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## Contents

	Page
<b>Special articles:</b>	
National economic councils.....	1
Public employment services.....	10
Unemployment in Buffalo, N. Y., in November, 1930, and comparison with November, 1929, by Frederick E. Croxton and Fred C. Croxton.....	33
Cooperative housing societies in 1929.....	47
<b>Employment conditions and relief:</b>	
Stabilization of employment in the boot and shoe industry, by Ethel- bert Stewart, United States Commissioner of Labor Statistics....	52
Decrease in railroad employment.....	54
Six-hour day adopted by large food-manufacturing company.....	60
Loans for the unemployed.....	61
New York—Report and recommendations of committee on stabiliza- tion of industry.....	61
<b>Industrial and labor conditions:</b>	
Annual report of the Secretary of Labor, 1930.....	75
Increase of Mexican labor in certain industries in the United States.....	81
California—Labor and social conditions of Mexicans.....	83
France and Austria—Labor treaty.....	89
France and Rumania—Labor treaty.....	91
<b>Old-age pensions:</b>	
Minnesota—Old-age pension movement.....	93
Canada—Old-age pensions.....	94
<b>Women in industry:</b>	
Woman workers in laundries.....	96
Industrial accidents among women.....	100
<b>Child labor and child welfare:</b>	
Third White House Conference on Child Welfare.....	101
Trends in employment of children, 1927 to 1929.....	102
Syria—Child labor law.....	107
<b>Health and industrial hygiene:</b>	
Costs of medical care among different types of families.....	108
Institutional care for convalescents.....	109
Cancer caused by coal tar and coal-tar products and mineral oils....	111
Effects of exposure of animals to dioxan gas.....	114
<b>Industrial accidents and safety:</b>	
Massachusetts—Regulations governing compressed-air work.....	115
North Dakota—Accidents, 1919–20 to 1929–30.....	120
Pennsylvania—Dependents of victims of fatal industrial accidents, 1929.....	121
France—Mine and railroad accidents.....	122
Mexico—Mine accidents, 1929.....	123
<b>Workmen's compensation:</b>	
Recent workmen's compensation reports—	
Iowa.....	124
North Carolina.....	125
Pennsylvania—New classification of permanent injuries.....	126
<b>Labor laws and court decisions:</b>	
Regulations regarding importation of convict-made goods.....	128
Indefinite employment may be terminated at will.....	130
Compensation not assignable in payment of prior debt.....	131

98885

CONTENTS

	Page
Labor turnover:	
Labor turnover in American factories, November, 1930.....	133
Industrial disputes:	
Strikes and lockouts in the United States in November, 1930.....	140
Conciliation work of the Department of Labor in November, 1930....	143
Work of United States Board of Mediation, 1929-30.....	146
Housing:	
Building permits in principal cities, November, 1930.....	148
Pennsylvania—Housing situation in Philadelphia.....	162
Wages and hours:	
Wages and hours in the hosiery and underwear industries, 1928 and 1930.....	166
Recent changes in wages and hours of labor.....	176
Average wages and hours of members of standard national and inter- national unions, 1929.....	179
New York—Arbitration award in the dress industry of New York City.....	181
Texas—Wages and hours in 1929-30.....	183
Australia—Wages and wage trends.....	185
Great Britain—Hours and other conditions in factories, 1929.....	189
Italy—Wage reductions.....	190
Morocco—Wages in Tangier.....	191
Spain—	
Wages in provincial capitals, 1928.....	192
Wages in Madrid, 1927.....	195
Trend of employment:	
Summary for November, 1930.....	196
Employment in selected manufacturing industries in November, 1930.....	198
Employment in coal mining in November, 1930.....	211
Employment in metalliferous mining in November, 1930.....	213
Employment in quarrying and nonmetallic mining in November, 1930.....	213
Employment in crude petroleum producing in November, 1930.....	214
Employment in public utilities in November, 1930.....	214
Employment in wholesale and retail trade in November, 1930.....	216
Employment in hotels in November, 1930.....	217
Employment in canning and preserving in November, 1930.....	218
Employment in laundries in November, 1930.....	219
Employment in dyeing and cleaning in November, 1930.....	219
Indexes of employment and pay-roll totals—mining, quarrying, public utilities, trade, hotels, and canning.....	220
Employment on Class I steam railroads in the United States.....	222
Changes in employment and pay rolls in various States.....	223
Wholesale and retail prices:	
Retail prices of food in November, 1930.....	231
Retail prices of coal in November, 1930.....	237
Comparison of retail-price changes in the United States and in foreign countries.....	240
Index numbers of wholesale prices in November, 1930.....	243
Immigration and emigration:	
Statistics of immigration for October, 1930.....	245
Publications relating to labor:	
Official—United States.....	247
Official—Foreign countries.....	248
Unofficial.....	251

## This Issue In Brief

*The formation of a national economic council to advise on questions affecting the social and economic welfare of the people of the country as a whole has been undertaken in a number of countries in the past several years. These councils are in close relationship with the chief officials and the parliaments in the countries in which they are set up and serve as advisory and investigative bodies as regards proposed legislation, and also assist in coordinating and rendering efficient the economic activities of the country.* Page 1.

*Twenty-four State departments of labor or industrial commissions and the United States Department of Labor operate 151 free employment offices permanently as part of their regular duties. The organization and machinery through which placement work is carried on by these agencies are shown in an article on page 10.*

*A sharp increase in unemployment in Buffalo occurred between November, 1929, and November, 1930, according to a recent survey. In 1929, for each 1,000 males enumerated, 59 were unable to secure work as against 165 per 1,000 in 1930. This represents an increase of over 150 per cent. The proportion of females unable to find work also increased more than 150 per cent. The least unemployment among males was found among those from 35 to 45 years of age.* Page 33.

*Thus far cooperative housing has had a very limited development in the United States, there being only some 45 societies in this field at the end of 1929. Of these, 43 were organizations owning apartment buildings, while 2 were operating residential hotels. Two other housing projects have been inaugurated since the beginning of 1930. The 25 societies furnishing data for the general study of cooperative associations recently made by the United States Bureau of Labor Statistics control property valued at more than \$8,000,000. They have provided living quarters for 2,300 householders and nearly 650 single persons.* Page 47.

*The fact that employment may be stabilized is graphically illustrated in an article which compares over a period of years the experience of one shoe plant, which maintained almost complete stability, with that of another plant where employment fluctuated widely and with the experience of the industry as a whole.* Page 52.

*Full-time working hours in the hosiery and underwear industries declined 7.1 per cent between 1913 and 1930 and earnings per hour increased 173.8 per cent, according to the latest survey of wages and hours in these industries by the Bureau of Labor Statistics. Between 1928, the date of the bureau's previous survey, and 1930, however, there was a slight increase in hours, the full-time weekly hours in 1930 being 51.6 as compared with 51.3 in 1928. Average earnings per hour increased from 44.4 cents in 1928 to 45.5 cents in 1930, and average full-time weekly earnings from \$22.78 in 1928 to \$23.48 in 1930.* Page 166.

*The report of the New York Committee on Stabilization of Industry* includes a recommendation for the adoption by industry of insurance schemes to help stabilize wage earners' incomes during periods of unemployment. Full and impartial investigation of the question by a properly constituted national body is also recommended to determine what steps can be taken to supplement the efforts of private industrialists and workers to protect the working people of the United States against the effects of unemployment too great to be offset by individual resources. Page 61.

*Although railroad employment during the period October, 1929, to October, 1930, declined almost 17 per cent, the decline was not at all uniform as between the different classes of employees.* Thus, among the executives, officials, and staff assistants the decline was only 4.6 per cent and among the clerical staff, about 10 per cent; the maintenance-of-way men were reduced by more than 25 per cent and the maintenance-of-equipment employees by some 17 per cent. Page 54.

*The number of 14 and 15 year old children entering industry for the first time showed an increase in 1929 over 1928, according to the annual report of the Chief of the United States Children's Bureau, whereas 1928, as compared with 1927, had shown a decrease.* The changes varied from place to place. Page 102.

*The power laundry business has increased very greatly within the last two decades, and this growth has been accompanied by an increased regularity in hours, according to a report on woman workers in laundries recently issued by the United States Women's Bureau.* The age level of the workers is rather high, and women who are or have been married far exceed the single in number. Page 96.

*Certain kinds of coal tar and coal-tar products have strong cancer-producing properties.* Studies of the effects of different kinds of coal tars which differ in their chemical composition have shown that blast-furnace tar is probably harmless but that gas-works tar, especially the high-temperature, horizontal-retort tar, has strong cancer-producing qualities. Coke-oven tar has caused a number of cases of cancer, as have also a number of the tar-distillation products such as creosote oil, green oil, anthracene, and pitch. Pitch is said to be undoubtedly the most harmful substance among tar products. Page 111.

*The 5-day week gained ground in England during 1929, according to the report of the Chief Inspector of Factories and Workshops, who states that in general it is approved by employers who have tried it, on the ground that it means a larger output with lower costs.* Page 189.

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## National Economic Councils

IN SEVERAL countries of Europe attempts have been made in recent years to provide for the special representation of the varied interests of the country, as well as to bring into play the specialized knowledge of various groups and individuals, through the formation of councils with advisory and consultative powers. These councils, which are in close relation with the chief officials and the parliaments of the different countries, serve largely as advisory and investigative bodies as regards proposed legislation or other questions affecting the social or economic welfare of the people.

The present article gives a brief description of the national council system in France, Great Britain, Germany, and Italy. In France the National Economic Council organized in 1925 has functioned successfully, particularly in regard to the comprehensive plan for coordinating and putting upon an efficient basis all the elements entering into the economic life of that country. In England and Italy the establishment of such councils is more recent while in Germany although a provisional economic council was organized in 1920 a bill providing for a permanent council which has been pending before Parliament for several years is not yet enacted into law.

Other countries in which such councils have been formed include Czechoslovakia, Spain, and Japan. In Czechoslovakia a consultative commission composed of 150 members chosen by the Government and representing employers' and workers' organizations and economists gives its opinion either on its own initiative or at the request of the Government, upon questions of general economic importance. A Council for the National Economy was appointed in Spain by royal decree in 1924. This organization, which acts entirely in a consultative capacity, is composed of 24 members representing the various commercial and producers' organizations of the country. In Japan the Imperial Economic Council is presided over by the Prime Minister and has for vice presidents the Ministers of Finance, Agriculture, and Commerce, the other members being designated by the cabinet and chosen among public officials and representatives of producers' organizations. The scope of the activities of the council are very wide, embracing economic subjects, protection of the workers, and the general industrial development of the country. In still other countries, notably Norway, Hungary, Poland, and Portugal, some attempts at the constitution of similar organizations have been made

while in Russia the Superior Council of National Economy forms one of the basic institutions of that Government.

A national economic council was recently established in Belgium to study and advise on problems connected with the economic welfare of the country. Unlike the councils in other countries, however, it will not have the character of a body representing the various economic interests of the country. The council will serve to coordinate the work of existing institutions and will, to a certain extent, be superimposed on these institutions. The members will be chosen for their knowledge and personal authority and the Prime Minister and the governmental departments concerned with the economic policy of the country will be represented so that contact will be insured with those departments which will ultimately be required to give effect to the proposals made by the council.

#### National Economic Council, France <sup>1</sup>

THE French National Economic Council (*Conseil National Économique*) was established by a decree dated January 16, 1925. The organization of such a council, having for its purpose the orientation of the political and social development of the country, had been urged by the General Confederation of Labor (*Confédération Générale du Travail*) since the close of the war. As a result of this demand by organized labor for the establishment of an economic council with executive powers the commission was appointed in 1924 to study the matter and after a series of meetings in which the scheme for the organization was drawn up, the cabinet took up the matter, making such changes in the plan as were necessary to bring it into line with the constitutional and legislative organization of the country. The plan adopted provided that the National Economic Council should not be subordinate to any particular ministry but should be attached to the Prime Minister's Department, although the money for its administration would be paid from the budget of the Ministry of Labor, it having been found impossible to satisfy the demand of the committee that the council should be a financially independent office with its own budget. The practical independence of the council is secured through its freedom to decide upon questions to be studied and because its members are not chosen by the Government but are merely appointed by it on the nomination of the different interests represented.

Although the proponents of the plan considered that the council should be given large powers of initiative and the right to lay its opinions and proposals before the chambers of Parliament, the Government felt that such a procedure might be unconstitutional and that the freedom of the Government might be lessened if it were required to introduce bills dictated by the National Economic Council. The decree, therefore, specified that the recommendations of the council should be transmitted to the Prime Minister who should, within one month, inform the council of the action taken or refer the question back to the council for further consideration. While the actual power of the council was therefore limited, the risk of rivalry

<sup>1</sup> This section is based upon Ministère du Travail, Bulletin, Paris, Jan.-Feb.-Mar., 1925, pp. 30<sup>a</sup>-33<sup>a</sup>; Revue d'Économie Politique, Paris, Juillet-Août, 1930, pp. 1172-1191; dan Le Perfectionnement de L'Outillage National, by Roger Franceq.



between the council and Parliament was avoided. But a possible widening of the scope of the activities of the council to include problems touching other nations is found in the provision that the council may consider questions which are of economic interest either from a national point of view or because of their international bearing.

The council, as established by the decree, is composed of 47 members representing the different economic and social groups of the country, as follows: Nine representing the consumers and the general public, selected from consumers' cooperative societies and consumers' leagues, mayors' associations, users of public services, and heads of families; 30 representing labor and industry, including (a) intellectual labor and teaching, (b) management in industry, agriculture, commerce, transportation, the cooperative movement, and the public utilities, (c) wage-earners, including officials, technical workers, and general labor in industry, commerce, agriculture, and transportation, and (d) artisans in city and rural trades; and 8 representing capital, including (a) industrial and commercial capital, (b) real estate (rural and city), and (c) banks, the stock exchange, and insurance and savings funds. The members are chosen in each class by the most representative organization or organizations, these organizations being named by the Government on the recommendation of the Minister of Labor after consultation with the different cabinet officers concerned.

The term of office of members of the council is two years and members must be French, at least 25 years of age, and in possession of full civil and political rights. Women are eligible under the same conditions as men.

The council meets regularly four times each year for 10 days, and extra sessions may be called by the Prime Minister, who is ex officio president of the National Economic Council. A permanent committee of 10 members is elected by the council to take care of current business between sessions, to carry out the decisions of the council, and to prepare the agenda for the meetings of the council. The law provides that the council shall have a permanent headquarters and that the general secretary shall be appointed by decree, on the recommendation of the Prime Minister, after consultation with the Minister of Labor and the executive officers of the council. Experts are appointed from a list established by the different Government departments concerned, from the Superior Labor Council and the Council of National Defense, and also including the French Government representative at the International Labor Office. When a question concerns an economic or industrial class not permanently represented on the council, representatives of such a class may be appointed, under the rules governing appointments, to share in the investigation.

All the ministerial departments, undersecretaries of State, high commissioners, and the competent committees of the Chamber and the Senate are entitled to be represented in the deliberations of the council and its permanent committee. The council, likewise, has the right to be heard by the competent committees of either branch of Parliament as well as by the ministers and members of the Government and to require them to send representatives to the meetings of the council and the permanent committee in case no delegates have been appointed.

It is provided that the Prime Minister shall consult directly with the Economic Council, and the proceedings and decisions of the council in the form of reports or recommendations shall be published in the *Journal Officiel*. Decisions reached by the council must receive a two-thirds vote of the members present and are then transmitted to the Prime Minister. The Government transmits to the National Economic Council, for purposes of information, all bills of economic interest after these have been tabled, and every law of an economic nature passed may provide for the compulsory consultation with the council in regard to the framing of the regulations necessary for its enforcement.

The Prime Minister and the ministers of foreign affairs, labor, finance, commerce and industry, agriculture, public works, and the colonies are all associated in the administration of the decree.

The council, since its establishment in 1925, has completed various studies relating to the "national equipment" (*l'outillage national*). The first study undertaken by the permanent committee was an investigation of the housing problem. In connection with this study an advisory committee on rents was appointed, which was empowered to codify and consolidate existing legislation and measures relating to rents, to consider the laws relating to cheap housing, and also to prepare a building program to meet public needs. A complete technical, administrative, and financial plan for the construction of dwellings was developed by this committee. After the completion of this work the council broadened its activities to cover all phases of the national economy for the purpose of establishing a program of action and deciding upon methods which appeared to be essential to put the "national equipment" into the fullest operation. In this "equipment" are included not only works created by the people as a whole but also all of the natural resources made use of by human labor and institutions designed to increase the production, circulation, and consumption of goods, as well as the basic industries which affect the entire national economy. Thus the council is concerned in the development of the means of transport (roads, rivers, seaports, aeronautics) and of communications (posts, telephones and telegraph, and radio) as well as the strengthening of power sources (hydraulic power and power distribution, solid and liquid fuels).

The council has also studied the improvement of agricultural production, studying successively the development of water power, production and use of fertilizers, electrification of rural districts, cooperative institutions, mutual associations, and agricultural credits. It is also interested in the development of these facilities in the French colonies, in the organization of the colonial markets, and in the possibility of the immediate utilization of colonial imports. Finally the council has endeavored to draw up a plan for the financing of this program and two plans—the Tardieu bill and the plan of the National Economic Council itself—were introduced into Parliament during 1930.

#### English Economic Advisory Council <sup>2</sup>

ON JANUARY 27, 1930, the English Government issued a Treasury minute, recording its decision to establish a new body, known

<sup>2</sup> This section is based upon *Economist* (London), Feb. 1, 1930, and *Manchester Guardian*, Jan. 30, 1930.

as the Economic Advisory Council. This is to be a standing body, reporting to the cabinet. The Prime Minister is to be its chairman, and other members are to be the Chancellor of the Exchequer, the Lord Privy Seal, the president of the Board of Trade, the Minister of Agriculture, and other ministers whom the Prime Minister may from time to time summon. In addition, there are to be other persons, not cabinet members, chosen by the Prime Minister by reason of their special knowledge and experience in industry and economics. Its purposes are thus defined:

To advise His Majesty's Government in economic matters.

To make continuous study of developments in trade and industry and in the use of national and imperial resources, of the effect of legislation and fiscal policy at home and abroad, and of all aspects of national, imperial, and international economy with a bearing on the prosperity of the country.

The council is to be subject to the general directions of the Prime Minister, but is not to interfere with the functions or responsibilities of any of the ministers or departments, and is to have no administrative or executive powers. It is to keep in touch with departments affected by its work, with a view to the concerted study of economic problems of national interest. It may set up standing committees and such special committees as may be required. It may initiate inquiries into and advise upon any subject falling within its scope, including proposals for legislation.

The council shall also cause to be prepared a list of persons with industrial, commercial, financial, and working-class experience and persons who have made a special study of social, economic, and other scientific problems who might assist the council by serving on committees or as advisers in matters of which they have expert knowledge or in other ways.

Its reports and its work are to be confidential, unless the council advises the Prime Minister otherwise. It is to have a secretary and assistant secretaries, at least two of whom must be economists, and such other staff as may be found necessary. It is estimated that it will cost less than £6,000 per annum, for which provision will be made in the regular budget.

In commenting upon the creation of the new body, the Manchester Guardian points out that it goes far toward removing the reproach often brought against the English system of government that "there is no regular channel through which men with ideas and experience, who are not politicians, can get into contact with the Government of the day." The Liberals and the Labor Party had both called, in the official statements of their programs, for the establishment of some such body as this as a means of formulating "a consistent and comprehensive policy for the development of national resources, and to coordinate the work of the departments on which the executive duties would fall." In the opinion of the Manchester Guardian, "The council is a step in the direction of more scientific handling of economic problems—a way of making the economist appreciate political difficulties and the politician realize economic necessities."

Since the work and reports of the council are confidential, it is impossible to give any résumé of its activities. One indication of the lines along which it is working, however, appears in the fact that beginning with August, 1930, the Ministry of Labor Gazette has published a quarterly supplement of economic and industrial informa-

tion, stating that this is done on the recommendation of the council. The supplement, which is compiled jointly by the Board of Trade and the Ministry of Labor, contains charts illustrating the course of trade, production, prices, wages, finance, and employment from 1924 up to the date of issuance, together with tables containing the statistics on which the charts are based. Also, in its issue for July, 1930, the Gazette discussed a report issued by the Economic Advisory Council, dealing with conditions in the iron and steel industries of France, Belgium, Luxemburg, Germany, and Czechoslovakia, based upon the results of a visit of investigation made, at the suggestion of the council, by a delegation composed of representatives of the leading iron and steel associations and of the Ministry of Labor.

### Provisional Federal Economic Council, Germany<sup>3</sup>

A PROVISIONAL Federal economic council was created in Germany by a Governmental order, dated May 4, 1920. The German constitution adopted at Weimar in July, 1919, proposed the establishment of district and Federal representative councils among workers and employers and other groups to be combined into a Federal council which should deal with economic problems and assist in carrying out the social laws of the country. The council was to voice the economic needs of the country and to act as an advisory body to the Reichstag, which would submit drafts of important laws to it for consideration and advice. It was planned also, that the council itself should have the right to initiate and introduce bills into Parliament. The Reichstag soon after convening on August 12, 1919, however, decided to create a provisional council instead of a permanent one as outlined in the Federal constitution.

The provisional council as constituted by the governmental order of May 4 consisted of 326 representatives divided as follows among the different groups: Agriculture and forestry, 68; horticulture and fishing, 6; industry, 68; commerce, banking, and insurance, 44; handicrafts, 36; transportation and public works, 34; consumers, 30; civil service and liberal professions, 16, together with 12 experts each appointed by the Reichstag and the Government, the representation being based upon the numerical and the economic importance of the various groups. The representatives in the first six groups are appointed by the central trade organizations of the various industries and occupations belonging to each group. The representatives of the consumers are appointed by the various municipal councils and associations of the larger cities, three being appointed by the Federal Council (Reichsrat) to represent rural communities; by associations of consumers' societies; and by various associations of housewives and of servants. Representatives of civil servants and the liberal professions are appointed by various national employees' unions and professional associations. The experts are appointed by the Federal Council from persons who are especially connected with the economic life of the country and by the Federal Government from

<sup>3</sup> This section is based upon Die Verfassung des Deutschen Reiches, art. 165, Berlin, 1919; Reichsgesetzblatt, 1920, p. 858 et seq.; International Labor Review, Geneva, June, 1925, pp. 812-813; Der Vorläufige Reichswerkschaftsrat 1920-1926, Berlin, 1926, p. 3; Reichsarbeitsministerium, Reichsarbeitsblatt, Amtlicher Teil, 1926, Beilage zu No. 44, pp. 1-16; and Soziale Praxis, May 1929, Col. 427.

persons who have, through special services, contributed to the industrial development of the nation. The membership of the council was regrouped at a general meeting of the council in 1921 to form three main divisions—employers, wage earners, and a group embracing consumers, civil servants, members of the professions, etc. It was anticipated that this realignment would simplify the voting, but as a matter of fact the first two groups have acted on the basis of their "class" interests rather than on the basis of the national interests which the council was intended to serve.

As the membership of the council proved to be too unwieldy for efficient and speedy work, much of the work has been carried on through committees. Up to 1926, 53 different committees had been created but since that time their number has been considerably reduced. No plenary sessions of the council have been held since the fall of 1923.

The work of the council included at first matters of immediate importance to the people as a result of the war such as the food supply and measures for the prevention of unemployment. In 1921, the council gave its attention mainly to financial problems and later the questions of export, credit, control of foreign trade, etc., were taken up. The establishment of a sound financial policy and the stabilization of the mark were dealt with in 1922 and the following year the tariff problem, measures for defense, finances, and credits were considered. In the field of social policy the council dealt with the various labor problems such as hours, wages, conciliation and arbitration, etc. In 1924 a policy of economy was introduced by the Government in its various departments and offices with the result that the work of the council was considerably curtailed. The holding of general meetings was permitted only if authorized by the Government and only four committees were retained, namely those on economic, social, financial, and housing problems. Further, the work of these committees was limited to discussion of the proposals of the Government, the committees not being permitted to act on their own initiative unless the chairman of the council obtained approval of the ministry concerned in each particular case.

The provisional council was concerned in the establishment of a permanent council and a bill was drawn up by it and introduced in the Reichstag providing for the establishment of such a council. The bill provided for division of representation among different important groups but with a much reduced membership, only 123 permanent members being provided for. The bill, which was changed to increase the membership to 144, is still before the Reichstag. The delay in its enactment into law is said to be due not to opposition to such a council by the major political parties but largely to the difficulty in the adjustment and apportionment of the representation of the various groups to suit the different interests concerned. The bill failed of the necessary two-thirds majority when it was voted upon in July, 1930, but it is expected that it will eventually be amended and passed.

Italian National Council of Corporations<sup>4</sup>

AN ITALIAN law enacted March 20, 1930, which became effective April 21, 1930, provided for the establishment of a national council of corporations to serve in an advisory capacity to the Ministry of Corporations. The Ministry of Corporations was created in 1926 for the supervision and control of the association of employers and syndicates of employees into which the people of Italy are divided, but in the four years since its creation, it appears to have evolved into a combined ministry for commerce, industry and labor.

The membership of the council, under the presidency of the head of the Government is composed of the Minister of Corporations, Minister of Interior, Minister of Agriculture and Forestry, and certain subordinate officials of these organizations, the presidents of the Workers' Spare Time Institute, the National Institute for Social Assistance, the Association of Disabled Soldiers and of the National ex-Service Association, one member from the national directorate of the National Fascist Party, and representatives of the seven occupational divisions of employers and employees, and of the associations of public employees. Ten technical advisers who are particularly competent in matters of law, economics, and syndical organization are appointed by the Minister of Corporations. These advisers may participate in discussions but do not have the right to vote. All except the ex officio members of the council remain in office for three years and may be reappointed. The members serve without pay except for expenses.

The council works through a central corporate commission, a special permanent commission, and sections and subsections. The central corporate commission is composed of the special members of the council representing the various interests and its duties are to coordinate the activities of the council, deal with matters of urgent importance which may arise between meetings and with national problems of production, etc. A special permanent commission appointed from the regular membership of the council may be created to consider questions of a general character which may be referred to it. Questions relating to special groups are dealt with by sections and subsections, the council being divided into seven sections for this purpose. The sections represent respectively the professions and arts, industry, land and waterways transportation, maritime and air transportation, agriculture, commerce, and banking, and each of the first four groups is divided into subsections. The employers' and workers' groups have equal representation in all sections and subsections.

A general assembly of the national council is held twice a year and special sessions may be called by the president on his own initiative or on the written demand of one-third of the members. Ten days' notice is required for all meetings except when the business is urgent, in which case the notice required is reduced to five days. Meetings of sections and subsections may be held separately or one or more

<sup>4</sup> This section is based upon *Bollettino del Lavoro*, Rome, January-March, 1930, pp. 139-142; and July-August, 1930, pp. 171-174; *International Labor Review*, Geneva, July, 1930, pp. 1-22; The act on the National Council of Corporations in Italy, by Ulrico Ailland; and an account of the Corporative State and the National Council of Corporations, prepared by H. H. Tittman, second secretary, American Embassy at Rome, dated Apr. 27, 1930.

sections may hold joint meetings to discuss matters of common interest. In general the public may be admitted to sessions of the council or of the sections but at the order of the president meetings may be held behind closed doors, in which case all present are pledged to secrecy.

The functions of the council are consultative, rule making, administrative, and coordinative. It executes and integrates the main provisions of the labor charter, examines and renders opinions on proposed laws and rules regulating production and labor, and in other cases as asked by officials of the Government, cares for the interests of the association, reports on the status and capacity of trade associations, recognizes and revokes recognition of confederations, associations, and delegates to associations of higher grades, watches over associations of lower grades, constitutes individual corporations, grants professional associations permission to determine the amount of fees to be charged for professional services, publishes rules to be observed by the professional classes, considers propositions of the sections and subsections, makes rules to coordinate the activities of trade, supplementary or corporative associations, reports collective agreements, and makes rules for the regulation of collective economic relations between the different classes of production represented by legally recognized associations.

When the request for opinion is obligatory under the law the royal decree and the ministerial decree following must contain the statement "Heard the opinion of the National Council of Corporations." Having received the opinion of a section or subsection or of several sections the minister who asked for it may request its reference to the whole council for consideration. The initiative for the making of rules belongs to the head of the Government on the proposal of the Minister of Corporations or the associations and he has the right of absolute veto.

The new organization was described as follows by Premier Mussolini in his speech at the inauguration of the council on April 21:

The National Council of Corporations may be defined as occupying in relation to Italian national economy the place that the General Staff occupies with respect to the Army; that is, it is the functioning brain which draws up plans and coordinates all activities. Such a comparison is not inapt, because Italian national economy is obliged to wage severe and incessant warfare and requires for that purpose a general staff and a fully competent rank and file.

Decisions handed down by the National Council of Corporations may be considered as regulations having the force of public law, but binding only in so far as they concern the persons, the economic matters, and the labor questions which they are intended to regulate. They are in no way laws in the formal sense, or provisions of an enabling act, or the delegation of powers on the part of the syndicates, or arbitral judgments, but are instead autonomous regulations of a technical-professional character.

## Public Employment Services

PERIODS of acute unemployment such as the country is now experiencing bring the public employment offices into general notice and emphasize the existence of an agency which perhaps receives too little attention in normal times. During the past few months, under the impetus given by the President's Emergency Committee on Unemployment, many local employment agencies under municipal or community auspices have organized and are in active operation. Emergency conditions tend to give to these enterprises publicity and community support which in large measure promote their successful operation.

Past experience has shown, however, that most of these emergency organizations disappear with the acute conditions that produced them. Popular interest as a rule dies with them, leaving in the field of public employment service only such machinery as exists by law or established custom.

What this machinery is, and something of the historic background of the present system of public employment agencies are dealt with in this article. Neither criticism nor defense of those agencies is intended. Rather the purpose is to show what is being attempted through governmental means to bring worker and job together in normal times as well as in periods of industrial depression, and the machinery through which that effort is made.

Principally for want of contact in locating them and securing the desired information, no attempt has been made to treat the numerous permanent municipal agencies which are independent of State control. Municipal employment bureaus are found here and there in all parts of the country, from Baltimore to Seattle, and as far as their functions and machinery of operation are concerned they are no doubt identical. They differ chiefly in the amount of financial support and public patronage they receive, which of course determines the amount of work they are able to do. The specific field of the present article is placement as a function of State and Federal governments.

Just half of the States—24<sup>1</sup>—maintain public employment offices as a State service. In all of them the department of labor or the industrial commission is the responsible administering medium. The normal number of employment offices which these States operate is 151, a number somewhat increased just now by reason of temporary expansions to meet an emergency.

State offices are located in the principal cities of the State, the number of such offices being distributed thus: Illinois, 20; Pennsylvania and Ohio, 13; California and New York, 11; Michigan and Wisconsin, 10; Connecticut and New Jersey, 8; North Carolina, 6; Arkansas, Indiana, and Kansas, 5; Massachusetts and Oklahoma, 4; Minnesota, Missouri, Nevada, and Virginia, 3; Iowa, 2; Maine, New Hampshire, Rhode Island, and West Virginia, 1.

In 11 additional States<sup>2</sup> the United States Employment Service acts through a State representative. These 11 States are chiefly

<sup>1</sup> Arkansas, California, Connecticut, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, Virginia, West Virginia, Wisconsin.

<sup>2</sup> Arizona, Delaware, Georgia, Maryland, Montana, North Dakota, Oregon, South Dakota, Texas, Vermont, Washington.



agricultural and the public employment service concerns itself with farm labor almost exclusively.

Several States<sup>3</sup> have laws directing the establishment of a State employment system, but have no offices in regular operation. Some of them have never undertaken the work at all. In some cases the enabling act has not been accompanied by the necessary appropriation. Colorado maintained several offices from 1907 to 1923, but the legislature of 1923 failed to renew the appropriation for them and they have never reopened. West Virginia established an office in February, 1930, although authority to do so has existed for years. State laws of Idaho and Montana declare that it shall be the duty of the municipality to establish employment offices, but no permanent organization has been effected in either State. Other States—Ohio and Wisconsin among them—require that the municipality, the county, or both, in which the State establishes a free employment office, shall contribute to its maintenance.

In several States the department of labor's efforts to provide an employment service are so seriously handicapped by insufficient money and staff that little is accomplished. The office has to confine itself to business which can be handled by telephone and correspondence, a practice which is sometimes spoken of as the "mail-order system" in the public employment field. In fact, in several instances, the legislation as well as the appropriation under which placement work is undertaken makes a more active policy impossible.

On the other hand, other States, by no means confined to those in the industrial area, are doing such effective work as materially to affect the employment situation, even for skilled labor and the professions.

#### Development of Public Employment Offices

OHIO was the first State to attempt placement work as a State function. A law calling for the creation of public employment offices in the five principal cities, which was drafted and sponsored by the Municipal Labor Congress of Cincinnati, was enacted in April, 1890. The bill as drafted made the employment offices branches of the State bureau of labor statistics, fixed the salaries of superintendents and clerks, who were to be appointed by the commissioner of labor, and placed the entire expense of operation upon the State. The senate, however, took the position that since the cities in which offices were established would derive all the benefit, they should pay for the service. To secure passage, an amendment was accepted which provided that the compensation of the superintendents and clerks "shall be paid out of the city treasury in which such free public employment office may be located." The city was also to fix the amount of the salary to be paid. At the same time it was entirely optional with the city whether or not it accepted the arrangement.

The five cities involved did, however, pass ordinances providing for salaries for the employees of the public employment offices, although Toledo provided only for a superintendent. The question then arose of responsibility for the equipment and maintenance of the offices, an expenditure for which no appropriation had been made by the legislature. As the bill had passed on the last day of

<sup>3</sup> Arizona, Colorado, Georgia, Louisiana, Maryland, Nebraska, North Dakota, Utah.

the session no legislative action could be had. The commissioner of labor obtained an opinion from the attorney general to the effect that "the spirit of the act requires the State to pay the necessary expenses connected with the establishment of free public employment offices" except salaries. The commissioner then proceeded to rent and equip offices and to appoint superintendents and clerks to man them, and, armed with the attorney general's opinion, secured an emergency deficiency appropriation of \$2,000 from the governor. The law was passed in April. By September offices were in operation in the five cities covered by the law—Cincinnati, Cleveland, Columbus, Dayton, and Toledo. Men were appointed as superintendents and women as clerks, and the clerks were to act as placement agents for the women applicants in the belief, as the commissioner explained it, "that women and girls out of work would prefer to approach one of their own sex when in search of employment." He added, apparently in defense, that "the wisdom of this course has since been demonstrated by the operation of the offices."<sup>4</sup>

One interesting point developed by the first tabulated report of the service is the fact that in the Toledo, Dayton, and Cleveland offices, during the first week of operation, more employers than workers applied for help. That condition continued in Toledo and Cleveland throughout the entire period covered by the first report, up to January 1, 1891.

Although the Ohio offices handled little but common and domestic labor, they were successful enough to be pretty firmly established from the first, sufficiently so, at least, that no serious attempt was made to repeal the legislation or to refuse appropriations. The system developed in usefulness within its limited field, and even achieved an impressive record during the panic years of 1893-94.

The connection of the city governments with the system proved an administrative stumblingblock, however. After several years of difficulties growing out of that impractical plan, the State, in 1904, took over the entire expense of operating the public employment service and assumed full authority.

The Ohio experiment was watched by other States interested in the movement, and by the close of the first decade New York and Illinois had followed Ohio's lead. The New York law as passed in 1896 was repealed 10 years later, and the legislation under which the present New York public employment system is conducted is comparatively recent. Illinois, by a law of 1899, established a system of State employment offices, providing for one office in each city of 50,000 population and over,<sup>5</sup> and three in each city of 1,000,000 and over. Chicago and Peoria were at the time the only cities involved, and except for the organization of an office in Chicago the system existed largely on paper for the next three or four years. The law contained a clause prohibiting the offices from furnishing any assistance to an employer whose workers were on strike or locked out. As the result of a trial brought to test the legality of that clause, the whole statute was declared unconstitutional in 1903. The legislature was in session at the time, and the law, with the disputed feature modified, was reenacted and strengthened. The clause dealing with

<sup>4</sup> Ohio Bureau of Labor Statistics. Fourteenth annual report, 1890, p. 13.

<sup>5</sup> This was changed later to cover cities of 25,000 population and over, and contiguous towns with a combined population of 25,000 and over.

strikes was changed to read: "Full information shall be given applicants concerning the existence of any strike or lockout in the establishment of any employer securing workers from the Illinois Free Employment Office."

That method of handling the strike situation is now dictated by many of the laws creating public employment offices, and is usually followed as a policy whether or not the law itself touches upon the matter.

Missouri established a State employment service in 1899 and opened offices in St. Louis, Kansas City, and St. Joseph. Connecticut and Wisconsin followed in 1901 with the establishment of five offices in Connecticut and four in Wisconsin. During the next decade Michigan, Massachusetts, Colorado, Oklahoma, and Indiana created State systems and opened two or more offices, and several other States instituted the "mail order" type of labor exchange within the office of the State bureau of labor.

But while the theory of placement work as a State function was thus gaining ground steadily, the system in practical operation could not be credited with conspicuous success. Some individual offices were efficiently operated and gained reputation and standing; in others the superintendent made no effort to do more than the minimum amount of routine which a political sinecure involved. The whole system was chaotic and planless, handicapped by political considerations, public indifference, and more important, wholly inadequate salaries and appropriations.

Until 1906 the largest of any of the State appropriations for public employment offices was but a drop in the bucket. At that time Massachusetts, enacting legislation for the creation of State employment offices, appropriated \$25,000 as a total for the entire State. Of this sum, approximately \$23,000 was spent in establishing and maintaining, during its first year of operation, the Boston office. Wisconsin in 1912 and Ohio in 1914 each succeeded in having the original appropriation increased, and supplemented it by direct or indirect contributions from the local governments in which offices were situated. The sum of \$54,235 voted in 1915 for the Illinois public employment offices exceeded by a considerable margin that of any other State, even of New York, for the same year.<sup>6</sup>

Salaries were for the most part statutory, generally \$1,000 or \$1,200 for superintendents, with \$1,500 as the highest salary paid by any State; \$600 to \$900 for assistants and clerks, and occasionally an assistant at \$1,000 a year.

In December, 1913, at the instigation of the superintendent of the Wisconsin State employment offices, a meeting of the officials of the State employment service in eight States<sup>7</sup> was held in Chicago, at which the American Association of Public Employment Offices<sup>8</sup> was organized. The objects of the organization as declared in its constitution were:

To improve the efficiency of the public employment offices now in existence; to work for the establishment of such offices in all States; to secure cooperation and closer connection between the offices in each State and among the States; to promote uniform methods of doing business in all the public employment offices; to secure a regular interchange of information and reports among the various offices; to secure a proper distribution of labor throughout the country by the cooperation of municipal, State, and Federal governments.

<sup>6</sup> Harrison, Shelby, and associates: *Public Employment Offices*. New York, Russell Sage Foundation, 1924, p. 124.

<sup>7</sup> Illinois, Indiana, Massachusetts, Michigan, Minnesota, Missouri, Ohio, Wisconsin.

<sup>8</sup> Name changed later to International Association of Public Employment Services.

