.4

² For index numbers of each month, January, 1913, to December, 1926, see Bulletin No. 396, pp. 44 to 61; and Bulletin No. 445, pp. 36 to 49.

RETAIL PRICES OF FOOD

TABLE 3.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD, BY YEARS, 1913, 1920 TO 1927, AND BY MONTHS FOR 1927 AND JANUARY AND FEBRUARY, 1928—Continued

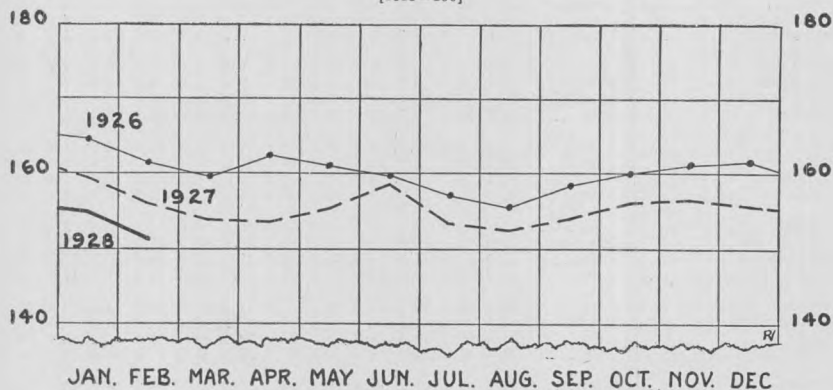
[Average for year 1913=100.0]

Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Pota-toes	Sugar	Tea	Coffee	All articles ¹
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920.....	186.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4
1921.....	113.9	147.5	176.8	175.8	150.0	109.2	182.4	145.5	128.1	121.8	153.3
1922.....	107.6	128.7	155.4	154.5	130.0	109.2	164.7	132.7	125.2	121.1	141.6
1923.....	112.0	134.8	155.4	142.4	136.7	109.2	170.6	183.6	127.8	126.5	146.2
1924.....	120.3	138.6	157.1	148.5	156.7	116.1	158.8	167.3	131.4	145.3	145.9
1925.....	147.5	151.0	167.9	184.8	180.0	127.6	211.8	130.9	138.8	172.8	157.4
1926.....	138.6	140.6	167.9	181.8	170.0	133.3	288.2	125.5	141.0	171.1	160.6
1927.....	122.2	131.0	166.1	166.7	173.3	123.0	223.5	132.7	142.5	162.1	155.4
1927: January.....	126.6	162.0	167.9	169.7	170.0	126.4	235.3	136.4	142.5	168.5	159.3
February.....	124.1	128.1	167.9	169.7	170.0	124.1	223.5	136.4	142.3	167.4	156.0
March.....	122.8	102.6	167.9	166.7	170.0	124.1	217.6	134.5	142.6	165.4	153.8
April.....	120.9	98.3	167.9	166.7	170.0	123.0	217.6	132.7	142.6	163.8	153.6
May.....	120.3	97.4	167.9	166.7	170.0	121.8	264.7	132.7	142.3	161.7	155.4
June.....	119.0	97.1	166.1	166.7	173.3	123.0	352.9	132.7	142.1	160.7	158.5
July.....	119.0	107.0	166.1	166.7	173.3	123.0	247.1	134.5	142.5	159.7	153.4
August.....	119.6	121.7	166.1	169.7	173.3	123.0	200.0	132.7	142.6	159.1	152.4
September.....	121.5	141.2	166.1	166.7	173.3	121.8	188.2	130.9	141.9	158.7	154.0
October.....	124.1	164.1	166.1	166.7	173.3	120.7	176.5	130.9	142.5	159.1	156.1
November.....	123.4	178.8	166.1	163.6	173.3	119.5	176.5	130.9	142.5	160.4	156.5
December.....	121.5	172.8	164.3	163.6	173.3	118.4	176.5	129.1	142.1	161.4	155.9
1928: January.....	119.6	162.0	164.3	160.6	173.3	117.2	176.5	129.1	142.3	162.8	155.1
February.....	115.8	124.9	164.3	160.6	173.3	117.2	176.5	129.1	142.1	163.1	151.6

¹ 22 articles in 1913-1920; 43 articles in 1921-1927.

TREND OF RETAIL PRICES OF FOOD

[1913=100]



Retail Prices of Food in 51

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

[Exact comparisons of prices in different cities can not be made for some articles,

Article	Unit	Atlanta		Baltimore		Birmingham		Boston		Bridgeport		Buffalo	
		Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	42.1	42.0	42.3	43.1	42.5	43.0	472.9	473.2	54.5	53.9	44.3	44.8
Round steak	do	38.3	38.3	39.3	39.2	36.8	37.8	56.1	55.3	47.5	47.5	37.7	37.7
Rib roast	do	32.6	33.1	33.2	33.0	30.7	30.5	42.4	42.7	41.2	41.6	33.3	33.4
Chuck roast	do	25.6	25.6	24.8	24.9	23.9	24.5	31.7	31.1	31.8	31.8	26.8	26.8
Plate beef	do	15.6	16.9	17.3	18.0	15.3	15.5	21.8	21.9	13.0	13.5	16.7	17.1
Pork chops	do	31.1	29.9	28.6	26.3	31.4	29.1	31.8	30.5	33.2	31.8	33.0	31.4
Bacon, sliced	do	44.2	43.3	39.7	39.5	44.0	43.0	43.2	42.5	49.0	49.1	39.8	39.6
Ham, sliced	do	52.1	50.8	52.0	52.7	51.3	51.3	56.4	55.1	55.4	55.0	48.6	48.6
Lamb, leg of	do	38.3	37.9	37.3	36.9	39.8	38.5	37.5	38.2	36.7	36.7	33.3	34.1
Hens	do	36.4	36.6	38.5	39.4	33.2	33.5	39.5	40.2	39.5	40.1	39.1	39.3
Salmon, canned, red	do	34.6	34.0	32.9	33.3	36.8	37.1	34.8	34.4	32.9	32.9	34.5	34.7
Milk, fresh	Quart	18.0	18.0	14.0	14.0	18.7	18.7	16.0	15.5	16.0	16.0	13.0	13.0
Milk, evaporated	15-16 oz. can.	13.5	13.8	11.4	11.3	12.3	12.3	12.0	12.0	11.6	11.6	11.4	11.4
Butter	Pound	57.8	57.0	62.9	61.2	58.4	57.9	58.7	58.7	57.4	57.2	58.6	56.0
Oleomargarine (all butter substitutes).	do	26.9	27.2	27.3	27.5	32.2	32.5	28.2	28.4	25.8	25.8	27.7	27.4
Cheese	do	38.0	37.8	38.3	38.1	39.3	38.6	40.8	40.6	42.8	43.5	39.3	39.8
Lard	do	18.7	17.9	17.1	16.8	18.5	18.0	18.9	18.6	18.2	17.7	18.0	17.4
Vegetable lard substitute	do	21.9	21.5	22.8	23.2	20.5	19.3	25.3	24.9	25.5	25.5	25.8	25.9
Eggs, strictly fresh	Dozen	56.7	43.3	56.6	46.3	58.7	39.7	63.8	59.9	72.3	57.4	55.6	47.3
Eggs, storage	do	46.5	49.0	43.4	41.3	45.3	29.0	50.6	48.2	48.7	43.0	43.6	40.5
Bread	Pound	10.8	10.8	9.6	9.6	10.1	10.1	8.6	8.6	8.8	8.8	8.7	8.7
Flour	do	6.3	6.3	5.0	5.0	6.5	6.5	5.8	5.8	5.5	5.4	4.8	4.8
Corn meal	do	4.0	4.0	4.1	4.0	4.1	4.1	6.5	6.7	7.3	7.3	5.1	5.1
Rolled oats	do	9.9	9.6	8.1	8.2	10.0	9.6	9.0	9.0	8.3	8.5	8.8	8.8
Corn flakes	8-oz. pkg.	9.7	9.7	9.1	9.1	10.1	10.1	9.8	9.8	9.6	9.6	9.4	9.3
Wheat cereal	28-oz. pkg.	26.6	26.6	24.3	24.4	27.4	27.4	24.9	24.9	24.7	24.6	24.8	25.0
Macaroni	do	21.3	21.3	19.1	19.5	18.4	19.0	21.1	21.9	22.4	22.4	21.4	21.4
Rice	do	9.0	8.9	9.5	9.5	10.1	10.3	11.9	11.8	10.9	10.5	10.0	10.1
Beans, navy	do	10.3	10.7	8.9	10.0	10.3	10.5	10.0	10.4	9.7	9.7	9.3	9.5
Potatoes	do	4.1	4.1	2.9	3.0	4.3	4.3	2.9	3.2	3.0	3.0	2.8	2.8
Onions	do	6.9	7.4	5.0	5.0	6.7	6.9	5.4	5.3	5.2	5.2	5.6	5.9
Cabbage	do	5.3	5.0	3.6	4.6	5.3	5.4	5.2	6.0	5.2	5.5	3.2	4.2
Beans, baked	No. 2 can.	11.0	10.7	10.9	10.9	11.2	11.2	12.6	12.7	11.5	11.5	9.9	9.9
Corn, canned	do	17.5	17.5	14.8	14.8	16.7	17.0	17.4	17.5	19.1	19.1	15.6	15.8
Peas, canned	do	18.9	18.9	14.7	14.6	19.8	19.8	19.9	20.0	21.0	21.0	15.7	16.1
Tomatoes, canned	do	10.3	10.3	10.2	10.3	10.4	10.3	11.8	11.8	13.4	13.4	12.8	12.7
Sugar, granulated	Pound	7.4	7.4	6.5	6.5	7.4	7.4	7.2	7.1	6.9	6.9	6.8	6.8
Tea	do	105.9	106.1	72.5	72.9	98.5	99.7	72.5	72.3	63.2	61.0	66.6	66.6
Coffee	do	48.9	48.8	44.2	44.3	50.7	50.7	52.5	53.0	47.2	46.9	46.3	46.2
Prunes	do	13.7	14.1	11.2	11.5	16.2	16.5	13.6	13.3	14.5	14.5	13.2	13.4
Raisins	do	15.4	15.4	12.7	12.7	15.0	15.0	12.7	12.7	14.1	14.1	12.9	12.9
Bananas	Dozen	28.1	28.8	25.1	25.2	38.2	37.7	48.0	48.0	38.3	39.2	42.9	42.6
Oranges	do	41.8	42.3	49.4	47.5	47.4	48.2	54.5	52.9	60.1	56.7	57.1	56.5

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

Cities on Specified Dates

OF FOOD IN 51 CITIES, JANUARY 15 AND FEBRUARY 15, 1928

[particularly meats and vegetables, owing to differences in trade practices]

Butte		Charleston, S. C.		Chicago		Cincinnati		Cleveland		Columbus		Dallas		Denver		Detroit	
Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
33.2	34.5	33.0	33.2	48.2	48.7	41.1	41.3	42.6	43.0	42.8	43.5	38.6	39.1	36.4	36.8	45.2	46.0
30.6	33.2	30.0	30.5	38.8	39.2	37.1	37.3	36.0	36.7	37.8	37.9	34.5	35.0	32.7	33.6	37.4	38.4
28.7	29.9	27.3	28.3	37.3	37.7	33.3	33.4	30.2	30.5	31.8	32.4	29.3	29.7	26.9	27.4	33.5	34.3
21.3	22.5	20.2	20.7	28.6	28.6	24.3	24.5	26.4	27.0	26.8	27.1	24.8	25.0	21.4	22.2	26.1	26.4
14.4	15.7	15.0	15.1	17.3	17.7	18.4	18.3	16.3	17.1	17.9	18.8	19.5	19.5	13.6	13.6	17.0	16.6
31.8	30.5	31.0	30.5	28.8	27.8	26.8	24.8	30.6	28.7	30.5	28.1	33.6	32.7	29.0	27.6	31.5	28.1
52.9	51.7	37.7	37.5	49.0	48.2	38.5	37.8	43.2	42.9	45.6	45.0	46.2	44.8	44.1	44.0	45.7	45.3
56.3	56.7	46.1	45.3	52.5	51.0	50.6	49.7	51.9	52.0	51.7	50.7	53.2	53.6	52.6	51.9	54.6	54.2
35.7	35.6	38.8	40.7	37.4	37.6	37.5	39.8	35.8	35.8	43.0	43.0	44.3	43.6	35.1	34.9	37.9	38.7
34.4	36.1	35.8	35.5	37.4	38.4	38.2	39.1	39.4	39.5	37.0	37.7	32.4	32.5	29.6	30.4	39.5	38.9
32.4	32.7	34.2	34.2	37.0	37.0	36.2	36.1	34.9	35.3	37.3	37.2	38.9	39.3	37.6	37.4	36.4	36.1
14.0	14.0	19.0	19.0	14.0	14.0	14.0	14.0	13.7	13.7	12.0	12.0	13.0	13.0	12.0	12.0	14.0	14.0
11.1	10.9	11.9	11.8	11.4	11.3	11.2	11.1	11.4	11.4	11.7	11.5	13.7	13.5	10.6	10.6	11.4	11.0
55.5	53.7	54.9	55.1	56.0	54.1	58.9	57.3	60.1	58.3	57.1	55.3	58.8	57.6	53.6	52.6	58.3	56.8
-----	-----	29.2	29.2	27.0	26.9	28.3	28.2	28.4	28.6	27.5	27.4	29.2	29.0	24.5	24.3	26.7	25.8
36.8	36.6	37.4	36.7	43.4	43.7	40.1	40.3	39.9	40.4	38.5	38.2	39.4	39.0	39.7	39.8	41.0	40.5
22.8	22.2	20.1	20.2	19.5	18.7	16.5	15.9	20.5	19.9	16.2	15.6	23.1	22.1	19.0	18.2	18.7	18.0
30.6	30.4	21.6	21.6	26.7	26.5	26.2	25.7	26.8	26.8	26.3	26.2	24.8	24.4	22.2	21.1	27.0	26.8
55.3	48.8	54.4	42.3	47.6	47.6	37.7	39.9	60.5	45.6	55.3	58.1	55.4	35.6	53.0	31.6	59.3	43.6
38.6	37.1	40.6	40.0	47.6	42.5	43.8	36.7	42.8	39.0	41.0	-----	-----	-----	43.6	25.0	43.7	36.0
9.8	9.8	10.9	10.9	9.6	9.6	8.6	8.1	7.7	7.7	7.3	7.2	9.4	9.3	8.3	8.2	8.1	8.1
5.3	5.4	6.8	6.8	4.9	4.8	5.5	5.5	5.4	5.4	4.9	4.9	5.5	5.7	4.4	4.4	5.1	5.0
6.2	6.2	3.9	3.9	6.7	6.8	4.4	4.4	5.3	5.4	4.1	3.9	4.5	4.4	4.5	4.5	6.0	5.9
7.8	7.9	9.5	9.5	8.6	8.7	8.8	8.9	9.3	9.4	9.5	9.6	10.6	10.6	7.4	7.4	9.5	9.5
10.5	10.3	9.9	9.9	9.5	9.5	9.6	9.6	10.1	10.0	10.1	10.2	10.6	10.5	9.6	9.5	9.8	9.9
28.5	28.3	25.7	25.6	25.7	25.7	25.1	24.8	25.8	25.9	26.1	26.1	27.8	27.7	24.4	24.6	26.0	26.0
19.0	19.4	18.5	18.5	19.1	19.1	18.6	18.4	21.4	21.4	19.4	19.4	22.0	22.0	19.6	19.5	21.9	22.1
10.7	10.7	7.2	7.2	10.6	10.5	9.4	9.5	10.6	10.6	11.7	11.6	12.3	11.9	9.2	9.3	11.5	11.5
10.1	9.8	10.1	10.3	9.7	10.3	8.3	9.5	8.8	9.3	8.8	9.2	11.4	11.7	9.7	10.2	8.8	9.5
1.7	1.7	3.3	3.4	3.0	2.9	3.1	3.0	3.1	3.1	2.7	2.7	4.6	4.4	2.1	2.0	2.5	2.4
4.8	5.9	5.9	5.7	5.4	5.5	5.1	5.2	4.5	4.6	4.7	5.1	6.9	6.6	4.0	4.3	4.3	4.6
6.2	6.2	4.1	4.3	5.1	5.6	3.9	5.0	3.6	4.5	3.9	4.2	5.4	5.0	3.8	4.2	3.6	4.4
13.5	13.5	9.8	9.8	13.0	12.8	10.4	10.3	12.9	12.6	11.7	11.8	12.4	12.4	11.2	11.4	11.5	11.1
14.6	15.6	14.9	14.8	16.1	16.0	15.3	15.3	17.5	16.9	14.8	14.5	18.8	18.7	14.2	14.1	15.6	15.5
14.1	14.1	16.2	16.1	16.5	16.6	17.1	17.1	18.0	17.6	16.4	14.8	21.6	21.6	15.4	15.3	16.5	16.3
12.8	12.8	9.8	9.8	13.8	13.9	11.9	11.9	13.7	14.0	12.6	12.6	12.7	12.5	11.8	11.9	12.4	12.3
8.7	8.6	6.7	6.7	6.9	6.9	7.3	7.4	7.6	7.6	7.7	7.7	8.0	8.0	7.6	7.5	7.3	7.4
81.6	82.0	80.7	80.7	69.9	69.5	80.1	79.6	78.7	80.0	87.9	87.9	107.1	107.1	69.9	69.4	73.9	75.2
54.2	54.4	43.8	44.4	48.9	48.8	44.0	44.1	50.8	50.8	48.0	48.3	57.7	57.7	49.5	49.5	47.9	47.0
14.2	14.5	10.8	10.8	14.4	15.2	13.2	13.7	14.0	14.0	15.4	16.1	17.0	17.5	14.3	14.2	13.8	14.0
14.6	14.6	12.9	12.9	14.4	14.3	14.2	14.2	13.5	13.6	13.9	13.9	15.5	15.4	13.7	13.2	13.8	13.7
13.8	14.0	23.2	26.0	40.4	40.4	41.1	41.1	11.1	11.1	39.2	37.5	36.3	36.3	11.0	11.8	36.9	35.7
54.0	51.7	32.5	34.2	56.6	54.9	46.0	48.3	54.3	53.8	51.4	50.9	50.8	52.4	51.7	50.1	54.3	54.0