The call for this conference expressed the belief that—

If we could have a meeting of the superintendents of all the offices to read and discuss papers on the management of employment offices, we might work out a more uniform method of doing business which would make cooperation among the various State offices easier. A system of interchange of reports might also be devised, and from these accurate information as to the condition of the labor market throughout the country might be compiled and circulated.<sup>9</sup>

A paper read at the meeting emphasized the lack of uniformity of methods and coordination of purposes thus:

There is little uniformity and practically no cooperation among the various offices, even within a State. Hardly in any office are all applicants registered. In many cases employers' applications are not taken if the help they want is not available, and there is a general practice of not registering applicants for employment unless there is some work to which they can be referred. This makes the statistics of the public employment offices very unreliable. It makes the proportion of applicants for whom work is found and the proportion of vacancies which are filled very high, and gives no idea of the actual supply of labor and demand for help. The statistics of the number of positions filled are also not very reliable. The methods of finding out whether the men sent to employers have secured the position are lax in many cases, and in few offices are they alike. The most efficient scheme has been devised in Boston, where a clerk verifies every position filled by means of the telephone or by mail.<sup>10</sup>

Granting, in his address to the next convention of the association, that in many respects the employment offices were floundering helplessly, Dr. Royal Meeker, then United States Commissioner of Labor Statistics, nevertheless maintained that—

In view of all the difficulties they have had to overcome, the public employment offices of the United States have accomplished great things. They have forced a reluctant and unbelieving public to recognize partially at least the fact of unemployment and the principle of public responsibility for the existence of unemployment and for the furnishing of work to all the workless; they have courageously attacked the abuses which are inseparable from private employment offices conducted for the sole purpose of doing the greatest number and doing them good and plenty; they have, with gigantically small appropriations, met the competition of private agencies long established and deeply entrenched; they are overcoming the suspicions of the bona fide workers and the contempt of employers. Their tasks have been rendered well-nigh impossible by the niggardliness of appropriations and the indifference of the public.<sup>11</sup>

Changes in viewpoint and administrative methods brought about by the reversal of conditions which severe labor shortage produced, and the entrance of the Federal Government into the placement field during the war have materially altered the status of the public employment service.

#### Federal Employment Service

THE Federal Government made its initial entry into the employment service field in 1907, for the specific purpose of diverting immigrant labor from the port of entry into less congested areas where employment opportunities were greater. The immigration act of 1907 created within the Bureau of Immigration and Naturalization, which was then in the Department of Commerce and Labor, a division of information "to promote a beneficial distribution of aliens admitted into the United States among the several States and territories desiring immigration."

<sup>9</sup> U. S. Bureau of Labor Statistics Bul. No. 192, p. 8.

<sup>10</sup> *Idem*, p. 15.

<sup>11</sup> *Idem*, p. 45.

This organization did little actual placement work. Its chief function was to disseminate information bearing upon "the resources, products, and physical characteristics of each State and territory" as a means of better distribution. Immigration offices were instructed to detail one employee to the information and distribution work, and a special office was established on Ellis Island.

Because it proved quite impractical to impress the newcomers with the Government's distribution program while they were at the receiving station, the office of the division of information was soon moved to New York City. Handbills were printed in many languages and distributed on the ferries from Ellis Island to the city, calling attention to the service and directing all interested persons to the office. The division prepared and published a series of bulletins dealing with the opportunities to be found in the various geographical groups of States. The information contained in these bulletins covered lands available for rent and for sale, soil, climate and market conditions, and many details of importance to strangers looking for farms or farm work, and to some extent business and industrial opportunities as well. The data had been collected by the division from authoritative sources within the different communities, and the bulletins were given to everyone requesting them. Some effort was made to list openings and to direct applicants to specific jobs, but while some placement work was done it was not material, and was limited by the resources of the division itself and the fact that few newly arrived immigrants could pay their transportation to inland points where jobs were to be had. While the work of the division was not limited either by law or by policy to aliens, it did not extend much beyond them.

The distribution of bulletins and information and the giving of help and advice so far as feasible continued to be the limited functions of the New York office, and a secondary activity of the various immigration stations throughout the country, until 1914-15, when considerable expansion was undertaken. In the meantime, in 1913, the Federal Department of Commerce and Labor had been reorganized into two separate departments, and the Bureau of Immigration became a bureau of the newly created Department of Labor.

The sharp decrease in immigration after the European War began left employees of the immigration service with little to do. At the same time industrial dislocation brought about by the war had produced serious unemployment in the United States. The country-wide organization of immigration offices was accordingly assigned a new job—that of serving as an employment medium. Legislative authority was contained in the organic act establishing the Department of Labor, which included among the duties of the new body that of advancing the opportunities of workers "for profitable employment."

The country was divided into zones, each zone in charge of a supervisor delegated from the personnel of the immigration offices within the zone. A plan of cooperation between the employment service and local post offices was developed by which applications for work and for workers were distributed throughout each community reached by the postal service, and then gathered up by the carriers and forwarded to the nearest branch of the employment service.

Later a similar arrangement was made with the Department of Agriculture, using its county agents as points of contact between workers and jobs.

This was of course definitely a "mail order" service, and suffered from all the handicaps and ills inherent in that system. Nevertheless it accomplished much, especially in the distribution of farm labor. And it served as a training ground in employment work which was of material advantage later. Functioning merely as a clearance medium, it achieved some notable successes, particularly in the matter of the Salem, Mass., fire in 1914, when the machinery proved effective in meeting a serious emergency. The fire destroyed the manufacturing and tenement sections of Salem and threw about 3,500 workers out of their employment and their homes. Most of them were textile operatives and boot and shoe workers. Through the division of information of the Bureau of Immigration, the Secretary of Labor got in touch with manufacturers in those two industries in all the States within reasonable distance. With the help of the Massachusetts State employment service, practically all of the workers who were willing to leave Salem were placed in other plants.

#### War Organization of the United States Employment Service

THE employment service machinery of the Bureau of Immigration had been in operation about three years when the United States entered the war, and at that time consisted of offices in 41 cities and branches in 52 cities, extending over 37 States. In 1917 the Secretary of Labor asked for an appropriation of \$750,000 with which to establish and operate a national employment system which would be adequate to meet war needs. Congress granted only \$250,000 for employment work, but shortly after the employment bill was passed the President allotted an additional \$825,000 from the security and defense fund for the reorganization and expansion of the employment service.

With effective organization thus made possible, the United States Employment Service was separated from the Immigration Bureau in January, 1918, and established as a distinct unit, administered by the Department of Labor through the assistant secretary. The headquarters office in Washington was organized under a director and two assistant directors, one for administration and one for the field, with an auxiliary planning and policies board composed of the chiefs of the various divisions of the department.

One of the first things undertaken after the organization of the employment service \* \* \* was to establish offices in the several States. Fifteen or 20 men possessing Government experience and some acquaintance with employment business were selected and detailed to the various States for the purpose of expanding the existing offices and organizing additional ones wherever necessary. This work was accomplished with such dispatch that at the end of the fiscal year there were in existence more than 400 employment offices throughout the entire United States.

Hand in hand with this undertaking was the organization of the United States into 13 employment districts and the selection and appointment of superintendents of those districts, as well as the appointment of a Federal director in each State.<sup>12</sup>

<sup>12</sup> United States Employment Service. Annual report of the director general for fiscal year ending June 30, 1918, p. 6.

In addition to the State branches, nation-wide divisions were established—the Public Service Reserve, the Boy's Working Reserve, the Farm Service Division, the Women's Division, and the Negro Division. Local volunteer advisory bodies known as community labor boards were also created. These were composed of two men, one representing employers and one the employees; two women, one representing working women and the other representing management, and a fifth member, the local agent of the United States Employment Service, who acted as chairman.

The Public Service Reserve was a recruiting medium which functioned locally through 15,000 enrollment agents.

These agents, acting under direction of a Federal director for each State, seek out workers in less essential occupations and through the employment offices distribute them at the points where they are most vitally needed to bring about maximum production.

The enrollment agents of the Public Service Reserve aid in the recruiting of labor for the employment districts in which they operate. They also act as agents of the community labor boards in stimulating and supervising the moving of workers from less essential to more essential occupations; in moving male workers into war work from occupations that can be readily filled by women, and in making industrial and man-power surveys.<sup>13</sup>

The Boys' Working Reserve, engaged chiefly in agricultural work, will be taken up later in discussing the handling of farm labor. The Women's Division served two purposes: One was that of making surveys to determine where and to what extent the work of women could be substituted for that of men. The other was actual placement in essential and related industries of large numbers of women who had been affected by lessened production in nonessential industries.

#### War Labor Recruiting

AS THE director of the United States Employment Service expressed it, the service "was called upon to perform the very remarkable feat of building a machine and operating it at the same time." In June, 1918, the War Labor Policies Board adopted a resolution declaring that:

All recruiting of industrial labor for public or private work connected with the war shall be conducted through or in accordance with methods authorized by the United States Employment Service. \* \* \* The full power of the Government shall be exercised through such agency to supply all the labor requirements of war industry and by means of volunteer recruitment to transfer men to such extent as may be necessary from nonwar to war work. \* \* \* An immediate campaign to secure the unskilled labor needed in war work shall be made by the United States Employment Service.<sup>14</sup>

This was followed immediately by a presidential proclamation which pointed out that "a central agency must have sole direction of all recruiting of civilian workers in war work; and in taking over this great responsibility must at the same time have power to assure to essential industry an adequate supply of labor, even to the extent of withdrawing workers from nonessential production." The President therefore urged "all employers engaged in war work to refrain after August 1, 1918, from recruiting unskilled labor in any manner except through this central agency."<sup>15</sup>

<sup>13</sup> United States Employment Service. Annual report of the director general for fiscal year ending June 30, 1918, p. 9.

<sup>14</sup> *Idem*, p. 31.

<sup>15</sup> *Idem*, p. 33.

In order to perform the enormous amount of work involved in a program of controlled recruiting and placement, some reorganization of the service was necessary. A policy of centralized administration and decentralized operation was adopted, by which the district organization was eliminated and the State made the administrative unit, with full power and responsibility placed upon the Federal director of employment in each State. Federal directors for the State were instructed to cooperate with existing State and local employment services. While such cooperation was greatly desired and was obtained in most cases, some friction developed; but the position taken was that the national interest as interpreted by the United States Employment Service was paramount and "must at all times prevail."

Regulations governing employers engaged in war work were adopted by the service, which prohibited advertising and the use of private employment agencies to obtain unskilled labor, but allowed employers to hire workers who applied directly to the plant, and permitted the use of scouts under the direction of the local employment office. Interstate transportation of workers was permitted only under regulation and control of the service. No restrictions were placed upon individual recruiting of skilled labor, beyond warning against "labor stealing" and practices which might cause "restlessness among men who are already engaged in other war work." Federal directors were instructed to give every possible assistance in obtaining skilled labor for employers engaged in essential industries and on war contracts.

Local placement offices were organized and opened as necessity arose, and reached a maximum of nearly 500. Special services were developed to handle shipyard, marine, and mine labor. This undertaking, in the case of workers in the Puget Sound shipyards and longshoremen on the Atlantic seaboard, broke up the practice in those industries of drawing labor from the waiting lines, or "shapes" which congregated at the various shipyard gates and on the docks, and organized central labor pools from which workers were drawn as needed. The mining division helped to meet the shortage of mine labor by establishing contact with practical miners who had left the mines and were engaged in nonwar work, and inducing them to return to the mines.

On the whole the entire program of centralized labor recruiting was carried out in a thorough and practical manner, and the results accomplished amply justify the wisdom of establishing it. Its benefits were seen in the reducing of labor turnover, in the transferring of unskilled labor from nonwar work to war work, and in the directing of unemployed or partially employed wage earners to industries closely allied with the prosecution of the war. All of these measures were important factors in adding to the number of laborers steadily engaged in war work.<sup>16</sup>

### Farm Labor

ONE of the most difficult tasks, in view of the universal shortage of common labor, was to find enough men to take care of the harvest in the western grain fields. The Employment Service opened a field office in Kansas City, Mo., to recruit and distribute harvest labor, and to obtain data on acreage, dates of cutting, and the labor demand. These data were secured through the cooperation of county agents

<sup>16</sup> United States Employment Service. Annual report of the director general for 1919, p. 8.



of the Department of Agriculture, the rural telephone offices, and the farmers' organizations. Recruiting was facilitated by publicity contributed by motion-picture producers, newspaper stories and advertisements, and the distribution of posters to the post offices and railroad stations.

Field representatives of the service were stationed at various centers to handle mobilization and distribution to strategic points, from which allotment to the farmers within the community on the basis of need or previous requisition was usually made by county agents and local community boards. Operations started in Oklahoma and Kansas and moved north as the grain ripened, with representatives of the service routing and directing the army of harvesters as they were needed.

The demand for labor on truck and fruit farms was met in large part by the United States Employment Service through the Boys' Working Reserve. This body was made up of boys between 16 and 21 years of age, organized primarily to help in maintaining food production. During 1918 it enrolled approximately 250,000 boys of high-school age, nearly all of whom went from cities and towns to work on farms.

Some of the notable mobilization records are as follows: In Illinois 21,000 boys worked on the farms; in Connecticut 10,000 boys helped care for the largest acreage of food crops in the history of the State; in New York State 12,000 members rendered invaluable service on the farms; in Indiana 15,000 boys were sent to the farm.<sup>17</sup>

In some States farm training camps or demonstration farms were established in conjunction with the State agricultural college, where the boys were given short intensive instruction in farm work before they were put to work; in other States the boys were sent without preliminary instruction directly to the farms where their services were most needed.

#### Postwar Activities

AFTER the armistice, the work of the United States Employment Service bearing directly upon war production was immediately discontinued. Recruiting and distribution of unskilled labor were stopped, and the regulations concerning the hiring of workers were withdrawn. Also the special organizations, such as the Public Service Reserve, Boys' Working Reserve, and others, were dropped. Very soon the problem became not one of finding workers but of finding jobs for the demobilized service men and the workers thrown out of employment by the sudden stoppage of war production.

The War Department and the War Industries Board called upon the United States Employment Service for information absolutely necessary in order that contracts for war materials might be curtailed or canceled and the Army demobilized with the least possible danger of serious unemployment during the period of reconstruction. To that end, instructions were issued on November 20, 1918, to all Federal directors of the employment service, under the terms of which a survey in about 122 selected industrial centers was undertaken in cooperation with the community labor boards, and a statement of labor conditions in those industrial centers telegraphed each week to the War Industries Board. The information contained in these telegrams was of value in the determination of questions relating to the effect of cancellation of war contracts upon the labor market.<sup>18</sup>

<sup>17</sup> United States Employment Service. Annual report of the director general for 1918, p. 11.

<sup>18</sup> United States Employment Service. Annual report of the director general for 1919, p. 18.

To meet the actual problem of placement "bureaus for returning soldiers and sailors" were established locally through joint action of the Federal, State, and municipal employment services, the Federal Departments of War, Navy, and Agriculture, the Red Cross, the Council of National Defense, and the many public service and welfare agencies. Over 2,000 of these bureaus were founded and through them placement was carried on locally.

This work was progressing satisfactorily when, in March, 1919, the failure of a deficiency appropriation bill left the United States Employment Service practically without funds. Immediate reduction to a skeleton organization took place, but through private contributions and the cooperation of organized forces already engaged in placement work, most of the offices were maintained until the end of the fiscal year, on June 30.

The appropriation granted the United States Employment Service for the fiscal year 1919-20 was insufficient to maintain any field organization.

Accordingly, on October 10, the employment offices up to that time operated by the service were turned over to the several States and municipalities in which they had been maintained, or, where this was not possible, they were abandoned. The system of cooperation with the States and municipalities which had been established was, however, maintained and developed. The official head of the State employment service, or, where a State service did not exist, the authorized representative of a local employment bureau, became the Federal director of the United States Employment Service at the nominal salary of a dollar a year; the employment offices successively turned over to the control of the State or local authority carried with them the furniture and equipment, together with the franking privilege and such blanks and forms as were deemed necessary to facilitate the transmission to the Washington office of uniform reports; and finally, a sum of money was allotted to each of the States in which a cooperating service was maintained to provide for the additional clerical service which such cooperation entailed.<sup>19</sup>

With the addition of its harvest labor and juvenile placement work, that statement covers the status of the United States Employment Service since that time.

Of the significance of the war-time organization in the development of the public employment office movement, the Russell Sage Foundation says:

Notwithstanding the gigantic handicaps which the service encountered, it has not been without its positive contributions. In the first place, it has given to the people of this country something of an insight into the function and possibilities not only of local employment offices but also of a nation-wide service. \* \* \* Particularly to the employees engaged in the State and city offices has the experience of the United States Employment Service given a broader vision of their work. It has instilled in them new ideals and aspirations. In the second place, the service has done much to point the way toward better administration of public employment offices.<sup>20</sup>

#### Present Organization and Activities of State Services

CONTROL and direction of the employment service throughout the State are lodged in a special bureau administered by a superintendent or a director in four States: California, Illinois, New Jersey, and Pennsylvania. Administration of the employment service is assigned to

<sup>19</sup> United States Employment Service. Annual report of the director general for 1920, p. 6.

<sup>20</sup> Harrison, Shelby, and associates: Public Employment Offices. New York, Russell Sage Foundation, 1924, p. 134.

bureaus which have other duties as well in Massachusetts, New York, and Ohio, while in Indiana, Michigan, and Wisconsin direction of the State service is assigned to one member of the industrial commission. The work of placing women in Indiana has been transferred to the department of women and children of the industrial board, and is regulated by the director of that department. In some instances, Iowa and Oklahoma for example, there is no central direction, and in others, as Connecticut and Virginia, supervision of the employment offices comes directly under the office of the commissioner of labor. The commissioner of labor of Virginia delegates one of his staff to supervise employment work.

In the small offices the staff consists usually of a director and a clerk. The offices in Maine and New Hampshire have only a director, and in other instances the clerk is a part-time worker who has other duties in the department of labor. Illinois, Massachusetts, and New York, all of which have large organizations, average eight employees per office, although Ohio, New Jersey, Pennsylvania, and Wisconsin, which also have an extensive system, operate with much smaller staffs.

The table following shows the number of State offices in each of the 24 States operating a State service; the number of employees in the service and the minimum and maximum salaries paid; the amount of State funds appropriated for the support of the State employment service; the amount of other public funds—city, county, and Federal—available; and the total annual expenditures for the latest completed fiscal year. Fiscal years are not uniform throughout the various States. The commissioner of labor of Missouri was unable to report the total amount of money used in the operation of the three offices in that State, because expenditures are met out of the general fund available for the use of the department of labor and industrial inspection, and a detailed statement of the division of the fund for separate activities can not be given.

The amount available for State employment offices through city and county governments represents in some cases only actual money appropriated; in other cases it covers money and, in addition, the estimated value of quarters, telephone service, light, and other office maintenance contributed to or shared with the State employment bureau by the local government.

The total annual expenditure of a little more than one and a quarter million dollars covers 148 offices in 23 States, as Missouri is not included in the total. Since the entire appropriation for the Missouri Department of Labor and Industrial Inspection is less than \$52,000 per year, however, the amount available for the State employment service probably would not increase the total expenditure materially. The Portland (Me.) office is operated under the supervision of the State department of labor and industry, but without actual money expense to the State, as the salary of the placement clerk is paid by the United States Employment Service, and office space, light, and heat are contributed by the State chamber of commerce. The State department of labor is, however, the responsible directing medium.

NUMBER OF STATE EMPLOYMENT OFFICES IN EACH STATE, NUMBER OF EMPLOYEES, SALARY RANGE, AMOUNT OF PUBLIC FUNDS APPROPRIATED BY STATE, CITY, COUNTY, AND FEDERAL GOVERNMENTS, AND TOTAL ANNUAL EXPENDITURES, BY STATES

State	Number of offices in State service	Number of employees	Salary range	State funds appropriated	Other public funds			Total annual expenditures
					City	County	Federal	
Arkansas.....	5	5	\$1,800-\$1,860	\$2,400			\$1,860	\$4,260
California.....	11	27	1,500-3,600	90,835				93,710
Connecticut.....	8	16	1,000-2,500	48,114				50,000
Illinois.....	20	109	1,500-3,300	266,080				266,080
Indiana.....	5	15	1,200-4,000	25,000	\$6,050	\$600	1,320	32,608
Iowa.....	2	4	1,800	3,600			2,760	6,360
Kansas.....	5	7	1,200-1,800	9,600			1,800	15,116
Maine.....	1	1	1,400				1,400	1,400
Massachusetts.....	4	34	960-2,820	72,500			4,881	72,159
Michigan.....	10	15	1,600	<sup>1</sup> 32,758			1,620	34,378
Minnesota.....	3	22	1,620-2,100	35,350	7,479		1,620	44,450
Missouri.....	3							
Nevada.....	3	3	1,200	2,000		638	1,485	4,123
New Hampshire.....	1	1	1,500	3,800			960	3,733
New Jersey.....	8	22	960-3,000	36,680	43,500		5,460	95,844
New York.....	11	96	960-4,250	166,280			5,280	171,560
North Carolina.....	6	8	1,500-1,800	9,140	<sup>2</sup> 5,600		2,580	17,320
Ohio.....	13	69	840-3,000	86,960	68,364		1,500	156,824
Oklahoma.....	4	5	1,200-1,500	9,088	600		1,440	10,566
Pennsylvania.....	13	58	1,020-6,000	100,000			8,300	102,800
Rhode Island.....	1	2	1,200-1,500	4,000			900	4,900
Virginia.....	3	8		2,500	7,600		1,680	11,780
West Virginia.....	1	2		3,000			2,440	<sup>3</sup> 4,440
Wisconsin.....	10	28	<sup>4</sup> 480-3,200	50,000	<sup>2</sup> 16,650		1,640	58,081
Total.....	151	557		1,059,685	157,081		50,926	1,262,492

<sup>1</sup> Estimated—in general departmental appropriation.

<sup>2</sup> City and county.

<sup>3</sup> Estimated—office recently established; maintenance cost not yet available

<sup>4</sup> Part time.

### Placement Procedure

SEPARATE accommodations for male and female applicants are required by law in most cases, and are furnished in all cases. Usually separate entrances are provided for women. The kind of quarters provided for public employment offices and their location have been matters of discussion and dispute from the beginning of the movement. In the early days it was generally felt that the entire project was threatened by the exceedingly unattractive quarters and locations which the offices occupied. Meager appropriations made it impossible, usually, to provide more suitable accommodations. This phase is passing. Assignment to quarters in city halls and county court houses has frequently solved the problem of accessible location, although in such quarters the matter of crowding is not always relieved. Illinois has recently made a special effort to improve the physical aspects of the employment offices, with the result, as stated by the director, that—

In Illinois to-day we have all of our offices on the ground floor of buildings located close to the employment districts, and we have nice furniture. We have fine quarters, well decorated, and they are offices that are a credit to the State of Illinois. We have found that by improving the conditions we have increased the service over 50 per cent.<sup>21</sup>

In Wisconsin, quarters are furnished and maintained by the local community, whether city, town, or county, in which, by agreement,

<sup>21</sup> U. S. Bureau of Labor Statistics Bul. No. 501, p. 90.

the State service establishes an office. Quarters must be approved as suitable by the industrial commission.

In addition to division into men's and women's departments, some offices segregate juvenile workers, and further subdivide their men's and women's departments into skilled and unskilled labor. Large general offices serving a wide clientele usually subdivide as closely as the size of the staff permits, creating special sections for common labor, farm labor, mechanical, manufacturing, clerical, technical, and professional workers, and so on. Occasionally branch offices are operated to serve a single class. The Chicago office, for example, handles unskilled labor chiefly through a branch office, thus leaving the other offices freer to care for the skilled and semiskilled. Branch offices in New York City and Chicago take care of negro workers, and the Philadelphia employment office has a special division for Negroes.

An applicant for work generally is received first at a central desk where he registers. After it is learned from his registration card what kind of work he is applying for, he is referred to the proper division. Sometimes, as in the Massachusetts State employment office in Boston, an employee is specially designated to act as "floor-man" or reception clerk, to guide and dispatch applicants to the proper interviewers.

The applicant is then interviewed by the person in charge of the section handling the kind of work he desires. The interviewer, or examiner, as he is variously called, learns in detail the applicant's experience and qualifications, and all other pertinent information which will be helpful in placing the applicant successfully.

Methods of establishing contacts with employers depend necessarily on conditions—the size of the staff, the time available for personal solicitation on the part of the superintendent or other staff officer, the amount of money provided for publicity, and other considerations.

Soliciting business by means of personal visits or by telephone is considered a vital part of employment work by most offices. Different plans are adopted. Some superintendents devote the last days of the week, when work in the office slackens, to promotion activities, visiting employers in the interest of the public placement agency. The Chicago office employs a solicitor for that purpose. The Columbus, Ohio, office makes a point of getting in touch with new establishments moving into the city, first by letter and later by personal visits, to offer the service of the organization in furnishing workers. The Massachusetts Department of Labor and Industries reports an increase of 50 per cent in the amount of business done by the mercantile office in Boston in 1928 resulting from special efforts made to bring the office to the attention of employers.

From each of the offices registrars have been sent out regularly to call upon employers for the purpose of acquainting them with the work of the offices, and through advertising and circular letters an endeavor has been made to secure an increase in the number of orders from employers.<sup>22</sup>

The employment services in Ohio, Pennsylvania, and Illinois issue a monthly bulletin to employers, listing the number and qualifications of available workers. New Jersey publishes a similar bulletin every two weeks. By this means especial emphasis is placed upon the higher-grade skilled, technical, and professional workers, and reports

<sup>22</sup> Massachusetts Department of Labor and Industries. Annual report for 1928, p. 102.

indicate that the method is successful. The Ohio service finds that its opportunities are becoming greater each year, as because of its publicity and promotion efforts "additional employers each succeeding year" turn to the State service to fill their need of workers. Employers often refer to the local State office the workers whom they release. It is occasionally necessary for the public employment offices to find persons to fill specific jobs at their disposal. This is done through advertising and circularizing other agencies.

Particular effort is being made by the most active offices to expand beyond the field of common and domestic labor into placement of higher-grade workers. Boston has a branch office serving mercantile interests exclusively, and the New York bureau of employment has recently established in each of its offices a special service for the placement of teachers. While the New York City offices have not been very successful in making contacts with employers in the commercial and professional fields, the "up-State offices obtain a comparatively large number of positions for professional and technical workers at good salaries."<sup>23</sup> The Ohio service reports that although employment as a whole was at low ebb during 1927-28, "the higher-grade placements have not only maintained their position but have shown a decided increase."<sup>24</sup>

Michigan has recently undertaken an experiment "to dissipate the feeling that our bureaus are a charitable institution for the down-and-outs." Applicants are charged \$1 for registration, which entitles them to help from the bureau at any time over a period of one year. This plan, it is felt, will attract the patronage of the better class of clerical and mechanical workers, whose attitude toward the State service has been that "anything that is given free has something the matter with it."<sup>25</sup>

#### Advisory Boards

THE CITY of Milwaukee, Wis., met an unemployment emergency in 1911 by opening a municipal employment agency created by the joint action and financial support of the city, the county (Milwaukee County), and organized workers and employers. The committee selected by these various bodies continued to administer the office until 1912, when the Milwaukee office merged with the Wisconsin State employment system. The committee continued, however, in the capacity of advisory council. Following the example set by Milwaukee, because of the effectiveness of the plan, the State adopted the policy of creating advisory councils similarly composed in each city in which State offices were located.

As at present constituted, the citizens' committee of Milwaukee has 20 members, the Milwaukee city council, Milwaukee County, the Federated Trades Council, and the Association of Commerce, each being represented by five members of its own choosing. The committee selects its chairman and vice chairman from its membership, and the superintendent of the Milwaukee employment office serves as secretary. Meetings are held monthly, at which the office accounts are audited, current work is discussed and criticized, and plans and decisions are made.

<sup>23</sup> U. S. Bureau of Labor Statistics Bul. No. 479, p. 15.

<sup>24</sup> Ohio Department of Industrial Relations. Seventh annual report, 1928, p. 37.

<sup>25</sup> Statement of Eugene J. Brock. (U. S. Bureau of Labor Statistics Bul. No. 478, p. 3.)

By virtue of the interests, the prestige and the business ability represented in its personnel, as well as by the unflagging application of its members to their task, the citizens' committee of Milwaukee has carried on not merely an impartial but also a businesslike and confidence-inspiring management of its public employment office. The power of the committee to withhold or secure appropriations from the city and county has made for an administration free from political or other partisan dominance and on the whole unassailable.<sup>26</sup>

The New York law of 1914 governing public employment offices made mandatory the creation of local advisory boards in connection with State offices. That law has since been repealed, but some of the local committees continue to function. They are advisory bodies solely, and represent local organizations of employers, workers, and other persons interested in the movement.

The Illinois law provides for both State and local advisory boards, but only the State body is active. It is called the general advisory board and is composed of five nonsalaried persons appointed by the governor, two to represent employers, two to represent organized labor, and one to represent the public. This fifth member is selected from a list of persons submitted by the other four. The purpose of the board is to make the Illinois employment offices more effective by conferring with superintendents on the best methods of operation, and by acquainting employers and workers with the service. It also recommends desirable legislation bearing upon the service.

Local advisory committees as provided by law are created in connection with the State employment service in Pennsylvania also. The law provides for six members, to be appointed by the secretary of labor and industry, one of whom shall be a woman. Of the six members, one is to represent unorganized employers and one unorganized labor. These committees, the department states, "enable both the bureau and the department to find out the opinion of any given industry or of persons interested in a given industry with reference to any projected action. They further enable the department to secure sound advice on possible methods of extending its influence."<sup>27</sup>

Ohio, in a less formal way, is using the representative advisory council plan of making contacts between the employment offices and the public they are designed to serve. Michigan has recently instituted the same plan in an effort to popularize its public employment service.

#### Federal Participation

EXCEPT in connection with seasonal farm labor, in which the United States Employment Service acts as a placement agency, the relation of the Federal Government to the various public employment services is largely by way of subsidies to assist their operation. A skeleton organization of the United States Employment Service of the Department of Labor, built up during the war, has been maintained, which functions under an annual appropriation of about \$200,000.

The plan of cooperation which has been developed between the United States Employment Service and the various State systems involves the appointment of a State official, usually the head of the

<sup>26</sup> Harrison, Shelby and associates: *Public Employment Offices*. New York, Russell Sage Foundation, 1924, p. 214.

<sup>27</sup> Pennsylvania Department of Labor and Industry. Special bulletin No. 25, p. 26.

State service, to serve as Federal director for the State at a salary of \$1 a year; the use by the State offices of standard record forms provided by the Federal office; and the grant to the State of the franking privilege in matters bearing directly upon placement. Where necessary the service pays, wholly or in part, the salary of employees needed to carry on its work where State funds are not sufficient. Thus placement clerks and examiners in offices in Pennsylvania, Massachusetts, Minnesota, Iowa, and other States are actually on the pay roll of the United States Employment Service and are engaged in work for both the State and the Federal services.

Iowa affords a good illustration of the cooperative make-up of many public employment office systems. There are two offices in the State—one at Des Moines and one at Sioux City. The superintendent in each case is appointed and paid by the State. Quarters for the Des Moines office are furnished by the Polk County commissioners; for the Sioux City office, by the city council. Each office is able to add a special examiner to its staff through the allocation of funds from the United States Employment Service to pay their salaries.

Similar financial assistance is given municipal agencies, several of which are operated jointly as Federal-municipal undertakings independent of the State government. Knoxville, Tenn., Portland and other Oregon cities, and Atlanta, Ga., are cases in point. In those States there is no State system. However, Federal cooperation may be extended to a municipal agency which is not identified with the organization in its State, as the case of Westfield, Mass., illustrates.

Largely for the purpose of promoting uniformity in records and reports, standard forms and the franking privilege are given as well to certain civic and social service organizations which are maintaining free employment bureaus.

Within the limits imposed by its construction, the United States Employment Service acts as a clearing house through and for its various cooperating agencies, and it issues monthly and distributes to those agencies the Industrial Employment Information Bulletin. This Bulletin contains current information on the industrial employment situation gathered from authoritative local sources, and comment on "items which affect employment tendencies, possibilities, and developments."

### Farm Labor

THE United States Employment Service has kept and expanded the machinery for recruiting and distributing harvest labor which it built up during the war. There are now 10 permanent field offices in addition to the original main office at Kansas City, Mo. These are located at Fort Worth, San Antonio, and El Paso, Tex.; Shreveport, La.; Denver, Colo.; Sioux City, Iowa; Sioux Falls, S. Dak.; Fargo, N. Dak.; Spokane, Wash.; and Portland, Ore.

The farm labor division functions practically the entire year in order to take care of the seasonal demands of the several agricultural sections of the country. Its first field of operation is in the 60,000-acre strawberry area of Missouri and Arkansas. Strawberry pickers are recruited from outside the territory, as very few pickers are available locally. In order that the service may function with maximum efficiency and direct its work intelligently, special agencies, under the direction of the field director, made a survey of labor requirements for the



season. Newspapers, posters, and bulletins giving information as to the needs of the area were of invaluable assistance in recruiting strawberry pickers.

\* \* \* Following the strawberry harvest, the next field of operation is the wheat harvest in Texas, Oklahoma, and Kansas, continuing northward to North Dakota. The requirements of the wheat area in the inland territory of Washington and Oregon, as well as Idaho and Montana, are taken care of by the assistant director, with headquarters at Spokane, Wash.

\* \* \* The gathering of the cotton crop presents many complicated and intricate problems for the farm-labor division. \* \* \* Texas being the most important cotton-growing State, the farm-labor division has been developed in that State to a higher degree of efficiency than in any of the other cotton-growing States. \* \* \* Where the farm-labor division is in operation in cotton-growing States, it is no longer necessary for the growers to leave their plantations and go to labor centers for the required help, as their request by letter or telephone is given immediate attention. By special arrangements made with automobile transportation companies, the pickers are dispatched to the points where needed. The cost of transportation is frequently advanced by the cotton growers and refunded to them by the pickers as it is earned.

\* \* \* The director of the farm-labor division makes the following report for the year under review (1928):

Men recruited for seasonal harvesting.....	541, 280
Men directed to general farm work.....	18, 291
Total.....	559, 571

The money expended to conduct the farm-labor division was approximately \$65,000, making a per capita cost of about 12 cents.<sup>28</sup>

Placement of farm hands by the Federal service has been incidental to its primary function of the recruiting and interstate distribution of seasonal labor. Supplying farmers with permanent help is generally regarded as a local obligation, which is discharged by the State offices so far as possible. Each State office in Pennsylvania makes a special effort to furnish farm labor for the farms in its district.

In a number of the State offices one day of each week has been set aside as farm labor day, selected according to the customs of the locality, on which day farmers seeking help and farm laborers seeking employment can meet at the State employment offices for interviews and for the making of working agreements. In this effort to furnish labor to the farmer, the State employment offices have had the complete and thorough cooperation of the local granges of the Pennsylvania State Grange.<sup>29</sup>

The agricultural division of the Illinois offices reports a large following among the farming interests of the State, and the latest available report of the New York Department of Labor (1928) states that "although there was a decreased demand for harvest labor, due to the return to the rural sections of idle factory hands, a large number of experienced general farm hands and dairymen were supplied to up-State farmers."<sup>30</sup>

### Juvenile Placement

PLACEMENT work in its relation to workers between the ages of 14 and 21 years, in so far as it has developed as a separate undertaking, is closely allied to the vocational guidance movement. For the most part it is carried on by city school boards through their vocational guidance departments or their continuation schools. It is, therefore,

<sup>28</sup> U. S. Department of Labor. Annual report of the Secretary of Labor for year ending June 30, 1929 pp. 28, 29.

<sup>29</sup> Pennsylvania Department of Labor and Industry. Special bulletin No. 25, p. 26.

<sup>30</sup> New York Department of Labor. Annual report, 1928, p. 210.

a widely scattered movement functioning wholly within the community.

In three States, however—New Jersey, New York, and Wisconsin—juvenile placement is an activity of the State labor body; the Department of Labor of New Jersey and of New York, and the Industrial Commission of Wisconsin. In New Jersey and New York the division of employment of the department is the agency doing that specialized work; in Wisconsin it comes directly under the industrial commission but is correlated with the employment service. New Jersey has only one juvenile placement office, located at Jersey City. While there are four such organizations in Wisconsin, only one, that at Milwaukee, is run by the State. The others are municipal enterprises. New York has five branch offices operating through the continuation schools in Albany, Buffalo, New York City, Rochester, and Syracuse.

Juvenile placement officers are frequently, perhaps generally, vocational counsellors who use vocational-guidance technique in dealing with young applicants for work. At the office of the bureau of employment of the New Jersey Department of Labor in Jersey City, the supervisor of vocational placement of the Jersey City board of education, acting jointly with the employment service, serves as vocational counsellor. The department in its annual report for 1929 points particularly to the fact that through the advice of the Jersey City office 351 boys and 258 girls who had applied for jobs returned to school. Moreover:

As against the usual experience of the junior, unaided in his approach to industry, of changing jobs three or four times in the first year, the bureau was required to find more than one job for only 7 per cent of those placed. The value of this bureau is shown particularly by the record of the vocational choices of the applicants—161 had no vocational objective of any kind, 419 had made some choice but changed on the advice of the counsellors, and 290 were placed at the occupation they had selected.

The Milwaukee office also stresses vocational advisement and seeks to further the child's schooling wherever possible.

Equal in importance to determining the child's bent and guiding him along the lines indicated by it is knowledge of the nature and conditions attending the work in which the child is placed. In New York—

It is the practice of the employment division of the State department of labor not only to visit every place of employment in which a job has been obtained for a boy or a girl, but to make a complete report of the visit. The employer's record card, as it is called, contains all of the information necessary about working conditions for boys and girls to enable the placement worker to fit the right child to the job. Each juvenile occupation in that particular place of employment is described and analyzed.<sup>31</sup>

The third phase of employment service to young workers, and one of the most important, is following up the child after he goes to work. Without this check, as has been said, "placement of juniors easily becomes exploitation." Follow-up work by the Milwaukee office "is done through monthly evening office hours when children who have been placed in jobs are given an opportunity to report; through visits to employers and parents, and conferences with representatives of agencies and schools."<sup>32</sup>

<sup>31</sup> Statement of Richard A. Flinn. (U. S. Bureau of Labor Statistics Bul. No. 479, p. 108.)

<sup>32</sup> Wisconsin Industrial Commission. Biennial report, 1924-1926, p. 29.

In New York follow-up letters are sent out at regular intervals, and the child is encouraged to return to the placement office from time to time for advice and help. Placement officers interview and visit with the children at the continuation schools on their school days. If a child complains about his work or working conditions, the employer is visited with a view to adjusting the difficulty.

Continued interest in the child after he goes to work is further promoted by the local junior advisory committees consisting of representatives of the schools, employees, employers, and child-welfare organizations.

Particular care is taken in selecting jobs for young workers to see that conditions with regard to accident hazards are satisfactory. The New York division of employment states that "more than 25,000 positions are obtained annually for boys and girls, and there are few, if any, cases in which these children have been injured on the job which our placement workers have selected for them."<sup>33</sup>

The junior division of the United States Employment Service carries on cooperative relations with juvenile placement offices through the State service in New Jersey and Wisconsin, and through the school board or other local agency in 14 other States.<sup>34</sup> Eleven cities in California conduct placement offices for young workers; there are two each in Massachusetts and Minnesota, while the work in the other States is confined to a single city. The Federal service, in the interest of uniformity, issues record and report forms to be used by the cooperating offices. Moreover, it keeps in touch with the movement throughout the country, disseminates information concerning it, and tries to stimulate and promote the effort to secure intelligent placement of young workers in their first jobs.

Cities other than those with which the United States Employment Service deals, notably Boston, Chicago, Cincinnati, Cleveland, and Gary (Ind.) are doing active work in juvenile placement through their school systems, as part of their vocational-guidance programs. Placement in these instances is essentially a part of the vocational-guidance movement and is in reality inseparable from it.

#### Placement of Handicapped Workers

RESPONSIBILITY for securing work for the handicapped and disabled, so far as it is met at all by governmental means, is divided between the public employment offices and the rehabilitation agencies. "Rehabilitation by placement" and "employment training" are two methods used in the return to industry of both veterans and disabled civilians under the State and Federal rehabilitation programs. Both methods, of course, involve securing a job for the trainee. To that extent the rehabilitation services are employment services.

Then, too, after the beneficiary of the rehabilitation service is declared rehabilitated, the responsibility of at least assisting him to find a job remains. Discharge of this responsibility is attempted in various ways. The Veterans' Bureau established an employment service, but its procedure is largely that of making contacts with

<sup>33</sup> Statement of Richard A. Flinn. (U. S. Bureau of Labor Statistics Bul. No. 479, p. 110.)

<sup>34</sup> California, Delaware, Georgia, Illinois, Indiana, Maryland, Massachusetts, Michigan, Minnesota, Ohio, Oklahoma, Pennsylvania, Rhode Island, Tennessee.

other agencies which do the actual placement. In the civilian rehabilitation field, the task of finding a job for the trainee seems to be assumed to a large extent by the rehabilitation agent who handled the case, and hence is largely individual effort. Placement after the course of training is completed is generally conceded to be the weakest point in the rehabilitation service at present. That does not, however, apply to placement work where the job secured is itself the means used to rehabilitate the disabled worker.

Close and effective cooperation exists between the rehabilitation and the employment services in Pennsylvania, where both agencies are bureaus of the State department of labor and industry; in New Jersey, where both occupy the same quarters in the principal industrial centers of the State and are to some extent under the same direction; and in Minnesota, where the placement agent of the State division of reeducation is assigned to the Minneapolis office of the State employment service and works directly in conjunction with it. Through the reciprocation of effort practiced in Pennsylvania, not only are the rehabilitants placed in employment, but applicants for work who are in need of rehabilitation may be referred to that bureau for the help it can give in overcoming their handicaps and making better employment objectives attainable.

Two States have an employment service for persons with a particular kind of disability. The division of the deaf of the Industrial Commission of Minnesota, and the bureau of labor for the deaf of the North Carolina Department of Labor and Printing function primarily as placement agencies for the hard of hearing. Each employs one full-time worker. Much work is done in Minnesota through the division of the deaf and the division of reeducation in the way of retraining deafened employees in vocations in which the disability will not be an occupational handicap. The division is also constantly alert to prove the employability of deaf persons and to increase their opportunities for employment. From information received from employers throughout the State it has compiled a list of occupations which the deaf can fill acceptably. Especial attention is given to follow-up after placement, as the division feels that—

It is of paramount importance that the deaf worker placed in a position is securely entrenched before being compelled to rely upon his or her own initiative and resources. Therefore it has been our custom to keep a watchful eye on the progress being made by such employees, to advise and assist in stimulating confidence in case of any sign of faltering, and to consult with the employer from time to time, because the matter of labor turnover among such workers is of vital importance when endeavoring to establish a stable market for the sale of this class of labor. When we are sure that such a worker is satisfied with his position and the employer is satisfied with his work, then we feel that particular problem has been solved.<sup>35</sup>

Before the establishment of the bureau of labor for the deaf in North Carolina in 1923, deaf persons needing work were wholly at a loss in making contacts which would help them find jobs. The State department of labor and printing was unable to assist them, not, it is pointed out, for lack of interest in them, "but owing to lack of understanding of their ability and needs." By emphasizing and reiterating the capability and employability of persons thus handi-

<sup>35</sup> Minnesota Industrial Commission. Fourth biennial report, 1927-28, p. 222.

capped, the bureau has created new opportunities for them and relieved unemployment among them. The bureau reports that the "positions in which the deaf have been placed are on the farms, in building construction, domestic science, tobacco, textile, and furniture manufacturing plants, shoemaking establishments, painting, teaching, printing, and one or two other classifications."<sup>36</sup>

Sections for caring for handicapped applicants are found in the Chicago and the Milwaukee public employment offices. Generally speaking, however, the many semipublic social service organizations are more active and more successful in securing jobs for disabled workers than are the governmental agencies. These organizations include the American Legion, the Institute for Crippled and Disabled, the National Tuberculosis Association, the National Society for the Prevention of Blindness, etc., with their various local branches and affiliated agencies.

### Emergency Machinery

SEVERAL times within the past 15 years periods of acute unemployment have called for emergency action by local, State, and national authorities. The immediate industrial effect in this country in 1914-15 of the war in Europe was to slow production down to a point where unemployment became a problem. The problem at that time was met locally, chiefly by "mayor's committees" in the principal industrial cities which, through coordination of various measures of distribution, stabilization, and so on, succeeded in tiding over the temporary depression.

Unemployment following the boom years of the war was far more widespread than the earlier dislocation, and reached proportions which resulted in the calling of the President's Conference on Unemployment in September, 1921. Again, in 1928 and 1929, various cities took local action to meet a growing menace of unemployment, and governors of several States called conferences to devise plans for dealing with the problem. By the latter part of 1930 the situation had once more reached the point where national action was thought necessary, and the President appointed a committee of Government officials to formulate plans for nation-wide effort.

Organization, procedure, and plans of both national movements were essentially the same. The position was taken that the immediate relief of the unemployed was a community problem, responsibility for which rested with mayors and other local authorities. The 1930 committee on unemployment divided the country into districts and put in charge of the work of coordinating local efforts Col. Arthur Woods, of New York, who had served in the same capacity in 1921.

In its more general aspect, the work of the committee has run along lines of prevention of unemployment through stabilization and education, and of promoting and organizing public works and stimulating building on the part of corporations and the public. As expressed by the New York Committee on Employment Planning, in its preliminary report to the governor, the function of the State and Federal agencies working on the problem is to deal with it "not primarily from the standpoint of immediate relief but more from the

<sup>36</sup> North Carolina Department of Labor and Printing. Twenty-fifth report, 1924-1926, p. 295.

standpoint of discussing practices that will help to stabilize employment."

Steps looking toward immediate relief have included surveys to determine the extent of unemployment, and the registration of workers who are out of work and looking for jobs. Registration has been accomplished in a number of cities through the cooperation of many agencies. Police officers have made a direct canvass; in some cities the schools and the teachers have been used, in others, school buildings, police and fire stations have been made the place of registration with social workers and volunteers doing the clerical work. Emergency placement committees have been organized in nearly every city, which undertake to find temporary jobs for the registrants, and to that end keep up an active campaign for short-time work and odd jobs.

New York City established a municipal employment bureau in the summer of 1930 which registered unemployed workers looking for work, and placed them in temporary or permanent jobs so far as jobs could be found for them.

One of the functions of both State and Federal emergency committees is to strengthen the public employment offices and to widen their fields through correlation and centralization of effort. Employer members of the State committees are relied upon to stimulate interest in the public agencies among employers who have jobs at their disposal.

Cincinnati, Ohio, anticipated the present emergency by creating, in 1928, a "permanent committee on stabilizing employment." Its program and procedure are practically what has now been adopted and undertaken by nearly every city in the country affected by the present depression. Subcommittees into which the Cincinnati committee divided concerned themselves with State-city employment exchanges; continuous employment; temporary employment; public work; cooperation of social agencies; budget and finance; State and national cooperation; transients; fact-finding; publicity and education.

An employment census was taken, and with accurate data as to where and to what extent unemployment existed, the subcommittee on temporary employment set about to "take up the slack" as much as possible pending more constructive action. This subcommittee, composed of 100 members representing various community groups and civic organizations, found temporary jobs for a large number of idle workers.

After two years of coordinated effort through the subcommittee on State agencies it is reported that "the improvement in and the increased prestige of the State-city employment bureau have enabled that agency to have a greater part in the placement of the unemployed than they have ever had before."<sup>37</sup>

One of the outstanding consequences of the President's conference of 1921 was the movement for a national system of employment exchanges. This movement has found expression in bills which have been introduced into each successive Congress since then.

<sup>37</sup> National Municipal Review, May, 1930, pp. 289-292: How Cincinnati Met the Unemployment Crisis, by C. O. Sherrill and Fred Hoehler.

## Unemployment in Buffalo, N. Y., in November, 1930, and Comparison With November, 1929

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### Introduction

**I**N THE first week of November, 1930, a study of unemployment was made in Buffalo, N. Y., which was similar to a study made in the same city a year earlier and to a series of five studies made in Columbus, Ohio, in the years 1921 to 1925, inclusive.<sup>1</sup> A brief report giving preliminary results of the 1930 Buffalo study was presented in the previous issue of the Labor Review. The present article presents detailed figures for the second Buffalo study and certain comparisons with the first study in that city.

The 1929 study was under the auspices of the New York Department of Labor and the 1930 study was under the joint auspices of that organization and of the Buffalo Foundation. Drawing upon its store of knowledge of the various sections of the city of Buffalo, the Buffalo Foundation selected for enumeration nine areas believed to be reasonably representative of the city and certainly more satisfactory than any random selection of blocks could be expected to be. The data were obtained by house-to-house visits within these same nine areas in each year and the actual enumeration was carried on by students of the State Teachers' College at Buffalo and the University of Buffalo, with the assistance of a number of trained social workers in 1930 and of students of Canisius College in 1929. The enumerators were given detailed printed instructions supplemented by oral discussion and their work was closely supervised. In each year the field work took place during the first week of November. In 1929 the data were gathered as of Monday, November 4, and in 1930 as of Monday, November 3.

Information concerning employment status was requested for all males 18 years of age or over (except those in school) and for all females 18 years of age or over who were usually employed in gainful occupations. Thus all housewives were omitted as were all women who worked outside the home, on a part-time basis, in addition to their housework. In 1929 the inquiries for each person were as to relation to head of household, sex, nativity, present or last industry in which employed, whether employed full time, part time, or unemployed, and, for a number of the unemployed, age. For those employed part time the fraction of usual full time was requested and for those unemployed the duration and reason for idleness. Data concerning age were secured for but part of the unemployed in 1929 as that inquiry was added after the beginning of the enumeration. In 1930 the same basic schedule form was used but the age inquiry was added for all persons enumerated. In addition, for each unemployed person inquiries were added as to whether he was able to work and whether willing to work. The two last-mentioned questions were added as an experiment in the hope that, when taken in conjunction with the

<sup>1</sup> For details of the Columbus studies see U. S. Bureau of Labor Statistics Bul. No. 409. The first Buffalo study is discussed in Special Bulletin No. 163, of the Bureau of Statistics and Information of the New York State Department of Labor and in the seventy-second number of the Foundation Forum of the Buffalo Foundation; the second Buffalo study is treated in Special Bulletin No. 167, of the Bureau of Statistics and Information and in a forthcoming number of the Foundation Forum. A comparison of the first Buffalo study and the Columbus studies appeared in the Labor Review, February, 1930.

reported reason for idleness some tentative measure might be forthcoming of (1) those able and willing to work, (2) those temporarily unable to work, (3) those permanently unable to work, and (4) those not desiring to work. The answers to the questions as to whether or not an unemployed person was able and willing to work were based upon the opinion of the informant, modified by queries from the enumerator, and, in numerous instances, subject to substantiation by a second visit by a trained social worker.

#### Summary of Results

IN BRIEF compass the findings of the two studies in Buffalo are:

1. In 1929 for each thousand males enumerated, 59 were unable to find work. In 1930, 165 males per thousand enumerated were unable to find work. The proportion of males unable to find work was thus over  $2\frac{1}{2}$  times as great in 1930 as in 1929.

2. In 1929 there were 68 males per thousand enumerated who were on part time. In 1930, 178 males per thousand enumerated were on part time. The proportion of males employed less than full time was over  $2\frac{1}{2}$  times as great in 1930 as in 1929.

3. The proportion of females unable to find work and the proportion on part time were each over  $2\frac{1}{2}$  times as great in 1930 as in 1929.

4. In both years the most unemployment and the least full-time employment were found among the native colored group, while the least unemployment and the most full-time employment were found among the native whites.

5. Unemployment had been of decidedly longer duration at the time of the 1930 study than at the time of the 1929 study.

6. Considering the males by age groups it was found that the least unemployment was present among those from 35 to 45 years of age, while the proportion of those unemployed in each group increased steadily as the groups considered were either younger or older.

7. The greatest proportion of unemployment and underemployment of males was found in the manufacturing and mechanical industries in both years. Those industry groups which employed large numbers of males and which showed the most unemployment and underemployment were the building trades; manufacture and servicing of automobiles, parts, and tires; and manufacture of iron and steel and their products. The greatest proportion of full-time employment was found among those males engaged in professional service, those self-employed (other than building contractors), and Government employees.

8. In 1930 those males permanently unable to work constituted 1.5 per cent of all males enumerated and those males unwilling to work were 2.0 per cent of all males enumerated.

#### Scope of Studies

TABLE 1 presents the number of persons covered in each of the studies. In the 1930 study the addresses of the houses visited in 1929 were taken as the basis of assignments for the enumerators. While this was desirable for the sake of comparability, it is obvious that the total number of households (and persons) enumerated in 1930 must be smaller than in 1929. There were frequent instances reported in which the house visited last year was vacant and a number



in which the premises had been demolished. For many of these cases other houses in the same neighborhood were substituted. Another, but less important, factor accounting for the smaller coverage in 1930 was the indisposition of a few enumerators who had delayed their field work until the latest possible date and who failed to advise their supervisors that a substitute would be needed. These omissions, it is believed, introduced no selective error. This conclusion is supported by the data of Tables 1 and 3 and by the fact that the number of households (and the number of persons) included in each of the nine areas constitutes almost exactly the same percentage of the total in 1930 as in 1929.

TABLE 1.—NUMBER AND PER CENT OF PERSONS OF EACH SEX ENUMERATED IN 1929 AND 1930

Year	Number			Per cent		
	Males	Females	Both sexes	Males	Females	Both sexes
1929	12,331	2,833	15,164	81.3	18.7	100.0
1930	11,287	2,715	14,002	80.6	19.4	100.0

It is altogether likely that the proportionally larger number of females included in 1930 than in 1929, small though it is, is accounted for by the entrance into the labor market of a number of women because of the unemployment of their husbands.

In Table 2 is given the nativity distribution of those enumerated in the 1930 Buffalo study and of the occupied persons shown in the census of 1920.<sup>2</sup> As would be expected there was a smaller proportion of foreign born among those enumerated in the Buffalo study. Because of restricted immigration, departure of immigrants, and deaths especially among the older immigrant groups there undoubtedly has been a decrease in the proportion of foreign born in most cities of the United States in the 10 years since 1920. The nativity distributions of the two Buffalo studies are much alike save that the 1930 study shows a somewhat larger proportion of native colored females than does the 1929 study.

TABLE 2.—NATIVITY OF PERSONS ENUMERATED IN 1930 STUDY AND OF OCCUPIED PERSONS 18 YEARS OF AGE AND OVER IN BUFFALO REPORTED BY UNITED STATES CENSUS (1920),<sup>a</sup> BY SEX

[This table does not include 31 persons, 24 males and 7 females, not reporting in the Buffalo study as to nativity]

Nativity	Number					
	Males		Females		Both sexes	
	Buffalo study	Census of 1920	Buffalo study	Census of 1920	Buffalo study	Census of 1920
Native white <sup>b</sup>	8,492	100,250	2,366	35,170	10,858	135,420
Native colored	240	2,012	91	612	331	2,624
Foreign born	2,531	56,654	251	8,247	2,782	64,901
Total		158,916	2,708	44,029	13,971	202,945

Nativity	Per cent					
	Males		Females		Both sexes	
	Buffalo study	Census of 1920	Buffalo study	Census of 1920	Buffalo study	Census of 1920
Native white	75.4	63.1	87.4	79.9	77.7	66.7
Native colored	2.1	1.3	3.3	1.4	2.4	1.3
Foreign born	22.5	35.6	9.3	18.7	19.9	32.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

<sup>a</sup> Fourteenth census of the United States, vol. 4 (Occupations), p. 458.

<sup>b</sup> Includes one male native-born Indian.

<sup>2</sup> Data of the census of 1930 are not available at this time.

Further evidence of the stability of the sample is given in Table 3, which shows for each industry group, for the two studies, the number of persons enumerated and the per cent which such number was of the total enumerated. The group "other" under manufacturing and mechanical pursuits shows a comparatively large number of persons because of the fact that it includes employees of radio and aircraft factories. In view of the probable future development of the aircraft industry, it would doubtless be advisable to segregate that group if the study is again repeated.

TABLE 3.—INDUSTRY DISTRIBUTION OF ALL PERSONS ENUMERATED, 1929 and 1930  
[This table does not include 138 persons in 1929 and 58 persons in 1930 not reporting as to industry group]

Industry group	1929		1930	
	Number of persons	Per cent of total	Number of persons	Per cent of total
Professional.....	562	3.7	533	3.8
Clerical (not otherwise specified).....	116	.8	36	.3
Domestic and personal service.....	777	5.2	912	6.5
Government employees (other than teachers).....	919	6.1	913	6.6
Trade and transportation.....	4,487	29.9	4,304	30.9
Retail and wholesale trade.....	1,693	11.3	1,706	12.2
Telephone and telegraph.....	254	1.7	251	1.8
Railway, express, gas, electric light.....	1,757	11.7	1,609	11.6
Water transportation.....	87	.6	100	.7
Other.....	696	4.6	638	4.6
Manufacturing and mechanical pursuits.....	6,961	46.3	6,181	44.3
Building trades, contractors.....	347	2.3	309	2.2
Building trades, wage earners.....	884	5.9	770	5.5
Clay, glass, and stone products.....	98	.6	116	.8
Food and kindred products.....	627	4.2	594	4.3
Iron, steel, and their products.....	1,456	9.7	1,299	9.3
Metal products, other than iron and steel.....	211	1.4	193	1.4
Paper, printing, and publishing.....	290	1.9	331	2.4
Wearing apparel and textiles.....	522	3.5	433	3.1
Automobiles, parts, and tires.....	1,068	7.1	950	6.8
Other.....	1,458	9.7	1,186	8.5
Labor (not otherwise specified).....	78	.5	42	.3
Self-employed.....	1,063	7.1	895	6.4
Miscellaneous.....	63	.4	128	.9
Total, all industries.....	15,026	100.0	13,944	100.0

### Employment Status

BECAUSE of the addition, in 1930, of inquiries concerning ability to work and willingness to work, it was possible to make a more detailed classification of the unemployed than could have been done in 1929. This involved a very slight sacrifice in comparability, the extent of which is discussed below. Those persons reported as unemployed in 1930 were classified into the four following groups:

1. Able and willing to work, but unemployed because of—
  - Slack work;
  - Forced retirement;
  - Miscellaneous reasons.
2. Temporarily unable to work, unemployed because of—
  - Sickness;
  - Injury.
3. Permanently unable to work, unemployed because of—
  - Sickness;
  - Injury;
  - Old age;
  - Miscellaneous reasons.

4. Unwilling to work, unemployed because of—  
 Voluntary retirement;  
 Laziness or indifference;  
 Miscellaneous reasons.

The cause of unemployment refers to the cause reported as explaining why an individual was out of work at the time of the study rather than the cause given to account for the loss of his job. Reasonably satisfactory results were obtained with the above fourfold classification when applied to males. When applied to females, however, satisfactory data could be obtained only for those falling in the groups "able and willing to work" and "temporarily unable to work." As the study was designed to include only those females 18 years of age or over who were usually employed in gainful occupations, there would be but few females who could logically fall in the groups "permanently unable to work" and "unwilling to work."

Table 4 shows for each sex and for the two combined the employment status of all persons enumerated in the 1930 study.

TABLE 4.—EMPLOYMENT STATUS OF ALL PERSONS ENUMERATED, BY SEX, 1930

Employment status	Number			Per cent		
	Males	Females	Both Sexes	Males	Females	Both sexes
Employed full time.....	6,930	1,958	8,888	61.4	72.1	63.5
Employed part time.....	2,007	326	2,333	17.8	12.0	16.6
Two-thirds but less than full time.....	856	113	969	7.6	4.2	6.9
One-half but less than two-thirds time.....	764	139	903	6.8	5.1	6.5
One-third but less than one-half time.....	261	47	308	2.3	1.7	2.2
Less than one-third time.....	109	24	133	1.0	.9	.9
Fraction not reported.....	17	3	20	.1	.1	.1
Unemployed.....	2,350	431	2,781	20.8	15.9	19.9
Able and willing to work.....	1,863	391	2,254	16.5	14.4	16.1
Temporarily unable to work.....	94	18	112	.8	.7	.8
Permanently unable to work.....	166	13	179	1.5	.5	1.3
Unwilling to work.....	226	9	235	2.0	.3	1.7
Classification not reported.....	1	-----	1	(1)	-----	(1)
Total.....	11,287	2,715	14,002	100.0	100.0	100.0

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

Summarizing the data shown in this table for males, it appears that, per thousand males enumerated—

614 were employed full time;

178 were employed part time;

165 were able and willing to work but were unable to secure jobs;

8 were ordinarily at work but were temporarily unable to work;

15 were permanently unable to work;

20 were unwilling to work.

The data of Table 4 indicate that a smaller proportion of females than of males was unable to find work, a smaller proportion of females than of males was on part time, and a larger proportion of females than of males was employed full time. This is attributable, in part at least, to the fact that females are more largely engaged in salaried occupations.

In Table 5 a comparison of the employment status of all males enumerated in 1929 and in 1930 is presented. Those unemployed classified in 1930 as able and willing to work are essentially equivalent to those classified as unemployed because of slack work in 1929. A very minor qualification is necessary, inasmuch as a few persons reporting themselves as retired in 1929 may have been forcibly retired. The number of these, however, would appear to be extremely small, for in 1930 the males who were reported as forcibly retired constituted but one-half of 1 per cent of all males enumerated. Those listed in 1930 as either temporarily or permanently unable to work because of sickness or injury and those shown as permanently unable to work because of miscellaneous causes<sup>3</sup> are equivalent to those classified as unemployed because of sickness or injury in 1929. Those permanently unable to work because of old age and those voluntarily retired in 1930 are comparable to those classified as unemployed because of old age or retirement in 1929.<sup>4</sup>

TABLE 5.—EMPLOYMENT STATUS OF ALL MALES ENUMERATED, 1929 AND 1930  
[This table does not include 13 males in 1929 and 1 male in 1930 not reporting as to cause of unemployment]

Employment status	Number		Per cent	
	1929	1930	1929	1930
Employed full time.....	10, 157	6, 930	82. 4	61. 4
Employed part time.....	833	2, 007	6. 8	17. 8
Unemployed.....	1, 328	2, 349	10. 8	20. 8
Able and willing to work <sup>1</sup> .....	724	1, 863	5. 9	16. 5
Temporarily or permanently sick or injured.....	282	218	2. 3	1. 9
Aged or retired <sup>2</sup> .....	248	251	2. 0	2. 2
Miscellaneous.....	74	17	. 6	. 2
Total.....	12, 318	11, 286	100. 0	100. 0

<sup>1</sup> This is the "slack work" classification of 1929; see text above.

<sup>2</sup> A very few forcibly retired persons may have been included here in 1929; see text above.

Because of the greater numerical importance of males nearly all comparisons made in this report of employment conditions at the time of the two studies are restricted to that sex. Comparing employment conditions among males in 1930 with those in 1929 it appears that while 68 males per thousand enumerated in 1929 were on part time, 178 per thousand were on part time in 1930, and that while 59 males per thousand enumerated were unable to secure work<sup>5</sup> in 1929, 165 per thousand were able to work but unable to find jobs in 1930. A more detailed comparison of unemployment in 1929 and 1930, by cause, is given in the following section. A further comparison between the two years in regard to part-time employment among males shows that in 1929, 86 per cent of those males employed part time were working one-half time or more and in 1930, 81.4 per cent of those males employed part time were working one-half time or more.

<sup>3</sup> Three cases for which information was not available as to whether the incapacity was due to sickness or injury.

<sup>4</sup> This is in contradiction to a statement appearing in the 1929 report, that, "undoubtedly a few persons who were reported as 'retired' took that step of their own volition." In the light of the additional information upon cause of unemployment shown by the more detailed classification of the present study and from a large number of second visits by enumerators to ascertain the exact cause when it had been shown only as "retired," it would appear that when an individual was reported simply as "retired" he had almost invariably retired of his own volition. This is borne out by the fact that the number of persons unemployed because of old age or retirement is very nearly the same in each of the studies.

<sup>5</sup> This is the "slack work" classification of the 1929 study.

For some purposes it is desirable to consider those unemployed or those on part time in relation to all persons enumerated, for other purposes the basis of comparison may be those able and willing to work. Considering these alternate bases, those males able and willing to work but unable to locate work in 1930 constituted:

- 165 per thousand of all males enumerated;
- 172 per thousand of those males able and willing to work.

In 1929 those unemployed males who were unable to find work were:

- 59 per thousand of all males enumerated;
  - 62 per thousand of all those males able and willing to work.
- Those males who had part-time employment in 1930 made up:
- 178 per thousand of all males enumerated;
  - 186 per thousand of those males able and willing to work.

In 1929 the males who were employed part time were:

- 68 per thousand of all males enumerated;
- 71 per thousand of those males able and willing to work.

The proportion of males unable to find work and the proportion of males on part time were each more than  $2\frac{1}{2}$  times as great in 1930 as in 1929. This holds true whether we consider those males unable to locate work in relation to all males enumerated or in relation to all males able and willing to work.

Those males employed full time in 1930 amounted to:

- 614 per thousand of all males enumerated;
- 642 per thousand of those males able and willing to work.

Those males employed full time in 1929 were:

- 824 per thousand of all males enumerated;
- 867 per thousand of all males able and willing to work.

Table 6 indicates the proportion of employment and the proportion of unemployment among all persons enumerated in 1929 and in 1930 who were able and willing to work, when part-time employment is expressed in terms of equivalent full time.

TABLE 6.—EMPLOYMENT STATUS OF ALL PERSONS (BOTH SEXES) ENUMERATED WHO WERE ABLE AND WILLING TO WORK, IN TERMS OF EQUIVALENT FULL TIME,<sup>1</sup> 1929 AND 1930

Year	Per cent of time employed	Per cent of time unemployed	Total
1929 .....	92.1	7.9	100.0
1930 .....	77.1	22.9	100.0

<sup>1</sup> Part time was reduced to full-time equivalent by considering each group employed part time as concentrated at the mid-point. Thus all those employed "two-thirds but less than full time" have been considered as employed five-sixths of the time and idle one-sixth of the time; those employed "one-half but less than two-thirds time" as employed seven-twelfths of the time and idle five-twelfths of the time, etc. The few who were employed part time but did not report the fractional time worked were not included in this table. A very few forcibly retired persons may have been excluded in 1929. (See p. 38.)

Upon the basis of Table 6 those persons enumerated in 1929 who were able and willing to work showed 92.1 per cent employment and 7.9 per cent unemployment while those enumerated in 1930 showed 77.1 per cent employment and 22.9 per cent unemployment.

No tables are included in this report dealing with the employment status of heads of households as a group, neither are any tables presented to show employment status by nativity groups or employ-

ment status in the nine areas studied. Detailed tables covering these considerations appear in the New York State Department of Labor Bulletin. In brief compass, the finding concerning heads of households in 1930 were that whether male or female heads be considered in relation to all males or all females there was a smaller proportion of heads of households unable to find employment, and a larger proportion working part time and full time. Comparing the nativity groups as to employment status it appears that in the case of either males or females, the greatest proportion employed full time, the smallest proportion employed part time, and the smallest proportion unable to find work were among the native white, while the native colored showed the smallest proportion employed full time, the largest proportion employed part time, and the largest proportion unable to find work.

In the 1929 study data of age were obtained for but part of those persons who were unemployed, as the age inquiry was included after the enumeration had begun. In the 1930 study the age inquiry was included for all persons whether employed or unemployed. A detailed table showing age and employment status for males and females is given in the report of the New York State Department of Labor. Table 7 presents a summary of the employment status of those males able and willing to work, by age groups, and gives the proportion in each age group who were employed full time or part time, or were unemployed.

TABLE 7.—EMPLOYMENT STATUS OF MALES ABLE AND WILLING TO WORK, BY AGE GROUPS, 1930

[This table does not include 27 males not reporting as to age]

Age (years)	Number				Per cent			
	Em- ployed full time	Em- ployed part time	Unem- ployed	Total	Em- ployed full time	Em- ployed part time	Unem- ployed	Total
Under 20.....	230	47	155	432	53.2	10.9	35.9	100.0
20 and under 25.....	737	216	332	1,285	57.4	16.8	25.8	100.0
25 and under 30.....	776	209	226	1,211	64.1	17.2	18.7	100.0
30 and under 35.....	922	273	185	1,380	66.8	19.8	13.4	100.0
35 and under 40.....	991	294	190	1,475	67.2	19.9	12.9	100.0
40 and under 45.....	921	309	183	1,413	65.2	21.9	12.9	100.0
45 and under 50.....	758	240	149	1,147	66.1	20.9	13.0	100.0
50 and under 55.....	640	180	146	966	66.3	18.6	15.1	100.0
55 and under 60.....	396	99	102	597	66.3	16.6	17.1	100.0
60 and under 65.....	312	73	91	476	65.6	15.3	19.1	100.0
65 and under 70.....	158	44	61	263	60.1	16.7	23.2	100.0
70 and over.....	67	20	41	128	52.4	15.6	32.0	100.0
Total.....	6,908	2,004	1,861	10,773	64.1	18.6	17.3	100.0

From the data shown concerning 10,773 males who were able and willing to work, it appears that the percentage in each age group who were unemployed was smallest among those males 35 to 40 and 40 to 45 years of age, while the percentage unemployed increased steadily according as the groups considered were either younger or older. Considering the proportion in each age group who were employed part time, it appears that the greatest part-time employment was present in the groups from 30 to 50 years of age, the least part-time work being in the youngest group and the group 60 and under 65

years. The greatest proportion of those employed full time was found among the central age groups, while the smallest proportion of full-time work was found among the youngest and oldest groups.

No comparison is offered of the age distribution of the unemployed persons enumerated in 1929 and in 1930, since the inquiry concerning age was made of only part of the unemployed in 1929. No comparison of the 1930 age data of this study with the age data of the census of 1930 can be made at this time as the census data have not yet been released.

### Cause of Unemployment

AS STATED above, a rather detailed classification of the unemployed was attempted in the 1930 study. Table 8 presents data of the unemployed, by cause of unemployment. Of all males reported as unemployed, 79.3 per cent were able and willing to work, 76 per cent were reported as unemployed due to slack work, and 2.4 per cent were shown as forcibly retired. Those males who were temporarily unable to work made up 4 per cent of the unemployed and those who were permanently unable to work were 7.1 per cent, to which figure sickness and injury contributed 5.3 per cent and old age 1.8 per cent. Voluntary retirement accounted for 8.9 per cent of the unemployed males and six-tenths of 1 per cent were returned as lazy or indifferent.

TABLE 8.—CAUSE OF UNEMPLOYMENT OF ALL UNEMPLOYED PERSONS ENUMERATED, BY SEX, 1930

[This table does not include 1 male not reporting as to cause of unemployment]

Cause of unemployment	Number			Per cent		
	Males	Females	Both sexes	Males	Females	Both sexes
Able and willing to work.....	1,863	391	2,254	79.3	90.7	81.1
Slack work.....	1,785	375	2,160	76.0	87.0	77.7
Forced retirement.....	57	6	63	2.4	1.4	2.3
Miscellaneous.....	21	10	31	.9	2.3	1.1
Temporarily unable to work.....	94	18	112	4.0	4.2	4.0
Sickness.....	66	15	81	2.8	3.5	2.9
Injury.....	28	3	31	1.2	.7	1.1
Permanently unable to work.....	166	13	179	7.1	3.0	6.4
Sickness.....	96	9	105	4.1	2.1	3.8
Injury.....	25	3	28	1.1	.7	1.0
Old age.....	42	1	43	1.8	.2	1.5
Miscellaneous.....	3	—	3	.1	—	.1
Unwilling to work.....	226	9	235	9.6	2.1	8.5
Voluntary retirement.....	209	8	217	8.9	1.9	7.8
Lazy or indifferent.....	15	—	15	.6	—	.6
Miscellaneous.....	2	1	3	.1	.2	.1
Total.....	2,349	431	2,780	100.0	100.0	100.0

A comparison of the unemployed males in 1929 and 1930 is given in Table 9. In 1929, 54.5 per cent of the unemployed males were able and willing to work but unable to find employment, but in 1930, 79.3 per cent were unable to find work. The percentage of males temporarily or permanently sick or injured and the percentage aged or retired were smaller in 1930 than in 1929, but this is because the total number of unemployed males was greater in 1930. The number of those aged or retired was very nearly the same in the two studies, while the number temporarily or permanently sick or injured was somewhat smaller in 1930.

TABLE 9.—CLASSIFICATION OF ALL UNEMPLOYED MALES ENUMERATED, 1929 AND 1930

[This table does not include 13 males in 1929 and 1 male in 1930 not reporting as to cause of unemployment]

Classes of the unemployed	Number		Per cent	
	1929	1930	1929	1930
Able and willing to work <sup>1</sup> .....	724	1,863	54.5	79.3
Temporarily or permanently sick or injured.....	282	218	21.2	9.3
Aged or retired <sup>2</sup> .....	248	251	18.7	10.7
Miscellaneous.....	74	17	5.6	.7
Total.....	1,328	2,349	100.0	100.0

<sup>1</sup> This is the "slack work" classification of 1929; see p. 38.<sup>2</sup> A very few forcibly retired persons may have been included here in 1929; see p. 38.

In Table 10 the various classes of the unemployed are shown in relation to all persons enumerated. Of all males enumerated those able and willing to work but unemployed because of slack work constituted 15.8 per cent; those in forced retirement, five-tenths of 1 per cent; those voluntarily retired, 1.9 per cent.

TABLE 10.—EMPLOYMENT STATUS AND CAUSE OF UNEMPLOYMENT OF ALL PERSONS ENUMERATED, BY SEX, 1930

[This table does not include 1 male not reporting as to cause of unemployment]

Employment status and cause of unemployment	Number			Per cent		
	Males	Females	Both sexes	Males	Females	Both sexes
Employed:						
Full time.....	6,930	1,958	8,888	61.4	72.1	63.5
Part time.....	2,007	326	2,333	17.8	12.0	16.6
Unemployed.....	2,349	431	2,780	20.8	15.9	19.9
Able and willing to work.....	1,863	391	2,254	16.5	14.4	16.1
Slack work.....	1,785	375	2,160	15.8	13.8	15.4
Forced retirement.....	57	6	63	.5	.2	.5
Miscellaneous.....	21	10	31	.2	.4	.2
Temporarily unable to work.....	94	18	112	.8	.7	.8
Sickness.....	66	15	81	.6	.6	.6
Injury.....	28	3	31	.2	.1	.2
Permanently unable to work.....	166	13	179	1.5	.5	1.3
Sickness.....	96	9	105	.9	.3	.8
Injury.....	25	3	28	.2	.1	.2
Old age.....	42	1	43	.4	.1	.3
Miscellaneous.....	3	—	3	(1)	—	(1)
Unwilling to work.....	226	9	235	2.0	.3	1.7
Voluntary retirement.....	209	8	217	1.9	.3	1.6
Lazy or indifferent.....	15	—	15	.1	—	.1
Miscellaneous.....	2	1	3	(1)	(1)	(1)
Total.....	11,286	2,715	14,001	100.0	100.0	100.0

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

A comparison of the unemployed males in 1929 and 1930 in relation to all males enumerated was given in Table 5. In addition to the remarks made earlier concerning that table, it may be noted here that the proportion of males temporarily or permanently unable to work was much the same in the two years as was also the proportion who were aged or (voluntarily) retired.



## Duration of Unemployment

A COMPARISON of the duration of unemployment of those unemployed males who were able and willing to work in 1930 and those reported as unemployed because of slack work in 1929 is given in Table 11. It is apparent that the unemployment of this class of males had been of decidedly longer standing at the time of the 1930 study than at the time of the 1929 study. While no figures are shown here for the duration of unemployment of those unemployed females who were able and willing to work at the time of the two studies, the duration of unemployment of this group had also been of longer standing in 1930 than in 1929.

TABLE 11.—DURATION OF UNEMPLOYMENT OF ALL UNEMPLOYED MALES ABLE AND WILLING TO WORK,<sup>1</sup> 1929 AND 1930

[This table does not include 14 males in 1929 and 12 males in 1930 not reporting as to duration of unemployment]

Duration of unemployment	Number		Per cent	
	1929	1930	1929	1930
Under 2 weeks.....	112	79	15.8	4.3
2 and under 4 weeks.....	158	147	22.2	7.9
4 and under 10 weeks.....	216	389	30.4	21.0
10 and under 20 weeks.....	87	331	12.3	17.9
20 and under 30 weeks.....	44	264	6.2	14.3
30 and under 40 weeks.....	22	147	3.1	7.9
40 and under 52 weeks.....	5	103	.7	5.6
52 weeks and over.....	66	391	9.3	21.1
Total.....	710	1,851	100.0	100.0

<sup>1</sup> This is the "slack work" classification of 1929; see p. 38.

## Industry and Employment Status

DETAILED data of employment status for males and for females by industry groups are shown in the reports of the New York State Department of Labor. A summary of the employment status of males in 1929 and in 1930 is given in Table 12.

Of the industry groups for which large numbers of males were reported, the greatest proportion of males unable to find work in 1930 was in the building trades, which showed 33.5 per cent of the enumerated wage earners and 30.1 per cent of the enumerated contractors out of work though able and willing to work. Next in order was the manufacturing and servicing of automobiles, parts, and tires, with 27 per cent unable to find work; manufacturing of iron and steel and their products, with 18.1 per cent unable to find work; domestic and personal service, with 15.8 unable to find work; and retail and wholesale trade, with 13.5 per cent unable to find work. The groups professional service, self-employed (other than building contractors), and Government employees showed the smallest proportions of those unable to find work.

The greatest proportion of part-time employment among males in 1930 was in the manufacture of iron and steel and their products, which showed 38.5 per cent of the enumerated males in that industry on part time. The percentage of males reported as employed part time was 32.3 per cent in the manufacture and servicing of automobiles, parts, and tires, 19.7 per cent among building contractors, 17.1 per cent for wage earners in the building trades, and 14.9 per cent in

the railway, express, gas, and electric light group. The smallest proportions of males employed part time were found in the groups professional service, telephone and telegraph, self-employed (other than contractors), and Government employees.

Considering the industry groups for which large numbers of males were reported, full-time employment among males was least in 1930 in the manufacturing and servicing of automobiles, parts, and tires, which showed 38.2 per cent of all males enumerated in that industry as fully employed. Following, in order, came building trades, contractors, 39.5 per cent; manufacture of iron and steel and their products, 39.9 per cent; building trades, wage earners, 44.9 per cent; and railway, express, gas, and electric light, 69.1 per cent. The greatest proportions of males employed full time were found in the groups professional service, telephone and telegraph, and self-employed (other than contractors).

Considering the two major industry groups, the data show that in 1930 of the 3,325 males enumerated in trade and transportation 73 per cent were employed full time, 11 per cent were employed part time, and 12.3 per cent were unable to find work, while in manufacturing and mechanical pursuits, for which 5,473 males were reported, 47.9 per cent were working full time, 27.1 per cent were employed part time, and 21.4 per cent were unable to find work.

No tables are presented in this article showing the employment status of females by industry groups. However, of the industry groups which employed large numbers of females, lowest employment was found in 1930 in the manufacture of wearing apparel and textiles with 33.5 per cent of the enumerated females able and willing to work but unable to find work and 32.4 per cent employed part time. Domestic and personal service showed 22.9 per cent unable to find work and 19.2 per cent on part time.