¹ Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	Fall River		Houston		Indianapolis		Jacksonville		Kansas City		Little Rock	
		Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak.....	Pound.....	67.9	68.4	36.8	36.3	42.3	41.9	35.4	36.2	40.5	40.5	38.1	38.8
Round steak.....	do.....	52.4	52.1	36.0	36.0	40.0	39.6	30.8	31.5	35.4	35.5	35.0	35.6
Rib roast.....	do.....	35.9	35.6	28.7	28.5	31.1	30.3	27.3	27.7	28.5	27.9	30.7	30.8
Chuck roast.....	do.....	27.3	27.5	23.8	23.0	26.9	26.4	21.2	20.4	22.3	22.3	23.3	23.5
Plate beef.....	do.....	16.0	17.3	20.0	20.3	17.0	17.1	13.1	13.3	16.2	16.0	18.8	19.0
Pork chops.....	do.....	30.6	28.7	33.0	29.0	29.2	27.8	30.1	28.0	27.1	25.4	28.6	27.1
Bacon, sliced.....	do.....	42.5	41.3	44.2	42.1	40.4	40.0	39.3	38.6	44.8	42.2	43.5	41.8
Ham, sliced.....	do.....	51.1	50.2	48.2	47.2	50.4	50.4	45.8	45.8	48.9	49.1	49.7	48.2
Lamb, leg of.....	do.....	40.5	40.7	33.3	32.9	39.0	40.0	37.6	37.6	35.4	34.8	37.0	37.0
Hens.....	do.....	43.5	42.5	33.2	32.4	38.4	38.2	34.2	33.5	32.5	33.4	29.8	29.9
Salmon, canned, red.....	do.....	36.3	36.0	33.9	34.3	35.3	36.0	35.8	34.6	36.5	37.2	35.2	35.6
Milk, fresh.....	Quart.....	15.0	15.0	15.6	15.6	12.0	12.0	20.3	20.3	13.0	13.0	15.0	15.0
Milk, evaporated.....	15-16 oz. can.....	12.9	12.5	11.7	11.5	10.7	10.8	11.8	11.7	11.5	11.6	12.0	12.2
Butter.....	Pound.....	56.4	56.1	56.0	55.0	56.9	56.0	57.5	54.9	56.1	54.9	55.9	55.2
Oleomargarine (all butter substitutes).....	do.....	26.9	27.1	26.5	25.8	29.3	29.7	30.3	30.8	25.5	27.9	28.0	28.0
Cheese.....	do.....	41.8	41.9	36.1	36.0	40.0	40.0	37.5	36.9	39.7	38.7	39.6	40.4
Lard.....	do.....	18.2	17.5	20.3	19.9	16.4	15.3	20.1	18.6	18.3	17.5	21.7	21.2
Vegetable lard substitute.....	do.....	26.6	26.6	16.4	15.9	27.0	26.5	21.2	21.9	27.0	27.0	20.7	20.2
Eggs, strictly fresh.....	Dozen.....	68.8	55.9	54.7	29.4	54.7	35.9	57.3	38.1	50.7	37.0	56.2	33.8
Eggs, storage.....	do.....	49.3	44.6	43.3	28.5	41.3	-----	48.0	45.0	38.9	-----	49.0	25.0
Bread.....	Pound.....	8.9	8.8	8.7	8.7	8.0	8.0	10.1	10.1	9.7	9.8	9.3	9.3
Flour.....	do.....	5.7	5.7	5.2	5.2	5.4	5.5	6.5	6.5	4.9	5.0	6.0	6.0
Corn meal.....	do.....	6.9	6.9	4.2	4.1	4.0	4.0	4.2	4.1	5.5	5.3	3.9	3.8
Rolled oats.....	do.....	9.5	9.6	8.8	8.7	8.7	8.7	9.5	9.6	8.9	9.0	10.4	10.5
Corn flakes.....	8-oz. pkg.....	10.0	10.0	8.9	9.1	9.4	9.4	9.9	9.9	9.8	9.8	10.6	10.3
Wheat cereal.....	28-oz. pkg.....	25.3	25.3	25.5	25.5	26.4	25.7	24.8	24.2	26.9	26.9	27.6	27.8
Macaroni.....	do.....	23.5	23.4	17.9	18.1	18.8	19.1	19.1	19.1	20.2	19.9	20.6	20.4
Rice.....	do.....	11.3	11.3	7.5	7.3	10.4	10.5	8.1	7.5	9.5	9.6	7.9	8.1
Beans, navy.....	do.....	9.8	10.2	9.8	10.2	8.9	10.1	9.9	10.4	9.7	10.3	9.6	10.5
Potatoes.....	do.....	3.1	3.2	4.2	4.0	2.7	2.6	3.9	3.8	2.6	2.6	3.5	3.5
Onions.....	do.....	5.3	5.2	5.1	5.1	5.3	5.3	6.2	6.5	6.0	6.3	5.9	6.1
Cabbage.....	do.....	6.3	6.9	5.0	4.8	4.1	4.1	4.1	4.1	3.9	4.1	4.6	4.5
Beans, baked.....	No. 2 can.....	11.9	11.9	10.5	10.5	9.7	10.2	10.4	10.7	11.8	11.8	10.2	10.5
Corn, canned.....	do.....	17.3	17.3	13.7	13.9	13.7	14.0	18.3	17.8	14.0	14.2	16.6	16.8
Peas, canned.....	do.....	19.0	19.5	13.9	13.5	14.2	14.2	16.6	16.6	14.9	15.4	17.5	17.6
Tomatoes, canned.....	do.....	12.8	12.3	9.7	9.8	12.2	11.8	9.9	10.0	11.2	11.5	10.0	10.0
Sugar, granulated.....	Pound.....	7.2	7.3	6.9	6.9	7.3	7.3	7.5	7.4	7.5	7.5	7.7	7.7
Tea.....	do.....	59.5	60.7	83.6	82.8	88.3	88.3	98.9	98.9	92.9	91.4	106.3	107.2
Coffee.....	do.....	49.8	49.8	42.0	41.9	47.8	46.4	47.7	47.5	51.1	51.0	52.0	53.2
Prunes.....	do.....	14.4	14.7	13.0	12.6	14.6	14.6	15.3	15.6	13.8	13.8	15.3	15.1
Raisins.....	do.....	13.5	13.6	12.9	12.5	14.2	14.5	15.0	15.0	14.5	14.0	15.1	15.0
Bananas.....	Dozen.....	10.2	10.2	26.3	26.7	31.7	31.1	26.4	28.6	11.2	11.1	9.5	9.3
Oranges.....	do.....	51.7	53.3	40.5	46.4	49.4	51.4	32.6	39.2	53.5	52.5	49.4	49.6

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

RETAIL PRICES OF FOOD

OF FOOD IN 51 CITIES, JANUARY 15 AND FEBRUARY 15, 1928—Continued

Los Angeles		Louisville		Manchester		Memphis		Milwaukee		Minneapolis		Mobile		Newark		New Haven	
Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
41.3	41.6	39.7	39.3	59.7	60.7	40.0	39.8	40.8	40.8	36.8	38.4	36.5	38.0	49.5	50.5	58.6	58.6
34.1	34.2	36.2	36.4	46.5	46.5	35.7	35.8	36.1	36.5	32.7	33.4	36.0	37.5	47.2	47.6	46.2	48.3
32.5	32.4	29.3	29.1	30.1	30.9	28.8	28.8	30.6	31.1	29.0	29.4	29.5	30.5	38.7	39.6	39.2	39.0
24.0	24.4	23.3	23.5	25.4	26.1	23.1	22.7	26.7	27.1	24.5	24.8	25.0	24.0	29.6	30.1	28.8	29.3
17.2	17.6	19.5	19.4	18.2	18.6	19.8	18.4	16.3	16.9	15.5	15.6	18.3	18.5	17.6	18.7	16.6	17.0
39.3	34.0	26.1	25.2	28.8	27.8	25.9	24.1	27.9	26.5	31.3	29.8	36.5	34.5	31.7	30.9	30.6	29.6
53.3	50.4	44.5	45.0	37.4	36.1	36.3	36.1	45.9	43.8	46.2	46.9	44.4	43.3	43.4	43.6	44.8	44.3
66.6	64.2	49.2	48.5	42.2	42.2	48.2	48.6	47.0	46.3	48.3	48.6	50.0	48.2	52.3	52.1	56.7	56.7
37.3	37.4	36.7	36.7	35.7	36.8	36.3	35.6	37.3	37.5	33.7	34.1	40.8	39.2	37.0	37.4	37.7	38.2
43.8	43.1	36.3	36.4	41.8	41.9	30.9	31.0	32.8	35.1	35.0	35.9	34.4	33.8	36.2	37.3	40.6	41.3
34.1	33.9	34.5	35.2	34.9	35.0	32.9	32.6	35.3	34.9	36.7	36.7	35.1	34.8	33.6	33.5	34.6	35.0
15.0	15.0	13.0	13.0	15.0	15.0	15.0	15.0	11.0	11.0	12.0	12.0	18.0	18.0	16.0	16.0	16.0	16.0
10.0	9.9	11.8	11.9	12.9	12.8	11.7	11.7	11.4	11.3	11.8	11.9	11.5	11.4	11.1	10.9	12.1	12.1
56.4	54.2	58.3	57.6	59.2	57.9	57.7	56.5	55.1	53.5	54.3	51.7	58.4	57.7	61.2	58.0	56.2	56.3
25.8	25.3	27.0	27.0	24.6	24.6	24.3	24.3	27.0	26.7	25.8	25.2	28.6	29.5	30.5	30.3	29.1	30.0
38.5	38.4	40.1	40.8	39.2	39.2	38.3	37.9	37.3	38.1	36.3	37.3	38.5	38.3	40.7	39.7	40.3	40.4
20.9	19.3	16.7	15.7	18.1	17.7	15.4	14.7	19.2	18.7	18.5	17.4	19.6	19.3	19.4	18.7	17.6	17.5
23.5	23.9	27.2	28.0	26.3	26.3	21.8	22.0	26.4	26.4	27.3	27.1	21.1	20.8	25.5	25.6	26.2	26.1
43.3	33.7	54.9	38.4	59.4	56.1	49.6	35.0	52.0	38.0	46.6	38.5	50.3	32.7	65.6	54.5	71.1	63.6
41.0	28.0			47.9	45.3	42.8		39.9	32.5	38.0	37.5	46.2	40.0	47.5	44.9	51.3	49.2
8.7	8.7	9.1	9.1	8.6	8.6	9.4	9.4	8.8	8.8	8.9	8.9	10.1	10.1	9.1	9.1	9.2	9.2
5.1	5.2	6.1	6.5	5.5	5.4	5.9	6.0	4.8	4.8	5.0	4.9	6.1	6.0	5.1	5.1	5.3	5.3
5.6	5.6	3.9	4.0	5.2	5.2	3.6	3.5	5.9	5.9	5.7	5.7	4.1	4.0	6.8	6.9	7.0	6.9
9.9	9.9	8.3	8.5	9.1	8.8	9.0	9.0	8.3	8.3	7.9	8.0	8.6	8.4	8.2	8.0	9.1	9.1
9.4	9.4	9.7	9.6	9.7	9.5	9.8	9.8	9.3	9.4	10.0	9.7	9.5	9.5	9.2	9.2	10.1	10.0
24.9	24.9	26.7	26.7	25.9	25.7	25.6	25.6	24.7	24.5	25.5	25.6	24.4	24.4	24.7	24.7	24.5	25.0
18.3	18.3	18.9	18.7	23.7	23.6	19.7	19.5	18.0	17.7	18.2	18.5	20.9	20.9	21.4	21.4	21.8	22.3
10.0	9.9	10.8	10.6	9.4	9.2	8.6	8.5	10.4	10.6	10.2	9.5	9.3	8.9	9.8	9.5	10.5	10.3
9.4	10.2	8.4	9.9	9.2	9.5	9.6	10.2	8.9	10.1	9.9	10.4	9.4	9.6	9.9	10.0	9.6	9.9
2.8	2.6	3.1	3.1	2.7	2.8	3.3	3.3	2.4	2.5	2.2	2.2	3.8	3.8	3.3	3.6	3.2	3.2
5.1	5.4	5.7	5.7	5.0	5.0	5.3	5.2	4.6	4.7	4.3	4.9	5.1	5.2	5.1	5.3	5.5	5.5
4.6	4.1	4.9	5.0	3.3	3.4	3.9	3.8	3.6	4.6	3.1	3.5	4.7	4.8	4.5	5.3	4.3	5.4
10.7	10.4	10.2	10.4	13.3	13.2	11.0	11.0	11.0	11.0	12.1	12.2	10.3	10.2	10.1	10.2	11.6	11.5
16.1	16.0	15.3	15.3	16.4	16.1	14.6	14.8	15.9	16.1	14.2	14.4	15.9	16.0	15.2	16.2	17.8	17.8
16.8	16.8	15.2	15.2	18.2	18.1	15.7	16.1	16.0	16.1	14.6	14.6	15.8	15.9	17.8	17.8	19.2	19.6
14.5	14.5	10.6	10.6	12.1	12.3	9.7	9.7	13.4	13.0	12.9	13.4	9.8	10.1	10.3	10.8	12.8	12.8
6.8	6.8	7.4	7.4	7.3	7.3	6.9	7.0	6.8	6.8	7.2	7.2	7.1	7.0	6.7	6.5	7.0	7.0
72.6	72.6	92.7	29.7	64.5	64.2	97.2	97.9	71.7	72.1	59.0	61.7	79.4	78.5	58.8	58.8	59.6	59.6
52.3	52.4	49.2	49.5	50.1	50.4	48.9	48.7	43.4	44.0	50.9	51.4	48.2	48.3	48.5	48.4	51.5	51.6
12.4	12.1	14.3	14.4	12.7	12.8	14.3	13.5	13.2	13.4	14.4	13.8	12.4	12.9	12.8	12.7	14.0	13.8
11.5	11.9	13.8	14.1	13.4	13.4	14.1	14.4	14.1	14.0	14.3	14.4	13.4	13.5	14.3	13.7	13.7	13.9
49.2	49.6	10.0	10.0	49.5	49.5	49.1	49.1	49.8	49.7	11.7	12.0	24.4	25.0	38.0	38.0	33.2	33.5
48.8	48.4	39.6	42.9	51.4	48.8	43.6	47.2	53.2	52.3	56.0	49.3	46.0	46.2	54.0	54.3	53.5	53.7