Of the 979 females classified in 1930 under trade and transportation, 82.6 per cent were employed full time, 6.6 per cent were employed part time, and 9.9 per cent were unable to find work. Of the 708 females in manufacturing and mechanical pursuits, 58.9 per cent were employed full time, 20.8 per cent were employed part time, and 18.8 per cent were unable to find work.

It is not possible to show for 1929 the number of those males in each industry who were unable to find work. Those shown in Table 12 as unemployed in 1929 were therefore unemployed from all causes. For 1930, figures are given both of those males unemployed from all causes and those unemployed who were able and willing to work but unable to locate work.

For every industry group shown, with the sole exception of professional service, the proportion of males working full time in relation to all males enumerated in the industry group was smaller in 1930 than in 1929. In some industry groups the decline was very marked. The percentage of males in metal products other than iron and steel (a relatively unimportant industry group) who were employed full time fell from 72.5 per cent of all males enumerated in that industry group in 1929 to 24.7 in 1930; those males employed full time in the manufacture of iron, steel, and their products fell from 79.1 per cent of all males enumerated in that industry group in 1929 to 39.9 per cent in 1930; those males working full time in the manufacture and

servicing of automobiles, parts, and tires were 66.6 per cent of all males enumerated in that industry group in 1929 and 38.2 per cent in 1930; those males working full time in the building trades as contractors were 63.7 per cent of all such contractors enumerated in 1929 and 39.5 per cent in 1930; those males working full time as wage earners in the building trades dropped from 68 per cent of those enumerated in that industry group in 1929 to 44.9 per cent in 1930.

The percentage of the males enumerated in each industry group who were working part time was greater in 1930 than in 1929 for every industry group except professional service.

As stated above, the only possible comparison of the unemployed in 1929 and 1930 by industry groups must be in terms of those unemployed from all causes. Comparing these figures (which include those unable to find work and also those unable and unwilling to work) reveals that a larger proportion of the males in each industry group were idle in 1930 than in 1929, except in the group clay, glass, and stone products. The increase in the percentage of those unemployed in each industry group in relation to all males enumerated in that group was so great that in every group except three those unable to find work in 1930 equaled or exceeded those unemployed from all causes in 1929.

TABLE 12.—COMPARATIVE SUMMARY OF EMPLOYMENT STATUS OF ALL MALES ENUMERATED, BY INDUSTRY GROUP, 1929 AND 1930

[This table does not include 127 males in 1929 and 49 males in 1930 not reporting as to industry group]

Number

Industry group	1929				1930				
	Em- ployed, full time	Em- ployed, part time	Unem- ployed, all causes	Total	Em- ployed, full time	Em- ployed, part time	Unem- ployed, able and willing to work	Unem- ployed, all causes	Total
Professional service.....	219	11	11	241	197	5	10	14	216
Clerical (not otherwise specified).....	21		4	25	3			1	4
Domestic and personal service.....	402	15	48	465	349	40	75	86	475
Government employees (other than teachers).....	750	22	66	838	659	48	64	126	833
Trade and transportation.....	3,080	100	236	3,416	2,428	366	409	531	3,325
Retail and wholesale trade.....	984	25	79	1,088	859	92	153	182	1,133
Telephone and telegraph.....	75		4	79	89	3	10	11	103
Railway, express, gas, elec- tric light.....	1,519	45	115	1,679	1,051	227	164	244	1,522
Water transportation.....	61	10	11	82	54	16	29	29	99
Other.....	441	20	27	488	375	28	53	65	468
Manufacturing and mechanical pursuits.....	4,755	632	766	6,153	2,618	1,487	1,172	1,368	5,473
Building trades, contractors.....	219	56	69	344	122	61	93	126	309
Building trades, wage earn- ers.....	580	79	194	853	338	129	252	286	753
Clay, glass, and stone prod- ucts.....	61	5	17	83	63	21	12	17	101
Food and kindred products.....	491	31	44	566	373	67	62	76	516
Iron, steel, and their prod- ucts.....	1,093	141	147	1,381	497	480	226	270	1,247
Metal products, other than iron and steel.....	140	39	14	193	43	93	33	38	174
Paper, printing, and pub- lishing.....	207	7	13	227	167	47	28	31	245
Wearing apparel and textiles.....	277	22	18	317	110	78	50	57	245
Automobiles, parts, and tires.....	647	185	139	971	335	283	237	259	877
Other.....	1,040	67	111	1,218	570	228	179	208	1,006
Labor (not otherwise specified).....	38	15	24	77	7	11	14	23	41
Self-employed.....	823	33	79	935	643	45	43	91	779
Miscellaneous.....	39	1	14	54	22	4	50	66	92
Total, all males.....	10,127	829	1,248	12,204	6,926	2,006	1,837	2,306	11,238

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TABLE 12.—COMPARATIVE SUMMARY OF EMPLOYMENT STATUS OF ALL MALES ENUMERATED, BY INDUSTRY GROUP, 1929 AND 1930—Continued

Per cent

Industry group	1929				1930				
	Em- ployed, full time	Em- ployed, part time	Unem- ployed, all causes	Total	Em- ployed, full time	Em- ployed, part time	Unem- ployed, able and willing to work	Unem- ployed, all causes	Total
Professional service.....	90.9 (1)	4.5 (1)	4.6 (1)	100.0 (1)	91.2 (1)	2.3 (1)	4.6 (1)	6.5 (1)	100.0 (1)
Clerical (not otherwise specified).	86.5	3.2	10.3	100.0	73.5	8.4	15.8	18.1	100.0
Domestic and personal service.	89.5	2.6	7.9	100.0	79.1	5.8	7.7	15.1	100.0
Government employees (other than teachers).....	90.2	2.9	6.9	100.0	73.0	11.0	12.3	16.0	100.0
Trade and transportation.....	90.4	2.3	7.3	100.0	75.8	8.1	13.5	16.1	100.0
Retail and wholesale trade.....	94.9	-----	5.1	100.0	86.4	2.9	9.7	10.7	100.0
Telephone and telegraph.....	90.5	2.7	6.8	100.0	69.1	14.9	10.8	16.0	100.0
Railway, express, gas, elec- tric light.....	74.4	12.2	13.4	100.0	54.6	16.1	29.3	29.3	100.0
Water transportation.....	90.4	4.1	5.5	100.0	80.2	5.9	11.3	13.9	100.0
Other.....	77.3	10.3	12.4	100.0	47.9	27.1	21.4	25.0	100.0
Manufacturing and mechanical pursuits.....	63.7	16.3	20.0	100.0	39.5	19.7	30.1	40.8	100.0
Building trades, contractors.	68.0	9.3	22.7	100.0	44.9	17.1	33.5	38.0	100.0
Building trades, wage earn- ers.....	73.5	6.0	20.5	100.0	62.4	20.8	11.8	16.8	100.0
Clay, glass, and stone prod- ucts.....	86.7	5.6	7.7	100.0	72.3	13.0	12.0	14.7	100.0
Food and kindred products.	79.1	10.2	10.7	100.0	39.9	38.5	18.1	21.6	100.0
Iron, steel, and their prod- ucts.....	72.5	20.3	7.2	100.0	24.7	53.4	19.0	21.9	100.0
Metal products, other than iron and steel.....	91.2	3.1	5.7	100.0	68.2	19.2	11.4	12.6	100.0
Paper, printing, and pub- lishing.....	87.4	6.9	5.7	100.0	44.9	31.8	20.4	23.3	100.0
Wearing apparel and textiles.	66.6	19.1	14.3	100.0	38.2	32.3	27.0	29.5	100.0
Automobiles, parts, and tires.....	85.4	5.5	9.1	100.0	56.7	22.6	17.8	20.7	100.0
Other.....	49.3	19.5	31.2	100.0	(1)	(1)	(1)	(1)	(1)
Labor (not otherwise specified).	88.0	3.5	8.5	100.0	82.6	5.8	5.5	11.6	100.0
Self-employed.....	72.2	1.9	25.9	100.0	23.9	4.4	54.3	71.7	100.0
Miscellaneous.....	82.4	6.7	10.9	100.0	61.4	17.8	16.5	20.8	100.0
Total, all males.....									

<sup>1</sup> Percentages not calculated because of small numbers involved.

### Conclusion

AN EXAMINATION of the results of this study can not but impress one with the seriousness of the problem of unemployment and underemployment. The figures here shown relate definitely to certain areas in Buffalo, but there is no reason to believe that conditions are greatly dissimilar in industrial areas in other cities of the same general type. The conditions disclosed by this and other studies of unemployment ought to command careful consideration with a view to developing measures for reducing involuntary unemployment and underemployment to a minimum. To this end there must be a close and sincere coordination of the forces of government, of industry, and of the community.

## Cooperative Housing Societies in 1929<sup>1</sup>

COOPERATIVE housing in the United States thus far has had rather a limited appeal, and the Bureau of Labor Statistics knows of only 45 cooperative societies in this field. Undoubtedly, difficulties of financing have had a good deal of influence in deterring groups of persons from undertaking the provision of their own housing accommodations.

Of the 45 societies, 43 own apartment buildings, while 2 operate residential hotels. The 25 societies furnishing data for the general study made by the Bureau of Labor Statistics control property valued at more than \$8,000,000. They have provided living quarters for 2,300 householders and nearly 650 single persons.

### Apartment Houses

OF THE 43 cooperative housing societies operating apartment buildings, reports have been received from 23, all located in Manhattan, the Bronx, or Brooklyn.

Of the 23 societies reporting, 1 was organized in 1916, 6 were started in 1920, 2 in 1921, 3 in 1922, 3 in 1923, 2 in 1924, 1 in 1925, 1 in 1926, 2 in 1927, 1 in 1928, and 1 in 1929. Few projects have been undertaken recently, practically the only new development which has come to the attention of the bureau being the buildings undertaken by the Amalgamated Clothing Workers on the East Side in New York City. Since the beginning of 1930, Consumers' Cooperative Services, a cafeteria organization in New York City, has constructed a building for its members.<sup>2</sup>

### Types of Buildings Provided

The dwellings provided by all of these societies are apartments exclusively, usually those of the 4-story, walk-up type—the 16-dwelling building having 4 apartments per floor. Another, and more attractive, type is the court building, with a simple archway leading from the street to a grassy court, from which one or more entrances (according to the size of the building) lead into the various wings. Not all of the societies erected a new building for their needs; in a few cases an old building was purchased and remodeled. The projects of the Amalgamated Clothing Workers and United Workers are of the multiple-building, colony type.<sup>3</sup>

All but one of the cooperative apartment buildings in Brooklyn which reported are 4-story buildings; the other is a 5-story structure the first floor of which is given over to stores. In New York City, 1 society has a 3-story building, 2 have 4-story buildings, 5 have 5-story buildings, and 2 have 6-story structures. Only three apartment buildings have elevators, two of these being the 6-story buildings.

The buildings of the 22 societies reporting on this point contain 2,312 apartments, of which 4 are 1-room apartments, 6 contain 2

<sup>1</sup> This is the sixth of a series of articles on the cooperative movement in the United States in 1929. The previous articles were given in the *Labor Review*, as follows: Wholesale societies, May, 1930 (pp. 108-110); gasoline filling stations, September, 1930 (pp. 11-18); consumers' societies, October, 1930 (pp. 21 to 34); credit unions, November, 1930 (pp. 1 to 11); and workers' productive associations, December, 1930 (pp. 25 to 32).

<sup>2</sup> For a detailed account of this project see *Labor Review*, May, 1930, pp. 111, 112.

<sup>3</sup> These have been described in detail in previous publications—Bulletin No. 465 of this bureau (pp. 115-132), and *Labor Review*, issues of August, 1928 (pp. 1-18) and March, 1930 (p. 144).

rooms each, 128 contain 3 rooms, 42 have 3½ rooms each, 188 are of 4 rooms, and 264 contain more than 4 rooms each. (In figuring the number of rooms, in only 1 case is the bathroom counted as a room but all the societies reporting count the kitchen as a room. Only four buildings contain kitchenette apartments; in one of these the kitchenette is counted as half a room, while in the others it is not counted.)

As the table following shows, the 23 societies reporting have a combined membership of 2,306 and paid-in share capital of \$1,102,825. They control property whose original cost aggregated \$10,845,386, but is now assessed at \$6,681,088. The cost of the individual buildings or projects ranged from \$16,000 for a 4-story building of 8 apartments to \$3,450,000 for a group project housing more than 1,000 families.

TABLE 1.—MEMBERSHIP, CAPITAL, AND VALUE OF LAND AND BUILDINGS OF HOUSING SOCIETIES IN 1929

Location	Number of societies reporting	Number of members	Share capital	Land and buildings	
				Original cost	Present assessed value
New York:					
Manhattan and Bronx.....	11	1,974	<sup>1</sup> \$550,139	\$9,358,166	<sup>2</sup> \$5,207,794
Brooklyn.....	12	332	<sup>3</sup> 552,686	<sup>3</sup> 1,487,220	<sup>3</sup> 1,473,294
Total.....	23	2,306	<sup>4</sup> 1,102,825	<sup>5</sup> 10,845,386	<sup>6</sup> 6,681,088

<sup>1</sup> 8 societies.

<sup>2</sup> 9 societies.

<sup>3</sup> 11 societies.

<sup>4</sup> 19 societies.

<sup>5</sup> 22 societies.

<sup>6</sup> 20 societies.

The table below shows the classification of the societies according to the original cost of the building and land.

TABLE 2.—DISTRIBUTION OF HOUSING SOCIETIES ACCORDING TO ORIGINAL COST OF BUILDING AND LAND

Original cost	Manhattan and Bronx	Brooklyn
Under \$25,000.....		2
\$25,000 and under \$50,000.....	2	1
\$50,000 and under \$100,000.....	1	5
\$100,000 and under \$500,000.....	4	2
\$500,000 and under \$1,000,000.....	1	1
\$1,000,000 and over.....	3	
Total.....	11	11

#### Cost to Tenant-Member

When the individual becomes a member of a housing society he subscribes for a certain amount of capital stock in the society estimated as covering the cost of the apartment or dwelling he will occupy. This total cost is arrived at after consideration of a number of factors; the total cost of land, building and other expenses connected therewith are taken as a basis and the cost of each dwelling is determined according to the number of rooms, floor space, location, and

other points of advantage or disadvantage. The cost figure so arrived at for each individual apartment is the price which the prospective tenant must pay, and the amount for which he must subscribe stock in the society. This stock may be paid for either as a whole or in installments, according to the requirements of the by-laws.

In the societies reporting, the average cost per room was as follows:

	Number of societies		Number of societies
\$170	1	\$700	1
\$190	1	\$725	1
\$250	2	\$835	1
\$275-400 <sup>4</sup>	1	\$1,080	1
\$340	1	\$1,200	1
\$350	1	\$1,487	1
\$400	1	\$1,646	1
\$457	1		
\$500	3	Total	20
\$587	1		

It is seen that in 60 per cent of the societies the average cost per room is \$500 or less, and in only 20 per cent does the cost exceed \$1,000 per room.

When the apartment is taken, the member is required to make a down payment of varying amount, and the rest is included as part of the monthly "rent," which also covers maintenance costs, interest, etc. Generally, any redecorating must be done at the tenant's expense. The initial payment required is shown in the statement below:

	Number of societies		Number of societies
\$500	2	\$2,000	1
\$580 or \$670	1		
\$665	1	Per room:	
\$1,000	1	\$125	1
\$1,000-\$2,400	1	\$150	1
\$1,100, \$1,300, \$1,600, or \$2,000	1	\$250	2
\$1,200	1	\$300	1
\$1,250	1	\$350	1
\$1,400 or \$2,000	1	\$375	1
\$1,500	1		
\$1,700	1	Total	20

The average monthly charge per room is shown below:

	Number of societies		Number of societies
\$4.00	1	\$10.50	1
\$5.00	1	\$10.70	1
\$6.00	2	\$11.00	2
\$6.40	1	\$11.50	1
\$6.75	1	\$11.97	1
\$7.00	1	\$12.50	3
\$8.00	2	\$14.00 or \$14.50	1
\$8.60	1		
\$9.00	1	Total	22
\$10.00	1		

<sup>4</sup> According to location of apartment.

## Cooperative Practice

Of the societies reporting, only four give title to the tenant purchasing an apartment, while in the rest of the cases the society retains the title, the tenant being given merely a lease (in one case only a month-to-month lease). However, 12 societies allow the tenant to sublet his apartment, though one of these prohibits his receiving any profit from the transaction. In one building, 7 of the 17 apartments were rented to nonmembers at the time the report was made. Fourteen societies allow the member to sell his apartment for what he can get, but in two cases the society must be given first chance to buy it, and in one case the purchaser must be acceptable to the society. Two other societies allow the sale of apartments by the tenant-members, but in one case the society sets the sale price and in the other the member is prohibited from making a profit on the sale. In five cases, if the member wishes to give up the apartment he must turn it over to the society, as he does not own the apartment, but merely has a lease.

To one comparing this situation with that existing in 1925, it is evident that many of the societies are backsliding as regards cooperative practice. Six societies have even adopted the practice of vote by shares, instead of one vote per member.

## Residential Hotels

THERE are in Washington, D. C., two cooperative residential hotels. One of these was organized in 1922 by a group of women some of whom had been residents of the Government Hotels.<sup>5</sup> The group and funds grew slowly but surely and in 1928 the apartment hotel was ready for occupancy.

The hotel is situated in one section of the Government office district. It is an 8-story building with 356 bedrooms. The first floor contains the office, lobby, writing room, small rooms for playing cards or entertaining guests, a small room with kitchenette attached for parties, and 20 rooms for transient guests. Male guests are admitted only to the first floor. The other floors have 48 bedrooms each, 44 of which have running water but no bath, 3 have private baths, and 1 has no water. There are two general lavatories on each floor, with bathtub and showers.

The tenant member must purchase a specified minimum of stock, which entitles her to the possession of a room. Monthly basic rents—for stockholders who take their meals in the hotel—are \$25 and \$40, according to whether the room has running water only, or private bath. Stockholders not taking meals at the hotel pay \$2.50 per month over the basic rent, nonstockholders \$7.50 more. Room rates for transients are higher. The rate for meals is \$25 per month for breakfast and dinner.

Elevator service is provided and there is a small assembly hall. A portico, which can be entered only from the inside hall, runs across part of the building. In the basement a room is set aside which is

<sup>5</sup> Erected by the United States Government to provide living quarters for woman employees of the Government during the war.



equipped with stationary tubs, ironing boards, etc., for the use of the guests who wish to do their own laundry work. On the roof of one of the two wings to the building there is a roof garden.

The second hotel project may be said to have grown out of the first, although the personnel of the cooperative group was different. This association was formed in 1928 and moved into its building on December 1, 1929, after a good many difficulties. This is a 7-story building having 168 rooms with private bath and 56 suites of 2 rooms which share one bathroom.

Each member must purchase 5 shares of preferred stock and one share of common stock. There is no limit to the number of shares of preferred stock that may be held by any one person but no stockholder may own more than one share of common stock, and it is only the latter that carries the voting privilege. Thus it works out that each member has only one vote.

The cost to the member is \$500 per room, of which \$50 must be paid down; the balance may be paid in installments of \$10 per month. Monthly basic rents range from \$25 to \$36.50; nonstockholders pay \$5 over the basic rate.

The hotel has some 280 tenants, of whom 129 are stockholders. As this hotel is situated just off the Union Station plaza and in the neighborhood of the House and Senate office buildings, it attracts many of the young women employed in that vicinity.

Elevator service, cafeteria, and a laundry room for the use of the guests are among the conveniences provided. There is an elaborate lobby, small writing nooks, and parlors for the entertainment of guests, as well as a ballroom. Meals are charged for at the rate of \$25 per month for breakfast and dinner.

The hotel is managed by a board of five directors, elected by the members.

# EMPLOYMENT CONDITIONS AND RELIEF

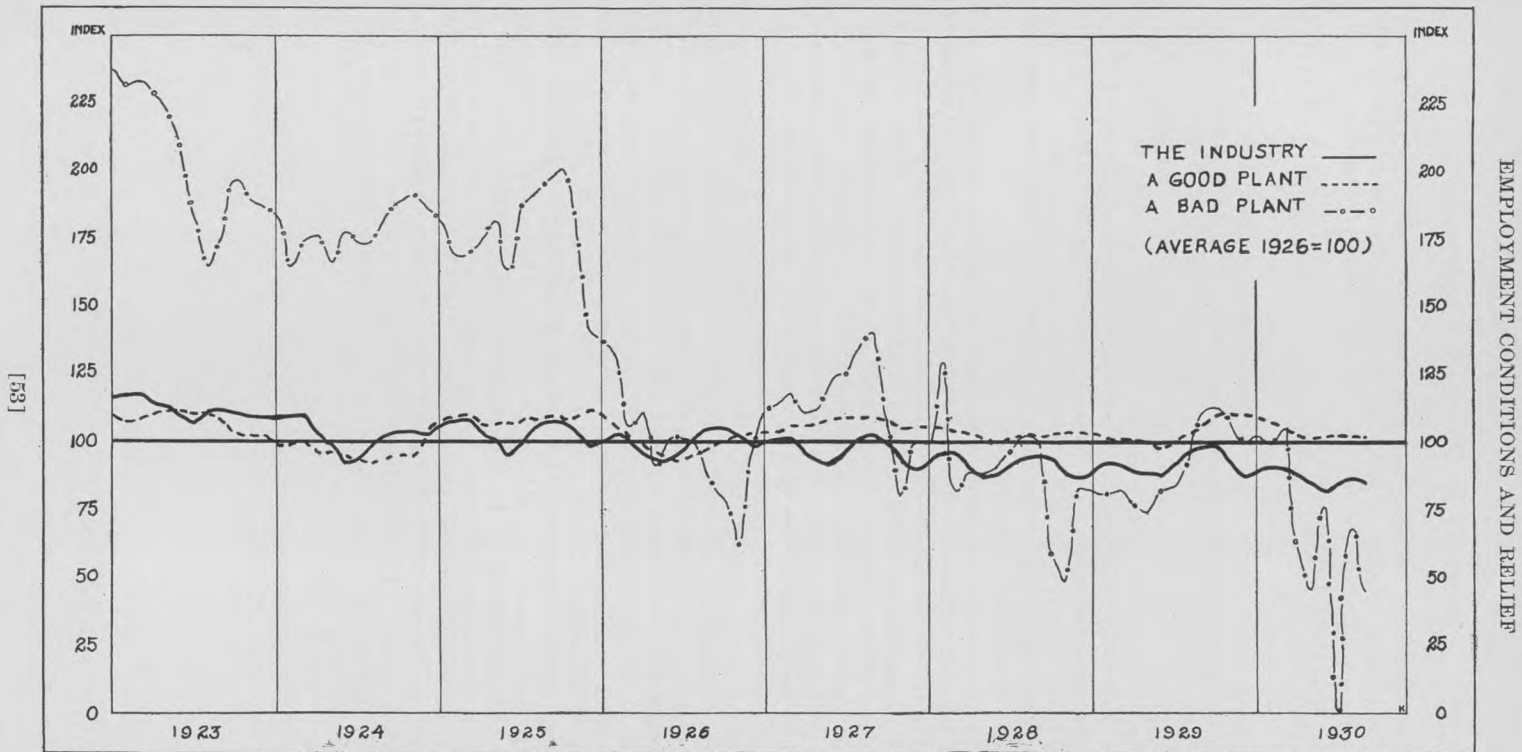
## Stabilization of Employment in the Boot and Shoe Industry

By ETHELBERT STEWART, UNITED STATES COMMISSIONER OF LABOR STATISTICS

**I**RREGULARITY of employment is found in all of our productive industries, though it is very much worse in some than in others, and varies year by year within the industries themselves. A typical example of the irregularity of employment in all kinds of industrial establishments is found in the boot and shoe industry. From data supplied to the United States Bureau of Labor Statistics by the establishments reporting monthly on volume of employment, the accompanying chart has been prepared, which brings out three points: The variation in employment in the boot and shoe industry as a whole, in large reporting plant having the greatest irregularity of employment, and in large plant where employment is the most regular, the last of these affording an illustration of what has been—hence what can be—accomplished by the best, that is, the most regular, of the large plants reporting to the bureau.

If we are to regularize employment we must not forget that this can not be done if we maintain the present number of establishments in any industry. That is to say, the 1,329 boot and shoe factories of the United States can not operate continuously with their present maximum force. To illustrate: 14.5 per cent of these establishments now employ 60.4 per cent of the wage earners and are producing 65.6 per cent of the total output, operating on broken time, or the irregular time of which we are speaking. If, however, these same plants were to operate full time at their present capacity they would produce 95 per cent of the total output, thus crowding out about 85 per cent of the present number of establishments.

In other words, in order to operate 200 establishments full time at present capacity, 1,129 other establishments would have to be closed. Not only that, but if all of the establishments worked at the same efficiency attained by the best establishment, 81,811 men would do the work now being performed by 202,191. To go a little more into detail, the most efficient boot and shoe factory in the United States, measured in output per man per day, produces 14 pairs of shoes per man per day. At this rate of production, 81,811 men working 300 days a year would produce the same number of shoes now produced by the 203,110 men which the census reports as engaged in the industry.



FLUCTUATIONS IN EMPLOYMENT IN THE BOOT AND SHOE INDUSTRY, 1923 TO 1930

### Decrease in Railroad Employment

THE shrinkage in employment that has been so widespread in the United States during the last year has been noticeable in railroad employment as well as in other lines of industry. Each month the Interstate Commerce Commission reports the number of persons employed on the fifteenth of the month by Class I railroads. Figures are available to October, 1930, the October figures being preliminary and subject to possible slight revision. The trend shown by such monthly figures is considered in this article.

On October 15, 1929, Class I railroads had 1,749,859 employees of all classes. On October 15, 1930 these roads had 1,454,963 employees, making a force reduction of 294,896, or 16.85 per cent, in the year's interval. Every month from October, 1929 to February, 1930 showed a decrease. In March, 1930, there was a slight increase, and this continued for three successive months. In June the number began to drop off again and the decrease continued each succeeding month to October, 1930.

Table 1 shows the changes in numbers employed in each of the seven main groups into which the Interstate Commerce Commission classifies the personnel of the railroads. At the head of the list is the group of executives, officials, and staff assistants. Here the shrinkage of personnel was comparatively small, the number having decreased during the year only from 17,001 to 16,219—4.60 per cent. Then followed in order, the professional, clerical, and general employees, with a decrease of 10.06 per cent; the yardmasters, switch tenders, and hostlers, with a decrease of 10.57 per cent; and the employees doing transportation work other than train, engine, or yard service, with a loss of 11.83 per cent. The decline in the number of employees engaged on the maintenance of equipment and stores approximated the decrease among the entire railroad force (17.45 as against 16.85 per cent), while by far the heaviest losses in employment were sustained by the employees engaged in the maintenance of way and structures (25.54 per cent).

A continuous though small decrease in numbers employed occurred month after month throughout the year in three of the seven groups, viz, the professional, clerical, and general employees, the employees working on the maintenance of equipment and stores, and the yardmasters, switch tenders, and hostlers. In the other four groups an increase in personnel occurred in each of three months during the period covered. The greatest variation in employment month by month was in the maintenance of ways and structures group, but there the changes may have been due partly to seasonal conditions.

TABLE 1.—NUMBER OF EMPLOYEES OF CLASS I RAILROADS, BY KIND OF WORK

Year and month	Executives, officials, and staff assistants		Professional, clerical, and general		Maintenance of way and structures		Maintenance of equipment and stores	
	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month
<i>1929</i>								
October.....	17,001		272,941		452,681		458,844	
November.....	17,004	+0.02	271,833	-0.41	400,689	-11.49	456,271	-0.56
December.....	17,009	+0.03	269,014	-1.04	351,390	-12.30	447,254	-1.98
<i>1930</i>								
January.....	16,975	-0.20	265,857	-1.17	331,292	-5.72	439,317	-1.77
February.....	16,931	-0.26	264,199	-0.62	322,327	-2.71	435,177	-0.94
March.....	16,934	+0.02	263,139	-0.40	337,188	+4.61	429,624	-1.28
April.....	16,874	-0.35	261,208	-0.73	376,604	+11.69	424,047	-1.30
May.....	16,842	-0.19	260,033	-0.45	408,042	+8.35	422,105	-0.46
June.....	16,720	-0.72	256,686	-1.29	394,934	-3.21	410,674	-2.71
July.....	16,569	-0.90	252,527	-1.62	383,985	-2.77	397,588	-3.19
August.....	16,495	-0.45	249,931	-1.03	374,499	-2.47	383,456	-1.04
September.....	16,385	-0.67	247,693	-0.90	356,484	-4.81	387,879	-1.42
October.....	16,219	-1.01	245,494	-0.89	337,056	-5.45	378,794	-2.34
Decrease October, 1929, to October, 1930:								
Number.....	782		27,447		115,625		80,050	
Per cent.....	4.60		10.06		25.54		17.45	

Year and month	Transportation—Other than train, engine, and yard		Transportation—Yardmasters, switch tenders, and hostlers		Transportation—Train and engine service		Total employees	
	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month
<i>1929</i>								
October.....	200,489		21,945		325,958		1,749,859	
November.....	195,597	-2.44	21,765	-0.82	317,868	-2.48	1,681,027	-3.93
December.....	191,514	-2.09	21,535	-1.06	307,369	-3.30	1,605,085	-4.52
<i>1930</i>								
January.....	186,578	-2.58	21,428	-0.50	299,588	-2.53	1,561,035	-2.74
February.....	186,853	+0.15	21,293	-0.63	297,537	-0.68	1,544,317	-1.07
March.....	187,210	+0.19	21,017	-1.30	291,551	-2.01	1,546,663	+0.15
April.....	185,469	-0.93	20,753	-1.26	287,611	-1.35	1,572,566	+1.67
May.....	184,906	-0.30	20,622	-0.63	288,935	+0.46	1,601,485	+1.84
June.....	183,210	-0.92	20,370	-1.22	281,683	-2.51	1,564,277	-2.32
July.....	180,585	-1.43	20,148	-1.09	280,309	-0.49	1,531,711	-2.08
August.....	178,521	-1.14	20,103	-0.22	281,362	+0.38	1,514,367	-1.13
September.....	178,742	+0.12	19,849	-1.26	278,874	-0.88	1,485,906	-1.88
October.....	176,772	-1.10	19,625	-1.13	281,003	+0.76	1,454,963	-2.08
Decrease October, 1929, to October, 1930:								
Number.....	23,717		2,320		44,955		294,896	
Per cent.....	11.83		10.57		13.79		16.85	

The Interstate Commerce Commission divides the railroad occupations into 148 groups. Many of these are separate, clear-cut occupations; others are a combination of kindred occupations. Figures for each of these 148 occupations are available for each month of the year period under consideration, but for lack of space can not be given here. Table 2, however, gives the monthly figures for eight large groups of occupations. In this table locomotive engineers of all classes are consolidated, but two groups of brakemen and flagmen are given separately so as to indicate the variation in the decrease in employment as between passenger and freight service.

TABLE 2.—NUMBER OF EMPLOYEES OF CLASS I RAILROADS IN SPECIFIED GROUPS OF OCCUPATIONS

[Numbers in boxheads refer to occupation numbers in Table 3]

Year and month	Clerks, mechanical device operators (office) stenographers and typists (No. 9-10-11-12-13 and 14)		Laborers, maintenance of way and structures (No. 51-52 and 53)		Carmen (No. 70-71-72 and 73)		Laborers and common laborers (shops, engine houses, power plants, and stores) (No. 85 and 86)	
	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month
<i>1929</i>								
October.....	188,297		318,975		101,585		90,017	
November.....	187,104	-0.63	271,518	-14.88	100,443	-1.12	89,619	-0.44
December.....	184,516	-1.38	229,031	-15.65	97,043	-3.39	87,797	-2.03
<i>1930</i>								
January.....	181,902	-1.42	214,263	-6.45	93,719	-3.43	86,964	- .95
February.....	180,360	-.85	207,297	-3.25	92,438	-1.37	85,905	-1.22
March.....	179,471	-.49	221,682	+6.94	91,406	-1.12	84,035	-2.19
April.....	178,062	-.79	257,293	+16.06	90,727	-.74	82,541	-1.78
May.....	177,267	-.45	286,021	+11.17	90,577	-.17	82,100	-.53
June.....	174,603	-1.50	274,530	-4.02	87,465	-3.44	79,412	-3.27
July.....	171,395	-1.89	265,314	-3.36	83,768	-4.23	77,192	-2.80
August.....	169,514	-1.10	256,966	-3.15	83,406	-.43	76,121	-1.39
September.....	167,984	-.90	241,201	-6.14	81,727	-2.01	74,916	-1.58
October.....	166,483	-.89	224,299	-7.01	79,837	-2.31	73,078	-2.45
Decrease October, 1929, to								
October, 1930:								
Number.....	21,814		94,676		21,748		16,939	
Per cent.....	11.58		29.68		21.41		18.82	
Year and month	Truckers, laborers and common laborers (stations, warehouses, platforms, grain elevators, and ore docks (No. 106-107 and 108))		Engineers and motormen (passengers, freight, and yard) (No. 141-142-143 and 144)		Brakemen and flagmen (road passenger) (No. 136)		Brakemen and flagmen (road freight) (No. 137 and 138)	
	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month	Number	Per cent of change from preceding month
<i>1929</i>								
October.....	43,844		66,259		12,844		59,377	
November.....	41,227	-5.97	64,514	-2.63	12,833	-0.09	57,202	-3.66
December.....	38,509	-6.59	62,421	-3.24	13,109	+2.15	54,537	-4.66
<i>1930</i>								
January.....	34,969	-9.19	60,931	-2.39	12,993	-.88	52,571	-3.60
February.....	36,003	+2.96	60,561	-.61	12,839	-1.19	51,951	-1.18
March.....	36,698	+1.93	59,219	-2.22	12,863	+ .19	51,242	-1.36
April.....	35,914	-2.14	58,507	-1.20	12,698	-1.28	50,402	-1.64
May.....	36,075	+ .45	58,690	+ .31	12,426	-2.14	51,007	+1.20
June.....	34,551	-4.22	57,186	-2.56	12,668	+1.95	49,678	-2.61
July.....	33,198	-3.92	57,025	-.28	12,651	-.13	49,278	-.81
August.....	32,748	-1.36	57,235	+ .37	12,472	-1.41	49,349	+ .14
September.....	34,281	+4.68	56,600	-1.11	12,131	-2.73	49,293	-.11
October.....	34,396	+ .34	56,893	+ .52	11,828	-2.50	50,134	+1.71
Decrease October, 1929, to								
October, 1930:								
Number.....	9,448		9,366		1,016		9,243	
Per cent.....	21.55		14.14		7.91		15.57	

Table 3 shows the number of employees in each occupation in October, 1929 and October, 1930, the difference in these numbers, and the per cent of difference. Of the 148 occupational groups, all but 4 show a decrease in employment as between October, 1929, and October, 1930. The greatest decrease in number was in track and roadway section laborers, in which group the number decreased from 228,267 to 177,721, or 22.14 per cent. The greatest per cent of decrease occurred among laborers on extra gangs and work trains, where the number decreased from 81,638 to 40,172, or 50.79 per cent.

The number of bridge and building painters employed declined 45.30 per cent, or from 4,049 to 2,215. Teamsters and stablemen, a very small group, decreased 45.22 per cent. Gang foremen of extra gang and work-train laborers decreased 44.75 per cent, or from 5,690 to 3,144. As before stated, the greatest lay-off of railroad labor in the year was in maintenance of ways and structures.

The shrinkage in road freight engineers and motormen on through freight trains was 18.27 per cent, and in road freight brakemen and flagmen on through freights 17.50 per cent.

Road passenger engineers and motormen decreased 6.49 per cent; road passenger conductors, 7.01 per cent; and road passenger brakemen and flagmen, 7.91 per cent. The yard employees were also decreased.

The reason for all of these changes in railroad employment is understood when traffic figures are inspected. The Interstate Commerce Commission reports 44,028,662,000 revenue freight ton-miles hauled in October, 1929, and 36,218,154,000 revenue ton-miles in October, 1930, a decrease of 17.74 per cent. In October, 1929, the railroads hauled 2,365,374,000 revenue passenger miles, and in October, 1930, 1,958,885,000 revenue passenger miles, a decrease of 17.18 per cent.

TABLE 3.—NUMBER OF EMPLOYEES OF CLASS I RAILROADS IN OCTOBER, 1929, AND OCTOBER, 1930, BY OCCUPATIONS

[There was a decrease in all but 4 occupations which are noted]

Division and occupation	October			
	1929	1930	Decrease	
			Num-ber	Per cent
<i>Executives, officials, and staff assistants</i>				
1. Executives, general officers, and assistants.....	7,696	7,597	99	1.29
2. Division officers, assistants, and staff assistants.....	9,305	8,622	683	7.34
Total.....	17,001	16,219	782	4.60
<i>Professional, clerical, and general</i>				
3. Architectural, chemical, and engineering assistants (A).....	3,605	3,379	226	6.27
4. Architectural, chemical, and engineering assistants (B).....	4,922	4,420	502	10.20
5. Subprofessional engineering and laboratory assistants.....	4,558	3,611	947	20.78
6. Professional and subprofessional legal assistants.....	557	535	22	3.95
7. Supervisory or chief clerks (major departments).....	4,928	4,799	129	2.62
8. Chief clerks (minor departments) and assistant chief clerks and supervising cashiers.....	12,984	12,686	298	2.30
9. Clerks and clerical specialists (A).....	13,264	12,470	794	5.99
10. Clerks (B).....	124,499	109,684	14,815	11.90
11. Clerks (C).....	17,384	14,161	3,223	18.54
12. Mechanical device operators (office).....	8,332	7,492	840	10.08
13. Stenographers and secretaries (A).....	3,707	3,622	85	2.29

TABLE 3.—NUMBER OF EMPLOYEES OF CLASS I RAILROADS IN OCTOBER, 1929, AND OCTOBER, 1930, BY OCCUPATIONS—Continued

Division and occupation	October			
	1929	1930	Decrease	
			Number	Per cent
<i>Professional, clerical, and general—Continued</i>				
14. Stenographers and typists (B).....	21, 111	19, 054	2, 057	9. 74
15. Storekeepers, sales agents, and buyers.....	3, 194	2, 976	218	6. 83
16. Ticket agents and assistant ticket agents.....	1, 626	1, 533	93	5. 72
17. Traveling auditors or accountants.....	1, 867	1, 719	148	7. 93
18. Telephone switchboard operators and office assistants.....	5, 040	4, 612	428	8. 49
19. Messengers and office boys.....	6, 147	5, 457	690	11. 22
20. Elevator operators and other office attendants.....	1, 344	1, 284	60	4. 46
21. Lieutenants and sergeants of police.....	2, 219	2, 186	33	1. 49
22. Patrolmen.....	5, 322	4, 681	641	12. 04
23. Watchmen (without police authority).....	2, 811	2, 495	316	11. 24
24. Supervising traffic agents.....	1, 804	1, 843	139	12. 16
25. Traffic agents, advertising and development agents.....	7, 790	7, 795	15	1. 06
26. Fire-prevention, smoke, and time-service inspectors, and office-building superintendents.....	462	462	.....	.....
27. Claim agents and claim investigators.....	1, 726	1, 614	112	6. 49
28. Real estate and tax agents and investigators.....	435	407	28	6. 44
29. Examiners, instructors and special investigators.....	595	499	96	16. 13
30. Miscellaneous trades workers (other than plumbers).....	738	649	89	12. 06
31. Motor-vehicle and motor-car operators.....	2, 223	2, 171	52	2. 34
32. Teamsters and stablemen.....	115	63	52	45. 22
33. Janitors and cleaners.....	7, 632	7, 135	497	6. 51
Total.....	272, 941	245, 494	27, 447	10. 06
<i>Maintenance of way and structures</i>				
34. Roadmasters and general foremen.....	3, 420	3, 209	211	6. 17
35. Assistant general foremen.....	403	382	21	5. 21
36. Supervising maintenance of way inspectors and scale inspectors.....	347	353	14	4. 03
37. Maintenance of way inspectors.....	840	768	72	8. 57
38. Bridge and building gang foremen (skilled labor).....	5, 756	4, 803	953	16. 56
39. Bridge and building carpenters.....	23, 856	19, 197	4, 659	19. 53
40. Bridge and building iron workers.....	1, 145	1, 047	98	8. 56
41. Bridge and building painters.....	4, 049	2, 215	1, 834	45. 30
42. Masons, bricklayers, plasterers, and plumbers.....	2, 339	1, 976	363	15. 52
43. Skilled trades helpers.....	12, 890	8, 761	4, 129	32. 03
44. Regular apprentices.....	55	59	14	17. 27
45. Portable steam equipment operators.....	3, 012	2, 529	483	16. 04
46. Portable steam equipment operator helpers.....	1, 125	831	294	26. 13
47. Pumping equipment operators.....	4, 296	3, 724	572	13. 31
48. Gang foremen (extra gang and work-train laborers).....	5, 690	3, 144	2, 546	44. 75
49. Gang foremen (bridge and building signal and telegraph laborers).....	534	421	113	21. 16
50. Gang or section foremen.....	39, 944	38, 856	1, 088	2. 72
51. Laborers (extra gang and work-train).....	81, 638	40, 172	41, 466	50. 79
52. Track and roadway section laborers.....	228, 267	177, 721	50, 546	22. 14
53. Maintenance of way laborers (other than track and roadway) and gardeners and farmers.....	9, 070	6, 406	2, 664	29. 37
54. General foremen and supervising inspectors (signal, telegraph, and electrical transmission).....	576	575	1	. 17
55. Assistant general foremen (signal, telegraph and electrical transmission) and signal and telegraph inspectors.....	794	746	48	6. 05
56. Gang foremen (signal and telegraph skilled trades labor).....	1, 600	1, 458	142	8. 88
57. Signalmen and signal maintainers.....	9, 794	8, 993	801	8. 18
58. Linemen and groundmen.....	2, 908	2, 593	315	10. 83
59. Assistant signalmen and assistant signal maintainers.....	3, 340	2, 690	650	19. 46
60. Signalmen and signal maintenance helpers.....	4, 993	3, 447	1, 546	30. 96
Total.....	452, 681	337, 056	115, 625	25. 54
<i>Maintenance of equipment and stores</i>				
61. General foremen (M. E.).....	1, 406	1, 328	78	5. 55
62. Assistant general foremen and department foremen (M. E.).....	10, 460	9, 715	745	7. 12
63. General foremen (stores).....	308	299	9	2. 92
64. Assistant general foremen (stores).....	183	158	25	13. 66
65. Equipment, shop, and electrical inspectors (M. E.).....	1, 555	1, 267	288	18. 52
66. Material and supplies inspectors.....	1, 825	1, 449	376	20. 60
67. Gang foremen and gang leaders (skilled labor).....	9, 857	8, 641	1, 216	12. 34
68. Blacksmiths.....	7, 784	6, 152	1, 632	20. 97
69. Boiler-makers.....	16, 098	13, 694	2, 404	14. 93

<sup>1</sup> Increase.