² The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

³ No. 2½ can.

⁴ Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article	Unit	New Orleans		New York		Norfolk		Omaha		Peoria		Philadelphia	
		Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	37.2	38.4	49.8	49.7	42.3	42.7	38.4	38.9	35.5	36.3	160.0	159.7
Round steak	do	32.9	33.4	46.9	47.0	36.2	37.8	36.7	36.2	34.2	34.8	46.3	46.2
Rib roast	do	31.3	32.8	42.3	42.7	33.9	33.2	26.5	26.6	25.0	26.0	39.3	40.6
Chuck roast	do	22.3	22.4	28.2	28.9	25.0	24.1	22.9	23.0	22.6	23.5	29.8	30.9
Plate beef	do	19.0	19.4	23.2	23.9	17.7	17.0	14.5	14.4	15.3	16.1	17.4	18.0
Pork chops	do	31.3	30.5	35.1	34.4	29.8	29.2	28.8	27.2	28.0	25.4	33.7	31.7
Bacon, sliced	do	42.9	41.0	45.2	45.0	41.7	42.6	46.6	45.9	45.4	44.2	42.9	40.5
Ham, sliced	do	48.7	47.1	55.2	55.6	45.3	45.0	48.4	46.8	49.6	47.7	52.8	53.2
Lamb, leg of	do	38.0	38.6	35.1	36.2	40.0	39.7	36.7	35.9	38.3	36.7	39.0	39.3
Hens	do	36.8	36.0	38.2	39.4	37.7	37.9	30.8	31.1	32.2	32.7	40.7	40.5
Salmon, canned, red	do	36.5	36.5	34.3	34.3	37.1	36.6	36.3	35.8	35.7	35.9	34.0	33.0
Milk, fresh	Quart	14.0	14.0	16.0	16.0	18.0	18.0	11.3	11.0	13.0	13.0	13.0	13.0
Milk, evaporated	15-16 oz. can.	11.2	11.1	11.2	11.1	11.5	11.7	11.8	11.8	11.4	11.3	11.8	11.7
Butter	Pound	58.8	57.5	60.1	56.9	60.1	59.9	54.2	53.9	54.6	51.6	62.5	60.5
Oleomargarine (all butter substitutes).	do	29.1	29.1	27.0	27.7	25.0	24.5	25.9	25.8	28.6	28.4	28.9	28.6
Cheese	do	40.4	40.4	40.5	40.3	36.9	37.4	39.2	38.3	39.2	38.9	42.3	42.9
Lard	do	19.3	18.1	19.8	19.2	18.5	17.9	19.4	18.6	18.5	17.9	17.9	16.8
Vegetable lard substitute	do	19.9	19.5	25.8	25.8	23.2	22.4	25.9	25.2	27.7	27.1	25.2	25.0
Eggs, strictly fresh	Dozen	54.0	38.2	66.6	54.2	54.1	45.1	46.2	34.0	52.9	36.5	63.8	51.5
Eggs, storage	do	43.8	33.0	48.1	40.7	46.8	47.7	38.7	35.0	43.0	38.0	46.0	42.4
Bread	Pound	8.7	8.7	9.1	9.1	9.9	9.9	9.7	9.7	10.0	10.0	9.4	9.4
Flour	do	6.6	6.6	5.3	5.2	5.5	5.5	4.3	4.3	5.0	5.1	4.9	4.8
Corn meal	do	4.1	4.2	6.7	6.6	4.6	4.6	4.7	4.5	4.8	4.8	5.2	5.3
Rolled oats	do	8.9	8.8	8.6	8.6	8.6	8.5	10.1	10.0	9.0	9.0	8.6	8.5
Corn flakes	8-oz. pkg.	9.7	9.6	9.2	9.2	9.7	9.7	9.8	9.9	9.7	9.7	9.4	9.4
Wheat cereal	28-oz. pkg.	24.9	24.9	23.9	24.1	24.8	25.0	28.4	28.0	26.3	26.3	25.3	25.0
Macaroni	do	10.8	10.8	20.9	20.8	19.0	19.0	21.2	21.2	18.6	18.6	20.9	20.8
Rice	do	9.4	9.3	10.2	10.0	11.3	11.1	10.5	11.0	10.9	10.4	10.9	10.9
Beans, navy	do	9.2	9.3	10.3	10.9	8.8	9.1	9.8	10.0	9.0	10.1	9.1	9.9
Potatoes	do	3.7	3.6	3.6	3.6	3.8	3.9	2.4	2.4	2.4	2.4	3.6	3.5
Onions	do	4.6	4.9	5.1	5.4	5.3	5.0	5.6	6.0	5.3	5.0	4.5	4.6
Cabbage	do	5.4	4.1	4.0	4.5	4.3	5.0	3.7	4.4	3.4	3.4	3.2	3.8
Beans, baked	No. 2 can.	11.1	10.9	10.9	10.7	9.9	9.9	12.9	13.0	11.1	10.4	10.6	10.8
Corn, canned	do	14.7	14.7	14.5	14.8	14.8	14.8	16.2	16.2	15.3	15.3	14.7	14.4
Peas, canned	do	17.8	17.0	15.2	15.2	17.8	17.6	15.8	15.8	17.3	17.3	15.3	15.5
Tomatoes, canned	do	10.9	10.6	11.1	11.0	9.7	9.7	13.4	13.4	12.8	13.0	11.3	11.5
Sugar, granulated	Pound	6.6	6.5	6.3	6.3	6.7	6.8	7.1	7.3	7.8	7.9	6.6	6.6
Tea	do	80.7	79.6	66.7	68.1	94.5	96.7	77.7	77.1	67.0	68.2	68.0	68.9
Coffee	do	35.2	36.1	47.0	46.8	49.4	49.8	53.7	53.7	45.8	48.6	42.9	42.6
Prunes	do	14.2	13.8	12.6	12.1	13.9	13.6	13.9	14.5	15.9	16.0	12.8	12.7
Raisins	do	12.9	12.9	13.1	13.2	13.6	13.8	14.7	14.7	13.8	14.0	13.3	13.1
Bananas	Dozen	16.4	16.4	40.2	39.3	34.5	34.4	212.0	212.0	210.5	210.0	30.6	30.7
Oranges	do	51.3	51.3	60.3	60.1	51.2	50.2	47.1	45.8	49.6	48.6	48.3	46.4

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

RETAIL PRICES OF FOOD

OF FOOD IN 51 CITIES, JANUARY 15 AND FEBRUARY 15, 1928—Continued

Pitts- burgh		Portland, Me.		Portland, Oreg.		Providence		Rich- mond		Rochester		St. Louis		St. Paul		Salt Lake City	
Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
49.8	50.3	166.1	165.7	34.5	35.1	177.2	178.3	43.3	44.3	45.0	45.4	39.2	39.2	38.1	39.1	33.4	35.4
41.3	41.9	49.4	49.6	32.4	32.4	51.5	51.8	38.7	39.0	37.5	37.9	38.3	38.3	33.7	33.8	31.9	32.8
36.8	37.2	32.9	32.9	29.1	29.8	41.4	41.8	34.1	34.0	33.0	33.0	32.4	32.4	31.7	32.3	26.4	26.6
28.3	29.4	23.4	24.3	23.8	23.9	32.2	33.2	24.8	25.5	27.9	28.3	23.8	23.9	25.8	26.5	21.7	22.4
16.6	17.0	19.5	19.4	18.2	18.4	20.8	20.7	17.6	18.2	16.0	16.9	17.0	17.1	15.3	15.6	15.5	16.6
31.9	29.8	31.2	28.6	35.0	31.8	32.1	30.9	31.5	29.9	33.7	32.7	26.6	24.0	27.6	26.8	32.1	32.3
48.6	47.5	42.5	40.4	52.8	50.6	41.4	40.2	41.6	41.6	40.2	39.4	41.7	42.1	43.9	42.6	46.5	45.0
57.1	57.9	49.1	49.4	55.6	54.4	54.2	54.1	45.0	44.6	51.6	51.6	49.5	49.3	45.8	44.7	53.8	52.7
39.7	40.0	35.4	36.4	35.8	36.9	37.9	38.9	43.7	43.4	37.3	37.9	35.2	35.4	32.6	31.9	34.5	34.9
44.5	44.0	40.7	41.2	34.3	34.2	40.3	41.3	36.2	36.3	39.6	40.3	33.1	34.2	33.4	32.9	30.5	30.9
34.1	34.4	35.8	35.9	36.1	36.1	33.4	33.3	35.3	35.3	36.7	36.7	35.8	35.8	39.9	39.6	34.9	35.4
14.8	14.0	15.0	15.0	12.0	12.0	15.7	15.7	14.0	14.0	13.5	13.5	13.0	13.0	12.0	12.0	10.0	10.0
11.0	11.0	12.6	12.6	10.5	10.4	12.1	12.0	12.4	12.4	11.3	11.3	10.8	10.6	12.0	12.1	10.5	10.4
60.7	58.5	59.1	59.1	57.2	55.3	55.4	54.8	61.3	60.6	56.6	55.5	59.5	58.3	53.1	51.0	53.4	51.0
29.2	28.7	26.7	26.9	25.2	25.6	25.6	25.7	30.7	30.0	28.6	28.7	27.2	27.1	24.6	24.6	27.3	26.9
42.0	42.0	39.1	39.7	38.5	38.6	38.6	38.7	37.8	37.8	40.1	39.1	38.9	38.6	38.9	38.2	31.3	31.3
18.8	18.4	18.1	17.8	20.4	19.9	18.2	17.7	18.6	18.6	17.9	17.1	15.2	14.1	18.3	18.0	21.2	20.9
27.6	27.3	26.1	26.2	28.7	28.8	26.3	26.3	25.7	25.9	26.1	26.0	25.2	25.1	28.5	28.5	29.3	29.3
61.4	47.7	58.1	55.4	45.8	34.8	64.1	55.3	52.3	45.9	56.5	45.4	53.8	38.6	47.3	39.2	43.5	36.2
44.1	37.0	47.0	46.7	-----	-----	45.1	43.0	42.5	35.0	43.6	34.5	39.4	33.5	39.8	-----	40.0	-----
8.5	8.6	10.1	10.1	9.2	9.2	9.0	9.0	9.1	9.0	9.1	9.1	9.8	9.8	9.3	9.3	9.8	9.8
5.0	4.9	5.0	5.3	4.8	4.8	5.5	5.5	5.3	5.2	5.1	5.1	5.1	5.1	5.1	5.1	4.1	4.2
6.0	5.9	5.1	5.0	6.1	6.2	5.1	5.1	4.7	4.8	6.2	6.1	4.2	4.2	5.3	5.4	5.5	5.3
9.1	9.1	7.7	8.0	10.7	10.7	9.0	9.0	8.6	8.6	9.4	9.4	8.2	8.1	10.1	9.7	8.6	8.3
10.1	9.9	9.8	9.9	9.6	9.6	9.6	9.5	9.7	9.8	9.5	9.4	9.0	9.1	10.1	10.1	10.9	10.7
25.2	25.2	25.9	25.6	27.1	27.2	24.7	24.7	26.2	26.1	25.5	25.5	24.8	24.8	26.5	26.3	25.9	25.9
23.0	23.1	23.9	23.9	18.3	18.3	22.9	22.9	20.9	20.2	21.1	21.3	19.7	19.6	18.5	18.5	20.2	19.8
11.2	11.1	11.9	11.9	9.9	10.2	10.1	10.5	11.6	11.3	9.8	9.7	9.8	9.8	10.7	10.7	8.8	9.0
9.0	9.7	10.1	10.4	9.6	10.0	9.7	10.0	9.5	10.3	9.2	9.5	9.0	9.6	9.5	10.1	8.8	9.4
3.0	3.1	2.7	3.0	2.3	2.2	2.8	3.0	3.5	3.6	2.5	2.5	3.0	3.3	2.0	2.0	1.8	1.6
5.4	5.4	4.9	5.1	5.0	4.8	4.8	5.2	5.6	5.3	4.5	4.6	5.1	5.0	4.1	4.2	3.1	3.1
4.3	4.9	2.5	2.4	4.6	4.8	4.5	5.4	4.2	4.9	1.7	1.9	3.6	3.7	3.5	3.9	3.0	3.3
12.7	12.4	15.0	15.2	11.7	11.7	10.6	10.8	10.1	10.1	10.2	10.2	10.1	10.2	13.4	13.4	12.7	13.6
16.4	16.3	14.6	14.4	18.6	18.4	17.2	17.0	15.1	15.0	16.2	15.9	15.7	15.3	14.6	14.6	14.4	14.7
17.2	17.2	17.8	17.5	18.6	17.5	18.5	18.6	17.6	18.4	17.9	17.9	15.3	14.9	15.0	15.0	15.8	15.3
11.6	11.7	12.3	12.4	16.8	16.8	13.0	13.1	10.6	10.5	14.5	14.2	11.0	11.0	13.7	13.6	13.8	13.9
7.3	7.4	7.2	7.1	7.1	7.0	6.9	6.9	7.0	7.0	6.4	6.6	7.0	7.0	7.2	7.2	8.0	7.9
82.4	82.9	62.2	62.2	80.3	80.3	60.4	59.7	90.6	92.1	69.0	69.0	74.3	74.9	66.0	63.9	84.2	83.4
47.8	47.7	50.9	50.9	52.6	52.6	49.9	50.6	45.7	46.5	46.0	46.4	46.2	46.4	52.2	52.2	54.5	54.8
13.8	13.4	11.7	11.7	10.8	10.8	12.5	12.6	14.3	13.8	12.9	13.0	14.5	14.4	14.0	13.9	12.6	11.7
13.8	13.5	13.0	12.9	12.9	12.9	13.5	13.4	13.1	13.3	13.8	13.9	13.4	13.3	14.9	14.5	12.9	13.0
41.2	38.9	11.7	11.7	12.6	12.6	31.4	32.9	39.0	40.0	39.2	38.3	33.3	33.8	212.0	212.1	12.7	12.7
49.9	50.2	57.8	60.2	49.5	48.6	59.7	58.8	47.5	50.4	55.0	55.2	48.8	49.2	60.9	57.4	49.9	49.1

² Per pound.

TABLE 4.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, JANUARY 15 AND FEBRUARY 15, 1928—Continued

Article	Unit	San Francisco		Savannah		Scranton		Seattle		Springfield, Ill.		Washington, D. C.	
		Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928	Jan. 15, 1928	Feb. 15, 1928
Sirloin steak	Pound	37.3	36.9	35.0	36.1	55.2	55.7	38.6	39.3	37.5	38.1	49.2	48.5
Round steak	do	34.4	35.4	28.6	28.9	46.2	46.8	35.7	35.9	36.7	37.5	43.0	41.7
Rib roast	do	33.9	33.7	26.8	27.8	39.2	39.4	31.6	31.7	25.0	25.3	35.7	36.1
Chuck roast	do	23.7	23.4	18.7	18.9	31.2	30.7	25.7	25.4	23.3	23.6	26.6	26.7
Plate beef	do	19.1	19.1	15.8	16.9	15.3	15.5	19.7	19.4	16.4	16.7	15.9	16.0
Pork chops	do	39.3	36.8	30.0	29.8	34.5	32.1	38.4	35.2	26.7	26.0	32.8	30.0
Bacon, sliced	do	56.6	55.5	40.6	39.7	46.5	45.6	66.2	64.4	43.8	43.2	42.1	41.6
Ham, sliced	do	61.1	60.2	43.3	42.5	54.5	55.5	59.6	57.7	48.8	47.1	55.8	56.3
Lamb, leg of	do	39.9	39.4	37.5	38.0	42.3	42.7	36.7	36.6	36.7	36.8	38.9	39.8
Ham	do	43.2	43.0	31.4	30.9	43.5	44.1	32.9	32.2	34.5	34.4	40.1	39.6
Salmon, canned, red	do	32.9	32.2	36.3	34.3	36.6	36.9	35.5	35.8	35.4	36.4	34.0	34.5
Milk, fresh	Quart	14.0	14.0	17.0	17.0	13.0	13.0	12.0	12.0	14.4	14.4	15.0	15.0
Milk, evaporated	15-16 oz. can	9.9	9.9	11.5	11.2	11.9	11.9	10.5	10.4	12.0	12.0	12.0	12.0
Butter	Pound	57.4	55.8	59.2	57.4	57.6	56.8	56.8	55.9	57.0	54.4	61.0	59.9
Oleomargarine (all butter substitutes)	do	25.5	25.4	31.5	31.5	27.8	27.8	25.7	25.3	28.5	28.3	27.4	27.7
Cheese	do	39.8	40.2	38.5	38.2	37.6	38.0	36.7	36.3	38.9	38.9	41.2	40.7
Lard	do	23.1	22.8	18.4	17.5	19.3	19.1	21.2	21.4	18.2	17.5	17.0	16.6
Vegetable lard substitute	do	27.8	27.5	17.5	16.9	26.1	26.2	27.2	27.2	27.5	27.5	23.7	23.5
Eggs, strictly fresh	Dozen	44.9	33.5	53.6	36.3	64.0	53.0	42.9	36.4	55.9	38.9	59.5	47.5
Eggs, storage	do			44.2	45.0	44.0	42.5	37.5		43.7	32.5	48.3	45.7
Bread	Pound	9.5	9.5	10.7	10.6	10.6	10.6	9.7	9.7	10.3	10.3	9.0	9.0
Flour	do	5.6	5.6	6.6	6.5	5.8	5.8	4.8	4.8	5.2	5.2	5.6	5.5
Corn meal	do	6.2	6.8	3.8	3.6	7.5	7.7	5.5	5.5	4.8	4.6	5.1	5.2
Rolled oats	do	9.9	9.9	8.7	8.8	9.8	9.8	8.6	8.6	9.6	9.7	9.3	9.3
Corn flakes	8-oz. pkg.	10.0	9.9	9.6	9.6	10.1	10.1	10.0	10.0	10.1	10.1	9.6	9.7
Wheat cereal	28-oz. pkg.	25.3	25.3	24.8	24.4	25.5	25.7	26.6	26.8	27.9	27.7	25.0	24.9
Macaroni	do	15.9	15.8	18.1	17.8	23.1	23.1	18.1	17.9	19.2	19.2	22.7	23.1
Rice	do	10.5	10.6	9.5	9.7	10.4	10.6	10.9	10.9	10.6	10.6	11.2	11.1
Beans, navy	do	9.6	10.5	9.8	10.2	10.6	10.8	10.4	11.3	9.4	11.0	9.2	9.6
Potatoes	do	2.9	2.9	3.6	3.5	3.0	3.0	1.9	1.8	2.6	2.6	3.5	3.7
Onions	do	4.5	5.0	6.3	6.2	4.8	5.2	4.3	4.8	4.8	5.0	4.7	5.1
Cabbage	do			5.3	5.2	3.5	4.3	4.6	4.9	3.5	3.6	5.3	5.3
Beans, baked	No. 2 can	12.7	12.7	11.9	11.6	11.2	11.2	11.6	11.4	10.3	10.3	10.2	10.4
Corn, canned	do	18.0	18.0	15.0	14.6	16.9	16.9	18.0	17.7	15.0	15.5	16.1	15.8
Peas, canned	do	18.2	18.1	16.6	17.3	17.3	17.4	19.3	18.7	16.1	16.2	15.1	15.3
Tomatoes, canned	do	14.9	14.7	9.8	9.9	12.4	12.2	15.8	16.0	13.7	13.7	10.8	10.8
Sugar, granulated	Pound	6.8	6.8	7.0	6.7	7.0	7.1	7.0	7.0	7.7	7.6	6.7	6.8
Tea	do	71.4	71.7	83.1	78.3	71.6	71.5	76.4	76.7	82.7	82.7	95.9	95.7
Coffee	do	52.5	52.7	45.7	43.9	49.9	50.0	50.2	50.5	51.4	51.6	45.7	45.5
Prunes	do	11.8	11.8	13.1	12.7	15.2	14.8	11.7	12.0	13.9	14.1	14.9	14.9
Raisins	do	12.1	12.0	13.7	13.8	13.8	13.7	13.2	13.0	14.2	14.1	13.8	13.6
Bananas	Dozen	30.0	30.6	30.0	30.8	32.3	32.5	21.6	21.9	21.3	21.3	36.1	35.9
Oranges	do	52.9	54.1	41.3	40.8	57.5	58.8	49.0	48.4	53.5	53.9	50.6	52.5

¹ No. 2½ can.² Per pound.

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 food³ in February, 1928, compared with the average cost in the year 1913, in February, 1927, and January, 1928. For 12 other cities comparisons are given for the one-year and the one-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average family consumption of these articles in each city.⁴

³ For list of articles see note 5, p. 153.⁴ The consumption figures used from January, 1913, to December, 1920, for each article in each city are given in the Labor Review for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the Labor Review for March, 1921, p. 26.

TABLE 5.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN FEBRUARY, 1928, COMPARED WITH THE COST IN JANUARY, 1928, FEBRUARY, 1927, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase, February, 1928, compared with 1913	Percentage decrease, February, 1928, compared with—		City	Percentage increase, February, 1928, compared with 1913	Percentage decrease, February, 1928, compared with—	
		February, 1927	January, 1928			February, 1927	January, 1928
Atlanta.....	54.8	2.6	2.4	Minneapolis.....	50.3	1.8	1.4
Baltimore.....	58.0	2.4	1.7	Mobile.....	.....	2.8	2.8
Birmingham.....	56.4	3.8	2.8	Newark.....	48.9	.7	1.5
Boston.....	55.3	1.3	1.5	New Haven.....	55.3	1.0	.7
Bridgeport.....	.....	1.2	2.5	New Orleans.....	49.7	3.2	3.1
Buffalo.....	56.2	2.8	1.7	New York.....	57.6	1.0	2.2
Butte.....	.....	2.9	.7	Norfolk.....	.....	.8	1.2
Charleston, S. C.....	52.8	4.3	1.6	Omaha.....	43.5	6.4	2.2
Chicago.....	62.0	3.5	2.1	Peoria.....	.....	6.3	2.5
Cincinnati.....	52.3	2.5	3.4	Philadelphia.....	57.3	1.8	2.5
Cleveland.....	49.5	4.2	2.1	Pittsburgh.....	53.4	4.2	2.9
Columbus.....	.....	4.4	2.9	Portland, Me.....	.....	.2	0
Dallas.....	51.3	.9	3.6	Portland, Oreg.....	38.0	.9	2.8
Denver.....	34.6	3.4	4.4	Providence.....	54.2	.8	.7
Detroit.....	56.3	4.0	3.0	Richmond.....	60.1	2.1	1.0
Fall River.....	52.6	1.0	2.1	Rochester.....	.....	.2	1.9
Houston.....	.....	4.8	5.1	St. Louis.....	54.2	3.2	2.0
Indianapolis.....	44.9	3.4	3.4	St. Paul.....	.....	3.3	1.5
Jacksonville.....	40.6	7.9	3.7	Salt Lake City.....	29.2	2.3	2.0
Kansas City.....	46.6	3.9	2.2	San Francisco.....	47.5	2.4	2.4
Little Rock.....	43.4	3.8	3.4	Savannah.....	.....	4.3	4.0
Los Angeles.....	37.6	3.9	3.0	Scranton.....	61.0	1.2	1.5
Louisville.....	50.2	.6	2.1	Seattle.....	42.1	1.8	1.7
Manchester.....	51.0	1.7	.6	Springfield, Ill.....	.....	5.2	2.5
Memphis.....	42.2	2.0	2.7	Washington, D. C.....	59.4	1.6	2.1
Milwaukee.....	52.3	3.0	1.8	.....	.....	.....	.....

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 February 99 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 41 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, Birmingham, Boston, Bridgeport, Buffalo, Charleston, S. C., Chicago, Cleveland, Columbus, Dallas, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Kansas City, Little Rock, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Haven, New York, Norfolk, Omaha, Peoria, Philadelphia, Pittsburgh, Portland, Me., Portland, Oreg., Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, and Scranton.

The following summary shows the promptness with which the merchants responded in February, 1928:

RETAIL PRICE REPORTS RECEIVED FOR FEBRUARY, 1928

Item	United States	Geographic division				
		North Atlantic	South Atlantic	North Central	South Central	Western
Percentage of reports received.....	99.0	100.0	98.0	99.4	99.0	97.0
Number of cities in each section from which every report was received.....	41	14	5	12	7	3

Retail Prices of Coal in the United States ^a

THE following table shows the average retail prices of coal on January 15 and July 15, 1913, February 15, 1927, and January 15 and February 15, 1928, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

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

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1927, AND JANUARY 15 AND FEBRUARY 15, 1928

City, and kind of coal	1913		1927	1928	
	Jan. 15	July 15	Feb. 15	Jan. 15	Feb. 15
United States:					
Pennsylvania anthracite—					
Stove—					
Average price.....	\$7.99	\$7.46	\$15.65	\$15.44	\$15.44
Index (1913=100).....	103.4	96.6	202.6	199.8	199.9
Chestnut—					
Average price.....	\$8.15	\$7.68	\$15.44	\$15.08	\$15.09
Index (1913=100).....	103.0	97.0	195.0	190.6	190.6
Bituminous—					
Average price.....	\$5.48	\$5.39	\$9.86	\$9.30	\$9.28
Index (1913=100).....	100.8	99.2	181.4	171.1	170.8
Atlanta, Ga.:					
Bituminous.....	\$5.88	\$4.83	\$8.62	\$7.93	\$7.92
Baltimore, Md.:					
Pennsylvania anthracite—					
Stove.....	17.70	17.24	116.00	116.00	116.00
Chestnut.....	17.93	17.49	115.50	115.25	115.25
Bituminous.....					
			8.32	8.07	8.11
Birmingham, Ala.:					
Bituminous.....	4.22	4.01	8.06	7.72	7.67
Boston, Mass.:					
Pennsylvania anthracite—					
Stove.....	8.25	7.50	16.50	16.25	16.25
Chestnut.....	8.25	7.75	16.25	16.00	16.00
Bridgeport, Conn.:					
Pennsylvania anthracite—					
Stove.....			16.00	14.88	14.88
Chestnut.....			16.00	14.88	14.88
Buffalo, N. Y.:					
Pennsylvania anthracite—					
Stove.....	6.75	6.54	13.74	14.01	14.03
Chestnut.....	6.99	6.80	13.37	13.61	13.63
Butte, Mont.:					
Bituminous.....			10.94	10.89	10.89
Charleston, S. C.:					
Bituminous.....	16.75	16.75	11.00	11.00	11.00
Chicago, Ill.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.80	17.00	16.95	16.95
Chestnut.....	8.25	8.05	16.80	16.46	16.46
Bituminous.....					
	4.97	4.65	9.64	9.21	9.21
Cincinnati, Ohio:					
Bituminous.....	3.50	3.38	7.84	7.08	7.10
Cleveland, Ohio:					
Pennsylvania anthracite—					
Stove.....	7.50	7.25	15.40	15.20	15.15
Chestnut.....	7.75	7.50	15.05	14.80	14.75
Bituminous.....					
	4.14	4.14	9.69	9.00	8.98

¹ Per ton of 2,240 pounds.

^a Prices of coal were formerly secured semiannually and published in the March and September issues of the Labor Review. Since July, 1920, these prices have been secured and published monthly.