TABLE 3.—NUMBER OF EMPLOYEES OF CLASS I RAILROADS IN OCTOBER, 1929, AND OCTOBER, 1930, BY OCCUPATIONS—Continued

Division and occupation	October			
	1929	1930	Decrease	
			Num-ber	Per-cent
<i>Maintenance of equipment and stores—Continued</i>				
70. Carmen (A).....	19,361	15,473	3,888	20.08
71. Carmen (B).....	3,770	2,963	807	21.41
72. Carmen (C).....	76,445	60,049	16,396	21.45
73. Carmen (D).....	2,009	1,352	657	32.70
74. Electrical workers (A).....	7,359	6,839	520	7.07
75. Electrical workers (B).....	2,854	2,695	159	5.57
76. Electrical workers (C).....	275	284	9	13.27
77. Machinists.....	54,836	47,960	6,876	12.54
78. Molders.....	1,043	933	110	10.55
79. Sheet-metal workers.....	10,942	9,399	1,543	14.10
80. Skilled trades helpers (M. E. and stores).....	102,243	83,159	19,084	18.67
81. Helper apprentices (M. E. and stores).....	4,463	3,136	1,327	29.73
82. Regular apprentices (M. E. and stores).....	10,582	8,032	2,550	24.10
83. Gang foremen laborers (shops, engine houses, power plants, and stores).....	3,786	3,228	558	14.74
84. Coach cleaners.....	12,070	10,977	1,093	9.06
85. Laborers (shops, engine houses, and power plants).....	37,383	31,955	5,428	14.52
86. Common laborers (shops, engine houses, power plants, and stores).....	52,634	41,123	11,511	21.87
87. Stationary engineers (steam).....	2,328	2,147	181	7.77
88. Stationary firemen and oilers (steam and electrical plants).....	4,539	4,025	514	11.32
89. Coal passers and water tenders (steam-station boiler rooms).....	446	362	84	18.83
Total.....	458,844	378,794	80,050	17.45
<i>Transportation (other than train, engine, and yard)</i>				
90. Chief train dispatchers, train dispatchers and train directors.....	5,279	4,869	410	7.77
91. Station agents (supervisory, major stations, nontelegaphers).....	2,452	2,427	25	1.02
92. Station agents (supervisory, smaller stations, nontelegaphers).....	5,157	4,866	291	5.64
93. Station agents (nonsupervisory, smaller stations, nontelegaphers).....	3,054	2,944	110	3.60
94. Station agents (telegraphers and telephoners).....	18,590	18,234	356	1.92
95. Chief telegraphers and telephoners or wire chiefs.....	881	857	24	2.72
96. Clerk telegraphers and clerk telephoners.....	13,330	11,668	1,662	12.47
97. Telegraphers and telephoners and towermen.....	23,351	21,230	2,121	9.08
98. Station masters and assistants.....	519	475	44	8.48
99. Supervising baggage agents.....	125	123	2	1.60
100. Baggage agents and assistants.....	693	633	60	8.66
101. Baggage, parcel room, and station attendants.....	8,420	7,426	994	11.81
102. General foremen (freight station, warehouse, grain elevators, and docks).....	520	497	23	4.42
103. Assistant general foremen, (freight stations, warehouses, grain elevators, and docks).....	402	353	49	12.19
104. Gang foremen (freight station, warehouse, grain elevator, and dock labor).....	3,538	3,263	275	7.77
105. Callers, loaders, sealers, sealers, and perishable freight inspectors.....	15,714	13,023	2,691	17.12
106. Truckers (stations, warehouses, and platforms).....	36,849	28,266	8,583	23.29
107. Laborers (coal and ore docks, and grain elevators).....	1,590	1,378	212	13.33
108. Common laborers (stations, warehouses, platforms, and grain elevators).....	5,405	4,752	653	12.08
109. Stewards, restaurant and lodging-house managers, and dining-car supervisors).....	1,846	1,668	178	9.64
110. Chefs and first cooks (dining cars and restaurants).....	1,716	1,569	147	8.57
111. Second and third cooks (dining cars and restaurants).....	2,976	2,712	264	8.87
112. Waiters and lodging-house attendants.....	7,433	6,547	886	11.92
113. Camp and crew cooks and kitchen helpers.....	4,042	3,094	948	23.45
114. Barge, lighter, and gasoline launch officers and workers.....	2,049	1,643	406	19.81
115. Deck officers (ferry boats and towing vessels).....	945	861	84	8.89
116. Engine-room officers (ferry boats and towing vessels).....	872	817	55	6.31
117. Deck and engine-room workers (ferry boats and towing vessels).....	4,333	3,942	391	9.02
118. Deck and engine-room officers and workers (steamers).....	967	705	262	27.09
119. Floating equipment shore workers and attendants.....	887	855	32	3.61
120. Transportation and dining service inspectors.....	944	847	97	10.28
121. Parlor and sleeping car conductors.....	40	36	4	10.00
122. Train attendants.....	3,349	2,996	353	10.54
123. Bridge operators and helpers.....	1,296	1,275	21	1.62
124. Crossing and bridge flagmen and gatemen.....	20,470	19,523	947	4.63
125. Foremen (laundry) and laundry workers.....	455	398	57	12.53
Total.....	200,489	176,772	23,717	11.83

<sup>1</sup> Increase

TABLE 3.—NUMBER OF EMPLOYEES OF CLASS I RAILROADS IN OCTOBER, 1929, AND OCTOBER, 1930, BY OCCUPATIONS—Continued

Division and occupation	October			
	1929	1930	Decrease	
			Number	Per cent
<i>Transportation (yardmasters, switch tenders, and hostlers)</i>				
126. Yardmasters and assistants.....	7,006	6,126	880	12.56
127. Switch tenders.....	5,321	4,725	596	11.20
128. Outside hostlers.....	2,145	1,906	239	11.14
129. Inside hostlers.....	5,818	5,335	483	8.30
130. Outside hostler helpers.....	1,655	1,533	122	7.37
Total.....	21,945	19,625	2,320	10.57
<i>Transportation (train and engine service)</i>				
131. Road passenger conductors.....	9,964	9,266	698	7.01
132. Assistant road passenger conductors and ticket collectors.....	1,328	1,280	48	3.61
133. Road freight conductors (through freight).....	15,755	12,581	3,174	20.15
134. Road freight conductors (local and way freight).....	9,642	8,517	1,125	11.67
135. Road passenger baggagemen.....	5,401	5,127	274	5.07
136. Road passenger brakemen and flagmen.....	12,844	11,828	1,016	7.91
137. Road freight brakemen and flagmen (through freight).....	35,728	29,474	6,254	17.50
138. Road freight brakemen and flagmen (local and way freight).....	23,649	20,660	2,989	12.64
139. Yard conductors and yard foremen.....	22,895	19,597	3,298	14.40
140. Yard brakemen and yard helpers.....	55,542	47,758	7,784	14.01
141. Road passenger engineers and motormen.....	12,458	11,649	809	6.49
142. Road freight engineers and motormen (through freight).....	21,305	17,413	3,892	18.27
143. Road freight engineers and motormen (local and way freight).....	9,671	8,594	1,077	11.14
144. Yard engineers and motormen.....	22,825	19,237	3,588	15.72
145. Road passenger firemen and helpers.....	11,297	10,434	863	7.64
146. Road freight firemen and helpers (through freight).....	22,703	19,057	3,646	16.06
147. Road freight firemen and helpers (local and way freight).....	9,693	8,748	945	9.75
148. Yard firemen and helpers.....	23,258	19,783	3,475	14.94
Total.....	325,958	281,003	44,955	13.79
Grand total.....	1,749,859	1,454,963	294,896	16.85

### Six-Hour Day Adopted By Large Food Manufacturing Company

IN AN effort to help relieve the unemployment situation, the Kellogg Co., of Battle Creek, Mich., reduced its working-day from 8 hours to 6, effective December 1, according to a press announcement by the president of the company. The plant will continue operating 24 hours a day, the reduction in hours per shift permitting the employment of approximately 25 per cent more workers. The base rate of pay was to be increased 12½ per cent, making the new minimum wage rate for male employees \$4 a day and the average daily wage about \$5.40. The reduction in hours was commented upon as follows by the president of the Kellogg Co.:

The plan has been under serious consideration by Mr. W. K. Kellogg and other executives for many weeks, the change having been decided upon only after long and careful study. We are receiving the whole-hearted cooperation of our employees in our desire to give more work to more people.

While actually reducing the number of working hours, we will in addition have increased the base rate per hour of our employees 12½ per cent, meaning that even with the shorter working period and the greater opportunity for recreation and enjoyment—the actual purchasing power of our employees' dollar compared with last year will be greater.

## Loans for the Unemployed

**A** PLAN to help its employees during the present business depression, by means of loans, has been announced by the International Harvester Co., of Chicago, according to the *Iron Age* (New York) for November 20, 1930. It is reported that these loans will be made, without interest, to the workers who have been or may be laid off and are expecting to return later to the employ of the company, the loans to be paid off in small installments after the employees have resumed work.

### Report and Recommendations of New York Committee on Stabilization of Industry

**O**N NOVEMBER 13, 1930, the Committee on Stabilization of Industry for the Prevention of Unemployment,<sup>1</sup> which was appointed by the Governor of New York in March, 1930, submitted its second report.<sup>2</sup> This body has held conferences with employers and leaders of public opinion in various parts of the State, collected data on stabilization projects, studied the experience of this and other countries, and promoted the organization of community groups to grapple with local unemployment problems. According to the committee any adequate program for dealing with unemployment must include the regularization of industry, a thoroughly organized labor market, and some measure of security for the worker and his dependents in periods when he finds himself jobless through no fault of his own. The full text of Part I<sup>3</sup> of this report follows:

#### Chief Causes of Unemployment

THE chief types of unemployment are four: Seasonal, cyclical, technological, and chronic. Seasonal unemployment seems to be half the principal single cause of the total volume and is caused either by uneven purchasing by ultimate consumers or by weather conditions which affect production. Thus the fact that men tend to buy their clothes spring and fall means that the retail sales are sharply peaked at these seasons. Retailers are reluctant to order clothes greatly in advance and this in turn causes factory sales to fluctuate irregularly. This affects factory production and causes men to be laid off in the idle seasons. The fact that most consumers buy their automobiles in the spring and early summer causes automobile and accessory factories to diminish their working forces during the last half of the year. And so with other industries, such as candy making, book printing, furniture, fertilizer, and farm machinery manufacture. Fluctuations in industries producing consumers' goods create irregular demand for raw materials and spread seasonal unemployment through the textile, leather, and other industries.

Most of these irregularities can be traced back to changes in the weather. These also affect production directly as well as indirectly.

<sup>1</sup> The personnel of the committee is as follows: Henry Bruere (chairman), Ernest G. Draper, Maxwell S. Wheeler, John Sullivan, Henry H. Stebbins, jr., and Frances Perkins; Paul H. Douglas, technical advisor.

<sup>2</sup> For preliminary report, see *Labor Review* for August, 1930, p. 26.

<sup>3</sup> Part II, printed separately, contains detailed description of various stabilization and insurance practices with which industries in the United States are attacking the problem of unemployment.

Canning, for example, is at present largely confined to the season when crops mature. Building and general construction is greatly reduced during the winter and this helps create alternate busy and slack seasons in woodworking, stone, cement and glass.

Business is not regular in its course but moves through cycles of prosperity, recession, depression, and revival. At the low point in a major cycle, employment in the industrial lines will range from 12 to 18 per cent less than at corresponding seasons in good years. Despite the large amount of research into the nature of the business cycle, causes of depression and boom are complex, changing, and accidental, and have not been any more definitely isolated than have the causes of cancer. We do, however, know far more about ways in which we might lessen the severity of these cyclical swings than we put into effect.

Although the menace of unemployment resulting from labor-saving devices or changes in the art of manufacture may have been exaggerated in the minds of the workers affected, it is well known that improvements in technical production do cause labor displacement. While ultimately these workers may be absorbed, there frequently is an intervening period of unemployment which causes much suffering and which must be mitigated.

Chronic unemployment mainly results from the practice of individual plants maintaining a labor reserve to meet their busiest days and seasons. This may be expected to continue until a better organization of the labor market is effected, which, by pooling the reserves, will release the present duplicate reserve staffs for other employment.

#### What Can Be Done?

SUCH being the main causes of unemployment, how can we grapple with them? We should like first to emphasize the rôle business can play in reducing seasonal employment. Because consumer demand for a product is irregular it does not invariably follow that the volume of production and of employment at the factory must follow suit. The example of a large number of firms, including many which we have studied in this State, shows, on the contrary, that employment can be regularized for many more products than is commonly believed. The four chief means of regularization, one or more of which are employed by many business concerns are: I. Stimulating consumer and dealer demand during the off season. II. Scheduling production so that employment will be fairly evenly distributed throughout the year despite the fluctuations in sales. III. Developing side-line and filler products for the slack seasons. IV. Using a flexible working-day rather than alternately hiring and laying off workers. Each of these methods will now be discussed in turn.

##### I. Stimulating Consumer and Dealer Demand in the Off Season

At first thought, this possible outlet would seem to be diminishing because of the increased practice of hand-to-mouth buying. While this is a very real obstacle, some firms have at least in part overcome it. The International Shoe Co. was in the past able to secure advance orders from its dealers by guaranteeing that if prices later rose, the prices on such deliveries would not, but that if prices fell, the

dealers would get the benefit of the reduction. The American Radiator Co. has stimulated off-season sales by quoting winter prices 5 per cent below those of the late summer and early fall.

Some large firms which have a dominant position in their industry have changed consumers' habits by advertising. The Hills Bros. Co., who pack Dromedary dates, have extended the holiday demand for their product by pointing out year-round possibilities for the use of dates. The Sherwin-Williams Co. has conducted campaigns to stimulate fall and winter painting. The Coca Cola Co. has made that drink a year-round product by constant advertising.

Small businesses can not by themselves effect such changes in the habits of consumers but joint effort through trade associations secures results. This is shown by the campaigns of the allied paint manufacturers to build up fall and winter business and by the successful way florists have taught us to "Say it with flowers."

It may be objected that such efforts merely transfer purchasing power and thus stabilize one industry at the cost of disorganizing others. But this overlooks the fact (1) that building up seasonal valleys means at the same time reducing seasonal peaks. This is clear in the case of price discounts and is probably generally true even in off-season advertising. If more painting is done in the fall, it is likely in the long run that less will be done in the spring; (2) even when the total business of a company or industry is increased and the sales of other firms diminished, these industries can in part protect themselves by fighting back with similar tactics to protect their slack seasons. The result may be a socially wasteful multiplication of advertising in some instances, but also it may mean a greater stability of operations for both industries, and hence greater regularity of employment which is the end most desired.

## II. Scheduling Production

This is by far the most common device which is now being used to keep employment fairly evenly distributed through the year. Among the prominent New York companies which are using this method to regularize operations are the Eastman Kodak Co., International Harvester Co., Auto Strop Razor Co., Procter & Gamble, Ithaca Gun Co., Sterling Engine Co., Remington-Rand Co., Remington Typewriter Co., Agfa-Ansco Co., Bausch & Lomb Optical Co., Spencer Lens Co., Neptune Meter Co., W. & L. E. Gurley Co., Sheridan Iron Works, Otis Elevator Co., Richardson-Boynton Co., Griffin Manufacturing Co., Oneida Community, Gorham Silver Co., Kirkman & Sons, Hickey, Freeman Co., S. S. White Co., Elite Glove Co., Columbia Mills, Knox Hat Co., Hills Bros. Co. In nearly all of these cases the following steps have been taken: (1) An estimated sales budget for the year is drawn up in advance based on past records and the reasonable prospects ahead. (2) As nearly as possible, this yearly quota is divided into 12 monthly or 52 weekly parts; goods are produced in this ratio and surpluses over current sales are stored to meet the demands of the rush seasons. (3) The estimated sales quota is checked several times during the year against actual sales. If the budget proves to be above actual sales, production is diminished. If realized sales exceed the budget quotas production is increased. If the forecasting has been competently done, however,

the error from purely seasonal causes should not be large, although cyclical fluctuations will continue to cause trouble. Even when the forecasts go somewhat awry, however, production and employment is in most cases better stabilized than before the sales budget was adopted. In some cases, such as the Eastman Kodak Co. and Bausch & Lomb, the accuracy of the forecasts has resulted in a curve of employment almost identical with the planned curve and has been kept so from season to season in normal years. It is much more difficult for a factory producing numerous lines to carry through a program of planned production than for a concern producing only a few products. Estimates will have to be made for each product and the possibilities of error in forecasting will multiply with the number of different articles to be marketed. It is therefore desirable for firms when beginning a program of budgeting and regularized employment to attempt to standardize their products. Sometimes they can reduce the number of kinds with profit. This was done by the Knox Hat Co., when it began to stabilize production, and it has appreciably helped the business. Despite obvious difficulties great success in forecasting and in stabilizing has been obtained by some firms which produce a multiplicity of products. The Eastman Kodak Co. is an outstanding example of scientific control of production through sales research and budgeting and is worthy of study by every business man having a problem of irregular production and fluctuating employment.

Even when a formal budget has not been drawn up, we discovered many firms which make a practice of manufacturing to stock during the dull seasons. We have received letters from 36 prominent manufacturers who follow this custom, in whose plants informal estimates of probable future sales were made. Doubtless many other concerns in the State, not brought to our attention, make a practice of manufacturing to stock. Regularizing production in this manner involves the necessity for coordinating sales plans and production and utilizing past experiences as a guide to future planning. It necessitates tempering optimism with caution. The attempt to regularize production in this fashion becomes, therefore, a part of the general movement to obtain better management in which every industrial investor and employee looks to management to participate.

### III. Introducing Side Lines and Fillers

The historical partnership of coal and ice—an alliance badly damaged at present by the illness of the junior partner—is the classic example of this method of reducing seasonality. The International Harvester Co. has taken on a varied line to keep its factories busy the year round at the approximate level of its spring peak. The Remington Arms Co. has experimented similarly to overcome the tendency to concentrate production in the fall. The Welch Grape Juice Co., by adding jelly and a fountain syrup to its line of grape juice and grape spread, has been able to prolong employment. The Beechnut Co., by packing peanut butter and other products, has greatly modified the alternate floods and droughts which normally characterize most food-packing industries. The New York Quinine & Chemical Works is also able to produce fairly steadily during the year because its products have different seasonal peaks. Even in

the clothing industry seasonal fluctuations have been coped with by some firms. The Dutchess Manufacturing Co. makes up standard boys' garments when the season is slack for other garments, and the H. A. Dix Co. manufactures nurses' dresses and uniforms during the months when its line of house dresses is in little demand. It is not enough, however, merely to develop side lines in order to maintain steady employment. It is also necessary to transfer workers from the main products to the fillers, and this in many cases requires additional training. The Michael-Stearns and the Hickey, Freeman Co., of Rochester, have both developed such flexibility to a very high degree.

In developing side lines, care is taken to select products which are adapted to the company's machinery, fixed capital, its sales policy and the skill of its workers. It would, for example, be ridiculous for an ice-cream manufacturer to produce sleds because the seasons for the two dovetailed. But it would be highly sensible for him to make candy to take up the slack of the winter months. In other words, the new product must be such as can in general be made with the same machinery, marketed by the same selling force, and manufactured at not too great cost approximately by the same working force. To determine what new products should thus be taken on calls for a very high quality of management. Not only must engineering knowledge be applied to determine the fitness of the plan for the product in question but the sales opportunities must be carefully analyzed as well.

#### IV. Using the Flexible Working-Day Instead of the Lay-Off

This method of meeting the seasonal peaks is used by the Delaware & Hudson Railway when the working time is varied between 8 and 10 hours a day, according to the demands of business. In this way permanent workers put in up to 10 or 12 hours extra a week to handle the fall increase in traffic, and at other times work only 48 hours, and sometimes only 32 hours a week. This practice is used in one form or another by a number of plants, including many canneries and the National Cloak & Suit Co., and has much to recommend it. If the total yearly hours are not excessive, it is better for a constant number of workers to be employed for a flexible number of hours per week than for a very fluctuating number of workers to be employed for a constant number of hours per week. The plan has, however, two dangers: (a) Ability to work employees overtime during the rush seasons may discourage employers from trying to iron out fluctuations in production and hence lessen the possibility of evening the number of man-hours worked and earnings received in the respective months; (b) overtime in some cases may be excessive and cause undue fatigue. Such a policy will, therefore, be better for a plant with a 44 or 48 hour basic week than for one where the standard week is already 54 or 60 hours. It is also desirable that overtime work should not be carried on for too long a time.

Many firms believe that such policies as we have mapped out, while socially desirable, would not pay them individually because of the added storage and interest charges which planned production entails. It is the common practice of most business men who have not yet regularized their employment to use this argument as an excuse for

their own inertia. The firms, however, which have regularized production find that such a program has brought economies which decidedly outweigh the costs. These economies are of four main kinds:

(1) The costs of hiring and maintaining large numbers of untrained workers for short periods of time. It is costly to hire new workers to meet the peak periods, since they are unaccustomed to the work. In consequence in all save unskilled work, the newly hired employees will, on the average, have low production and high spoilage. A New York manufacturing firm has stated to us that it finds "new employees," even though they are what is known to the trade as skilled mechanics, are not even 40 per cent efficient for the first six months. Another manufacturer who has stabilized production writes that in his opinion "it is impossible to produce the goods as fast as they are sold during the season. If one does, it means overtime, high pressure, and poor work with the consequent loss of sales by not having the goods ready when wanted, and also having a loss of customers on account of poor work due to high pressure and green help. This surely is not good business, and such a loss amounts to more than the loss of interest on money represented by goods held in store."

By keeping steady work all the year round, costs are reduced by having experienced workers turn out the product. With the stability of jobs assured, the only part of labor turnover which remains is that due to the instability of men.

(2) By reducing the fixed capital charge per unit of product, if an appreciable increase is made in the working force to meet seasonal peaks, additional capital in the form of machinery and floor space must be provided. When the busy season passes, men can be laid off but not capital. Interest and depreciation charges upon this idle capital will have to be met out of the product of the occupied portion and unit costs will be higher than if the capital were fully employed throughout the year. It thus becomes possible through regularization to turn out the same annual output with a smaller quantity of fixed capital, and so reduce interest charges for this form of capital. One New York concern stated this advantage:

If we produce at the same rate that our goods are sold, our factory would have to be equipped to handle our maximum demand. During slow periods our machinery would be idle or working at a small percentage capacity. Our factory is not equipped to handle our business during peak seasons. We know that together with less space now required we effect considerable saving.

Another firm stated to the commission that it was able to meet its peak load with a plant which was one-fourth smaller than it would have been had they [not] produced stock during the months when sales were slack.

It may be objected to this that, since most firms already have capital equipment to care for their peak load, regularization of output would merely mean that a portion of the plant would be idle throughout the year instead of it being entirely used at some periods and much less at others. Regularization, it is thus claimed, would neither reduce the total of fixed charges nor the amount for each unit of output.

But such a contention ignores the fact that a business can contract its total capacity by not replacing machines which depreciate or



become obsolete and in many cases by disposing of some of its floor space to other firms. Even if the volume of business remains constant, establishments can through regularization reduce their unit costs. If their business expands, they can provide for this growth factor from what would otherwise have been the unused capital equipment in the slack months. In short, the policy of regularization will generally mean a decrease in the cost of fixed capital.

While more space will have to be provided in the warehouse, less space will have to be provided in the factory; and the savings in the latter are likely to be appreciably greater than the losses in the former, since factory space is filled with costly machinery and therefore has a higher value per cubic foot than warehouse facilities. On the other hand, there is often a substantial interest loss on high-value goods, and in such cases there may be no business justification for regularizing output. No general rules can be framed to apply to all cases.

(3) Where work is irregular and uncertain, firms find it necessary to pay an hourly rate above the average in order to attract an adequate and fairly competent staff of workers. Workers want security and assurance of regular work, and all but the reckless or shiftless generally prefer to work for a firm which gives continuous employment than for others whose hourly rates may be somewhat higher but where the workers are never sure of next week's work. Regularization should therefore mean lower unit labor costs as well as lower fixed capital charges. One company reported to us that because it gave steady employment it was able to pay an hourly rate which was 10 to 15 per cent below the market average.

In these gains labor benefits as well as employers. The greater volume of employment during the year appreciably outbalances the lower hourly rate. The worker thus obtains an increased annual income at the same time that the employer reduces his unit costs.

(4) Regularization lessens the conscious and unconscious restriction of output on the part of the workers. In industries where work is irregular it is the almost universal tendency for employees to slacken their efforts as they see off seasons approaching. By reducing their effectiveness they can make such work as they have last longer and can postpone the day when they are unemployed. Next to the fear of having the piece rate cut, the fear of unemployment is probably the chief cause of withheld effort. The evil effects of unemployment are therefore only partly visible; like an iceberg they lie mostly below the surface.

This tendency to soldier on the job may be partially checked by efficiency systems and by piece rates, but as long as the workers have unemployment to fear it will continue. Regularization would mean the elimination of most of the important causes of unemployment—namely, the seasonal factor—and by assuring the workers of their jobs would enable them to work harder without fear of “working themselves out of a job.”

There is much reason, therefore, for business to set itself vigorously to the task of regularizing production. The social need, the economic advantages, and the practical methods of stabilization must be called to the attention of business managers everywhere. Those who seek to reduce unemployment should seek the cordial interest

and cooperation of employers. That is one of the chief tasks which we have set ourselves, and by means of conferences in various cities of the State we have sought to stir the interest of business men in the practical achievement of those who come to these conferences to describe the successful methods of stabilization which they follow. Trade associations and local chambers of commerce might well make stabilization of operations one of their major concerns. Some have done so, notably the Rochester chamber. Trade associations particularly should study the problems of their individual industries with a view to determining how production and employment can best be regularized. The State could be of service to small businesses which can not afford a specialized research staff by having two or more competent industrial engineers or experienced administrators who will place their knowledge and experience at the disposal of plants which wish to regularize. Such experts should under no conditions be political appointees but should be secured after consultation with well-recognized associations of engineers and managers. Under such safeguards we believe that a competent advisory staff could be of great service to industry and labor in the State. We recommend that it be attached to the department of labor.

#### All Unemployment Can Not be Cured by Regularization

WE WOULD be guilty of false optimism, however, if we were to conclude that all industries can be regularized by such methods. If one classifies the industries which have been able to put into effect production to stock under planned policies, one finds that they fall into one or more of the following classes: (1) Those producing a standardized product such as soap, dates, silverware, standard parts, etc. Soap may be stored during the winter for summer sales with no fear on the part of the manufacturer that by that time it will be out of style; (2) those with highly skilled workers where it is very important to retain a steady staff, such as plants manufacturing measuring instruments, optical works, etc.; (3) those where the product is quasimonopolized and where the manufacturer can accordingly resist pressure from dealers; (4) those where storage costs per dollar of value are not excessively high. Such industries are important but there are many others which do not fall into these four categories. In those which do not, the elimination of seasonal fluctuations is at present almost impossible.

This is particularly true in industries where styles change rapidly, as in the manufacture of clothing and shoes and more particularly in the women's branches of both of these industries. Women's clothing stocks are almost as perishable as radishes or celery. A style which seems good one week may be displaced by another the following week. In an industry such as this, with small and highly competitive plants, it is suicide for a firm to manufacture goods to stock. A manufacturer must instead produce after the orders have been given him by retailers or jobbers. With the increase of hand-to-mouth buying, the volume of individual orders is becoming smaller and the time allowed for delivery shorter. Some relief might be found by following the H. A. Dix Co., which manufactures standardized garments during the slack seasons, but as the desire for more individualized dress on the part of women increases, the practicability of

this outlet has steadily diminished. Women's shoes have become almost as disorganized in their styles as women's clothing, and the increase of the style factor has compelled the International Shoe Co. largely to abandon its former program of stabilization.

#### Weather Changes Will Continue to Cause Unemployment

It is also true that while we can mitigate we can not entirely remove the direct influence of the weather in causing unemployment. More building is now done in the winter than was formerly believed possible, but even at best the inclemencies of winter weather in this State will always cause a considerable amount of unemployment. Such stoppage of work will not only affect workers in the building trades but will cause irregularities in industries producing building materials. Such goods are bulky and have high storage costs. This will continue to serve as a deterrent against large quantities being produced to stock. The canning of food can be better regularized than it is to-day but it is idle to hope that in the predictable future all unevenness can be ironed away.

We must, therefore, face the fact that while good management can reduce it can not cure seasonal unemployment and that even if industry were to set itself to the task with far more energy than it has shown in the past a considerable amount of seasonal unemployment would exist.

#### Cyclical Unemployment

DURING periods of cyclical unemployment individual firms are to a large degree helpless to overcome the numerous factors that create depression. Some business men have argued that by indulging in more advertising during depressions and by releasing new products, stabilization can be effected. But such a policy at best can only be practiced by firms producing specialty goods. It is patently impracticable for producers of standardized consumers' goods or of capital goods who are of course most severely hit by periods of depression. Furthermore, the increase in business which the specialty firm may obtain is primarily at the expense of other industries and hence does not help in the general solution. The ultimate control of the business cycle is in our opinion still a long way off. It probably involves some form of international action governing the supply of money and credit which will stabilize the general price level and so prevent those fluctuations which encourage business to peak activity during periods of prosperity and discourage it from production during periods of depression.

The State and municipal governments are not as helpless in these emergencies as are private industries. They can time their public works so that an appreciable volume of additional work can be undertaken as private business slackens. In order to do this adequately, however, it is necessary for the State and the municipalities to draw up long-time programs of improvements and to obtain authorizations for the necessary bond issue. Considerable progress has been made in framing such programs for the State and for certain branches of the city governments in the State, but there needs to be a general adoption of the idea by all the municipalities. As a depression approaches, the State and local authorities could accelerate construc-

tion and thus afford a considerable measure of relief. In order to do this effectively, however, there should be coordinated action on the part of the State and municipalities and we suggest that the State government assume the initiative in setting up a State planning board which will be headed by the State director of public works and include the responsible executives of the chief cities and counties of the State.

Added construction by private business during periods of depression will also be of assistance. Because of lower material and labor costs and the lower rates of interest such a policy will in many cases prove to be actually economical for the large enterprises.

It has been a common practice during this depression for firms to work the major portion of their force part time instead of laying off a large portion completely and having the remainder work full time. Out of 598 firms with a total force of 180,000 which replied to a questionnaire we addressed to 1,400 manufacturing concerns, 157 employing 61,000 workers explicitly stated that they were following this policy. This sharing of work during periods of depression we heartily indorse. Less hardship is occasioned the employed group by having their incomes somewhat reduced than for some to be totally deprived of earnings, and employers are enabled to keep their forces more nearly intact for the period of revival which sooner or later must follow.

#### Technological Unemployment

WHILE ultimately the workers displaced by improvements in machinery or in management may find work, the intervening period of unemployment is likely to be onerous and when new work is found it is often at a sacrifice in earnings.

Ways must be found therefore to lighten the burden which society now compels the workers to bear alone as the price of industrial progress. The following methods are now being used by some concerns and deserve to be much more widely copied.

1. Technological changes are planned especially with a view to minimizing the resulting displacement of labor; improvements are introduced gradually instead of in revolutionary fashion and are especially furthered during periods of prosperity.

2. When it is necessary to reduce the working force because of technical changes such reduction is affected by not replacing normal losses due to death, superannuation, separation, etc., rather than through outright dismissal. This is the policy followed by the Baltimore & Ohio Railroad.

3. A dismissal wage is paid to those who are dropped because of technical and administrative changes. This is done by the John A. Manning Co., the Delaware & Hudson Railroad, and has been paid under certain circumstances by Hart, Schaffner & Marx, and the United States Rubber Co. While these dismissal wage payments should be adequate in amount they need be paid only in cases of dismissal for lack of work.

In addition, society can and should provide at least three other services which will help ease the worker's transition from declining to expanding industries:

1. Competent and impartial agencies, preferably governmental, should issue from time to time forecasts of those industries where, because of impending technical changes and an inelastic demand for

the commodity, a decline in the number of workers is imminent. Such information, judiciously distributed, would restrain many young people from entering industries on the downward trend, and would lead others to leave them as opportunities arose elsewhere.

2. Displaced workers should be reeducated for work in other lines and especially for such occupations as they may be fitted for in the expanding industries.

3. An adequate system of public employment offices to facilitate finding work for those displaced.

### Public Employment Offices and Chronic Unemployment

LOGICALLY, an all-inclusive State employment service, by pooling the labor reserves, should diminish the idle surpluses which tend to be retained by individual firms and industries. An employment service could thus help decasualize many workers and diminish unemployment. By centralizing applications for men and for work, it could also reduce time lost by workers between jobs. It would free workers from high fees charged by private agencies and would tend to remove the frequent abuse of splitting such fees between foremen and agencies, a practice which induces arbitrary firing. It would, moreover, give supplementary services to groups such as juveniles, women, and the older employees who would otherwise be inadequately aided.

We must be frank to say, however, that the development of the public employment offices has not in the past been such as to realize these possibilities. Part of this failure has been due to inadequate funds, but part has also been caused by a lack of interest and competence on the part of the staff which has until recently existed. As a result of the survey conducted by an advisory committee appointed by the industrial commissioner, Frances Perkins, the management of the State public employment offices has been changed and improved methods adopted. The improvement which resulted was evidenced by increase in placements from an average of 4,800 in January and February, to 8,000 in April, 10,400 in May, and 7,600 in June, 1930. This betterment was effected in the face of a falling labor market. This committee believes that the public employment service should be furnished with additional funds and that advisory committees of employers and workers should be created to cooperate with them in the different cities where there are offices. The practice of associating industry and employee representatives in the management of the offices should tend to popularize them by improving their opportunity to secure openings for competent workers. The New York labor market is now broader than the confines of the State itself. Our business establishments draw workers from all parts of the Atlantic seaboard and from other regions of the country as well. Our workers in turn frequently seek work in other States. There is need, therefore, of a vigorous and effective federated system of State employment offices which will manage interstate clearance of labor and which will promote efficient employment work in other States. This is the type of system contemplated in the bill introduced in Congress by Senator Wagner of this State which, having passed the Senate, is now before the House of Representatives.

We believe that a substantial improvement in the condition of the unemployed would be effected if, instead of the present chaotic and ill-supervised way in which private employment agencies are licensed by the municipalities, a centralized system of State licensing and inspection were substituted.

#### Stabilization of Wage Earners' Incomes During Periods of Depression

WE MUST face the fact that despite the efforts to minimize it some unemployment will continue. Good management may reduce but will not eliminate seasonal unemployment. Good management, in its zest for improvements, may on the other hand, at times increase technological unemployment. Cyclical fluctuations may be lessened in part by an intelligent public works policy, but their control lies outside the power of State and Federal agencies.

Despite all efforts therefore a large number of workers and their families will continue to confront hardships from the effects of business depressions. How then may these workers and their dependents be protected against the hardships and uncertainties of these periods? Society can not rest until it has satisfactorily answered this question. Charity, while necessary at present, should not be the final method by which the worst effects of unemployment are alleviated. Charitable relief is often inadequate in amount and carries with it a sense of degradation which causes large groups to suffer greatly before they will ask for aid.

Several courageous plans have been launched by employers and workers to meet this problem. In the clothing and fur trades of New York City, employers and employees have set up joint insurance funds which give relief to the most needy unemployed. A similar fund has been established in the men's clothing industry of Rochester and New York. In the last few months the General Electric Co., under the leadership of its president, Mr. Gerard Swope, has initiated a comprehensive plan which has now been adopted by virtually all of the constituent works of the company. This plan calls for the payment of 1 per cent of the earnings of workers who accept the plan, matched by equal contributions by the company. While the plan does not provide for workers who are dropped from the company's employ because of lack of work, it does propose to take care of those who are laid off but still retained on the rolls without pay. After a 2-week waiting period during which no benefit is given, the unemployed worker is paid 50 per cent of his average full-time earnings, with a maximum limit of \$20 a week, for not more than 10 weeks during the year.

A further interesting feature of the plan is that when the expenditures from the fund are equal to its receipts, the company proposes to declare a state of emergency and thereafter every employee at the particular works affected, from the manager down, will contribute an added 1 per cent of his full-time earnings, irrespective of whether he is or is not a member of the plan. At such times the sales force and general administrative staff, from the president down, will also contribute to the fund. This practice will put some pressure on the sales and administrative staffs to get business in order to keep the plant running. The company will add an extra 1 per cent of the pay roll to match the extra contributions of the workers. A maximum possible fund of 4 per cent can thus be set up.

While all of the workers will thus be liable for assessments during periods of emergency, benefits may only be paid to those who have previously agreed to have 1 per cent deducted from their earnings. Since the large majority of employees in the several plants who voted favorably for the plan automatically become members of the plan and eligible for its benefits there is a very strong incentive placed upon the remainder also to join and thus to be able to share the protection which they may be assessed to maintain. It is expected therefore that nearly all of the 88,000 employees of the company will in the not distant future come under the plan.

Such attempts as these to protect workers and their families against one of the greatest causes of misery in modern times are worthy of all praise. They should be studied by private industry and by labor and in one form or another, whether as dismissal wages or insurance against unemployment, should be widely copied. Such payments are not doles nor are they merely palliatives. In the first place, they extend to labor the same type of financial protection against depressions and bad years which many well-managed companies can now give to their stockholders. Such systems will also help stabilize industry itself. The very fact that workers will have incomes which they otherwise would not receive will give them increased purchasing power in depression periods. If the success in accident prevention following the adoption of the compensation law is a criterion of what will happen when unemployment is made a direct expense to industry, as it is made in the General Electric Co., there will be added incentive to reduce it and industry will turn with increased vigor to those regulatory devices which are designed to lessen seasonal fluctuations.

If reasonable stabilization of the wage earners' incomes can be effected by voluntary action of employers and employees for the majority of the workers, a great boon will result to the State. Perhaps some form of voluntary unemployment insurance can be devised and paid for by employers and workers analogous to group health and life insurance now so extensively supplied by insurance companies. If management does not bend itself to this task of stabilizing income, however, then it seems inevitable that the State will by its own initiative seek relief for the evils of unemployment as they affect the worker. We are aware that American opinion is by no means settled on the wisdom of such elaborate systems of unemployment insurance as have been adopted in England and European continental countries. It fears addition to the already extensive bureaucracies; it hesitates to dampen effort to sustain business activity, and to discourage the provision by individual workers for bad times out of savings made when times are good. On the other hand the public conscience is not comfortable when good men anxious to work are unable to find employment to support themselves and their families.

The subject needs patient, full, and fair-minded investigation. There needs to be much public discussion of the matter in the light not of prejudice nor misunderstanding nor arbitrary solutions, but of scientific inquiry and a complete searching of the facts and analysis of possible plans.

You will best know how to secure wide and thorough inquiry so as to ascertain what is most suitable for this State. The commission

has had impressed upon it the necessity of securing, if possible, the joint consideration of the question by the leading industrial States to the end that such solutions as may seem desirable may be designed to meet the needs of the principal industrial sections of the country. The problem is one that is wider than the borders of the State and should, we think, be approached with that fact in mind.

### Summary and Recommendations

WE THEREFORE recommend:

1. A serious and determined effort by management to lessen seasonal fluctuations in production and in employment through well-tested methods of regularization. Trade associations, chambers of commerce, and the State should facilitate this by supplying information and a staff which will help private enterprises to reduce seasonality. It would be desirable for the State department of labor to have one or more competent production engineers or experienced business men whose services could similarly be placed at the disposal of the smaller firms who wish to stabilize but who do not have a sufficiently specialized managerial staff to work out the method of doing so. In the selection of these experts, the advice of professional associations of engineers and of managers should be followed.

2. Management should take all possible steps to lessen the temporary unemployment which may be caused by technical and policy changes. Dismissal wages should be paid to those displaced because of impersonal forces rather than personal fault.

3. Increased appropriations should be provided for the State employment service and the fullest efforts made to get the working cooperation of employers and labor in all cities where offices exist. As these offices increase in strength, an earnest effort should be made to decasualize industry by eliminating the surplus labor reserves. State licensing and inspection of private employment agencies should be substituted for municipal supervisions.

4. Communities should organize committees to consider the problem of local unemployment. These groups can be of service in promoting the movement for regularization, in improving the local employment offices, in helping frame a public works policy, and in stimulating community action to relieve distress and to consider remedies.

5. There should be set up a State planning board to help frame a long-time program of public works for State and municipal governments and to accelerate work on this program during periods of business depression.

6. Sharing of slack time among workers during periods of depression to the fullest degree possible rather than dismissing a portion of the employees entirely from work is a desirable practice.

7. Adoption by industry of insurance plans which will help to stabilize the wage earners' incomes during periods of unemployment. Full and impartial investigation of this question by a properly constituted national body to determine what can be done to supplement efforts of private industrialists and workers to protect the working people of the Nation against the effects of unemployment too great for individual resources to offset.



# INDUSTRIAL AND LABOR CONDITIONS

## Annual Report of the Secretary of Labor, 1930

**I**N THE Eighteenth Annual Report of the Secretary of Labor, for the fiscal year ended June 30, 1930, James J. Davis reviews the activities of the United States Department of Labor during his administration of nearly 10 years, which terminated December 1, 1930. The accomplishments of various bureaus and services of the department up to June 30, 1930, are here summarized.

### Conciliation Service

**DURING** the administration under review the Federal Conciliation Service has handled 4,898 cases involving controversial situations between men and management. These strikes, threatened strikes, and lockouts directly and indirectly affected 5,114,484 wage earners. During the 10-year period there has been a gradual reduction in the number of disputes affecting the great industries of the country. The immense effect of the Conciliation Service in "maintaining peace and harmony in American industry and the prevention of losses can not be measured in terms of dollars and cents."

### Employment Service

**I**N 1921, in the face of what was perhaps one of the worst unemployment crises in the history of this country, steps were taken to reorganize the United States Employment Service, and this agency in cooperation with the several States proved itself of real value in that emergency.

As now constituted the Employment Service performs five distinct functions, two of which are in cooperation with the several States and municipalities, namely: The operation of public employment offices, and the junior division (in cooperation with schools in junior guidance and placement work).

Three functions are maintained as strictly Federal operations: An information division, a farm-labor division, and a specialized employment service for veterans.

The Employment Service, in cooperation with the several States and municipalities, has increased from year to year until at the present time there are 215 cooperative offices, for which the service acts as a clearing house. It gives some financial assistance, provides standard forms for conducting the work of the offices, and extends such other courtesies and assistance as it can to these cooperating agencies.

The junior division offers a wonderful field for practical service. With over 2,000,000 boys and girls leaving school each year to enter business and industry, it would be well, the Secretary believes, for

every high school to maintain a junior guidance and placement office for the purpose of directing those who are leaving school to proper vocational employment channels.

The industrial employment information division renders a conspicuous service by developing monthly current industrial information from approximately 600 industrial centers.

The farm-labor division has been increased from 1 permanent office in 1921 to 19 permanent offices. During the harvest season it operates more than 100 temporary offices to meet emergencies that arise. Before the Federal Government undertook to recruit and distribute workers to harvest the season's crops there was no intelligent direction of men for this work. Each State was competing against the others for harvest workers. The supplying of labor to harvest perishable crops without loss to the farmer is a service that can not be measured in monetary values. For several years now no crops have been left unharvested for lack of help in the areas served by the farm-labor division. During the last calendar year the farm-labor division was responsible for directing more than 600,000 men for the harvesting of cotton, wheat and other small grains, hay, berries, fruits, vegetables, legumes, potatoes, corn, and beets, and for miscellaneous and general farm work.

The placing of more than 3,000 men in jobs within the space of less than four months demonstrates the value of the recently established specialized employment activity for all ex-service men. This has been especially helpful during the present stress of unemployment when thousands of ex-service men were seeking work. Twenty-two of these offices are now operating at strategic points throughout the country.

#### Bureau of Immigration

AFTER analyzing the immigration situation at the present time as compared with that prior to the passage of the quota-limit acts, the Secretary reports in brief that immigration from Europe has been reduced from an annual average of about 813,000 in the 10 years of normal unrestricted immigration (1901-1910) to an average of 156,000 at the present time.

Immigration from Canada which averaged about 18,000 from 1901-1910, and that from Mexico which averaged about 5,000 during the same 10 years, increased to an average of 94,000 and 47,000, respectively, following the adoption of the European quota system in 1921. There has never been any considerable volume of immigration from other countries of the New World, and though the number has increased to some extent in recent years, it is still relatively unimportant. Finally, real immigration from China, Japan, and other countries of the Orient has been almost stopped.

Referring to his repeated advocacy of the adoption of a more scientific system of selecting immigrants, the Secretary declares that the industrial depression during the past years has brought out more obviously than ever the need for the departure from our existing haphazard method of immigrant control.

Among the recommendations made by him for amendments to immigration legislation are the following: That no consular immigration visas should be issued to unattached applicants except on a

definite showing that the admission of such applicants would not be detrimental to employment conditions in the United States; that Congress consider the feasibility of adjusting the quota system so that it will prove an acceptable substitute for the laws and parts of laws that relate only to Chinese and other Oriental immigration; and that it be made possible to expel from the United States certain classes of obviously undesirable aliens who are now immune from deportation—namely, habitual law breakers.

In concluding this section of his report, the Secretary says:

I am firmly convinced that the law relating to the expulsion of extremists ought to be amended to provide that any alien who at any time after entry to the United States becomes affiliated with any organization the purpose of which is to supplant our form of government with a totally different system, or who engages independently in advocating such change, through force or violence and not by the exercise of the peaceful methods provided by the Constitution, should be deported from the United States.

### Bureau of Naturalization

ATTENTION is called in the report to the marked and most encouraging change in the public attitude toward United States citizenship, and its obligations.

Years ago naturalization was the football of politics, and the manner of its bestowal prior to Federal supervision assumed the proportions of a national scandal. The highest gift which this country could bestow was conferred upon thousands of the unfit in return for an unintelligent vote. Such proceedings are now happily a thing of the past.

Among the beneficial changes put into effect in the Naturalization Service since 1921 are the redistricting of the field territory, the reassignment of the field personnel, and the providing for the examination of applicants and their witnesses before the filing of their petitions.

Recommendation is made by the Secretary for (1) a codification of the naturalization laws; (2) the passage of a law to provide for the revocation of citizenship in cases in which within 5 years after its acquisition persons commit felonies or acts of gross immorality; and (3) the enactment of a law requiring an applicant for citizenship definitely to establish his or her ability to speak, read, and write English and to evidence a comprehensive knowledge of the United States system of government.

### Housing Corporation

ON March 4, 1921, when Secretary Davis assumed the duties of office, the property interest of the Housing Corporation remaining to be disposed of had a total value in excess of \$28,000,000, and consisted of real-estate sales contracts aggregating \$19,500,000; unsold properties appraised at approximately \$1,000,000; and transportation loans in the sum of \$7,500,000.

During the past nine years the liquidating program has had for its object the attaining of the greatest financial return to the Government, as well as to the communities in which the projects were located.

In liquidating the assets of the Housing Corporation, there has been covered into the Treasury of the United States \$31,009,190.51,

which was derived from the following sources: Collections from rentals and sales, \$13,546,674.37; interest collected on rental and sales accounts, \$4,912,813.71; liquidation of transportation loans, \$5,203,350.80; interest collected on transportation loans, \$1,284,694.17 construction salvage, \$163,476.06; operation of Government hotels and miscellaneous receipts, \$5,898,181.40.

The Government hotels, erected to provide housing accommodations for some 2,000 female civilian employees drawn to Washington by the war emergency, were operated until June 30, 1930, when, in order to make way for the enlarging of the Capitol grounds, it became necessary to raze these war-time structures.

#### Bureau of Labor Statistics

THIS departmental agency has continued to cover all of the various subjects of inquiry initiated prior to 1921 and in addition has undertaken many new lines of labor statistics and research.

In 1921 the bureau began the collection of current data on building permits issued in principal cities. Such permits are particularly valuable employment indexes. The results of the bureau's compilations and analyses of these permits are published monthly and now cover 288 cities having a population of over 25,000.

The work of the bureau in the field of accident statistics has also been greatly improved by the inauguration of a series of annual reports on accident statistics in the various States. The work is being done in cooperation with the appropriate State officials, but the labor of tabulation and analysis falls upon the bureau. The effort of the bureau to coordinate the work of the State agencies and to act as a clearing house for this mass of scattered material will no doubt be greatly helpful in the movement toward better accident statistics. The bureau began in a small way the collection of monthly data on employment in 1915. Since then the scope of the work has been constantly expanded, with the result that in June, 1930, the monthly reports covered 13 industrial groups, including such important ones as mining, public utilities, and wholesale and retail trade, and represented 40,000-odd establishments with more than 5,000,000 employees and pay-roll totals of about \$135,000,000 per week. Less spectacular, but also of interest, is the expansion of the wholesale-price reports. In 1921 the wholesale-price indexes were based on reports covering 404 commodities. They now include 550 commodities.

One of the most important additions of recent years to the bureau's work has been the enlargement of the annual survey of union wages to include reports from all trade-unions and not merely from a selected group of organizations, as had previously been done.

In 1921 only three subjects were on a basis of monthly publication; namely, volume of employment, retail prices, and wholesale prices. In June, 1930, the number of subjects for which monthly statistics were completed and published had increased to seven, the additional subjects being labor turnover, building permits, industrial disputes, and wage changes. This represents a notable step in advance. Moreover, the speed of publication has been greatly increased through the development of a system of press releases and printed pamphlets.

Another significant departure in the policy of the bureau as regards its reports has been the making of the Labor Review into the principal medium of publication for all the research work of the bureau. Now the Labor Review carries summary data of every study immediately on completion of the investigation and, necessarily, long before the full report can be issued in bulletin form.

Another recent and very important undertaking of the bureau is that of compiling current statistics on labor turnover. Occasional studies on this subject were made many years ago by the bureau, but only in 1929 was this work systematized and arrangements made by which regular monthly reports were obtained. This work has been constantly expanded until now the rates are based on reports from more than 2,000 establishments, representing more than 1,500,000 employees.

Of the new lines of research, particular mention should be made of the series of studies of labor productivity in various industries. The purpose of these studies was to determine scientifically the increase in man-hour output as a result of the improved mechanics and methods of industry. Very thorough studies of this character have been completed for the glass industry, for newspaper printing, and for merchant blast furnaces, and similar studies are under way for other important industries.

#### Children's Bureau

COMMENTING on the notable developments within the last decade in child welfare activities, the Secretary states that the Children's Bureau has contributed to many of these developments through scientific studies, correspondence with individual mothers, preparation and distribution of popular educational material, and financial aid and technical leadership made possible by the maternity and infancy act, which was in operation from 1922 until June 30, 1929.

Maternal and child-hygiene studies which have been completed or are in progress concern causes of death and sickness of infants during the first month of life, the period in which more than half the number of deaths during infancy occur; causes of death in child-birth; prevalence and methods of control of rickets, a disease of growth resulting primarily from lack of sufficient sunlight; and the effect of posture training on the health of children. Inquiries into child-labor conditions in various occupations have continued, and increasing emphasis has been placed upon studies of vocational opportunities for boys and girls.

Studies of juvenile and domestic relations courts have been followed by the drafting of comprehensive statements concerning the fundamental principles that should govern their operation. Cooperation with State commissions for the study and revision of child-welfare laws and with State departments dealing with dependent and delinquent children has been greatly extended. A conference of representatives of State departments dealing with dependent and neglected children was called by the Secretary of Labor for February 13 to 15, 1929, and attended by officials from 32 States and participated in by representatives of the Children's Bureau. Current sta-

tistics of child labor and of delinquent and dependent children dealt with by juvenile courts are received from steadily expanding areas.

During the 9-year period from July, 1921, to June, 1930, 5,643,226 free copies of bulletins on prenatal care, infant care, child care, and child management have been distributed, while 2,000,000 copies have been sold by the Superintendent of Documents. Over 1,000,000 letters were received, of which about 900,000 represented requests from individual mothers for bulletins on the care of the mother and child, or from organizations making requests for the mothers for these bulletins. Brief folders dealing with various aspects of prenatal and child care have also been widely distributed, and the bureau's exhibit material, which is loaned to national, State, and local agencies, has been expanded and improved.

With the passage of the maternity and infancy act in 1921 the bureau was enabled to cooperate with the States in the development of an educational program for the promotion of the health of mothers and babies. Forty-five States and the Territory of Hawaii accepted the provisions of the act and received Federal funds to carry out plans approved by the Federal Board of Maternity and Infant Hygiene, of which the Chief of the Children's Bureau was chairman. Prior to the passage of the act only a few States and cities had initiated any work directed toward lessening the risk of death and illness due to causes connected with childbirth, and state-wide child-hygiene programs had been little developed in most States. The infant mortality rate for the expanding birth-registration area, which now includes 46 States and the District of Columbia, has declined from 76 per 1,000 live births in 1921 to 68 in 1929. The maternal death rate, long stationary, has at last begun to show indications of a downward trend, and the reduction is greatest in the rural areas, to which special attention was given under Federal and State cooperation.

#### Women's Bureau

THE standards formulated by this bureau in its early days remain, the Secretary reports, the approved dictum for the employment of women.

Of the 79 bulletins issued by the bureau to date, 64 have been published within the present administration of the department, as have 10 of the 12 annual reports. These 74 documents comprise more than 6,200 pages, the findings and conclusions of scientific study by field investigation or other research.

The bureau's reports go to 790 libraries, some 500 of which are connected with educational institutions and supply reading matter to students of economics and sociology. Furthermore, they are sent to 500 or more educators—professors, deans, superintendents, teachers—scattered over the United States. In addition, the exhibits that present the bureau's findings in pictorial or other popular form are lent to scores of organizations in every State of the Union and on request have been sent to Panama, Cuba, Porto Rico, Hawaii, and 18 foreign countries.

The educational effects of the bureau's work are evident in the legislation in a number of States; in the increased care in making sani-

tary regulations and commissions' rulings; and, more than all, in the voluntary action of employers in correcting undesirable conditions disclosed in the surveys.

Some of the most interesting studies ever undertaken by the bureau are now in progress. For example, unemployment in the cigar industry because of the extended use of machines; in radio manufacturing because of the seasonal character of the industry; and among wage earners in general in an industrial city of the Middle West; output under longer and shorter hours in plants that have worked for considerable periods under different hour schedules and that have complete production records; hazards in the use of substances that contain harmful chemicals, the present survey dealing with spray painting in the stove industry.

The bureau has not been able as yet to make a scientific study of the controversial question of the employment of married women and, of more recent development, the problem of the woman over 30 or 35 who is unable to secure industrial employment on account of her age, part of the broad subject of the effects on the wage earners of changed methods in industry and the extent of unemployment directly traceable to such changes. Nor is it at present equipped to make a study on piecework, on posture, on fatigue, and a number of other important matters that await its investigation.

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### Increase of Mexican Labor in Certain Industries in the United States

**I**N AN article on "Some Aspects of Mexican Immigration," Paul S. Taylor presents two tables for the purpose of measuring the penetration of Mexican labor in two widely separated sections of the United States and in certain units of three outstanding industries—transportation, the manufacture of steel, and meat packing.<sup>1</sup>

Although the use of Mexicans for maintenance-of-way work dated back to the last decades of the preceding century, such laborers were employed during the war and have been used since by a number of eastern and western railroads.<sup>2</sup>

More than 10 years ago the Pennsylvania Railroad Co. brought 2,000 or 3,000 Mexicans from the Southwest, but by August, 1926, there were only 253 employed on the lines east of Altoona, where most of the company's Mexican track labor outside of Chicago is found. The Baltimore & Ohio Railroad and possibly other railroads also brought Mexicans east at approximately the same period as did the Pennsylvania Railroad, but within a few years most of these railway workers entered other industries in the East or returned to the Southwest. At present, however, Mexicans are shipped in considerable numbers from Chicago for employment on railroads both east and west, especially for extra gangs in summer. The principal railroads using Mexican labor are those operating west of

<sup>1</sup> The Journal of Political Economy, Chicago, October, 1930, pp. 609-615.

<sup>2</sup> Journal of the American Statistical Association, June, 1930, p. 206: "Employment of Mexicans in Chicago and the Calumet Region," by Paul S. Taylor.

Chicago with lines tapping the Southwest. The increasing use of this racial group by these roads is indicated in the table below:

CHANGES IN RACE AMONG COMMON LABORERS IN MAINTENANCE-OF-WAY DEPARTMENTS OF NINE WESTERN RAILROADS, BETWEEN 1909 AND 1928-29<sup>1</sup>

Race	1909		1928-29	
	Number	Per cent	Number	Per cent
American and miscellaneous white.....	10,944	31.3	12,020	31.3
American colored.....			481	1.3
American Indian.....	35	.1	149	.4
Chinese.....	406	1.2	119	.3
East Indian.....	73	.2	1	
Filipino.....			287	.7
Greek.....	7,653	21.9	767	2.0
Italian.....	5,941	17.0	1,337	3.5
Japanese and Korean.....	3,895	11.2	384	1.0
Mexican.....	5,972	17.1	22,824	59.5
Total.....	34,919	100.0	38,369	100.0

<sup>1</sup> The railroads, or portions thereof, and dates of reporting in both 1909 and 1928 or 1929 are: Southern Pacific, May 1; Atchison, Topeka & Santa Fe, west of Albuquerque, May 31; San Pedro, Los Angeles & Salt Lake City, July; Union Pacific, July; Oregon Short Line, May 31; Denver & Rio Grande, July 1; Oregon Railroad & Navigation Co., April; Northern Pacific, west of Paradise, Mont., June 1; Great Northern, Spokane and Cascade divisions, July.

As the author points out, the principal change disclosed in the above tabulation is the great increase in the use of Mexican labor, which in 1909 constituted only 17.1 per cent of the common labor in the maintenance-of-way departments of the 9 railroads covered, while in 1928-29 the proportion of Mexican workers was 59.5 per cent. The statistical record also shows the results of the slowing down and the restriction of European immigration, the exclusion of Orientals, the tendency of older immigrants to take up other occupations, and the unrestricted Mexican immigration until 1929.

Statistics on the annual employment of Mexicans and Negroes in two steel plants and two packing plants for specified years are given in the following table, which is a contribution toward the comparison of the migration of Mexicans and Negroes to the Chicago-Gary region. As will be noted, the data on Mexicans in the steel plants begin with 1916, when such workers were first recorded separately in the nationality reports of these establishments. The figures for Mexicans in packing plants commence with 1917.

One steel plant reported 7 negro employees in 1910 and 8 in 1911, but the steel plant having approximately all of the 266 negroes in 1912 had no nationality reports on file previous to that date.



NUMBER AND PER CENT OF MEXICAN AND NEGRO EMPLOYEES IN TWO STEEL PLANTS AND TWO MEAT-PACKING PLANTS OF THE CHICAGO-GARY REGION

Year	Two steel plants				Total employees	Two meat-packing plants			
	Mexicans		Negroes			Mexicans		Negroes	
	Number	Per cent	Number	Per cent		Number	Per cent	Number	Per cent
1912			266	1.5	17,441				
1913			112	.9	12,693				
1914			70	.7	9,964				
1915			196	1.1	17,265				
1916	18	0.1	558	2.9	19,490				
1917	33	.1	1,274	5.5	23,140	7	(1)	(2)	20,901
1918	104	.5	1,546	6.7	23,073	78	0.3	(2)	27,254
1919	142	.7	2,699	13.4	20,112	79	.3	(2)	27,642
1920	283	1.3	2,580	12.1	21,365	266	1.5	5,110	27.8
1921	49	.4	1,375	10.0	13,780	82	.6	2,928	20.3
1922	313	1.6	2,901	15.0	19,403	86	.7	4,236	32.7
1923	1,205	6.0	2,761	13.8	19,985	482	3.2	5,148	33.6
1924	1,749	7.9	3,438	15.5	22,118	711	4.8	4,840	32.4
1925	1,866	8.5	3,105	14.1	22,052	644	4.7	4,244	30.6
1926	1,895	9.1	2,678	12.9	20,762	612	4.5	4,068	29.6
1927	1,819	8.8	2,568	12.4	20,723	596	4.5	3,864	29.0
1928	2,081	9.4	2,716	12.3	22,061	746	5.7	3,894	29.5

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

<sup>2</sup> Data available for one plant only: 1917, 1,466; 1918, 1,624; 1919, 1,710.

As indicated in the above table, Mexicans appeared later than Negroes in both the steel and packing plants. Steel manufacturers brought numbers of Mexicans from the southwest, which explains the larger proportion in steel manufacture than in meat packing. By 1928 the Mexicans constituted 9.4 per cent of the labor force of the two steel plants while Negroes, who in 1924 formed 15.5 per cent of such force, had declined to 12.3 per cent. The packers, on the other hand, brought Negroes north, such workers in 1928 making up almost 30 per cent of the labor force of the two packing plants, and the Mexicans only 5.7 per cent. Over a 10-year period, both of the labor groups have expanded substantially, not only in numbers but in the proportions they constitute of the total workers. It is obvious that the other classes of employees have been displaced during the decade 1919-1928.

### Labor and Social Conditions of Mexicans in California

THE report of the Mexican Fact-Finding Committee dealing with Mexicans in California was published in October, 1930. The committee was appointed by the Governor of the State, and consisted of the director of the California Department of Industrial Relations, acting as chairman of the committee, and the directors respectively of the California Department of Agriculture and the California Department of Social Welfare. Some of the principal findings presented in the report are given below.

#### Mexican Immigration Before and After Passage of Quota Acts

It is conservatively estimated that between 1900 and 1920 approximately 200,000 Mexicans came into the United States illegally.

The rush of Mexican immigration commenced during the period of the World War, doubtless as a result of the shortage of labor at that time. During three fiscal years in which the 3 per cent quota act of 1921 was operative the reported number of Mexican immigrants coming into this country rose from 18,246 in 1922 to 87,648 in 1924—from 5.9 per cent of the total immigration in 1922 to 12.4 per cent in 1924. In the four fiscal years under the 2 per cent quota act the reported immigration from Mexico rose from 32,378 in 1925 to 57,765 in 1928, constituting 11.0 per cent of all the immigration to this country in 1925 and 18.8 per cent in 1928. The decline in Mexican immigration in 1925 was due to the fact that that year was the first subsequent to the adoption of visa requirements and the visa charge of \$10.

Mexican immigrants are taking the places of immigrants from eastern and southern Europe and are entering this country in greater numbers than any European immigrant race. Under the existing quota act more than 40 per cent of all alien immigrants declaring California as their intended permanent residence are Mexicans. In brief, the principal immigrant race now coming to California is the Mexican.

Neither Mexico's official statistics on emigration nor the United States' figures concerning Mexican immigration are complete. Beyond a doubt, there are now more than 1,000,000 Mexicans in the United States and under existing immigration legislation, the committee declares, unlimited numbers can continue to come in. More than 80 per cent of the Mexicans residing in this country in 1920 were living in three States—Arizona, California, and Texas. The proportion residing in California rose from 7.8 per cent of the total in the country in 1900 to 15.2 per cent in 1910 and to 18.2 per cent in 1920.

Considering only the total Mexicans residing in the three States of Arizona, California, and Texas, it is a fact that the proportion of this total residing in California rose from 8.7 in 1900 to 17.9 in 1910, and to 22.1 in 1920. During the same period, the proportion of this total residing in Texas declined from 76.1 in 1900 to 66.2 in 1910, and to 62.6 in 1920. The proportion of this total residing in Arizona remained about the same from 1900–1920.

While of the total immigrant alien Mexicans admitted during the three years 1909–1912, 3.8 per cent designated California as their State of intended future permanent residence, during the three years 1924–1927, 17.0 per cent designated California as their State of intended future permanent residence.

The proportion of Mexican immigrant aliens declaring California as their intended future permanent residence expanded 1305 per cent from 1909–1912 to 1924–1927. Between the 10-year periods 1900–1910 and 1910–1920 percentual expansion in the Mexican population was much greater in California than in either Arizona or Texas. A comparison of census and immigration statistics indicates that Mexican immigrants drift into California from Texas and in the process of this drifting many settle in Arizona and New Mexico.

#### Foreign-Born Population of California

OF THE people of Mexico, approximately 10 per cent are of white stock, 29 per cent pure Indian, and 59 per cent mestizo. It is conservatively estimated that the present Mexican population in California is about 250,000. In 1910 the Mexicans constituted 6.5 per cent of the

total foreign-born whites in that State; in 1920 the percentage was 12.7. Between 1910 and 1920 the number of Mexicans in California increased more than the numbers of any other foreigners in that State during the same period.

If the United States immigration laws continue to permit unrestricted immigration from Mexico, this group of aliens will, the committee thinks, predominate among the foreign-born people in California. Between 1910 and 1920 the number of Mexican-born whites increased 159 per cent in California as a whole; the increase of Mexican-born persons in 12 cities of the State combined was 214.8 per cent, the increase running as high as 284.9 per cent in Los Angeles, 312 per cent in Oakland, and 368.9 per cent in Sacramento.

#### Naturalization of Mexicans

IN 1920 only 4.9 per cent of the Mexican males and females 21 years and over residing in California were naturalized as compared to the 47.7 per cent naturalized among all foreign-born whites of both sexes 21 years of age and over residing in that State.

Of the total number of aliens admitted to United States citizenship during five fiscal years ended June 30, 1928, only one-tenth of 1 per cent were Mexicans. In 1920 the alien male and female Mexicans, 21 years of age and over, were 6.5 per cent of the total aliens 21 years of age and over residing in the United States.

Judging by the data presented, it appears certain that while the number of naturalized Mexicans will be somewhat greater in 1930 than in 1920, the ratio of naturalized Mexicans of the total alien Mexicans in the United States will be lower in 1930 than it was in 1920.

Attention is drawn to the fact that Mexicans are comparatively new immigrants in the United States and consequently their average length of residence here is less than for most of the other foreign groups. This may explain to some extent the low percentage of Mexicans naturalized. When an alien petitions for final citizenship papers, it is necessary for him to prove his legal admission to this country. As large numbers of Mexicans have come into the United States illegally, they can not, of course, meet the requirement.

#### Mexicans in Industries and Nonagricultural Occupations

IN CALIFORNIA manufacturing industries there are about 11 Mexicans in every 100 wage earners. In factories where there are both Mexicans and other workers, the Mexicans constituted 17 per cent of all the employees. The proportion of Mexicans in a number of industries ranged from 2.4 to 66.3 per cent. Over 50 per cent of all Mexicans in the industries in California are employed in establishments in Los Angeles County and only 10 per cent in establishments in San Francisco County. There are probably about 28,000 Mexicans in the manufacturing industries of the State, and at the time of the enumeration there were 2,700 Mexicans in fruit and vegetable canneries.

Based on reports from 159 building and construction companies employing 20,650 workers on June 15, 1928, the proportion of Mexicans in all classes of construction is 16.4 per cent. In May, 1928, there were 10,706 Mexican laborers on the pay rolls of six large interstate and interurban railroads in California. In brief, the report

states, Mexicans have secured a strong foothold in the industries of the State and are certainly displacing other immigrant races and the native-born.

#### Wage Rates of Mexicans in California

THE following data on wage rates for Mexicans in the manufacturing industries of California are based on the best available information:

Of 255 hourly wage rates reported for Mexicans, 43.6 per cent were under 50 cents; 24.3 per cent were from 50 to 55 cents; and 32.1 per cent were 55 cents and over, only 3.2 per cent being from 85 cents to \$1.10.

Of the 250 daily wage rates quoted, 26.8 per cent were under \$4; 32.8 per cent were \$4 to \$4.50; 13.6 per cent, \$4.50 to \$5; 12 per cent \$5 to \$5.50; and only 14.8 per cent, \$5.50 and over.

Of 136 weekly wage rates, 31.6 per cent were under \$20, 31.7 per cent from \$20 to \$26, 29.3 per cent \$26 to \$36, and only 7.4 per cent over \$36.

Most of the Mexicans in manufacturing establishments are laborers, but they are also found in relatively skilled occupations such as those listed below:

(a) In the metals, machinery, and conveyances group of industries: Blacksmiths, core makers, foundry machine molders, machinists, mechanics, pipe makers, and polishers;

(b) In the wood manufactures group of industries: Finishers, machinists, stickerman, and upholsterers;

(c) In the chemical, oils, and paints industries: Joint turners, mechanics, and painters;

(d) In the printing and paper goods group of industries: Bookbinders, and workers in photo and job press departments;

(e) In the foods, beverages, and tobacco group of industries: Bakers, butchers, mechanics, and packers.

In vegetable and fruit canneries, Mexican females are employed mainly in the cutting departments and occasionally in the canning departments. They are rarely used in the packing departments.

In building and construction Mexicans are employed mostly as common laborers, at pick and shovel work, at digging trenches and in cesspool work; also at grading. Reports from representative building and construction concerns indicate that the hourly rates of Mexicans in the industry run from 40 to 50 cents, and daily wage rates from \$3.50 to \$5, the prevailing rates appearing to be 50 cents per hour and \$4 per day.

On railroads Mexicans are used as "section and extra gang" laborers, their average rates being 38 cents per hour and \$3.06 per day.

According to reports from 14 private employment offices which in the calendar year 1928 sent out 14,343 Mexicans to various jobs, 39.6 per cent of these workers were railroad laborers; 24.4 per cent, agricultural laborers; 5 per cent, building and construction laborers; 26.6 per cent, other laborers; and 4.4 per cent workers in industries, in restaurants and hotels, in apartments and homes, and in mercantile establishments.

The average wage rates of Mexicans other than railroad workers sent to jobs by employment agencies are as follows: Hourly, with board 38 cents, without board 43 cents; daily, with board \$2.61, without board \$3.51; weekly, with board \$14.99, without board \$16.60; and monthly, with board \$47.75 and without board \$67.86.

On railroads, in building and construction, and in agriculture, free camping facilities are frequently provided.

The majority of Mexican alien immigrants who come to this country are "laborers" not "farmers and farm laborers."

#### Labor Needs in California in Crop Production

FROM the detailed evidence brought together in the report under review, concerning the labor requirements for crop production in California with special reference to Mexican workers, the fact-finding committee declares that the Mexicans form an important factor in such production and at present are one of the main sources of agricultural labor in that State. They will undertake work that white labor will not or can not perform. They toil under excessive heat, dust, isolation, and on temporary jobs, and can be used in gangs. Mexicans are preferred by a large majority of farm operators to Japanese, Filipinos, Porto Ricans, Chinese, Negroes, and East Indians. In brief, "a material and abrupt reduction in the present available supply of farm labor will force changes in California agriculture."

#### Health Relief and Delinquency Conditions Among Mexicans of California

MEXICANS constitute the largest group of unskilled, low-paid labor in California and they have come into the State willing to occupy the same economic level as in their own country. They have had little or no schooling and are unfamiliar with English. Before they came to this country they lived on a meager diet, paying little attention to sanitation and hygiene. Their infant mortality rate is high, as is also the rate for tuberculosis and other communicable diseases. They have had a feudal relation toward authority, making it difficult for them to adjust themselves to American traditions. Furthermore, the committee reports, there is a racial prejudice against them, especially against those of non-European stock who are not white and whose customs and habits are so different from the American standard.

Mexicans in California have a tendency to live in colonies both in urban and in rural districts, and this retards their assimilation with the native population. The housing facilities available to most of the Mexicans are often poor and do not conform to proper sanitation standards. Sales agreements frequently prohibit these aliens from buying property in any but Mexican districts. The existing ground-rent system in certain sections results in overcrowding and unhygienic conditions.

In 1929, births among Mexicans in California constituted 17.7 per cent of all births in the State. In certain cities near the border, the Mexican births constituted 60 to 70 per cent of all births.

In the seven years from 1921 to 1927 the excess of births over deaths among the white population of the unincorporated area of Los Angeles County was only 241, while the Mexican excess of births over deaths for the same period was 4,070.

In Los Angeles city for the 10-year period from 1918 to 1927 the total excess of births over deaths was 43,066, of which number 10,189, or 23.8 per cent, were Mexican.

The infant mortality rate in the unincorporated area of Los Angeles County in 1916 was 70 in 1,000 births for white babies and 285 among Mexican babies. In 1929 the white rate had been reduced to 39.6 but the Mexican rate was 104.5 in spite of great efforts on the part of the health department.

According to the Los Angeles Health Department, the rate of communicable disease cases among Mexicans is above that of the general population. The number of deaths per 100 for such cases was decidedly higher among the Mexicans. Approximately 23 per cent of the cases at the Los Angeles County Tuberculosis Sanitarium are Mexicans. In 1929 the Mexican deaths from tuberculosis in Los Angeles County (unincorporated area) constituted 21.25 per cent of the total deaths from this disease, and in 1928 the proportion of Mexicans in the clientele of the tuberculosis clinics operated by the City of Los Angeles was 27 per cent. A study made in 1926 disclosed that 23.8 per cent of all the Mexican cases (families) handled by the Los Angeles County Charities involved tuberculosis, while only 10.8 per cent of the non-Mexican cases involved such disease.

In the three years 1925-1927, the Women's Venereal Clinic of the Los Angeles City Health Department reported that its Mexican cases constituted 41.1 per cent of its total cases. Of all the cases receiving home nursing care in 1929 from the division of nursing of Los Angeles city, 29 per cent were Mexicans. The proportions of Mexicans in the State hospitals for the insane and among the admissions to State homes for the feeble-minded in 1927-28 were not large, being respectively 4.3 and 6.9 per cent. In 1929-30 the total of 31,375 patients treated at the Los Angeles County General Hospital included 5,516 Mexicans.

There is one Mexican among every 10 children receiving State aid in California. In 1928 the proportion of Mexican children in the orphanages of the State was 7.8 per cent and in Los Angeles County over 16 per cent of all the children in institutions were of the race in question. Five-sixths of the Los Angeles chest agencies give no assistance to Mexicans. Those organizations which do serve these people give them a great part of their service. The table following shows the percentages of Mexican cases reported by various other agencies and institutions:

PERCENTAGE OF MEXICAN CASES OF TOTAL REPORTED BY VARIOUS WELFARE AGENCIES OR INSTITUTIONS

Agency or institution	Year or period	Per cent Mexican cases are of total
Los Angeles County charities	1923-1928	25.0
Los Angeles County farm	1928	3.9
Orange County Social Service Department	1926-1928	140.0
County Welfare and Relief Department of Riverside	1923-1928	130.0
County Welfare Department of San Diego	1923-1927	120.0
San Quentin Prison	1908-1929	10.5
Folsom Prison	1929	6.6
Preston Correctional School for Boys	1928	20.0
Whittier Correctional School for Boys	1928	10.0
Ventura State Correctional School for Girls	1928	4.1
Public and private institutions for delinquent girls	1928	27.7
Los Angeles County Jail:		
Men	1927-1928	17.1
Women	1927-1928	14.8
Los Angeles City Jail	1925-26	14.6
	1926-27	16.2
	1927-28	17.5
Los Angeles County Juvenile Probation Department	1928	22.1
Juvenile Bureau of Los Angeles City Police Department (probation cases)	1925-26	13.4
	1926-27	13.1
	1927-28	12.2

<sup>1</sup> Approximate.

While the percentage of Mexicans among the probation cases handled by the juvenile bureau of the Los Angeles city police department shows a decrease in the 3-year period 1925-1928, the percentage of Mexican juveniles arrested during that period increased from 15.9 to 17.3.

#### Size and Income of Mexican Families

A HOUSE-TO-HOUSE investigation of Mexican families in Southern California disclosed the fact that the majority of the males included in the survey were unskilled laborers in agricultural pursuits. Many semiskilled and skilled workers, such as blacksmiths, carpenters, electricians, and mechanics, were, however, found among these immigrants.

Of 769 Mexican families covered by the investigation, 40.4 per cent had 3 children or fewer; 54.7 per cent, 4 children or fewer; and 45.3 per cent, 5 children or more. The average number of children per family canvassed was 4.3.