RETAIL PRICES OF COAL

165

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1927, AND JANUARY 15 AND FEBRUARY 15, 1928—Continued

City, and kind of coal	1913		1927	1928	
	Jan. 15	July 15	Feb. 15	Jan. 15	Feb. 15
Columbus, Ohio:					
Bituminous.....			\$7.74	\$7.21	\$7.24
Dallas, Tex.:					
Arkansas anthracite—					
Egg.....			16.00	15.75	15.50
Bituminous.....	\$8.25	\$7.21	13.22	12.70	12.70
Denver, Colo.:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	8.88	9.00	16.00	16.00	16.00
Stove, 3 and 5 mixed.....	8.50	8.50	16.50	16.00	16.00
Bituminous.....	5.25	4.88	10.70	10.50	10.47
Detroit, Mich.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.45	16.00	16.00	16.00
Chestnut.....	8.25	7.65	15.67	15.50	15.50
Bituminous.....	5.20	5.20	10.22	9.31	9.31
Fall River, Mass.:					
Pennsylvania anthracite—					
Stove.....	8.25	7.43	16.75	16.75	16.75
Chestnut.....	8.25	7.61	16.25	16.25	16.25
Houston, Tex.:					
Bituminous.....			13.50	12.80	12.60
Indianapolis, Ind.:					
Bituminous.....	3.81	3.70	7.56	7.27	7.23
Jacksonville, Fla.:					
Bituminous.....	7.50	7.00	14.00	14.00	14.00
Kansas City, Mo.:					
Arkansas anthracite—					
Furnace.....			14.50	14.10	14.10
Stove No. 4.....			15.83	15.33	15.33
Bituminous.....	4.39	3.94	7.85	7.50	7.54
Little Rock, Ark.:					
Arkansas anthracite—					
Egg.....			14.00	13.50	13.50
Bituminous.....	6.00	5.33	10.90	10.60	10.60
Los Angeles, Calif.:					
Bituminous.....	13.52	12.50	16.50	16.50	16.50
Louisville, Ky.:					
Bituminous.....	4.20	4.00	7.82	7.46	7.49
Manchester, N. H.:					
Pennsylvania anthracite—					
Stove.....	10.00	8.50	17.50	17.50	17.50
Chestnut.....	10.00	8.50	17.50	17.25	17.25
Memphis, Tenn.:					
Bituminous.....	4.34	4.22	8.78	8.33	8.32
Milwaukee, Wis.:					
Pennsylvania anthracite.....	8.00	7.85	16.80	16.65	16.65
Chestnut.....	8.25	8.10	16.65	16.20	16.20
Bituminous.....	6.25	5.71	10.49	9.48	9.48
Minneapolis, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.25	9.05	18.10	18.15	18.15
Chestnut.....	9.50	9.30	17.95	17.70	17.70
Bituminous.....	5.89	5.79	11.75	11.72	11.69
Mobile, Ala.:					
Bituminous.....			9.92	9.54	9.46
Newark, N. J.:					
Pennsylvania anthracite—					
Stove.....	6.50	6.25	14.00	14.00	14.00
Chestnut.....	6.75	6.50	13.50	13.50	13.50
New Haven, Conn.:					
Pennsylvania anthracite—					
Stove.....	7.50	6.25	15.35	15.10	15.10
Chestnut.....	7.50	6.25	15.35	15.10	15.10
New Orleans, La.:					
Bituminous.....	6.06	6.06	11.29	11.29	11.29
New York, N. Y.:					
Pennsylvania anthracite—					
Stove.....	7.07	6.66	14.75	14.75	14.75
Chestnut.....	7.14	6.80	14.50	14.42	14.42
Norfolk, Va.:					
Pennsylvania anthracite—					
Stove.....			16.00	15.00	15.00
Chestnut.....			16.00	15.00	15.00
Bituminous.....			9.73	9.05	9.09

‡ Per 10-barrel lot (1,800 pounds).

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON JANUARY 15 AND JULY 15, 1913, FEBRUARY 15, 1927, AND JANUARY 15 AND FEBRUARY 15, 1928—Continued

City, and kind of coal	1913		1927	1928	
	Jan. 15	July 15	Feb. 15	Jan. 15	Feb. 15
Omaha, Nebr.:					
Bituminous.....	\$6.63	\$6.13	\$10.19	\$10.26	\$10.16
Peoria, Ill.:					
Bituminous.....			7.18	7.10	6.94
Philadelphia, Pa.:					
Pennsylvania anthracite—					
Stove.....	1 7.16	1 6.89	1 15.79	1 14.93	1 15.00
Chestnut.....	1 7.38	1 7.14	1 15.54	1 14.43	1 14.50
Pittsburgh, Pa.:					
Pennsylvania anthracite—					
Chestnut.....	1 8.00	1 7.44	15.88	14.88	14.88
Bituminous.....	3 3.16	3 3.18	6.24	5.65	5.51
Portland, Me.:					
Pennsylvania anthracite—					
Stove.....			16.98	16.80	16.80
Chestnut.....			16.98	16.80	16.80
Portland, Oreg.:					
Bituminous.....	9.79	9.66	13.49	13.32	13.21
Providence, R. I.:					
Pennsylvania anthracite—					
Stove.....	4 8.25	4 7.50	4 16.50	4 16.25	4 16.25
Chestnut.....	4 8.25	4 7.75	4 16.50	4 16.00	4 16.00
Richmond, Va.:					
Pennsylvania anthracite—					
Stove.....	8.00	7.25	16.50	15.50	15.67
Chestnut.....	8.00	7.25	16.50	15.50	15.67
Bituminous.....	5.50	4.94	11.70	9.70	9.73
Rochester, N. Y.:					
Pennsylvania anthracite—					
Stove.....			14.60	14.60	14.60
Chestnut.....			14.15	14.15	14.15
St. Louis, Mo.:					
Pennsylvania anthracite—					
Stove.....	8.44	7.74	17.45	16.90	16.90
Chestnut.....	8.68	7.99	17.20	16.45	16.45
Bituminous.....	3.36	3.04	7.44	7.02	7.02
St. Paul, Minn.:					
Pennsylvania anthracite—					
Stove.....	9.20	9.05	18.10	18.15	18.15
Chestnut.....	9.45	9.30	17.95	17.70	17.70
Bituminous.....	6.07	6.04	12.21	11.98	11.98
Salt Lake City, Utah:					
Colorado anthracite—					
Furnace, 1 and 2 mixed.....	11.00	11.50	18.00	18.00	18.00
Stove, 3 and 5 mixed.....	11.00	11.50	18.00	18.00	18.00
Bituminous.....	5.64	5.46	8.47	8.34	8.36
San Francisco, Calif.:					
New Mexico anthracite—					
Cerrojos egg.....	17.00	17.00	26.50	26.50	26.50
Colorado anthracite—					
Egg.....	17.00	17.00	25.75	25.75	25.75
Bituminous.....	12.00	12.00	17.06	17.25	17.25
Savannah, Ga.:					
Bituminous.....			3 13.25	3 11.13	3 11.13
Scranton, Pa.:					
Pennsylvania anthracite—					
Stove.....	4.25	4.31	11.00	10.75	10.75
Chestnut.....	4.50	4.56	10.67	10.50	10.50
Seattle, Wash.:					
Bituminous.....	7.63	7.70	10.47	10.18	10.12
Springfield, Ill.:					
Bituminous.....			4.35	4.44	4.44
Washington, D. C.:					
Pennsylvania anthracite—					
Stove.....	1 7.50	1 7.38	1 15.81	1 15.51	1 15.51
Chestnut.....	1 7.65	1 7.53	1 15.54	1 15.01	1 15.01
Bituminous—					
Prepared sizes, low volatile.....			1 11.75	1 11.00	1 10.75
Prepared sizes, high volatile.....			1 9.75	1 8.75	1 8.75
Run of mine, mixed.....			1 8.10	1 7.88	1 7.88

¹ Per ton of 2,240 pounds.

³ Per 25-bushel lot (1,900 pounds).

⁴ The average price of coal delivered in bin is 50 cents higher than here shown. Practically all coal is delivered in bin.

⁵ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

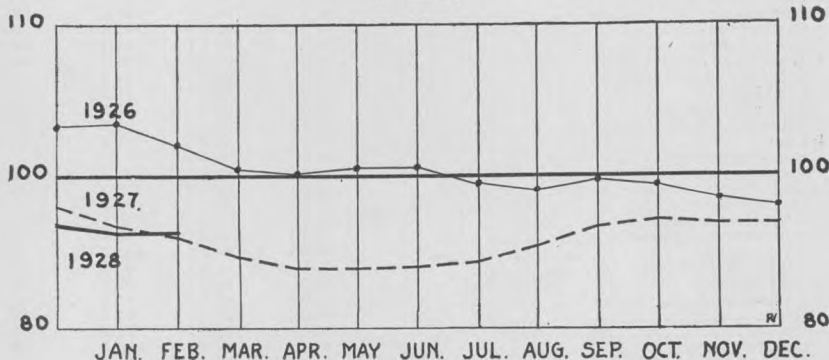
Index Numbers of Wholesale Prices in February, 1928

PRACTICALLY no change in the general level of wholesale prices from January to February is shown by information collected in representative markets by the Bureau of Labor Statistics of the United States Department of Labor. The Bureau's weighted index number, computed on prices in the year 1926 as the base, and including 550 commodities or price series, stands at 96.4 for February compared with 96.3 for January, an increase of one-tenth of 1 per cent. Compared with February, 1927, with an index number of 95.9, an increase of one-half of 1 per cent is shown.

Farm products as a group declined $1\frac{1}{2}$ per cent from the January level, due to price decreases for beef steers, hogs, cotton, eggs, hay, and tobacco. Corn, oats, rye, calves, lambs, potatoes, and wool, on the other hand, were higher than in January.

TREND OF WHOLESALE PRICES

[1926=100]



Foods as a whole advanced slightly in price, while hides and leather products again advanced sharply. Small price increases are shown for fuel and lighting materials, metals and metal products, and building materials, while small decreases are shown for textile products, chemicals and drugs, and house-furnishing goods. In the group of miscellaneous commodities price reductions in crude rubber caused a decline of almost 2 per cent in the group level.

Of the 550 commodities or price series for which comparable information for January and February was collected, increases were shown in 134 instances and decreases in 139 instances. In 277 instances no change in price was reported.

Comparing prices in February with those of a year ago, as measured by changes in the index numbers, it is seen that farm products and hides and leather products were considerably higher, while foods and textile products were somewhat higher. Slight increases are shown for metals and metal products and house-furnishing goods, while slight decreases are shown for building materials, chemicals and drugs, and miscellaneous commodities. Fuel and lighting materials, owing to large decreases in bituminous coal, coke, and petroleum products, were $15\frac{1}{4}$ per cent cheaper than in February, 1927.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100]

Commodity groups	February, 1927	1928		Purchasing power of the 1926 dollar in February (cents)
		January	February	
Farm products.....	95.4	106.1	104.5	95.7
Grains.....	95.3	104.7	108.4	92.3
Livestock and poultry.....	99.4	100.2	100.1	99.9
Other farm products.....	92.6	110.7	106.1	94.3
Foods.....	95.9	98.5	98.7	101.3
Butter, cheese, and milk.....	107.1	108.6	106.4	94.0
Meats.....	89.6	91.6	97.8	102.2
Other foods.....	95.7	99.0	96.2	104.0
Hides and leather products.....	100.2	121.0	124.1	80.6
Hides and skins.....	101.5	151.4	158.7	63.0
Leather.....	99.7	123.8	129.3	77.3
Boots and shoes.....	99.8	108.4	109.2	91.6
Other leather products.....	101.2	108.4	108.4	92.3
Textile products.....	94.6	96.7	96.6	103.5
Cotton goods.....	92.6	102.3	101.4	98.6
Silk and rayon.....	90.9	83.7	84.8	117.9
Woolen and worsted goods.....	98.9	99.0	99.9	100.1
Other textile products.....	97.9	90.4	88.2	113.4
Fuel and lighting.....	95.8	80.8	81.2	123.2
Anthracite coal.....	98.9	94.8	95.3	104.9
Bituminous coal.....	101.5	94.9	94.7	105.6
Coke.....	96.1	86.0	84.4	118.5
Manufactured gas.....	99.0	95.9	(1)	-----
Petroleum products.....	90.9	65.6	66.6	150.2
Metals and metal products.....	98.0	98.1	98.3	101.7
Iron and steel.....	97.7	93.9	94.9	105.4
Nonferrous metals.....	93.6	91.7	90.5	110.5
Agricultural implements.....	99.4	98.8	98.8	101.2
Automobiles.....	99.9	104.3	104.3	95.9
Other metal products.....	99.5	98.2	97.9	102.1
Building materials.....	96.2	90.8	91.0	109.9
Lumber.....	96.0	88.5	88.9	112.5
Brick.....	96.0	92.4	92.5	108.1
Cement.....	96.5	96.5	96.5	103.6
Structural steel.....	99.6	91.9	94.5	105.8
Paint materials.....	94.5	88.0	85.9	116.4
Other building materials.....	96.6	92.7	93.2	107.3
Chemicals and drugs.....	97.6	96.3	95.8	104.4
Chemicals.....	98.2	102.4	102.1	97.9
Drugs and pharmaceuticals.....	90.2	72.6	71.7	139.5
Fertilizer materials.....	99.6	94.8	94.0	106.4
Fertilizers.....	100.0	97.0	96.5	103.6
Housefurnishing goods.....	97.9	98.6	98.4	101.6
Furniture.....	97.8	98.2	98.0	102.0
Furnishings.....	98.9	98.8	98.7	101.3
Miscellaneous.....	90.6	89.0	87.3	114.5
Cattle feed.....	115.8	133.1	139.1	71.9
Paper and pulp.....	92.9	90.9	90.9	110.0
Rubber.....	78.3	82.2	64.7	154.6
Automobile tires.....	78.7	69.7	69.8	143.3
Other miscellaneous.....	100.3	98.8	99.2	100.8
All commodities.....	95.9	96.3	96.4	103.7

¹ Data not yet available.

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

THE principal index numbers of retail prices published by foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced in most cases to a common base, namely, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers of retail prices compiled by the bureau, because of the fact that in numerous instances satisfactory information for 1913 was not available. Some of the countries shown in the table now publish index numbers of retail prices on the July, 1914, base. In such cases, therefore, the index numbers are reproduced as published. For other countries the index numbers here shown have been obtained by dividing the index for each month specified in the table by the index for July, 1914, or the nearest period thereto as published in the original sources. As stated in the table, the number of articles included in the index numbers for the different countries differs widely. These results, which are designed merely to show price trends and not actual differences in the several countries, should not, therefore, be considered as closely comparable with one another. In certain instances, also, the figures are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities and the localities included on successive dates.

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

Country...	United States	Canada	Belgium	Czecho-slovakia	Denmark	Finland	France (except Paris)	France (Paris)	Germany
Number of localities.	51	60	59	Entire country	100	21	320	1	71
Commodities included...	43 foods	29 foods	56 (foods, etc.)	29 foods	Foods	36 foods	13 (11 foods)	13 (11 foods)	Foods
Computing agency	Bureau of Labor Statistics	Department of Labor	Ministry of Industry and Labor	Office of Statistics	Government Statistical Department	Central Bureau of Statistics	Ministry of Labor	Ministry of Labor	Federal Statistical Bureau
Base=100...	July, 1914	July, 1914	April, 1914	July, 1914	July, 1914	January-June, 1914	August, 1914	July, 1914	October, 1913-July, 1914
1923									
Jan.....	141	142	383	-----	180	1108	-----	309	-----
Feb.....	139	142	397	-----	1103	-----	331	316	-----
Mar.....	139	145	408	-----	-----	1096	-----	321	-----
Apr.....	140	143	409	-----	-----	1047	-----	320	-----
May.....	140	140	413	-----	-----	1016	337	325	-----
June.....	141	138	419	-----	-----	1004	-----	331	-----
July.....	144	137	429	-----	188	1003	-----	321	-----
Aug.....	143	142	439	-----	-----	1087	349	328	-----
Sept.....	146	141	453	-----	-----	1103	-----	339	-----
Oct.....	147	144	458	-----	-----	1140	-----	349	-----
Nov.....	148	144	463	-----	-----	1133	373	355	-----
Dec.....	147	145	470	-----	-----	1112	-----	365	-----
1924									
Jan.....	146	145	480	836	194	1089	-----	376	127
Feb.....	144	145	495	838	-----	1070	400	384	117
Mar.....	141	143	510	830	-----	1067	-----	392	120
Apr.....	138	137	498	829	-----	1035	-----	380	123
May.....	138	133	485	825	-----	1037	393	378	126
June.....	139	133	492	833	-----	1040	-----	370	120
July.....	140	134	493	837	200	1052	-----	360	126
Aug.....	141	137	498	842	-----	1125	400	366	122
Sept.....	144	139	503	853	-----	1125	-----	374	125
Oct.....	145	139	513	867	-----	1156	-----	383	134
Nov.....	147	141	520	889	-----	1160	426	396	135
Dec.....	148	143	521	891	-----	1160	-----	404	135
1925									
Jan.....	151	145	521	899	215	1130	-----	408	137
Feb.....	148	147	517	911	-----	1120	440	410	145
Mar.....	148	145	511	904	-----	1152	-----	415	146
Apr.....	148	142	506	901	-----	1137	-----	409	144
May.....	148	141	502	894	-----	1097	434	418	141
June.....	152	141	505	914	-----	1101	-----	422	146
July.....	156	141	509	916	210	1145	-----	421	154
Aug.....	157	146	517	894	-----	1222	451	423	154
Sept.....	156	146	525	884	-----	1187	-----	431	153
Oct.....	158	147	533	875	-----	1165	-----	433	151
Nov.....	164	151	534	863	-----	1164	471	444	147
Dec.....	162	156	534	866	-----	1138	-----	463	146
1926									
Jan.....	161	157	527	854	177	1090	-----	480	143
Feb.....	158	155	526	845	-----	1106	503	495	142
Mar.....	156	154	521	832	-----	1100	-----	497	141
Apr.....	159	153	529	832	-----	1085	-----	503	142
May.....	158	152	558	837	-----	1078	523	522	142
June.....	156	149	579	861	-----	1090	-----	544	143
July.....	154	149	637	876	159	1105	-----	574	145
Aug.....	152	150	681	878	-----	1153	610	587	146
Sept.....	155	147	684	878	-----	1137	-----	590	145
Oct.....	157	147	705	888	-----	1126	-----	624	145
Nov.....	158	148	730	902	-----	1114	647	628	148
Dec.....	158	151	741	912	-----	1110	-----	599	150
1927									
Jan.....	156	153	755	914	156	1092	-----	592	151
Feb.....	153	151	770	914	-----	1095	586	585	152
Mar.....	150	149	771	915	-----	1086	-----	581	151
Apr.....	150	146	774	923	152	1069	-----	580	150
May.....	152	145	776	931	-----	1058	572	589	151
June.....	155	146	785	949	-----	1072	-----	580	153
July.....	150	147	790	962	153	1102	-----	557	157
Aug.....	149	147	787	919	-----	1159	553	539	150
Sept.....	151	146	794	910	-----	1146	-----	532	151
Oct.....	153	148	804	907	152	1156	-----	520	152
Nov.....	153	149	809	905	-----	1175	526	500	152
Dec.....	153	151	812	913	-----	1171	-----	523	153

COMPARISON OF RETAIL PRICE CHANGES

171

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

Country	Italy	Netherlands	Norway	Sweden	Switzerland	United Kingdom	South Africa	India (Bombay)	Australia	New Zealand
Number of localities	447	6	31	49	33	630	9	1	30	25
Commodities included	20 foods and charcoal	29 (27 foods)	Foods	50 (43 foods, 7 fuel and light)	Foods	21 foods	24 foods	17 foods	46 foods and groceries	59 foods
Computing agency	Ministry of National Economy	Central Bureau of Statistics	Central Bureau of Statistics	Social Board	Labor Office (revised)	Ministry of Labor	Office of Census and Statistics	Labor Office (revised)	Bureau of Census and Statistics	Census and Statistics Office
Base=100	1913	January-June, 1914	July, 1914	July, 1914	July, 1914	July, 1914	1914	July, 1914	July, 1914	July, 1914
1923										
Jan	542	148	214	166	160	175	117	151	145	139
Feb	527	149	214	165	158	173	117	150	144	140
Mar	524	149	214	166	159	171	117	149	145	141
Apr	530	149	212	163	161	168	117	150	152	142
May	535	147	214	161	164	162	118	148	156	143
June	532	145	213	161	166	160	118	146	162	142
July	518	145	218	160	166	162	116	148	164	142
Aug	512	143	220	161	166	165	115	149	165	143
Sept	514	142	218	165	167	168	115	149	161	145
Oct	517	145	217	165	167	172	117	147	157	146
Nov	526	149	221	164	171	173	120	147	157	147
Dec	528	149	226	164	172	176	118	152	156	147
1924										
Jan	527	150	230	163	173	175	120	154	155	150
Feb	529	151	234	162	172	177	122	151	153	149
Mar	523	152	241	162	171	176	122	147	152	150
Apr	527	152	240	159	169	167	122	143	150	150
May	530	151	241	159	169	163	122	143	151	150
June	543	151	240	158	170	160	120	147	149	150
July	538	150	248	159	170	162	117	151	148	148
Aug	534	150	257	163	170	164	117	156	147	146
Sept	538	152	261	165	170	166	117	156	146	145
Oct	556	154	264	172	174	172	120	156	146	145
Nov	583	156	269	172	175	179	122	157	147	148
Dec	601	157	274	172	175	180	121	156	148	150
1925										
Jan	609	156	277	170	172	178	120	152	148	147
Feb	609	157	283	170	172	176	120	152	149	146
Mar	610	157	284	171	171	176	121	155	151	149
Apr	606	155	276	170	169	170	124	153	152	149
May	600	154	265	169	168	167	123	151	154	150
June	602	152	261	169	169	166	122	149	155	149
July	605	152	260	169	169	167	120	152	156	151
Aug	619	152	254	170	169	168	119	147	156	152
Sept	642	152	241	168	170	170	118	146	156	153
Oct	645	149	228	166	168	172	119	148	157	155
Nov	652	149	223	165	168	172	117	149	156	156
Dec	653	148	221	164	167	174	116	151	155	154
1926										
Jan	658	148	216	162	165	171	116	151	155	154
Feb	649	147	212	160	163	168	117	150	154	153
Mar	636	147	205	159	161	165	118	151	159	152
Apr	633	146	198	158	161	159	119	150	163	151
May	643	146	195	157	159	158	119	150	163	151
June	647	146	194	157	159	158	118	152	162	151
July	645	146	198	156	159	161	117	155	159	149
Aug	648	146	196	156	157	161	117	153	157	150
Sept	656	149	193	157	158	162	117	153	155	148
Oct	662	148	191	157	160	163	120	153	153	147
Nov	655	148	186	158	159	169	119	152	155	146
Dec	622	146	184	157	159	169	117	154	158	149
1927										
Jan	629	147	180	156	158	167	116	155	158	148
Feb	615	146	177	153	157	164	117	152	153	146
Mar	610	146	173	151	156	162	118	152	151	146
Apr	606	145	169	151	156	155	119	151	151	145
May	599	145	169	150	156	154	121	150	152	145
June	558	145	172	151	157	154	120	151	153	144
July	540	144	175	151	157	159	119	154	152	144
Aug	532	143	175	152	157	156	118	155	155	143
Sept	525	143	174	156	159	157	117	151	157	143
Oct		146	173	155	159	161	119	148	159	143
Nov		148	171	155	161	163	119	147	157	144
Dec		148	171	160	160	163	119	149	155	146

Changes in Meat Consumption Habits in the United States

THE Bureau of Animal Industry of the United States Department of Agriculture has recently published data giving the per capita consumption of meat, by kinds, from 1900 to 1927. These figures show certain changes in the American habits of meat consumption. The changes are not so evident when the individual yearly figures are examined, as there are certain yearly variations due to temporary conditions. When, however, comparison is made by five-year periods the change in consuming habits becomes quite apparent. This is brought out in the table, which gives the average per capita meat consumption, by kind, for the five-year periods 1900 to 1904, 1915 to 1919, and 1923 to 1927.

AVERAGE ANNUAL PER CAPITA CONSUMPTION OF DRESSED MEATS IN THE UNITED STATES, BY SELECTED FIVE-YEAR PERIODS

Kind of meat	1900-1904	1915-1919	1923-1927
	<i>Pounds</i>	<i>Pounds</i>	<i>Pounds</i>
Beef.....	70.98	58.92	61.26
Veal.....	4.32	6.24	8.04
Lamb and mutton.....	6.94	5.50	5.30
Pork (excluding lard).....	61.52	55.70	70.24
Total.....	143.76	¹ 126.54	144.84

¹ Includes 0.18 pound goat meat.

Comparing the earliest period with the latest, it is evident that there has been no important increase in the per capita consumption of meat, the average being 143.76 pounds in the earliest period as compared with 144.84 in the latest period. Between these periods, however, there was a decline in per capita beef consumption from 70.98 to 61.26 pounds and a counterbalancing increase in pork consumption from 61.52 to 70.24 pounds. The consumption of veal increased notably—from 4.32 pounds per capita to 8.04 pounds. The per capita consumption of lamb and mutton, however, decreased from 6.94 to 5.30 pounds. The data for the five-year period 1915 to 1919 represent roughly the war era and are of significance only as showing the great decline in domestic meat consumption during that period.

COST OF LIVING

Changes in Cost of the Canadian Family Budget, 1921 to 1927¹

THE table below shows the cost per week, in specified months, from 1921 to 1927, of the family budget in terms of average retail prices of certain classes of commodities in 60 Canadian cities:

The following items are included in the budget.

CANADIAN FAMILY BUDGET

Item	Quantity	Item	Quantity
Foods (29):		Foods (29)—Continued.	
Beef, sirloin steak.....pounds..	2	Beans, handpicked.....pounds..	2
Beef, shoulder roast.....do....	2	Apples, evaporated.....do....	1
Veal, shoulder roast.....do....	1	Prunes, medium size.....do....	1
Mutton, leg roast.....do....	1	Sugar, granulated.....do....	4
Pork, fresh roast, ham.....do....	1	Sugar, yellow.....do....	2
Pork, salt, mess.....do....	2	Tea, black, medium.....do....	3/4
Bacon, breakfast.....do....	1	Tea, green, medium.....do....	3/4
Lard, pure, leaf.....do....	2	Coffee, medium.....do....	3/4
Eggs, fresh.....dozen.....	1	Potatoes.....do.....bags..	3/4
Eggs, storage.....do.....do....	1	Vinegar, spirit.....do.....quarts..	1/4
Milk.....do.....quarts..	6	Starch, laundry.....do.....pounds..	1/4
Butter, dairy, solid.....pounds..	2	Fuel and lighting:	
Butter, creamery, print.....do....	1	Coal, anthracite.....do.....tons....	1/4
Cheese, old.....do.....do....	1	Coal, bituminous.....do.....do....	1/4
Cheese, new.....do.....do....	1	Wood, hard.....do.....cords....	1/4
Bread, plain, white.....do....	15	Wood, soft.....do.....do....	1/4
Flour, family.....do.....do....	10	Coal oil.....do.....gallons..	1
Rolled oats.....do.....do....	5	Rent.....do.....months..	1/4
Rice, good, medium.....do....	2		

While this budget serves to indicate the rise or fall from time to time in the cost of the included items it is not intended to show the minimum cost of food and fuel for an average family in Canada or in any one of its Provinces. The quantities of meats, cereals, dairy products, etc., in this budget were adopted as constituting a liberal allowance for the healthy family of a man engaged in hard physical labor. An average family, however, with an income sufficient to do so would purchase less meat, etc., but more fresh and canned vegetables, fruit, etc., so that there would be little change in the total amount of expenditure for food.

For the average family of five the expenditure for the items in this budget would perhaps be equivalent to 65 per cent of the total income. It is estimated that an allowance for clothing and sundries would increase the cost of the given totals about 50 per cent.

¹ Canada. Department of Labor. Prices in Canada and other countries, 1927. Ottawa, 1928. Issued as a supplement to the Labor Gazette, January, 1928, pp. 4, 5, and Labor Gazette, Ottawa, January, 1928, p. 84.

MONTHLY LABOR REVIEW

COST PER WEEK OF FAMILY BUDGET IN CANADA IN SPECIFIED MONTHS,
1921 TO 1927

[This budget is intended to show the changes in the cost of items included, not to show the minimum cost for an average family]

Year and month	All (29) foods	Starch, laundry ($\frac{1}{8}$ pound)	Fuel and lighting	Rent ($\frac{1}{3}$ month)	Total ¹
1921: January	\$14.48	\$0.049	\$4.17	\$6.60	\$25.30
July	10.96	.044	3.70	6.83	21.53
1922: January	11.03	.042	3.53	6.92	21.52
July	10.27	.040	3.41	6.95	20.67
1923: January	10.52	.040	3.61	6.96	21.13
July	10.17	.040	3.48	6.97	20.65
1924: January	10.78	.041	3.49	6.92	21.23
July	9.91	.041	3.37	6.98	20.30
1925: January	10.77	.041	3.37	6.91	21.09
July	10.49	.041	3.28	6.89	20.70
1926: January	11.63	.041	3.44	6.86	21.96
July	11.07	.042	3.32	6.87	21.30
1927: January	11.37	.041	3.33	6.85	21.59
July	10.92	.041	3.28	6.86	21.10
December	11.17	.041	3.29	6.87	21.37

¹An allowance for clothing and sundries would increase the total cost about 50 per cent.

LABOR AWARDS AND DECISIONS

Awards and Decisions

Brotherhood of Locomotive Engineers—Southwestern Railroads

A DECISION by a board of arbitration consisting of J. J. Pelley and W. J. Jenks representing the carriers, A. Johnston and S. H. Huff representing the Brotherhood of Locomotive Engineers, and Leslie M. Shaw and W. P. Stacey appointed by the United States Board of Mediation, handed down a decision February 4, 1928, relative to a controversy between the members of the Brotherhood of Locomotive Engineers and their employers, The Atlantic Coast Line Railroad Co., Central of Georgia Railway Co., Charleston & West Carolina Railway Co., Chesapeake & Ohio Railway Co., Clinchfield Railroad Co., Florida East Coast Railway Co., Georgia Railroad Co., Louisville & Nashville Railroad Co., Louisville, Henderson & St. Louis Railway Co., Nashville, Chattanooga & St. Louis Railway Co., Norfolk Southern Railroad Co. (steam service only), Norfolk & Western Railway Co., Richmond, Fredericksburg & Potomac Railroad Co., Winston-Salem Southbound Railway Co., and Jacksonville Terminal Co.