Of the 701 Mexican families for which reports on average monthly income were obtained, 69.2 per cent averaged less than \$100 per month; 20.5 per cent, \$100 but under \$150; 5.9 per cent, \$150 but under \$200; and only 4.4 per cent, \$200 or over.

According to a study of the total incomes for 12 consecutive months of 435 families, 47.1 per cent had yearly incomes of less than \$1,000; 31.5 per cent, \$1,000 but under \$1,500; and 21.4 per cent \$1,500 or over. The average yearly incomes of these 435 families were \$1,156.15. Of the 403 families with children for whom data were secured in yearly incomes, 142 (35.2 per cent) reported 250 children on full-time or part-time work, but mostly on part time.

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#### Labor Treaty Between France and Austria<sup>1</sup>

A TREATY dated May 27, 1930, concluded between representatives of the French and Austrian Governments provides for the protection of the nationals of either country who enter the other country in order to engage in work.

The agreement provides that every facility will be offered to workers of one country desirous of engaging in work in the other in taking up their residence in that country as well as to their families who may accompany them or join them later. Identification cards and passports will be provided them and no special authorization will be required when these workers or their families return to their own country.

The contracting parties agree to authorize the recruitment of workers for the purpose of engaging in work in enterprises in the metropolitan area of the other country, but the recruitment of labor for other areas must be agreed upon by representatives of the two countries. The Government of the country in which labor is being recruited has the right to specify the localities where such recruitment is authorized and the other country is entitled to designate the sections to which such labor may be directed. The Governments of the two countries will agree upon the number and classes of workers

<sup>1</sup> Data are from Bulletin du Ministère du Travail et de l'Hygiène, Paris, April-May-June, 1930, p. 241.

to be employed so that the recruitment of labor will not result in injury to either the economic development of the one country or the economic condition of the nationals of the other.

Labor contracts proposed by the employers and demands presented by the workers must conform to regulations established by the qualified administrations of France and Austria and must not contain any provisions contrary to the present convention. Numerical recruitment, that is, employment of workers not designated by name, will be carried out in Austria exclusively through the bureau of migration, and in France through the public employment office attached to the Ministry of Labor. Prior to their departure, however, such workers will either be accepted and classified, or rejected, either by an official governmental commission appointed by the country of their destination, or by a representative of their prospective employer or the representative of an occupational organization who, in either of the two latter cases, must be accepted by both Governments. In cases in which a stated number of workers is requested, a copy of the demand containing the number and class of workers desired and the name of the person in charge of their acceptance will be transmitted to the country supplying the workers and the local authorities will assist representatives of the official commission or of the employers in the selection of workers having the proper physical and occupational qualifications.

Workers who have been hired in a group or who have an individual contract must present a properly indorsed contract before they will be admitted to the country and in addition must have a health certificate issued by an accredited physician. Passports will be issued to workers at their own expense within four days after the presentation of their identification cards.

Recruited workers will receive the same wages as workers of the same class in the enterprise in which they are engaged or the normal and current wage of workers of the same class in the locality in which they work, and the Government of the country in which they are employed agrees to insure the carrying out of this provision.

Workers of either country will enjoy within the territory of the other the same protection granted to the nationals of the country by the present and future laws regulating working conditions and covering the health and safety of the workers. They are also entitled to the same assistance, in the event of unemployment, as is granted to the workers of the country in which they reside. In France this includes the assistance granted by the municipal and departmental unemployment funds and in Austria the regular payments under the unemployment insurance system. The social insurance systems, covering sickness, invalidity and insanity, in effect in each of the countries, are also to be applicable to the nationals of the other country. Costs of assistance furnished by the State will not be repaid by the country to which the person belongs but in cases of permanent disability or of incurable mental disease which has lasted more than one year, such persons may be returned to their native country or if not repatriated, the country of origin must pay for their care.

All complaints by workers regarding working and living conditions imposed upon them by the employers must be transmitted either directly or through diplomatic or consular channels to the adminis-



trative authority of the country in which they reside, which organization must endeavor to secure an amicable settlement.

The convention will become effective as soon as ratifications are exchanged. It will remain in force for the period of one year and will be renewed by tacit consent from year to year unless it is denounced, in which case denunciation must be made three months before the expiration of the year.

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### Labor Treaty Between France and Rumania <sup>1</sup>

**A** TREATY concluded between France and Rumania under date of January 28, 1930, assures equality of treatment for the nationals of the two countries in regard to the laws on social insurance and other labor laws.

The convention provides that nationals of either country may enter the other country without hindrance for the purpose of engaging in work and that their entrance into the country as well as that of their families will be facilitated in every way, including the provision of identification cards and passports. No special authorization will be required by either country for workers returning to the country of origin.

Each contracting country agrees to authorize the recruitment of labor for work in the other country under the following conditions: Such workers may be recruited only for the metropolitan territory of the contracting parties. Recruitment for other territories may be carried out only by special agreement between the two countries, the country having the right to determine the regions in which recruitment will be authorized and the other country the right to designate the section to which workers may be directed. The Governments of the two countries will decide upon the number and the classes of workers to be recruited, in such a way as not to injure the economic development of the one country or the condition of the workers in the other. The offices having charge of the exchange of labor will be the Ministry of Labor in Rumania and the public employment service of the Ministry of Labor in France.

Emigrant workers will receive the same pay as that of other workers of the same class employed in the same enterprise or the nominal rate for the same class of work in the locality. Each country undertakes to secure equality of treatment as regards the wages of workers from the other country.

In each country the nationals of the other contracting State will receive the same protection as that granted to natives of the country in the application of the present and future laws regulating labor conditions and assuring the health and safety of the workers. In the case of unemployment of workers recruited from the other country, such unemployed workers are entitled to the services of the employment offices and to assistance from insurance institutions or unemployment aid under the same conditions as nationals of the country. Reciprocal rights are also granted for compensation for industrial accidents or in case of sickness and provision is made for

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<sup>1</sup> Data are from Bulletin du Ministère du Travail et de l'Hygiène, Paris, April-May-June, 1930, p. 237.

the care of nationals of either country who, while residing in the other country, become insane or disabled. Costs of assistance provided by the State in which such workers are residing will not be repaid by the country of origin. However, if it is considered feasible, workers who are permanently crippled or disabled or who have been treated for a mental ailment for at least one year will be returned to their native country if they are able to travel and, if not, the home country of such persons will pay the costs of their care after a certificate has been filed notifying the home country of such persons of their disability.

The convention becomes effective, upon ratification, for the period of a year, and will be renewed by tacit consent from year to year unless it is denounced by one of the contracting countries, in which case denunciation must be made three months before the expiration of the year.

## OLD-AGE PENSIONS

### Old-Age Pension Movement in Minnesota

THE old-age pension law enacted in Minnesota in 1929 (see *Labor Review*, May, 1929, p. 109) was upon a county basis and permissive in its terms. If any county wished to establish the system, the proposition must first be presented to the legal voters of the county at a general election and must be approved by a majority of those voting at the election. In accordance with this provision 12 counties placed the question of adopting the system upon their ballots at the recent November elections. The *Old Age Security Herald* reports in its issue for December, 1930, that in six counties the measure was approved, in three it received a plurality but not the necessary majority of all votes cast, and in the remaining three the results were not definitely known at the time of writing. An interesting feature of the election was that the largest and most populous counties gave the largest majorities in favor of the plan.

Hennepin County, which includes within its territory the city of Minneapolis, the largest in the State, voted by a tremendous majority—84,000 to 11,000 votes—to apply the law in justice to the aged poor of the county. In Ramsey County, whose chief center of population is the city of St. Paul, second largest in the Commonwealth of Minnesota, the victory of old-age security was just as decisive—33,000 to 6,000 votes. St. Louis County, which counts as one of its centers the city of Duluth, the third largest city, also went on record in favor of pensions to the indigent aged by 40,987 votes to 2,968. Out of more than 8,000 voters in Washington County only about 1,000 voted against the proposal, while nearly 5,000 registered themselves in favor of pensions. The measure also carried in Blue Earth County with a handsome lead—6,081 to 3,196. The vote in Pennington County stood 1,696 to 1,082 votes in favor of the measure.

It is known that in several counties where the measure failed to win approval, a majority of those voting on the question were in favor, but the measure was lost because of the failure of a part of the electorate to give any expression of opinion. In Steele County, for instance, 3,300 voted for adoption, 1,900 against and 1,700 did not express themselves either way, so that the favorable ballots did not constitute a majority of all the ballots cast in the general election, and the measure was lost.

It is stated that in Hennepin County the ballot was so decisive that the system was put into effect at once; in other counties, owing to budgetary difficulties, action will not be so prompt, but preparations are being made to put the plan into operation as soon as possible. St. Louis County will probably begin payments on January 1, 1931, according to the chairman of the county commissioners.

The Minnesota law provides for pensions to persons aged 70 or over who have resided in their respective counties at least 15 years and meet certain tests as to character and citizenship. The maximum pension payable is \$1 a day.

### Old-Age Pensions in Canada

IN ITS issue for October, 1930, the Canadian Labor Gazette gives a summary of the Canadian experience with the old-age pension act, which is now in operation in five Provinces and in the Northwest Territories. The Dominion act was passed early in 1927, but has no effect in any Province until that Province passes legislation adopting it. In the Territories, however, it may be put into effect by an order in council. Under its terms a pension, which may not exceed \$240 a year, is payable to any British subject aged 70 and over whose income does not amount to as much as \$365 a year, and who meets certain requirements as to character and length of residence in the Dominion and in the Province. The Dominion pays quarterly to each Province one-half of the amount disbursed in pensions during the preceding three months, but leaves the administration of the act in the hands of the provincial authorities. The dates at which the act became effective are as follows: British Columbia, September 1, 1927; Saskatchewan, May 1, 1928; Manitoba, September 1, 1928; Northwest Territories, March 1, 1929; Alberta, August 1, 1929; Ontario, November 1, 1929. On June 30, 1930, there were 47,291 pensioners. The following table gives some data as to their distribution:

NUMBER OF PENSIONERS AND PER CENT OF POPULATION PENSIONED, JUNE 30, 1930, BY PROVINCE

Province	Pensioners		
	Number	Per cent of total population	Per cent of population over 70 years of age
Alberta.....	2,341	0.36	30.97
British Columbia.....	4,792	.81	44.02
Manitoba.....	5,283	.79	47.21
Ontario.....	30,268	.92	26.53
Saskatchewan.....	4,603	.53	45.60
Northwest Territories.....	4	.04	3.66

The figures for Ontario present two points of interest: The percentage of the total population enrolled on the pension list is larger, and the proportion of the population aged 70 and over who are pensioned is smaller than in any other of the five Provinces. The latter fact is probably due to the recent coming into effect of the act, which had been in operation in Ontario for less than nine months at the time these figures were assembled. The former is probably explicable by the different age levels of the eastern and western Provinces, concerning which Doctor Jamieson, the administrator of the act in Ontario, has this to say:

The population of people over 70 years of age varies considerably in the different Provinces, for example, in the West, where the settlement has been of more recent date, it is considered more of a young man's country. In British Columbia and the prairie Provinces, the census shows there are about 18 over 70 in each thousand of their population; in Manitoba the percentage is somewhat higher, and in Ontario there are 35 in every thousand.

The sex division of these pensioners, by Provinces, was as follows:

NUMBER OF MALE AND FEMALE PENSIONERS, JUNE 30, 1930

Province	Males	Females
Alberta.....	1,380	961
British Columbia.....	2,776	2,016
Manitoba.....	2,759	2,524
Ontario.....	14,149	16,119
Saskatchewan.....	2,552	2,051
Northwest Territories.....	4	
Total.....	23,620	23,671

It is the usual experience that there is an excess of women in the higher age groups, and consequently the number of women receiving old-age pensions is apt to surpass the number of men. Ontario is the only one of the five Provinces showing this condition, and this again is probably due to the fact that it represents a longer period of settlement than the western Provinces. When a new territory is opened up, men lead the way, and it is only after a considerable period that the proportion of women in the population becomes normal.

The amount paid out in pensions in each Province, and the share borne by the Dominion, is shown for the quarter ending June 30, 1930, and for the total period during which they have been paid, in the following table:

TOTAL COST OF OLD-AGE PENSIONS IN CANADA AND COST TO DOMINION GOVERNMENT, FOR SPECIFIED PERIODS

Province	April 1 to June 30, 1930		Since adoption of old-age pension act	
	Total	Dominion's share	Total	Dominion's share
Alberta.....	\$152,475	\$76,238	\$419,895	\$209,948
British Columbia.....	279,320	139,660	2,328,995	1,164,478
Manitoba.....	321,263	160,631	1,970,559	985,279
Ontario.....	1,735,020	867,510	3,990,708	1,995,354
Saskatchewan.....	274,992	137,496	1,594,935	797,468
Northwest Territories.....	261	261	818	818
Total.....	2,763,331	1,381,796	10,305,910	5,153,345

Concerning the figures for Ontario, Doctor Jamieson, already quoted, speaking in September, had this to say:

The total number of pensioners on our Ontario list for the last month was 31,967, and the total amount paid out in pensions was \$632,069, and while we have a death rate of over 300 each month, we have about 700 or 800 new applications, so we estimate there will be, when we reach the peak load, about 35,000 pensioners, and a yearly roll in excess of \$8,000,000, in addition to the cost of administration.

# WOMEN IN INDUSTRY

## Woman Workers in Laundries

WHILE the wages, hours, and working conditions of women employed in laundries are the main topics of Bulletin No. 78, recently issued by the Women's Bureau, some space is also given to the development of the business itself during the last few decades. A striking feature has been its rapid growth, accompanied by a marked increase in the number of employees and a change in the character of work done. Up to 1915 it was chiefly a shirt-and-collar business with a slowly growing commercial and family trade. About that time the home electric washer was introduced, and in order to compete with this the laundries provided a wet-wash service, with a charge per pound of clothing washed. As an outgrowth of this came the rough-dry and the finished services for families, frequently on a pound basis of payment. The effect of these changes is shown in the figures concerning the extent of the business. From 1909 the number of laundries reporting rose from 3,845 to 5,962, the number of wage earners from 105,216 to 203,215, and the amount received for work done from \$100,900,182 to \$453,877,518; in other words, the number of laundries increased by 55.1 per cent, the number of wage earners by 93.1 per cent, and the amount received for work done by 349.8 per cent.

The figures illustrate the result of two marked changes in the laundry industry, one in the character of articles laundered and the other in the way in which the work is done. The change in type of work, from men's linen, chiefly collars and cuffs, to the inclusion of commercial work and family bundles that may be returned damp, rough dried, or ironed, has greatly increased the volume of work without a proportionate increase in wage earners or plants. The second change is that from an industry run on haphazard and individualistic lines to one operated on scientific and group methods. These changes could not have taken place without a transition in the social whole. A New York State report briefly enumerates the conditions that have played their part in the revolution of the laundry industry: A steadily increasing number of women are employed outside the home; those not so employed engage others to do their washing in greater numbers than ever before; servants are becoming increasingly difficult to obtain and increasingly expensive; more people are living in apartments than formerly; apartments are becoming smaller, with poorer facilities for washing and ironing.

Coincidentally with these changes have come various improvements in working conditions, especially in the matter of regular hours. It used to be taken for granted that the laundry industry, due to the difficulty of getting the work in regularly and to the insistence upon its speedy return, must have peak days and slack days each week. When in 1912 the United States Bureau of Labor Statistics made a study of women in power laundries in Milwaukee, it was found that 86.8 per cent of the workers had two or more short days in the week, with others correspondingly long. (U. S. Bureau of Labor Statistics Bul. No. 122, p. 74.) This latest investigation shows an almost complete change in this respect, as there was little variation in the daily hours except for the Saturday half holiday. This improvement is ascribed to a campaign of education among housewives, who "are being educated to the fact that to insist on the completion of laundry

work in the earlier part of the week means long hours for the workers and fatigue that is not compensated for by shorter hours later in the week."

### The Workers

THE study, which was undertaken in the fall of 1927 with the cooperation of the Laundryowners' National Association, covered 290 power laundries in 23 cities and 17 States, employing 24,337 workers, of whom 19,758 (81.2 per cent) were women. The majority of the women were native born. Negro women were freely employed, but their numbers and proportion naturally varied according to the section of the country. The following table shows for the 18,369 reporting as to nativity, the division between foreign born and native, whether colored or white.

PER CENT OF NATIVE BORN AND OF FOREIGN BORN AMONG 18,369 WOMAN WORKERS

Section	Native born		Foreign born
	White	Negro	
Eastern.....	55.1	14.4	30.5
Middle western.....	55.7	29.9	14.4
Western.....	64.4	.4	35.2
Southern.....	13.2	86.3	.5
All sections.....	48.8	32.4	18.7

Among the foreign born, Mexicans and Canadians were most numerous, forming nearly one-third of that group. The Mexicans were found almost exclusively in the West and the Canadians in the East and, to a much less degree, in the Middle Western States.

Outside the southern cities, where negro women were naturally in a large majority, Chicago and Cleveland had the greatest proportions of negro women. In Chicago negroes comprised more than three-fifths (62.9 per cent) of all the woman workers and in Cleveland nearly one-half (49 per cent). It is of interest to note that the cities of Jersey City and Newark, combined, although north and near the seaboard, employed a much larger number of negro than of foreign-born women.

The age distribution of the workers shows a smaller proportion of young girls and a larger proportion of middle-aged or elderly women than is general in industry. Those reporting on this item numbered 16,462, thus divided as to age.

DISTRIBUTION OF WHITE AND COLORED LAUNDRY WORKERS BY AGE GROUPS

Age group	White		Negro	
	Number	Per cent	Number	Per cent
16 and under 18 years.....	426	3.5	148	3.5
18 and under 20 years.....	1,211	9.9	485	11.5
20 and under 25 years.....	2,170	17.7	1,176	28.0
25 and under 30 years.....	1,643	13.4	925	22.0
30 and under 40 years.....	3,408	27.8	963	22.9
40 and under 50 years.....	2,312	18.9	405	9.6
50 and under 60 years.....	855	7.0	87	2.1
60 years and over.....	235	1.9	13	.3
Total.....	12,260	100.0	4,202	100.0

It will be noticed that the age level of the negro women is lower than that of the whites. The majority of both races were found in the age group 20 and under 40 years, but only 58.9 per cent of the white as against 72.9 per cent of the colored women were massed here. There was not much difference in the proportion under 20 years of age, but among those aged 50 and over, white women outnumbered the colored very largely.

In both races married women were more numerous than the single, the percentages standing as follows:

PER CENT OF MARRIED AND OF SINGLE LAUNDRY WORKERS

Conjugal condition	White	Colored
Single.....	33.6	28.9
Married.....	43.1	41.1
Widowed, divorced, or separated.....	23.3	30.0

### Hours, Wage Rates, and Earnings

THE scheduled weekly hours ranged from under 44 to 60 and over. The most characteristic week, by section, was as follows:

DISTRIBUTION OF WORKERS BY HOURS WORKED

Section	Hours	Per cent of women
Western.....	48 and under.....	97.2
Eastern.....	do.....	80.2
Middle Western.....	50 and under 54.....	51.7
Southern.....	54 and over.....	48.4

Where the State regulation set a high standard for daily or weekly hours, as an 8-hour day or a 48-hour week, the scheduled hours of the laundries reported tended to coincide with the legal limit; but in the cities where the statutory standard was less stringent, the progressive laundry managers frequently had adopted schedules below the legal boundaries for hours. Thus the effect of good legal regulation in reducing the general level of hours is apparent. \* \* \* For the progressive laundry manager a high legal standard means stabilized competition as far as hours are concerned, while in a State with no regulation he must compete with the unscrupulous who make no effort voluntarily to stabilize and limit their employees' hours of work.

Wage rates and earnings were taken for a specific week, usually in the fall of 1927, but in a few cases early in 1928. The week selected was one without holidays or other disturbing factors, which might be considered as nearly as possible typical of the plant's routine. As usual, there was a considerable difference between wage rates and earnings, due to overtime or overtime or some special cause. The following table shows for the races separately the weekly rates and the weekly earnings, with the number and percentage of women in each specified group:



NUMBER AND PER CENT OF WOMEN IN SPECIFIED WAGE AND EARNINGS GROUPS,  
BY RACE

Wage or earnings group	White		Colored	
	Number	Per cent	Number	Per cent
Weekly rate:				
Under \$10.....	63	0.5	2,307	54.9
\$10 and under \$15.....	3,500	30.0	1,535	36.6
\$15 and under \$20.....	5,997	51.4	345	8.2
\$20 and over.....	2,110	18.1	16	.4
Total.....	11,670	100.0	4,203	100.0
Weekly earnings:				
Under 10.....	831	5.9	3,005	59.2
\$10 and under \$15.....	4,672	33.1	1,656	32.6
\$15 and under \$20.....	6,168	43.7	366	7.2
\$20 and over.....	2,433	17.3	49	1.0
Total.....	14,104	100.0	5,076	100.0

For the white women the median rates were \$16.50 and median earnings \$16.10 per week; for the colored women these figures were, respectively, \$9.25 and \$8.85 a week. The median earnings varied according to locality as follows:

## MEDIAN EARNINGS OF LAUNDRY WORKERS, BY LOCALITY

Locality	White	Negro
All places.....	\$16.10	\$8.85
East.....	14.50	12.50
Middle West.....	14.75	12.25
West.....	17.90	17.50
South.....	13.95	7.15

The high median for colored women in the West is based upon the earnings of only 16 workers, colored employees being the exception in that section; on the other hand, the preponderance of colored workers in the South, where earnings are low for both races, brings down the median earnings of the Negro group as a whole.

Working conditions were studied in much detail. Temperatures, taken by sling psychrometer, dry-bulb and wet-bulb readings, varied considerably. Of 604 readings, 7 per cent showed cool, 46.7 per cent comfortable, 29.5 per cent warm, and 16.9 per cent hot temperatures, as reported by the agents. One-third of the laundries visited lacked artificial ventilation of any kind. Of 214 laundries for which the item was reported, 11.2 per cent had hoods with exhausts over all their flat-work ironers and a number of others had some of their machines so equipped. Seats for all employees were supplied in 19 laundries, and for some employees by 118 others. First aid was provided in all but 15 laundries, and a special person to administer it in all but 58. Lunch rooms were provided in 55 laundries, special rest rooms in 27, and cloak rooms in about one-half.

### Industrial Accidents Among Women

THE United States Women's Bureau has recently published, as its Bulletin No. 81 the results of a study of industrial accidents, by sex, for the period 1920 to 1927. The data on which the study is based were obtained from reports issued in the 21 States that have published accident data separately for men and women, principally by the administration of the workmen's compensation act in the respective State.

It is pointed out that comparison of statistics from the various States is extremely difficult, because differences exist in the provisions of compensation laws and in administrative practices. It was, however, found from the available data that industrial accidents are in all cases relatively fewer among female employees than among male employees. The proportion of females among all gainfully employed persons, as quoted from the United States Census of Occupations, 1920, ranges from 29.3 to 11.4 per cent, with an arithmetical average of 20.2 per cent. The proportion of females among the injured persons reported ranges from 12.7 per cent in Rhode Island for the year ending September 30, 1927, to less than 1 per cent in Alabama for 1922, when the last separate tabulation for females was published. The arithmetical average reaches only 5.3 per cent, indicating an even smaller proportion of female workers among the injured than is exhibited by the range.

Distribution of accidents to females by age of injured is shown for 11 of the States, which had supplied information on that point, also by extent of disability, by industry, and by cause. In five of the six States reporting industry classifications in standard form more than one-half of the injuries to female workers occurred in manufacturing.

Examples are presented of programs on accident-prevention work by several State labor agencies, and some recommendations are given for further reduction of accidents, together with a strong plea for publication by the different States of standard and uniform statistics on accidents.

# CHILD LABOR AND CHILD WELFARE

## Third White House Conference on Child Welfare

THE White House Conference on Child Health and Protection, for which plans had been under way for more than a year, met in Washington, November 20-22, 1930, with an attendance estimated at several thousand, coming from all parts of the Union. The preparatory work, which had been in the hands of 17 major committees, each with numerous subcommittees, was divided into four general sections—medical service, public health service and administration, education and training, and the whole question of the handicapped. A number of preliminary reports were presented, dealing with various aspects of these questions, but none of the reports has as yet been prepared for general distribution. In the address with which he opened the conference, Secretary of Labor James J. Davis emphasized the need for translating these studies into practical results. Study of the situation, he pointed out, was no new thing:

If we could put into practice what is now known about safeguarding the health of children, preventing dependency and delinquency, providing opportunities for wholesome group activities, we could in a single generation profoundly improve the whole character of our national life. The long, unhappy procession of children who enter adult life physically, socially, and mentally handicapped could be made a much shorter one and the efficiency of our citizens be correspondingly increased.

In spite of our knowledge of the subject, however, there are still lamentable defects in our program of child care. Some of these are due to economic difficulties and some to social attitudes, but all present difficulties of solution, calling for united action if they are to be remedied.

I note that the committee on the dependent child tells us that large numbers of children still suffer unrelieved in their own homes, or are separated from their homes because of poverty; that there are many child-caring agencies without responsible organization, under no inspection representing the entire community, with inferior, inadequate staffs; that even almshouses, condemned a hundred years ago for the care of children, are still used in certain localities for this purpose; and that invalidism, accidents, irregular employment, unemployment, and insufficient wages leave hundreds of thousands of family homes without that adequate income which is essential to the maintenance of a home suitably equipped for the rearing of citizens.

Here are problems fundamental in any program for the health and protection of children. It is a long list of things that must be done. No item is more important to the child nor contributes more to our national welfare than the uninterrupted employment of American fathers at a wage which will provide security and a reasonable standard of living for their families.

No one would say that this is an easy problem to solve, but, with President Hoover, I believe that a way must be found to prevent these cycles of industrial depression and provide adequate wages for American workmen.

Nor are the other recommendations easy to accomplish. We shall need the combined effort and intelligence of all the individuals and agencies represented in this conference to give to American children the opportunities that should be theirs.

The feature of the proceedings which aroused perhaps more public interest than any other was a recommendation contained in the majority report of the committee on Federal health activities, that the child health, maternity, and infancy work of the Children's Bureau should be shifted to the Public Health Service. Miss Abbott, head of the Children's Bureau, presented a minority report opposing this move and received such strong support that the recommendation, instead of being accepted, was laid before the conference committee on procedure, and by it held over for consideration by the President's continuation committee. In defending the retention of these services by the Children's Bureau, Miss Abbott emphasized the desirability of a unified approach on the part of the Federal Government to all the problems of childhood.

The conception of the unity of the child and the value of having the disciplines and techniques of the social, medical, statistical, and other related sciences associated in the scientific study were advocated by the conference in 1909 and enthusiastically approved by President Roosevelt and, in turn, by Congress.

There is ample evidence that this plan of unified approach has greatly increased public interest in all the problems of children and child life. To remove the health work from the Children's Bureau would not merely remove one section of the bureau's activities, it would destroy it as a children's bureau.

It has been generally recognized that, in addition to sanitation, control of communicable diseases, inspection of milk and other public health activities fundamental in a health program for both adults and children, there must be a special organization for promotion of the health of children.

Any child health organization, because it is a special organization for an age group, necessarily conflicts with an attempt to organize the health activities on a complete functional basis.

In development of its work on behalf of children, the United States Children's Bureau has carefully avoided duplicating work being done by any other agency, and it has endeavored to build up agencies whose proper functioning in the community is important to the welfare of both adults and children.

Finally, if it were necessary to choose between efficient organization for promotion of the general health and the most effective method of promoting the health of children, I should consider the latter as of greatest importance. Fortunately such a choice is not necessary. By national interlocking committees and local coordination of activities, such a choice has been demonstrated by experience to be unnecessary.

In summing up the results of the conference, Secretary of the Interior Ray Lyman Wilbur stressed the need for the establishment of local child welfare conferences throughout the country to carry on the work. The greatest danger in trying to carry into action the findings of the conference would be to have too scattered a program or too much centralization.

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### Trends in Employment of Children, 1927 to 1929

FOR some years past the Federal Children's Bureau has made a practice of collecting records of the first certificates given children authorizing their employment—work certificates, as they are usually called—and in the annual report of the bureau chief for 1929–30, data are given concerning such certificates issued in 1929. The child labor laws of most States prescribe that children under certain ages, differing to some extent with the State, must obtain these permits before they may be lawfully employed, and also require that the permits must contain certain definite data as to age, sex,

school grade reached, and the like. Consequently the records of these certificates, if accurately kept, furnish information bearing upon several aspects of the child-labor problem. When the bureau began a study of this matter several years ago, it found that comparatively few places had recognized the importance of keeping such records of the certificates issued as would furnish readily the information desired, and that even where records were kept, the data preserved in one State might be on a different basis from that of another, so that the figures of different States could not be combined. Efforts were therefore made both to encourage the keeping of such records, and to promote uniformity in the methods of presenting the data, with the result that the field covered by the records collected is continually widening and the figures growing in significance. In cases where statistics of this kind can not be collected on a state-wide basis, the bureau has tried to secure them from the larger cities of the State. Comment is made on the increasing volume and value of the data secured.

For 1926, the first year in which personal visits to State and local offices were made, the bureau received reports from only 12 States, 26 cities in 12 other States, and the District of Columbia, whereas for 1929 it received reports from 19 States, 65 cities in 15 other States, and the District of Columbia.

It is estimated on the basis of the 1920 census that the number of 14 and 15 year old children receiving certificates in the States and cities from which reports are now being received represents approximately 70 per cent of the 14 and 15 year old children in the United States going to work in occupations for which certificates are usually required under the State child labor laws. These records, of course, do not include the large number of children entering occupations (such as agricultural pursuits and domestic service) for which certificates are not required under State laws, nor those going to work illegally. It should be remembered also that the number of first regular certificates issued does not indicate the total number of children at work at any given time but only the number beginning work during a single year. These figures are, however, representative of conditions as regards at least the legal employment of children of employment-certificate age in most industrial and commercial pursuits in the important child-employing centers.

A tabulation has been made of the figures relating to 137,786 children 14 and 15 years of age and of 82,301 children aged 16 and 17 who received regular certificates for the first time in 1929. The following table shows the number of those aged 14 and 15 as reported from 17 States and the District of Columbia, and from cities of 50,000 or over.<sup>1</sup> (Two States, Alabama and Oklahoma, are omitted, because they did not show the number of first regular certificates separately from the number of reissued certificates.)

<sup>1</sup> Population according to census estimate of July 1, 1928, or where no estimate was made, according to census of 1920.

NUMBER OF CHILDREN 14 AND 15 YEARS OF AGE RECEIVING THEIR FIRST REGULAR EMPLOYMENT CERTIFICATES IN 1928 AND 1929 AND PER CENT OF CHANGE FROM PREVIOUS YEAR, BY STATE AND CITY<sup>1</sup>

State and city	1928		1929	
	Number	Per cent of change as compared with 1927 <sup>2</sup>	Number	Per cent of change as compared with 1928 <sup>3</sup>
States reporting:				
Connecticut	5,649	-11	6,537	+16
Bridgeport	635	+9	915	+44
Hartford	453	-28	560	+24
New Britain	274	+11	253	-8
New Haven	962	-2	884	-8
Waterbury	363	-24	374	+3
District of Columbia	252	+35	279	+11
Indiana	706	-17	822	+16
Fort Wayne	46	---	78	---
Hammond	34	---	41	---
Indianapolis	183	-21	209	+14
South Bend	75	-11	61	-19
Iowa	<sup>3</sup> 707	-8	<sup>3</sup> 862	+22
Cedar Rapids	<sup>3</sup> 32	---	<sup>3</sup> 30	---
Davenport	<sup>3</sup> 122	+33	<sup>3</sup> 157	+29
Des Moines	<sup>3</sup> 169	---	<sup>3</sup> 184	+9
Sioux City	<sup>3</sup> 83	+34	<sup>3</sup> 112	+35
Kansas	128	+3	170	+33
Kansas City	80	+11	124	+55
Topeka	15	---	21	---
Wichita	24	---	7	---
Kentucky	647	-18	798	+23
Covington	35	---	47	---
Louisville	390	-23	482	+24
Maine	<sup>4</sup> 98	-52	<sup>4</sup> 170	+73
Portland	<sup>4</sup> 13	---	<sup>4</sup> 29	---
Maryland	<sup>5</sup> 3,240	-15	<sup>5</sup> 3,815	+18
Baltimore	<sup>5</sup> 2,961	-17	<sup>5</sup> 3,553	+20
Minnesota	268	-14	253	-6
Minneapolis	112	-9	93	-17
St. Paul	<sup>6</sup> 131	-9	112	-15
New Hampshire	<sup>7</sup> 828	+9	<sup>7</sup> 1,120	+35
Manchester	<sup>7</sup> 240	-2	<sup>7</sup> 411	+71
New Jersey	<sup>8</sup> 16,788	-7	<sup>8</sup> 17,385	+4
Jersey City	<sup>8</sup> 1,340	-14	<sup>8</sup> 1,371	+2
Newark	<sup>8</sup> 2,306	-2	<sup>8</sup> 2,264	-2
Trenton	<sup>8</sup> 786	-9	<sup>8</sup> 824	+5
New York			54,897	---
Albany			361	---
Binghamton			268	---
Buffalo	2,414	-7	2,783	+15
Elmira			174	---
New York	34,313	-4	35,934	+5
Niagara Falls	266	+55	63	-76
Rochester	1,588	-1	1,476	-7
Schenectady			470	---
Syracuse			514	---
Troy			200	---
Utica			671	---
Yonkers	429	-12	413	-4

<sup>1</sup> Data are from State or local official sources.

<sup>2</sup> Per cent not shown where number of children is less than 50 nor where figures for previous year are not available.

<sup>3</sup> Includes children to whom regular certificates were issued for work outside school hours and during vacation.

<sup>4</sup> Number of 15-year-old children to whom regular certificates were issued; law does not permit the issuance of regular certificates to children under 15. In Grand Rapids, Mich., in 1929 a regular certificate was issued to one child of 14 years for work on a farm; in Hamtramck, Mich., in 1928 regular certificates were issued to two children of 14 years and in 1929 to three children of 14 years, after investigation disclosed necessity for employment; in Lansing, Mich., in 1929 regular certificates were issued to one child of 14 years compelled to support himself and to three children of 14 years enrolled in the high-school industrial course and working part time.

<sup>5</sup> Exclusive of 211 children in 1928 and 213 children in 1929 to whom "vocational" certificates were issued.

<sup>6</sup> Revised figures supplied by State.

<sup>7</sup> Includes in New Hampshire children to whom regular certificates were issued for "after-school" work, and in San Diego in 1928 children to whom certificates were issued for work outside school hours which were not reported separately.

NUMBER OF CHILDREN 14 AND 15 YEARS OF AGE RECEIVING THEIR FIRST REGULAR EMPLOYMENT CERTIFICATES IN 1928 AND 1929 AND PER CENT OF CHANGE FROM PREVIOUS YEAR, BY STATE AND CITY—Continued

State and city	1928		1929	
	Number	Per cent of change as compared with 1927	Number	Per cent of change as compared with 1928
States reporting—Continued.				
Pennsylvania			27,758	
Erie	127	-52	138	+9
Harrisburg	76	-37	109	+43
Philadelphia	9,715	-2	10,455	+8
Pittsburgh	980	-29	1,429	+46
Scranton	694	( <sup>9</sup> )	757	+9
Tennessee	2,239		1,526	-32
Chattanooga	59	-22	97	+64
Knoxville	87	-46	<sup>9</sup> 172	+98
Memphis	403		238	-41
Nashville	45	-82	36	
Vermont	61		77	+26
Washington	492	+6	458	-7
West Virginia			403	
Charleston			35	
Huntington			60	
Wheeling			57	
Wisconsin	2,162	-17	1,656	-23
Milwaukee	1,282	-26	861	-33
Cities in States not reporting:				
California—				
Long Beach	21		11	
Los Angeles	701	-16	857	+22
Oakland	65	-17	69	+6
Pasadena	30		19	
Sacramento	39		56	
San Diego	204	+39	14	
San Francisco	134	-14	145	+8
Colorado: Denver	235	+12	211	-10
Delaware: Wilmington	285	( <sup>9</sup> )	320	+12
Georgia: Atlanta	46	-12	20	
Illinois—				
Chicago	<sup>6</sup> 3,454	-17	3,486	+1
Decatur	<sup>3</sup> 121		88	
East St. Louis	<sup>3</sup> 93	-24	98	
Oak Park			15	
Peoria	64	-3	72	+13
Rockford	66		50	-24
Springfield	140	+4	134	-4
Louisiana: New Orleans	<sup>10</sup> 1,195	-31	<sup>10</sup> 1,100	-8
Massachusetts—				
Boston	2,382		2,847	+20
Fall River			1,183	
Lawrence			441	
Lowell	307	+32	467	+52
Lynn	277	+3	333	+20
Somerville	262	-5	299	+14
Springfield	398	+2	427	+7
Michigan—				
Detroit	<sup>4</sup> 1,003	+46	<sup>4</sup> 1,033	+3
Grand Rapids	<sup>4</sup> 158	-11	<sup>4</sup> 193	+22
Hamtramck	<sup>4</sup> 54		<sup>4</sup> 56	+4
Highland Park			0	
Kalamazoo	<sup>4</sup> 34		<sup>4</sup> 24	
Lansing			<sup>4</sup> 62	
Saginaw	<sup>4</sup> 9	-93	<sup>4</sup> 8	

<sup>3</sup> Includes children to whom regular certificates were issued for work outside school hours and during vacation.

<sup>4</sup> Number of 15-year-old children to whom regular certificates were issued; law does not permit the issuance of regular certificates to children under 15. In Grand Rapids, Mich., in 1929 a regular certificate was issued to one child of 14 years for work on a farm; in Hamtramck, Mich., in 1928 regular certificates were issued to two children of 14 years and in 1929 to three children of 14 years, after investigation disclosed necessity for employment; in Lansing, Mich., in 1929 regular certificates were issued to one child of 14 years compelled to support himself and to three children of 14 years enrolled in the high-school industrial course and working part time.

<sup>6</sup> Revised figures supplied by State.

<sup>7</sup> Includes in New Hampshire children to whom regular certificates were issued for "after-school" work, and in San Diego in 1928 children to whom certificates were issued for work outside school hours which were not reported separately.

<sup>8</sup> Less than 1 per cent.

<sup>9</sup> May include a few children to whom certificates were reissued.

<sup>10</sup> Includes children to whom regular certificates were issued for work during vacation.

NUMBER OF CHILDREN 14 AND 15 YEARS OF AGE RECEIVING THEIR FIRST REGULAR EMPLOYMENT CERTIFICATES IN 1928 AND 1929 AND PER CENT OF CHANGE FROM PREVIOUS YEAR, BY STATE AND CITY—Continued

State and city	1928		1929	
	Number	Per cent of change as compared with 1927	Number	Per cent of change as compared with 1928
Cities in States not reporting—Continued.				
Missouri—				
Kansas City.....	175	-2	<sup>3</sup> 338	-----
St. Louis.....	1,773	-13	1,730	-2
Nebraska—				
Lincoln.....	6		3	-----
Omaha.....	69	-41	74	+7
Ohio—				
Akron.....			11 3	-----
Cincinnati.....	11 7		11 3	-----
Cleveland.....			0	-----
Columbus.....	11 6		11 7	-----
Dayton.....	0		0	-----
Springfield.....	11 5		11 7	-----
Toledo.....	11 21		11 23	-----
Youngstown.....	0		0	-----
Oregon: Portland.....			265	-----
Rhode Island: Providence.....	<sup>4</sup> 1,704	+9	<sup>4</sup> 1,943	+14
Utah: Salt Lake City.....	125	+29	92	-26
Virginia: Richmond.....			174	-----

<sup>3</sup> Includes children to whom regular certificates were issued for work outside school hours and during vacation.