The men had made four demands upon the carriers as follows:

1. A request for an increase of 15 per cent in all classes of service including differentials, arbitrarians and special allowances, and that the present minimum guaranty in passenger service be increased 15 per cent.
2. A request for Mallet rate for three-cylinder steam and electric locomotives.
3. A request that there be added to the freight locomotive classification the following: Mallet engines and engines carrying Mallet rates of over 275,000 pounds on drivers, a differential of 25 cents for each additional 50,000 pounds on drivers and on other engines a differential of 25 cents for each 50,000 pounds over 350,000 pounds on drivers.
4. A request that when boosters are attached to tenders, the weight of the tender be added to the weight on drivers of locomotives and the total weight so produced shall fix the rate for the respective classes of service.

The board awarded the men an increase of 6½ per cent, disallowed the second and third demands, and spoke as follows relative to the fourth:

Fourth: With respect to the request that when boosters are attached to tenders the weight of the tender be added to the weight on drivers, it is adjudged that when a locomotive leaves a terminal with booster in condition to operate, the weight on drivers shall be determined by adding the tractive effort of the booster to the tractive effort of the locomotive, and establish new weight on drivers proportionate to the increased tractive effort.

Example: Locomotive without booster weighs 224,000 pounds on drivers, with tractive effort of 47,500 pounds. Tractive effort equals 21.2 per cent of weight on drivers. Booster adds 10,000 pounds to the tractive effort, making total tractive effort 57,500 pounds; 57,500 pounds is 21.2 per cent of 271,000 pounds, the new weight on drivers.

The representatives of the men did not sign the above award but signed a dissenting opinion reading as follows:

In dissenting from this award, we realize that we could hardly have hoped for a unanimous agreement granting all that we had requested. But when we agreed to submit our request to a board of arbitration we did believe that an award would be handed down which would give due consideration to the increased responsibility, the increased productivity, and the increased efficiency of the engineers. We certainly expected also that it would take into consideration the

wage discriminations the engineers were subjected to during the period of Federal control of the railroads, at which time some of the transportation employees received 39½ per cent increases, while the engineers received only 11¼ per cent in passenger service and 15½ per cent in freight service.

While we do not feel the increase granted the engineers in the eastern territory was an adequate compensation considering their added responsibility and earning power for the railroads, we could not conceive a lesser increase being awarded for the engineers in the southeast than that granted the men in the east.

We want also to state that we do not consider this a settlement. It merely causes us to pause in our efforts to secure for the engineers in the southeastern territory a wage compatible with their duties.

Railroads—Train Service Board of Adjustment, Eastern

Cancellation of Trip

THE facts in docket No. 441, decided by the train service board of adjustment (eastern) February 8, 1928, were as follows: A run extending from Woodsville to Concord, N. H., on the Boston & Maine Railroad one day with a return run the next, was canceled one day, but an extra train with an extra crew ran over the same route that night at midnight. The committee contended that the regular crew should not have been annulled but should have been used on the extra trip, and not having been used should be paid for the round trip. The management contended that the crew was properly canceled in accordance with rules and that no agreement existed for an extra train to be operated by a regular crew of a canceled train.

The board, however, decided that the regular brakeman making the above claim should be paid his claim.

Seniority

A QUESTION as to what extent seniority rights should be observed was settled in docket No. 426 of the train service board of adjustment (eastern) February 6, 1928. It is the custom for a Baltimore & Ohio engine crew to leave Rossford at 7.05 a. m., proceed "light" over the tracks of the New York Central to Toledo, 2 miles distant, and there get a train at the passenger station at 8 o'clock. One morning at 6.30 the regular fireman was reported sick. The crew dispatcher at Rossford, stating that there was not time to call a man off the extra board that was maintained at Toledo without delaying the train, sent out a man available at Rossford. The fireman who was first on the extra board and lived within the recognized calling district laid claim to the pay on the ground of seniority under rule 11, paragraph "a" of the firemen's contract. The carrier felt that the call was an emergency one and that the crew dispatcher acted properly. The board, however, sustained the claim of the fireman.

Switching

THE claim of a conductor and train crew of a train on the Boston & Maine Railroad for extra compensation for one hour each day for disposing of train at a station where they handled cars for other than their own trains was settled by the board in docket No. 443, February 7, 1928.

According to rule 28 of the conductors' agreement, conductors are not required to do switching at points where switch engines are on duty, but are required to pick up a car ahead on one track or to

set out a car from one place in a train. An order was issued to a certain conductor on arriving at a station at a time when no switching crew was on duty to "set over the parlor car and baggage car onto next track so to leave parlor car first out" for train the next morning to pick up.

The conductor and crew based their claim on the ground that "they were handling cars for other than their own train"; that when they set off their train "on siding they had completed their run, and the placing of the parlor car on another track for train to pick up was done to avoid a switch" by the other train and therefore constituted "handling cars for another train and entitled the crew" to one hour's pay each day that service was performed.

The management said:

4. That if the contention of the committee is sound, then if a car is set out anywhere, which is subsequently moved by another crew regardless of conditions, the crew setting out the car would be entitled to one hour's extra compensation. The rule never contemplated any such thing; it was known that there would occasionally be cases where a road crew might be called upon to do work for some other crew involving handling cars that had not been and were not to be a part of train of crew who were to handle, and when they did such work they would be paid under the emergency rule.

The board sustained the claim of the men.

Decision of Italian Labor Court Regarding Seamen's Wages

A DISPATCH from Warren D. Robbins, chargé d'affaires ad interim in Rome, Italy, contains information concerning an important decision made by the new Labor Court as regards a proposed reduction in seamen's wages.

Under the new labor laws passed in December, 1925, the officers and seamen of the Italian mercantile marine have formed a Fascist syndicate as have also the shipowners' associations. Under the provisions of the laws collective agreements establishing rates of wages become law and can be changed only by the mutual consent of the parties or by appeal to the arbitration tribunal. Strikes and lock-outs are forbidden and the decision of the Labor Court, consisting of special judges, is final.

Alleging a "general movement for a reduction of the cost of living," the reduction of wages in many industries, and also decreased earnings in the shipping trade, the shipowners of Genoa and other ports proposed a 20 per cent reduction in the wage scale of ships' officers and ordinary seamen, to be guaranteed by a contract with the seamen's union. The officers and men refused to agree, and the case was appealed to the Labor Court.

When the case came up for hearing late in January, 1928, the men showed that Italian officers and seamen were still earning less than British seamen, and that a reduction therefore was not justified. The court decided that the wages of seamen should remain unchanged until the end of June of the current year and that thereafter the conditions of labor for seamen would be automatically reviewed each half year unless either side expressed a desire for their revision two months before the expiration of the contract.

This, it is stated, is the first important labor decision under the new law.

IMMIGRATION AND EMIGRATION

Statistics of Immigration for January, 1928

By J. J. KUNNA, CHIEF STATISTICIAN, UNITED STATES BUREAU OF IMMIGRATION

THE statistics for January, 1928, show a total of 26,725 aliens admitted and 20,955 departed. Of those admitted, 18,146 were immigrants or newcomers for permanent residence in this country and 8,579 were visitors or persons passing through the country. Nearly three-fourths, or 15,632, of the aliens departing in January were here on a visit or intend to return after a short stay abroad. The other 5,323 outgoing aliens were of the emigrant class, intending to settle permanently in a foreign country.

Canada and Mexico were the principal sources of immigration, 5,635 immigrant aliens coming from the former and 3,392 from the latter. Germany, with 2,750, sent the largest number of immigrants from Europe this month, while 1,211 came from Great Britain, 876 from Italy, 821 from the Irish Free State, and 523 from the Scandinavian countries. Compared with January, 1927, the above figures show a decrease in all cases except Canada and Italy. In January, 1927, Canada sent 5,409 immigrants; Mexico, 3,436; Germany, 3,547; Great Britain, 1,310; Italy, 755; the Irish Free State, 842; and the Scandinavian countries, 820.

The Italians, with 1,462, lead the list of emigrants leaving during January to make their homes abroad. Practically all of these returned to their native land. Among the total emigrants leaving the United States during the month, the men outnumbered the women by about 4 to 1, and the largest group, nearly two-thirds of the total, were between the ages of 22 and 44 years. The men also outnumbered the women among the immigrants admitted in January. Of the total immigrants, 10,216 were males and 7,930 females.

The single immigrants numbered 11,205, married 6,353, and widowed and divorced 588.

Over two-thirds of the immigrants were going to States in the North Atlantic and North Central divisions, New York leading the list with 4,873, followed by Michigan with 2,353. Texas received 2,043 of these immigrants, mostly Mexicans coming across the Rio Grande, and California was the destination of 1,500 immigrants, a large proportion of whom were of the Mexican race.

During the month, a total of 1,348 aliens were debarred from entering the United States, 1,225 having been rejected at the land border ports and 123 at the seaports. In the same period, 808 aliens were deported from the United States for various causes under the immigration laws, mainly for entering without immigration visas.

About three-fifths (16,261) of the 26,725 aliens admitted to the United States were natives of Europe; while 9,106 were born in countries in the Western Hemisphere, principally Canada and Mexico; 1,056 were born in Asia, and 302 in Africa, Australia, and the Pacific Islands.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1, 1927, TO JANUARY 31, 1928

Period	Inward					Aliens debarred from entering ¹	Outward					Aliens deported after landing ²
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total	
	Immigrant	Non-immigrant	Total				Emigrant ³	Non-emigrant ³	Total ²			
1927												
July.....	23,420	15,973	39,393	29,935	69,328	2,002	9,230	18,509	27,739	65,686	93,425	700
August.....	28,418	19,011	47,429	57,701	105,130	1,574	6,322	17,014	23,336	43,039	66,375	1,346
September.....	31,000	25,619	56,619	75,557	132,176	1,600	7,625	16,885	24,510	39,748	64,258	901
October.....	31,719	21,578	53,297	50,254	103,551	1,567	6,402	16,424	22,826	24,396	47,222	932
November.....	27,758	13,841	41,599	24,325	65,924	1,723	5,871	16,886	22,757	22,612	45,369	1,030
December.....	22,350	10,452	32,802	18,922	51,724	1,679	9,085	21,418	30,503	25,209	55,712	99
1928												
January.....	18,146	8,579	26,725	19,909	46,634	1,348	5,323	15,632	20,955	27,126	48,081	808
Total.....	182,811	115,053	297,864	276,603	574,467	11,493	49,858	122,768	172,626	247,816	420,442	6,716

¹ Not included among inward numbers, as they were not permitted to enter the United States.

² Deported aliens are included among the emigrant or the nonemigrant aliens.

CURRENT NOTES OF INTEREST TO LABOR

Harmon Foundation Awards for Industrial Workers¹

THE Harmon Foundation was organized in New York in 1922, by William E. Harmon, as a membership corporation. The foundation's activities include—

1. Assistance in establishing playgrounds. About \$350,000 has been contributed to this department.

2. Lending money to students on business principles. It was reported in December, 1927, that approximately \$400,000 had been so loaned.

3. Social research, for which more than \$100,000 has already been expended.

4. The recognition of distinctive achievement. About \$125,000 had been involved in this function toward the close of 1927.

The foundation endeavors "to seek out and encourage the meritorious but unknown, or comparatively so, rather than to place more laurels on those who have already achieved success."

The range covered at present includes awards for constructive and creative production among negroes, a home improvement competition among farm wives in a county in South Carolina, awards for outstanding leadership among Girl Scouts, recognition of outstanding character among the Eagle Scouts of the Boy Scout organization, selection of authors of published articles and manuscripts each year which make distinct contributions to the civic, social, or industrial welfare of the country.

An award is made each year to the person who, in the judgment of the judges, has during that 12-month period "rendered or been responsible for an outstanding social contribution."

The foundation has recently inaugurated awards to distinguish and encourage unknown workers in the rank and file of industry who make beyond their job requirement some definite and exceptional contribution through their labor to the welfare of their fellow workmen, to industry, and to the community. The principal honorariums are \$1,000 with a gold medal and \$500 with a silver medal. The foundation will also confer 100 bronze medals.

Only the workers themselves are eligible. Industrial administrators are excluded. Nominations must be indorsed by at least two fellow employees. The detailed statement on eligibility reads as follows:

Any person employed in the United States in any of the following branches of manufacturing—automotive, building, electrical, metal, textile (including clothing)—may be proposed. Such a person must either through the regular performance of his work, or through an outstanding act or acts, have shown beyond the normal call of duty unusual skill, devotion to his work, inventiveness, heroic self-sacrifice or other service which has either promoted the success of

¹ Harmon Foundation, News Bulletin, New York, December, 1927.

the product of his employment, or contributed to the mutual welfare of the community, the manufacturing organization and its employees.

Nominations may be received from: (a) The general public, (b) newspapers, periodicals, and house organs, (c) employing organizations, (d) fellow employees, (e) invited nominators, (f) judges of the awards.

All persons wishing to make nominations must write to the honor men in industry awards, Harmon Foundation, 140 Nassau Street, New York, N. Y., for a nomination blank. Each inquiry shall be accompanied by a stamped, addressed envelope. Only those nominations submitted on the required form containing complete data will be considered.

The period for the acceptance of nominations began December 15, 1927, and will expire October 15, 1928. The names of those who receive the awards will be publicly announced on or about December 1, 1928.

A committee of five men and women who have knowledge of the labor requirements in the respective employments under consideration in the awards will act as judges.

Retirement of California Labor Commissioner

MR. JOHN A. MCGILVRAY, for four and one-half years chairman of the California Industrial Accident Commission and later director of the new Department of Industrial Relations, has resigned to resume private law practice in Sacramento. Mr. Will J. French has succeeded Mr. McGilvray as director of the Department of Industrial Relations.

Government Pawnbroking Institution in Persia

A PAWNBROKING institution to be conducted by the Government was authorized in Persia by a law of November 2, 1926, and opened its doors on January 21, 1927, according to a report dated January 17, 1928, from Consul Orson N. Nielsen at Teheran. The purpose of the institution was to enable persons of small or moderate means to secure loans quickly and at a reasonable rate of interest. The report states that the project met with immediate success, and within eight months after it began operating the space given over to the storing of pledges had to be greatly increased. Not more than 12 per cent interest per annum may be charged and during 1927 the rate asked was only 9 per cent. This is said to have had the effect of reducing the private pawnbrokers' rates, which were often extortionate. The writer comments that "in a country in which a large part of the population lives from hand to mouth, a well-conducted pawnbroking establishment supplies a real need."

PUBLICATIONS RELATING TO LABOR

Official—United States

INDIANA.—Industrial Board. *Annual report for the fiscal year ending September 30, 1927.* [Indianapolis, 1927?] 70 pp.

Contains reports on the activities of the State free employment service, of the factory and building inspection department, of the department of women and children, and of the compensation department.

That portion of the report dealing with industrial accidents and compensation is reviewed on page 69 of this issue.

KANSAS.—Public Service Commission. Women's division (and child labor). *Second annual report, for year ending December 31, 1926.* Topeka, 1927. 29 pp.

MISSOURI.—Bureau of Labor Statistics. *Forty-seventh annual report, for year ending December 31, 1926.* Jefferson City, [1928?]. 266 pp., illus.

Contains statistics on manufacturing in three of the principal cities of the State and in rural districts in various counties, and on wages, industrial accidents, and employment offices.

OHIO.—Department of Industrial Relations. Division of Labor Statistics. *Report No. 14: Statistics of mines and quarries in Ohio, 1926.* Columbus, 1927. 60 pp.

Brief summaries of the data on fatal accidents and on wages and hours are given, respectively, on pages 71 and 119 of this issue.

PENNSYLVANIA.—Department of Labor and Industry. *Special bulletin No. 18: Opportunities and conditions of work for minors under 18 in the glassware industry.* Harrisburg, 1927. 43 pp.

A study based on an investigation of 20 plants, employing 4,457 workers, of whom 703, or 15.8 per cent, were under 18 years of age. The occupations at which these young people were employed are described, and careful consideration is given to the conditions under which they worked, the strains and hazards of the work, and the methods of guarding against these. The sanitation and service facilities of the work places are discussed, and also the opportunities for advancement offered to young workers.

— Department of Welfare. *Bulletin No. 1, revised edition: Manual of the Mothers' Assistance Fund.* Harrisburg, 1927. 98 pp.

PORTO RICO.—Mediation and Conciliation Commission. *Annual report, fiscal year 1926-27.* San Juan, 1927. 67 pp. (In English and Spanish.)

During the fiscal year 1926-27 there occurred in Porto Rico 43 strikes, involving 10,915 workers. Thirty-eight of these strikes were settled through the good offices of the commission. The report contains accounts of the principal strikes that occurred during this period.

VIRGINIA.—Department of Labor and Industry. *Thirtieth annual report, for the year ending September 30, 1927.* Richmond, 1928. 123 pp.

Contains detailed statistics of wages and hours in the various industries of the State, and reports of the activities of the divisions of women and children, of mines, of the State public employment service, and of factory inspection. Figures on accidents in mines are included.

UNITED STATES.—Department of Agriculture. *Technical bulletin No. 40: Agricultural cooperative associations, marketing and purchasing, 1925,* by R. H. Elsworth, Bureau of Agricultural Economics. Washington, 1928. 97 pp.; maps, charts.

Reviewed on page 86 of this issue.

— Department of Commerce. Bureau of Fisheries. *Document No. 1025: Fishery industries of the United States, 1926,* by Oscar E. Sette. Washington, 1928. (Appendix V to the report of the United States Commissioner of Fisheries for 1927, pp. 337-483.)

Includes figures showing number of persons engaged in the fishing industry in various parts of the United States and in Alaska.

UNITED STATES.—Department of Commerce. Bureau of Foreign and Domestic Commerce. *Trade information bulletin No. 516: The Guianas—commercial and economic survey*, by M. J. Mehan. Washington, 1927. 29 pp.; map.

Includes data relating to labor supply and wages.

— Bureau of Mines. *Bulletin 283: Coal-mine fatalities in the United States, 1926*, by William W. Adams. Washington, 1927. 121 pp.

Reviewed on page 67 of this issue.

— Bureau of the Census. *Census monographs VII: Immigrants and their children, 1920*, by Niles Carpenter. Washington, 1927. 431 pp.

This monograph covering various aspects of the immigrant problem emphasizes the significance of immigration in national life in the United States; the ethnic, language, and religious divergencies between the native and foreign populations, and the large proportion of single immigrant men, or immigrant men separated from their families, who are in the physical prime of life; the deep-rooted differences existing among the various elements in the immigrant population itself; and the inadequacy of the present available information on immigration as "a proper statistical background for a permanent immigration policy."

Official—Foreign Countries

AUSTRALIA (NEW SOUTH WALES).—Registry of Friendly Societies. *Report for the 12 months ended June 30, 1926*. Sydney, 1927. 22 pp.

The report shows that the societies were in a satisfactory condition at the close of the year covered. There was a total membership of 234,699, which was an increase of 3.61 per cent over the preceding year. The amount spent in benefits averaged £3 0s. 6d. (at par, pound=\$4.8665, shilling=24.33 cents, penny=2.03 cents) per adult member, and reached a total of £643,061, of which nearly half, £307,380, went for medical attendance and medicines, £269,768 for sickness pay, and £65,913 for funeral donations. The total expenses of management were £146,695, or an average of 12s. 11d. per member.

— (WESTERN AUSTRALIA).—Department of Labor. *Third annual report, for the year 1926-27*. Perth, 1928. 50 pp.

Statistics on labor conditions in Western Australia, taken from this report, are shown on page 59 of this issue.

CANADA.—Department of Immigration and Colonization. *Report for the fiscal year ended March 31, 1927*. Ottawa, 1928. 83 pp.

— Department of Labor. *Report for the fiscal year ending March 31, 1927*. Ottawa, 1928. 164 pp.; charts.

The 15 sections of this annual report deal, respectively, with the following subjects: Industrial disputes investigation act; conciliation work; fair wages; statistics of strikes and lockouts, wages and hours of labor, prices and cost of living, and fatal industrial accidents; the Labor Gazette; labor organizations in Canada; organization in industry, commerce, and the professions in Canada; labor legislation in Canada; departmental library; combines investigation act; Government annuities act; old-age pensions act; employment offices coordination act; technical education act; and the International Labor Organization.

— Department of Trade and Commerce. Bureau of Statistics. *Coal statistics for Canada for the calendar year 1926*. Ottawa, 1927. 106 pp.; charts.

— Sixth census of Canada, 1921. Volume III—Population. Ottawa, 1927. 551 pp. (In English and French.)

Part 1 of this volume contains data on dwellings, conjugal condition of family heads, children, and orphanhood; Part 2 relates to wage earners.

— (QUEBEC).—Department of Public Works and Labor. *General report for the year ending June 30, 1927*. Quebec, 1927. 147 pp., illus.

Includes the reports of the provincial employment bureaus and the first report of the Women's Minimum Wage Commission.

GREAT BRITAIN.—Home Office. *Statistics of compensation and of proceedings under the workmen's compensation acts and the employers' liability act, 1880, during the year 1926.* London, 1928. 31 pp. (Cmd. 3005.)

Reviewed on page 81 of this issue.

—Industrial Fatigue Research Board and the Illumination Research Committee. *The effect of different systems of lighting on output and accuracy in fine work (typesetting by hand).* London, 1928. 9 pp.; diagrams.

—Ministry of Health. *Reports on public health and medical subjects, No. 38: An investigation into the alleged high mortality rate from tuberculosis of the respiratory system among slate quarrymen and slate workers in the Gwyrfaï rural district, by Dr. T. W. Wade.* London, 1927. 38 pp.; illustrations, charts.

This study of the mortality from tuberculosis among workers at slate quarries in one district in Wales showed that the death rates were very high, particularly after the age of 35. The exposure to slate dust, which consists of silica in the form of quartz and mica, was greater in the dressing mills or sheds than in the quarries and it was among the workers in the sheds that the highest mortality occurred. It was considered by the investigator that the very high mortality during the later periods of life among these workers was due mainly to inhalation of the slate dust but that poor housing and food were also factors in the high death rate.

HUNGARY.—Office Central Royal Hongrois de Statistique. *Annuaire statistique hongrois, 1923, 1924, 1925.* Budapest, 1927. 353 pp.

Compilation of statistics on population, production, prices, wages, industrial accidents, education, etc., in Hungary for the years 1923, 1924, and 1925.

JAPAN.—Ministry of Agriculture and Forestry. *The statistical abstract, 1926.* [Tokyo?], 1927. 165 pp.

Contains data on number of persons engaged in fishing, accidents to fishermen, statistics of agricultural production, and data as to cooperative associations.

NORWAY.—[Departementet for Sociale Saker.] Statistiske Centralbyrå. *Meglingsinstitusjonens virksomhet. Tariffavtaler og arbeidskonflikter, 1926.* Oslo, 1927. 27 pp. (Norges offisielle statistikk VIII, 38.)

Report, by the Norwegian Central Statistical Bureau, on collective agreements and industrial disputes in Norway in 1926.

SPAIN.—Ministerio de Trabajo, Comercio e Industria. Dirección General de Trabajo y Acción Social. *Estadística de los salarios y jornadas de trabajo, referida al período 1914-1925.* Madrid, 1927. ccixxii, 159 pp.; maps, charts.

A comprehensive presentation of data relating to wages and working hours in Spain, by Provinces and industry. Data from this report are given on page 129 of this issue.

Unofficial

AMERICAN FEDERATION OF LABOR. *Research series No. 3: A study of actual earnings in Philadelphia Typographical Union No. 2, by Jürgen Kuczynski.* Washington, 1928. 30 pp.; charts.

BACON, CORINNE, Compiler. *Standard catalogue, social sciences section. About 1,300 titles of the most representative and useful books on social, economic, and educational questions.* New York, H. W. Wilson Co., 1927. 160 pp. 2d edition, revised and enlarged.

Each entry is accompanied by a brief description of the publication.

BLANSHARD, PAUL. *Labor in southern cotton mills.* New York, The New Republic (Inc.), 1927. 88 pp.

An interesting discussion of the cotton textile worker of the South, and of conditions under which he lives and works, as compared with the conditions of similar workers elsewhere.

DERULLE, C. *La sidérurgie*. Paris, Librairie Octave Doin, 1925. 348 pp.

This study of the iron and steel industry contains a historical summary of the development of the industry, and accounts of manufacturing processes and of the organization of the industry from the economic standpoint. The last section deals with the industry from the social point of view and covers employers' and workers' organizations, apprenticeship, wages, hygiene, and participation in management; and outlines the improvements in working conditions which could be made without delay.

DOUGHARTY, H. *Pension, endowment, life assurance, and other schemes for employees*. London, Sir Isaac Pitman & Sons (Ltd.), 1927. 136 pp.

A careful discussion of the principles underlying industrial pension schemes, with full details, particularly as to the financial features, and briefer descriptions of endowment and group life insurance plans. Appendixes contain model plans.

FAMILY ENDOWMENT SOCIETY. *Six aspects of family allowances*. London, S. W. 1, 24 Tufton Street, Westminster, 1927. 23 pp.

A collection of addresses made at the first public conference on family allowances, held at the London School of Economics in October, 1927, under the auspices of the Family Endowment Society. A brief report on this conference was published in the March, 1928, Labor Review (p. 106).

INDUSTRIAL RELATIONS COUNSELORS (INC.). *Library bulletin, No. 1, January, 1928*. New York, 165 Broadway. 18 pp., mimeographed.

This first number of a bulletin which the Industrial Relations Counselors (Inc.) plans to issue periodically lists and describes briefly the more significant literature on industrial relations published in 1927. It also contains a bibliography on the five-day week and a short list of bibliographies on various topics of interest to employers and workers.

INTERNATIONAL FEDERATION OF TRADE-UNIONS. *Report of proceedings at the fourth ordinary congress, Paris, August 1 to 6, 1927, together with reports of the conferences of the International Trade Secretariats and the International Trade-Union Women*. Amsterdam, 1927. 275 pp.

The 1927 Congress of the International Federation of Trade-Unions was reported upon in the October (pp. 84, 85) and November (pp. 12-16), 1927, issues of the Labor Review.

JACOBSON, ELI B. *English for workers*. New York, International Publishers, 1928. 112 pp.

This is said to be the first textbook of English prepared entirely for workers which has appeared in the United States. The subject matter contains information for workers, and is so arranged that it can be used in class instruction or for self-teaching.

JENKIN, A. K. HAMILTON. *The Cornish miner*. London, George Allen & Unwin (Ltd.), 1927. 351 pp., illus.

A history of the Cornish tin mining industry, miners, and mining customs, written with a keen appreciation of the romance and historic interest of the subject.

KENYON, DOROTHY. *The manufacturers' child labor program*. New York, National Consumers' League [1928?]. 19 pp.

The manufacturers' program is compared, point by point, with the laws governing the employment of children in various parts of the Union, and the conclusion is drawn that while the standards it embodies are in advance of those existing in some States, in others they would mean no improvement, and in still others would involve a distinct giving up of gains already made.

The pamphlet contains a series of tables, giving with regard to each point of the manufacturers' program the legal position of each State in that particular.

LANE, MAY ROGERS. *Occupational studies—survey of their uses, content, and volume, and bibliography, history, and reviews of research—pamphlet series, 1920–1926.* Scranton, International Textbook Co., 1927. 81 pp.

This volume brings together a survey made by the White-Williams Foundation of Philadelphia in 1925 and a bibliography originally compiled for a meeting of the Vocational Guidance Association of Philadelphia and vicinity in April, 1925, with some additional information which was added for the meeting of the National Vocational Guidance Association in February, 1927.

NATIONAL METAL TRADES ASSOCIATION. Committee on Industrial Education. *Foremanship.* Chicago, 1927. [Various paging.]

A collection of 52 lessons setting forth the fundamental principles of practical foremanship, prepared as a training course by the National Metal Trades Association.

— — — *Foremanship: Conference leader's manual.* In two parts. Chicago, 1927. 54, 35 pp.

Designed to assist conference leaders in presenting the text material of the foremanship training course listed above.

— — — *Foremanship: The introduction and administration of foreman training—information for management.* Chicago, 1926. 12 pp.

PEOPLE'S YEARBOOK. *Annual of the English and Scottish wholesale societies, 1928.* Manchester, Cooperative Wholesale Society (Ltd.), No. 1 Balloon Street [1928?]. 312 pp.

Contains detailed information concerning the various organizations of the cooperative movement of Great Britain, statistical data regarding the movement in other countries of the world, and articles on various labor and economic subjects.

RAYNAUD, BARTHÉLEMY. *Supplément au code du travail (1926–27).* Paris, Société Anonyme du Recueil Sirey, 1928. 62 pp. (*Petits codes Carpentier.*)

Contains the text of conventions between France and Belgium relating to the night work of women and children, unemployment, weekly rest, and the Geneva convention (1921) upon the use of white lead in painting.

WANGER, RUTH. *What girls can do.* New York, Henry Holt & Co., 1926. 293 pp., illus.

Intended for use in vocational guidance, suggestive rather than comprehensive. A limited number of occupations in different fields are analyzed with respect to their advantages and disadvantages, and sources are given from which fuller information may be secured, the object being to develop a method by which girls may learn how to investigate for themselves pursuits in which they may become interested.

WARBASSE, JAMES PETER. *What is cooperation?* New York, Vanguard Press, 1927. 170 pp.

A discussion, by the president of the Cooperative League of the United States, of the consumers' cooperative movement, its principles, methods, and accomplishments, simply and briefly set forth.

WEBB, CATHERINE. *The woman with the basket—the history of the Women's Cooperative Guild, 1883–1927.* London, Women's Cooperative Guild, 1927. 205 pp.

Reviewed on page 83 of this issue.