<sup>4</sup> Number of 15-year-old children to whom regular certificates were issued; law does not permit the issuance of regular certificates to children under 15. In Grand Rapids, Mich., in 1929 a regular certificate was issued to one child of 14 years for work on a farm; in Hamtramck, Mich., in 1928 regular certificates were issued to two children of 14 years and in 1929 to three children of 14 years, after investigation disclosed necessity for employment; in Lansing, Mich., in 1929 regular certificates were issued to one child of 14 years compelled to support himself and to three children of 14 years enrolled in the high-school industrial course and working part time.

<sup>11</sup> Children under 16 adjudged incapable of profiting substantially by further instruction.

In 1928 as compared with 1927, of the States reporting, 9 showed a decrease in the number of children receiving first certificates, while 3 States and the District of Columbia showed an increase; the following year the situation was reversed, 10 States and the District showing an increase, and only 4 showing a decrease. While the percentage of increase in 1929 was sometimes considerable, the numbers involved were generally not large; the increase in Vermont showed the smallest number, 16, and that in Connecticut the largest, 888. Individual cities sometimes displayed a movement directly contrary to that of the State, but as a whole, for the area for which reports were received, 1929 showed an increase, while 1928 had shown a decrease, as compared with the preceding year.

The number of 14 and 15 year old children to whom first regular certificates were issued increased 5 per cent in 1929 over 1928 in the 14 States and the District of Columbia and the 49 cities in 15 other States, for which comparable figures are available. In many of these places—7 States and 22 cities in other States—the increases in 1929 followed decreases in 1928 as compared with 1927, but in 3 States, 6 cities, and the District of Columbia both years showed an increase. In the States and cities for which comparable figures are available for 1927, as well as 1928 and 1929, the number of 14 and 15 year old children to whom regular certificates were issued increased 6 per cent in 1929 over 1928, whereas in 1928 there was a decrease of 7 per cent as compared with 1927.

In localities which reported a decrease in the number of permits issued in 1929 as compared with 1928, it is suggested that changes in the laws raising educational standards and more rigid enforcement



of the child labor and compulsory school-attendance laws were probably factors in keeping children in school and thereby reducing the number of 14 and 15 year old children going to work.

Separate figures for white and colored children aged 14 and 15 were given in the reports from 9 States, 43 cities in 18 other States and the District of Columbia, showing that colored children were only 1 per cent of the number to whom first regular certificates were issued, though the percentage of colored children in this age group throughout the Union is 12. This does not show, however, the actual proportions of white and colored children going to work, since colored children are employed perhaps more frequently than white in domestic and personal service and in agricultural pursuits, for which certificates are not usually required.

In general, the largest number of the 14 and 15 year old children entered mechanical and manufacturing occupations, though the proportion varied as between the sexes.

Of the 21,971 boys 14 and 15 years of age for whom information concerning occupation was received, 34 per cent were first employed in manufacturing and mechanical work, 27 per cent entered mercantile establishments, 24 per cent entered public messenger and delivery service, and the remaining 15 per cent went into office work, domestic and personal service, and miscellaneous jobs. A much larger proportion of the 16,444 girls than of the total number of boys (54 per cent as compared with 34 per cent) started to work in manufacturing and mechanical occupations; 19 per cent entered mercantile work and 18 per cent went into domestic and personal service. A slightly larger proportion of girls than of boys secured jobs in offices, and a very small number of girls were employed in messenger service.

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### Child Labor Law for Syria

**A** CHILD labor law has been enacted in Syria, according to information furnished by the American vice consul, Nelle B. Stogsdall, at Beirut, dated September 13, 1930, and giving the provisions of the law as reported by "L'Orient" on August 12, 1930. The employment of children under 11 years of age in factories, quarries, mines, workshops, etc., is forbidden, and in workshops maintained by charitable organizations children under 11 years of age "may not do manual labor work for more than four hours." Night work is prohibited for all children under 16 years of age except in establishments under the direction of their fathers or tutors.

# HEALTH AND INDUSTRIAL HYGIENE

## Costs of Medical Care Among Different Types of Families

A PRELIMINARY report<sup>1</sup> has been issued by the Committee on the Costs of Medical Care on the expenditures for all types of medical expenses among 4,560 families in different sections of the country. The study, which is to provide information as to the incidence of illness, the expenditures that are made for its prevention and care, the individuals or agencies providing the care, and the distribution of expenditures among families of various economic levels has been in progress since the spring of 1928, with the collaboration of the medical societies, health officers, and public-health nurses of 15 States and 3 cities outside of these States. Fifteen thousand families, 156 health officers and health departments, and 320 nurses have been cooperating in the study and it is believed that when it is completed the facts presented will be reasonably representative of conditions throughout the country. The study covers families living in large and small cities, towns, and rural areas. Hospital facilities are available in some of the towns but in other cases the towns are dependent for hospital care and other institutional facilities upon cities within a radius of from 20 to 60 miles.

As a preliminary to the investigation a house-to-house canvass was made by public-health nurses to explain the purposes of the study and interest the families in keeping systematic records of all illnesses and expenditures. Visits were made at intervals throughout the year to those families agreeing to cooperate, in order to obtain the histories of the illnesses that had occurred and other data as to charges and expenditures. In most cases there were 6 interviews with each family during the 12-months period of observation, representing usually about 10 calls. The data secured cover the history of each illness in a family during the observation period, the type and amount of medical care received, and the costs of such care. All cases of illness which disabled a person for at least one day or for which any medical service of any kind was rendered were included, and any disorder for which drugs costing 50 cents or more were purchased was considered as an illness. Costs are included for nursing, dental and eye care; treatment by osteopaths, chiropractors, and Christian Science practitioners; professionally prescribed or self-prescribed medication; laboratory work; health examinations and immunizations and other items; and free work of all kinds as well as minor ailments for which no attention of any kind is secured are also recorded. It is pointed out that the distribution of families according to income levels results only from the attempt to secure as large a statistical sample in each group as possible, without taking

<sup>1</sup> Committee on the Costs of Medical Care. The Costs of Medical Care: Preliminary report, by Nathan Sinai and Margaret C. Klem. Washington, 910 Seventeenth Street, N. W., 1930.

into consideration the proportionate number in specified income groups in the population of the United States. In the present report the proportion of families in the lower income group is smaller than obtains for the country at large. The families have been arranged in four broad income groups, although in the final report they will be divided into seven groups.

From the data assembled it is shown that the charges for medical care increase steadily with income. For families with incomes under \$2,000, the average charge per family was \$71.48, while for families with incomes over \$5,000 the average expenditure was \$311.06 per annum.

The following table shows the average charges for medical care during a 12-month period among 4,560 families in 13 States:

AVERAGE CHARGES FOR MEDICAL CARE PER FAMILY AND PER INDIVIDUAL DURING A 12-MONTH PERIOD, BY INCOME GROUPS

Income group	Number of families	Average number of persons per family	Average charges	
			Per family	Per individual
Under \$2,000.....	1,788	4.7	\$71.48	\$15.28
\$2,000 to \$3,000.....	1,372	4.5	102.76	22.77
\$3,000 to \$5,000.....	723	4.5	145.63	32.70
\$5,000 and over.....	677	4.0	311.06	76.86

The uneven distribution of costs is shown in the following table, which gives the percentage of families in different income groups incurring expenses for medical care within specified amounts.

PERCENTAGE DISTRIBUTION OF FAMILIES IN DIFFERENT INCOME GROUPS ACCORDING TO CHARGES FOR MEDICAL CARE PER FAMILY FOR A 12-MONTH PERIOD

Income group	Number of families	Per cent of families with charges in following ranges							
		Under \$25	\$25-\$49	\$50-\$99	\$100-\$249	\$250-\$499	\$500-\$999	\$1,000-\$2,499	\$2,500 and over
Under \$2,000.....	1,788	40.2	19.8	20.9	13.8	4.1	1.0	0.2	-----
\$2,000 to \$3,000.....	1,372	26.7	18.9	23.1	22.2	6.2	2.7	.2	-----
\$3,000 to \$5,000.....	723	22.1	13.3	20.5	28.4	10.5	4.4	.8	-----
\$5,000 and over.....	677	11.1	10.6	14.6	28.0	17.3	11.4	6.4	0.6

### Institutional Care for Convalescents

**T**HE first report among the miscellaneous series of contributions on the costs of medical care issued by the special committee studying this question deals with the provision of institutional care for convalescents especially among the wage-earning and low-salaried classes.<sup>1</sup>

The problem of convalescence involves both the question of proper medical care and provision of a suitable place for the care of persons recovering from a serious operation or illness whose home surroundings

<sup>1</sup> Committee on the Costs of Medical Care. Institutional Convalescence, by E. H. Lewinski-Corwin. Washington, 910 Seventeenth Street N.W., 1930.

are not conducive to quick recovery. The housing and family conditions of a very large number of persons are such that ease, quiet, proper food, and peace of mind can not be secured at home. The housewife returning from a hospital usually finds it necessary to take up her household duties at once and the breadwinner feels it necessary to resume work at the earliest possible moment, so that as a result many patients discharged from hospitals suffer relapses or setbacks and in some cases permanent ill effects from the lack of the needful convalescent care. This is especially true of persons recovering from pulmonary, cardiac, and other infections after childbirth, and after certain operations or in certain chronic conditions in which the beneficial effects of hospital care are lost if there is too abrupt resumption of the daily duties.

The provision of convalescent homes for the care of such cases is the more necessary because the average stay of a patient in a hospital is gradually being reduced. In the large cities it usually does not exceed 11 or 12 days, and in case of childbirth the usual period of hospitalization is 10 days. Comparatively few patients have recovered sufficiently upon leaving the hospital to be able to resume their ordinary routine at once, and this shortening of the average period of hospitalization renders more imperative the provision of facilities for convalescence. Aside from the fact that the hospital beds are needed for the acutely ill, it is far more expensive to care for convalescent patients in the hospital than in a convalescent institution. The average hospital cost at the present time is \$5 per day, and in the convalescent homes only about \$2. This latter charge may increase when the standard of the convalescent homes is raised to approximate modern standards of convalescent care but, the writer says, it should never be more than about half of what it costs to maintain a patient in a hospital. The convalescent home, therefore, is the solution for the problem presented by the demands from the hospitals for the rapid clearance of beds for acute cases, from the needy sick for help in regaining their health, and from the community for the use of the most efficient and at the same time the least costly methods in restoring people to health.

The facilities for institutional care are at the present time inadequate in most cities. During recent years, however, expenditures for hospital accommodations have increased enormously so that some communities have almost reached the saturation point although the demand for hospitalization grows with the increasing supply. A similar potential demand for convalescent facilities exists in every community. However, just as not every sick person needs hospital care, so also not every patient needs institutional care for convalescence, and adequate studies of the reasonable requirements are, therefore, needed. According to present information 12 convalescent beds should be provided for every 100 hospital beds but data which are now being compiled indicate the need for a possible upward revision of this standard. There are at the present time about 300 convalescent homes in the United States which are distributed among 33 States, but the number of beds available in these institutions and the period during which these homes are open, whether for one season or for the entire year, will not be known until a study which is now being made by the American conference on hospital service is completed.

Until recently, the writer says, convalescence as a medical problem has received little attention. The question of the kind and amount of medical supervision needed in convalescence institutions depends upon the types of cases treated. The best arrangement is believed to be that in which the convalescent home is definitely linked with the medical service of a hospital. It is also stated that a certain degree of specialization is desirable if the best results are to be obtained, as about 25 per cent of the patients require a special regimen or special diet, or special treatment. The need, therefore, for a thorough analysis of the problem from the social, medical, and organizational viewpoints is pointed out. Even in communities which maintain many convalescent institutions it is said that the adjustment of the accommodations to the needs of the locality has not been attempted in any serious way, and while many more homes are needed, there is also needed "an intelligent policy with regard to the best fulfillment of their purpose."

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### Cancer Caused by Coal Tar and Coal-tar Products and Mineral Oils

A STUDY of the cancer incidence among workers engaged in the production of the different kinds of coal tar and coal-tar products and among persons working with mineral oils, published in a recent issue of the *Journal of Industrial Hygiene*,<sup>1</sup> shows the conditions as regards the hazard from these products in the United States.

Coal tar is produced by the destructive distillation of coal, but there are several different kinds of coal tars according to their chemical composition, the composition depending upon the kind of coal from which the tar is derived and on the methods of carbonization. The most important factors are the temperature at which the destructive distillation is carried out and the length of time during which the coal is subjected to heat. The classification of coal tars is given in the report as follows: Gas-works tar from lightly and fully charged horizontal retorts, inclined retorts, and intermittently and continuously charged vertical retorts; blast-furnace tar; coke-oven by-product tar; producer-gas tar. Water-gas tar, which is a by-product in manufacturing water gas for illumination, does not belong to the coal-tar series, but is often mixed with coal tars and is one of the tars which is principally used for distillation.

Tar is used as a fuel, in undissolved form, for open-hearth furnaces; in the construction and repair of roads and for preserving roads and settling road dust; and dehydrated tar is used for the manufacture of roofing paper. Pitch is also used as fuel; in road construction; for roofing; as a protective coating for pipes; insulation of dry batteries; ingredient in metal paints; for core compounds; in carbon manufacturing, etc. Naphthalene and anthracene are used mainly in the dye industry, but crude naphthalene is sometimes mixed with hard pitch and sold as a liquid fuel. Creosote oil, in which the high boiling tar acids have been retained, is used principally in the wood-preserving industry. The constituents of the creosote oils vary widely, but a

<sup>1</sup> The *Journal of Industrial Hygiene*, May, 1930, pp. 169-197: "Occupational Cancers," by Imre Heller, M. D.

very extensively used creosote oil consists of 90 per cent oil and 10 per cent straight coal tar.

Previous studies and experimental work have shown without question that tar and tar-distillation products will cause epithelioma among workers handling these substances. Blast-furnace tar is considered to be harmless, as it has not been shown either industrially or experimentally that it has cancer-producing properties; but gas-works tar, especially the high-temperature, horizontal-retort tar, has strong cancer-producing power. Coke-oven tar has caused a number of industrial cases of cancer. Of the tar-distillation products, creosote oil, green oil, anthracene, and pitch have all been responsible for cases of cancer among workers in different occupations using these products. Pitch is said to be undoubtedly the most harmful substance among tar products, 100 cases of cancer among workers handling pitch having been reported to the British Home Office during the period 1920 to 1923.

#### Occurrence of Tar Cancer in the United States

IN THE present study visits were made to tar producing and distillation plants and to factories where tar products were used. Plant physicians and private physicians treating workers with skin affections were interviewed and the records of cancer clinics and hospitals studied for evidence concerning the occurrence of occupational cancer. In tar distillation nearly every worker comes in contact with tar or tar products, but in spite of this exposure, the incidence of cancer is very low in such plants. Among a number of distillation plants in different localities no skin cancers had been reported and the writer found only two cases in hospital records of cancer among tar-distillation workers. He also found the incidence of cancer to be very low among coke-oven workers, and no cases were found among workers in water-gas plants.

Gas-works tar, however, was found to be responsible for a number of cases. Of 19 cases of cancer among workers in tar reported by two New York hospitals over a period of several years, 11 were due to gas-works tar and only 1 to coke-oven tar, in most of the remaining cases the workers probably using a mixture of coke-oven tar and gas-works tar. In one factory using a great deal of pitch, in which the workers were exposed to pitch fumes and pitch dust, 21 cases of skin cancer had occurred among the workers during the last 10 years. In 15 cases the epithelioma was due to contact with gas-house pitch, while in 2 cases in which there was no exposure to pitch it was thought to be due to heavy tar oil which was used in making lampblack. In the 4 remaining cases there had been exposure to coke-oven pitch. The occupational origin of the cases among the workers handling gas-house pitch was clear, as they showed the characteristic signs of "pitch irritation" before the development of the cancer, but in three of the workers in coke-oven pitch the site of the lesion was on the lip, and as the epithelioma developed without warning, these cancers were regarded as probably not of occupational origin.

The rarity of the occurrence of skin cancers among distillation workers and workers handling tar products in this country is explained by the greater use of coke-oven tar and water-gas tar and it is believed also to be partly due to racial immunity. Many Negroes

are employed in tar-distillation plants, and it is a well-established fact that Negroes are less susceptible to skin diseases than white men.

### Cancer Caused by Mineral Oils

PETROLEUM consists of various types of hydrocarbons and many other nonhydrocarbon constituents, but on the basis of the nature of the residue of their distillation mineral oils may be divided into three groups: Paraffin-base oils, asphalt-base oils, and mixed-base oils containing both paraffin and asphalt.

It has been shown that certain mineral oils have decided carcinogenic activity. In general the experiments have shown that the more volatile oils were lacking in tumor-producing properties while the heavier oils were capable of producing cancer. No complaint of skin cancer has been made among workers in oil refineries using crude oils with an asphaltic base, and investigation of 15 oil refineries in Pennsylvania where the oils have a paraffin base failed to show the occurrence of cancers due to the oils among these workers. The mixed-base mid-continent oils, used in the oil refineries of Indiana and Ohio, however, seem to be more dangerous, as eight cases are reported for that locality for the years 1926 to 1929. Five cases, one of them fatal, occurred during the years 1926 to 1928 among press dumpers in the paraffin press house. Eleven cases were reported from the records of two hospitals in New York City. These cases occurred among oil pumpmen, stillmen, and dumpers, but it was impossible to obtain information about the kind of oil with which these men had been working. Altogether, the writer secured data regarding 21 cases of cancer caused by mineral oils. Sixty-two per cent of the cases occurred among workers engaged in paraffin extraction. The location of the cancer in 43 per cent of the cases was on the hand or arm, and in 38 per cent, on the scrotum.

The data indicate, it is said, that workers are exposed to the dangerous effect of the unrefined oil in almost every kind of operation, the factors which appear to influence the frequency of occurrence of cancer appearing to be personal cleanliness, individual susceptibility, and the degree of contact with oil.

So far the occurrence of skin cancer from the use of refined lubricating and spindle oils is practically unknown in this country and it is believed that the active substance in the crude oil which is responsible for the development of cancer is destroyed during refining. The sulphuric acid used in the refining process is considered with reference to the type of oil used in the United States to cause "pronounced changes in the composition of the oil, so that the strongly irritative or carcinogenic activity of the unrefined product is reduced in the refined product to a merely irritative but never carcinogenic activity." The writer considers therefore that the strong acid treatment which evidently removes the dangerous element from spindle oil accounts for the absence of occupational cancer among mule spinners in this country, as he was able to find only two cases of scrotal cancer in mule spinners which could be considered to have been positively contracted in the United States. Only six cases have been reported and four of these were probably due to the mule-spinning occupation in which the men were engaged for a long time in England prior to arriving in this country.

### Effects of Exposure of Animals to Dioxan Gas

**A** STUDY of the effects on guinea pigs of exposure to dioxan gas, one of the newer chemical products coming into industrial use, has been made by the United States Bureau of Mines.<sup>1</sup>

Dioxan gas is a colorless liquid, which can be mixed in all proportions with water and ordinary organic solvents. It has a faint and pleasant odor described as similar to absolute ethyl alcohol.

Suggested uses of dioxan are as a solvent in the manufacture of lacquers, celluloid, and other products where nitrocellulose, cellulose acetate, etc., are used; as a wetting agent for materials not easily wet with water; as a solvent for fats, oils, and greases; in dye baths and dye or stain compositions; in the preparation of varnishes, polishing compositions, paint and varnish removers, detergent and cleaning preparations, toilet preparations and cosmetics, cements, glues, shoe creams, emulsions; and as a preservative, fumigant, or deodorant.

The study showed only the acute effects as produced by a single exposure and the experiments were planned to give information relative to the concentrations and periods of exposure which produce slight, moderate, or serious response.

The symptoms exhibited by the animals subjected to the test were principally those of eye and nasal irritation with signs of lung irritation after long exposure, and narcosis with high concentration of the gas. The experiments showed that dioxan vapor is a very mild lung irritant and that this is probably its chief action from the standpoint of producing pathological changes. In animals dying as a result of exposure to the vapor or killed immediately after exposure to conditions which did not cause death but produced slight injury, the principal pathological findings were congestion and edema of the lungs and hyperemia of the brain. As dioxan has a comparatively low vapor pressure, however, it was not found possible to obtain concentrations in the air at 68° F. which would kill the guinea pigs in less than two to three hours' exposure. Concentrations of 1 per cent did not cause death after eight hours' exposure. The vapor also possesses warning properties manifested by eye, nose, and throat irritation. Exposure of persons to 0.16 per cent in air by volume resulted in immediate slight irritation of the eyes and nose with lacrimation, while exposure to 0.55 per cent caused a marked and discomforting degree of the same symptoms with a burning sensation in the throat. In view of the comparatively low toxicity of dioxan vapor, therefore, and the warning intensity of concentrations below those which caused serious effects in guinea pigs, it appears that health hazards from breathing the vapors are slight under ordinary conditions of ventilation and reasonable conditions of exposure. Dioxan presents a hazard to life, however, like all comparatively nontoxic volatile liquids, when there is exposure to high concentration, such as may accumulate in the air confined over the liquid in tanks, vats, and similar places.

<sup>1</sup> U. S. Public Health Service. Public Health Reports, August 29, 1930, pp. 2023-2032: Acute response of guinea pigs to vapors of some new commercial organic compounds, VI. Dioxan, by W. P. Yant and others.



# INDUSTRIAL ACCIDENTS AND SAFETY

## Massachusetts Regulations Governing Compressed-Air Work

ON December 1, 1930, the revised rules and regulations of the Massachusetts Department of Labor and Industries, division of industrial safety, governing compressed-air work, became effective. These regulations were prepared after an investigation and a public hearing, as required by law, and apply to all work involving the use of tunnels, caissons, or other apparatus or means in which compressed air is employed.

Authority is given to the Massachusetts Department of Labor and Industries to investigate places of employment and to determine and prescribe safety devices or other reasonable means for the prevention of accidents, and the law also provides that no person shall violate any reasonable rule, regulation, order, or requirement made by the department.<sup>1</sup>

The rules and regulations promulgated by the department are here reproduced in full:<sup>2</sup>

1. *Notice.*—No work in which compressed air is to be used shall be started until seven days after the firm, corporation, commission, or person undertaking such work has notified in writing the department of labor and industries of such contemplated work.

2. *Responsibility.*—Whenever the construction work is in progress there shall be present at all times at least one competent person representing the employer, who shall in all respects be responsible for full compliance of these regulations and who shall have authority to require all employees to comply with such regulations.

3. *Daily inspections.*—In every tunnel or section thereof, or other work requiring the use of compressed air as covered by these regulations, there shall be a competent person designated by person in charge to make a regular inspection once every working-day of all tunneling appliances, boilers, engines, compressors, magazines, shaft houses, explosives, locks, lighting circuits, and gauges, and it shall be his duty to report in writing to the person designating him, on forms approved by the department of labor and industries the result of these inspections, which shall remain on file and shall be subject to the inspection of the department of labor and industries or its representatives.

4. *Pressure shifts and intervals.*—The working time in any 24 hours shall be divided into two shifts under compressed air with an interval in open air. The minimum rest interval in open air shall not begin until the employee has reached the open air. Persons who have not

<sup>1</sup> New Jersey, New York, and Pennsylvania have also enacted laws governing employments in which compressed air is used: New Jersey, chapter 121, Acts of 1914 (as amended by ch. 90, Acts of 1929); New York, chapter 31, Consolidated Laws, 1909, Article XV, sections 425 to 437 (as amended by ch. 123, Acts of 1925); Pennsylvania, Statutes, 1920, sections 5424 to 5436.

<sup>2</sup> For the text of the laws of the other States, see Bureau of Labor Statistics Bulletin No. 370—New Jersey, pp. 717-719; New York, pp. 772-774 (also Bul. No. 403, p. 38); Pennsylvania, pp. 906-909.

previously worked in compressed air shall work therein but one shift during the first 24 hours. No person shall be subjected to pressure exceeding 50 pounds per square inch except in emergency. The maximum number of hours to each shift and minimum open-air interval between the shifts during any 24 hours for any pressure, as given in columns 1 and 2 of the following table, shall be that set opposite such pressure in columns 3, 4, 5, and 6.

PRESSURE SHIFTS AND INTERVALS OF WORK FOR EACH 24-HOUR PERIOD

Gauge pressure per square inch		Hours			
Minimum number of pounds (1)	Maximum number of pounds (2)	Maximum total (3)	Maximum first shift in compressed air (4)	Minimum rest interval in open air (5)	Maximum second shift in compressed air (6)
Normal	18	8	4	½	4
18	26	6	3	1	3
26	33	4	2	2	2
33	38	3	1½	3	1½
38	43	2	1	4	1
43	48	1½	¾	5	¾
48	50	1	½	6	½

The employer may determine the time of each shift when the pressure is less than 18 pounds, provided that the total for the two shifts does not exceed eight hours.

5. *Decompression.*—No person employed in compressed air shall be permitted to pass from the place in which the work is being done to normal air, except after decompression in the intermediate lock as follows:

A stage decompression shall be used in which a drop of one-half of the maximum gauge pressure shall be at the rate of 5 pounds per square inch per minute. The remaining decompression shall be at a uniform rate and the total time of decompression shall equal the time specified for the original maximum pressure.

(a) Where the air pressure is greater than normal and less than 15 pounds to the square inch, decompression shall be at the minimum rate of 3 pounds per minute.

(b) Where the air pressure is 15 pounds or over and less than 20 pounds to the square inch, decompression shall be at the minimum rate of 2 pounds per minute.

(c) Where the air pressure is 20 pounds or over and less than 30 pounds to the square inch, decompression shall be at the minimum rate of 3 pounds every two minutes.

(d) Where the air pressure is 30 pounds or over to the square inch, decompression shall be at the minimum rate of 1 pound per minute.

The time of decompression shall be posted in each man lock. (See form.)

6. *Special attendance employee.*—Decompression lock shall be in charge of a special employee whose duty it shall be to be in attendance at the lock during the periods of decompression and to regulate the valves controlling the supply of air and the rate of pressure.

7. *Employment record.*—A record of men employed under air pressure shall be kept by a special employee who shall remain outside the lock near the entrance. This record shall show the period of stay in the air chamber of each employee and the time taken for decompression.

8. *Regulations—temperature, lighting, sanitation.*—The following provisions shall be observed in the conduct of air-pressure work:

(a) The temperature of all working chambers which are subjected to air pressure shall, by means of after-coolers or other suitable devices, be maintained constantly at a temperature not to exceed 85° F.

(b) All lighting in compressed air chambers shall be by electricity only. In cases of emergency portable electric lamps shall be used, which shall be provided by the contractor. Lighting in tunnels and working chambers shall be supplied from a different circuit from that supplying lights in shafts.

(c) All passages shall be kept clear and properly lighted.

(d) No nuisance shall be tolerated in the air chamber and smoking shall be strictly prohibited. No animal of any kind for any purpose shall be permitted in air chambers.

9. *Same—air supply, exhaust valve, and telephone communication.*—The air supply pipe shall be carried to and within 100 feet of face of tunnel. The air shall be analyzed at least once in every 24 hours, and record of such analysis shall be kept at medical officer's office. The amount of CO<sub>2</sub> shall never exceed 1 part in 1,000.

Exhaust valves shall be operated at intervals, especially after a blast. The men shall not be permitted to resume work after a blast until the smoke and gas have cleared sufficiently.

There shall be means of communicating by telephone at all times between the working chamber, the outside thereof, and the power house on the surface.

10. *Same—shafts, locks, bulkheads, and screens.*—Whenever a shaft is used, such shaft shall be provided, where space permits, with a safe, proper, and suitable staircase for its entire length, with landing platforms not more than 20 feet apart. Where this is impracticable suitable ladders shall be installed, subject to the approval of the commissioner of labor and industries or his representative.

Shafts shall be subjected to a hydrostatic pressure of 100 pounds per square inch, at which pressure they shall be made absolutely tight and stamped on the outside shell about 12 inches from each flange, showing the pressure to which they have been subjected.

All man shafts shall be properly lighted, as required by the commissioner of labor and industries or his representative.

Locks, reducers, and shafting used in connection with caissons shall be riveted construction throughout. The material used in the manufacture shall be not less than one-quarter inch steel plate.

All necessary instruments shall be attached to all caisson and air locks showing the actual air pressure to which men employed therein are subjected. They shall include pressure gauge, timepiece, and thermometer, and shall be accessible to and in charge of a competent person.

All outside caisson air locks shall be provided with a platform not less than 42 inches wide and provided with a guard rail 42 inches high.

All caissons, whether circular, square, or rectangular in form, more than 10 feet in diameter or length, shall be provided with a man lock and shaft for the exclusive use of the men; to be equipped with a timepiece and gauge, to be heated to 70° F. during the months when heating is necessary, with valves so arranged that the lock can be operated from within and without.

Locks shall be so located that the distance between the bottom door and water level shall be no less than three feet.

In addition to the gauge in the locks, an accurate gauge shall be maintained on the outer and inner side of each bulkhead. These gauges shall be accessible at all times and shall be kept in accurate working order.

Wherever space permits, each bulkhead shall have at least two locks in perfect working order. The man lock shall be large enough so that employees who use it shall not be obliged to assume a cramped position. The emergency lock shall be large enough for an entire working shift. Every lock shall be lighted by electricity, shall contain a pressure gauge and timepiece, and have a nonshatterable bull's-eye in each door or in each end. Valves must be so arranged that the locks can be operated from within and without. Each man lock shall be in charge of a competent lock tender, whose hours of labor shall be governed by those set down in the schedule governing compressed-air workers.

Intermediate bulkheads with locks, or intermediate safety screens, or both, may be required by the commissioner of labor and industries in tunnels. The distance from such intermediate bulkheads or safety screens to the heading shall not be greater than that prescribed by the commissioner.

11. *Medical officers, etc.*—Any person or corporation carrying on any tunnel, caisson, or other work in the prosecution of which men are employed or permitted to work in compressed air, shall, while such men are so employed, also employ and keep in employment one or more duly qualified physicians to act as medical officer or officers, who shall be in attendance at all times while such work is in progress so as to guarantee constant medical supervision of men employed in compressed-air work. Said medical officer shall also be charged with the duty of enforcing the following regulations:

(a) No person shall be permitted to work in compressed air until after he has been examined by such medical officer and reported by such officer to the person in charge thereof as found to be qualified physically to engage in such work.

(b) No person not having previously worked in compressed air shall be permitted during the first 24 hours of his employment to work for longer than one-half day period (as provided in rules for compressed-air work adopted by the department of labor and industries), and after so working shall be reexamined and not permitted to work in a place where the gauge pressure is in excess of 15 pounds unless his physical condition be reported by the medical officer, as heretofore provided, to be such as to qualify him for such work.

(c) In the event of absence from work, by an employee, for 10 or more successive days for any cause, he shall not resume work until he shall have been reexamined by the medical officer, and his physical condition reported as heretofore provided, to be such as to permit him to work in compressed air.

(d) No person known to be addicted to the excessive use of intoxicants shall be permitted to work in compressed air.

(e) After a person has been employed continuously in compressed air for a period of two months he shall be reexamined by the medical officer, and he shall not be allowed, permitted, or compelled to work until such examination has been made, and he has been reported, as heretofore provided, as physically qualified to engage in compressed-air work.

(f) Such medical officer shall at all times keep a complete and full record of examinations made by him, which record shall contain dates on which examinations are made and a clear and full description of the person examined, his age and physical condition at the time of examination (including height and weight), also the statement as to the time such person has been engaged in like employment. This medical officer shall also keep an accurate record of any caisson or other disease incapacitating any person for work that shall occur in the operation of a tunnel, caisson, or other compartment in which compressed air is used; also a record of all loss of life that shall occur in the operation of a tunnel, caisson, or other compartment in which compressed air is used. These records shall be open to the inspection of the department of labor and industries or its representatives, and a copy thereof shall be forwarded to said department within the 48 hours following the occurrence of the accident, death, injury, or caisson disease, stating as fully as possible the cause of said death or caisson or other disease and the place where the injured or sick person has been taken, and such further information relative thereto as may be required by said department.

(g) Properly heated, lighted, and ventilated dressing rooms shall be provided for all employees engaged in compressed-air work. Such rooms shall contain metal lockers and benches and shall be open and accessible to men during the intermission between shifts. Bathing accommodations equipped with running hot and cold water service shall be provided; also suitable and adequate toilet accommodations, at the ratio of not less than 1 for every 25 men employed.

(h) Whenever compressed-air work is carried on during the period from October 1 to April 1, a covered passageway shall be provided from the opening into the caisson or tunnel to the lockers or dressing rooms of the employees.

(i) A medical lock at least 6 feet in height shall be established and maintained in connection with all work in compressed air. Such lock shall be kept properly heated, lighted, and ventilated, and shall contain proper medical and surgical equipment. Such lock shall be in charge of the medical officer. The patients' chamber in the medical air lock shall be so arranged that the patients may be kept under constant observation through a nonshatterable glass window without the necessity of the attendant entering the chamber.

(j) A liberal supply of hot coffee and sugar shall be provided and served to the men during work in compressed air. The coffee must be heated by means other than direct steam and shall be supplied to the employees free of charge. It shall be the duty also and the joint responsibility of the contractor, persons, or corporation employing the medical officers to enforce these rules governing the medical officer's duty.

(k) *Identification badge.*—An identification badge, such as approved by the department of labor and industries, shall be furnished to all employees, advising police officials that the employee is a compressed-air worker, stating the location of medical lock and stating that in cases of emergency an ambulance surgeon shall remove the patient to the medical lock and not to the hospital.

12. *Fire prevention.*—All reasonable precaution shall be taken against fire hazards and such regulations as may be prescribed by the commissioner for protection against fire shall be promptly complied with.

13. *Posting of labor law.*—Copies of such sections of the labor law as apply shall be furnished by the department of labor and industries to the person in charge and posted by him in a conspicuous place at the entrance to each work place.

14. *Definition.*—Whenever in the foregoing the words "adequate," "suitable," "proper," or "safe" are used, they shall be understood to mean adequate, suitable, proper, or safe in the opinion of the department of labor and industries.

15. *Modification or suspension of regulations.*—These regulations may be modified or suspended in whole or in part by the department of labor and industries if good and sufficient reason therefor is presented to the department at a hearing where all parties are given an opportunity to be present or represented.

16. *Violations.*—Whoever violates any reasonable rule, regulation, order, or requirement made by the department of labor and industries under authority hereof shall be punished by a fine of not more than \$100. (Sec. 180 of ch. 149, General Laws.)

### Accidents in North Dakota, 1919-20 to 1929-30

**A** URGENT plea has been made by the compensation commission of North Dakota for press publicity on accident facts, in an attempt to combat the large increase in accidents experienced recently. Legislative limitation upon expenditures prohibits the commission from adopting other methods of accident prevention.

The continuous increase is shown by the published number of accidents reported yearly since the establishment of the workmen's compensation bureau in July, 1919, as follows:

NUMBER OF ACCIDENTS REPORTED IN NORTH DAKOTA, 1919-20 TO 1929-30

Fiscal year	Number of accidents	Fiscal year	Number of accidents
1919-20 .....	827	1925-26 .....	2,800
1920-21 .....	1,296	1926-27 .....	3,188
1921-22 .....	1,192	1927-28 .....	4,096
1922-23 .....	1,654	1928-29 .....	4,995
1923-24 .....	1,809	1929-30 .....	5,773
1924-25 .....	2,110		

A detailed tabulation, presenting the number of accidents by counties, shows accidents ranging as high as 294 per 1,000 population for one county for the first 10 months of 1930, and it is estimated that the 1930-31 year will probably show a total of 7,000 accidents.

It is pointed out that not only are accidents in the State growing in number, but the proportion of severe accidents to total accidents is also increasing at an enormous rate. This, it is said, establishes rather definitely that the explanation for the increase in number of accidents is not in any increased pay-roll exposure, nor in greater familiarity with the law, nor in increased reporting of minor cases. The total pay-roll exposure for the calendar year of 1925 was more than 20 per cent greater than that of 1929, yet the calendar year of 1929 has an increase of 109 per cent in accidents over 1925.

While the ratio of deaths to total accidents is still less than the American accident table ratio, it has gradually become more unfavorable. The American accident table ratio is 762 deaths for every 100,000 accidents. The average North Dakota ratio, for the 10½ years up to January 1, 1930, was 495.3 deaths for every 100,000 accidents, about 35 per cent below the American accident table figures. From January 1, 1930, to October 1, 1930, the ratio was 716.3 for every 100,000 accidents, only 6 per cent below those same figures.

### Dependents of Victims of Fatal Industrial Accidents in Pennsylvania, 1929

**I**N ORDER to give some idea of the number of persons directly affected socially and economically by the staggering number of industrial fatalities, the director of the Bureau of Statistics of the Pennsylvania Department of Labor and Industry analyzes the dependency involved in 1,798 such fatalities compensated in his State in 1929.<sup>1</sup>

Only 6 of the 1,798 persons killed were women, and 5 of these had no dependents. The sixth woman had a dependent father. Of the 1,792 male wage earners killed, 434 or 24.2 per cent were single, 1,233 or 68.8 per cent were married, 76 or 4.3 per cent were widowed, and 49 or 2.7 per cent were divorced.

Only 275 or 49.2 per cent of the 559 single, widowed, and divorced male wage earners had dependents as defined by the Pennsylvania workmen's compensation act. The following table gives the number and per cent of married men leaving widows and specified numbers of children:

WIDOWS AND CHILDREN (UNDER 16) OF MARRIED MEN KILLED IN INDUSTRIAL ACCIDENTS COMPENSATED IN 1929

Class and number of dependents	Married men leaving dependents		Class and number of dependents	Married men leaving dependents	
	Number	Per cent		Number	Per cent
Widow only.....	387	31.3	Widow and 6 children.....	54	4.4
Widow and 1 child.....	215	17.5	Widow and 7 children.....	25	2.0
Widow and 2 children.....	187	15.1	Widow and 8 children.....	10	.9
Widow and 3 children.....	149	12.1			
Widow and 4 children.....	116	9.4	Total.....	1,233	100.0
Widow and 5 children.....	90	7.3			

<sup>1</sup> Pennsylvania. Department of Labor and Industry. Labor and Industry, Harrisburg, August, 1930.

In total these 1,233 married men had 3,762 persons dependent upon them.

There were 122 children under 16 orphaned by the accidental death of 64 widowers. Twelve other widowers who were killed had no child dependents under that age.

Furthermore, 79 of the males killed in industrial accidents had dependent mothers, 26 had dependent fathers, and 109 were supporting wholly or partially both mothers and fathers. There were also three men who were killed who had brothers or sisters under 16 dependent upon them.

In brief, the 1,798 fatal cases under review show that 284 of the victims had no dependents and 1,514 or approximately 85 per cent left 4,213 persons who were dependent upon them. According to this analysis, for every 2 of the 1,798 persons killed in industrial accidents, 5 persons became dependent on the State compensation system.

### Mine and Railroad Accidents in France

THE number of accidents in French coal mines and on the railroads in 1928 and 1927, respectively, has been reported<sup>1</sup> recently by the Ministry of Labor. The figures cover all accidents entailing disability lasting more than four days, employers being required to report to the mayor's office all accidents in which disability lasts longer than that time and to file a medical certificate indicating the probable results of the injury. The mayor immediately reports to the Government mining engineer the accidents occurring in coal and mineral mines, quarries, and allied industries.

The following table shows the total number of employees and the total number killed or injured in mines and quarries in France in 1928:

NUMBER OF EMPLOYEES IN FRENCH MINES AND QUARRIES AND NUMBER OF ACCIDENTS CAUSING DEATH OR DISABILITY LASTING MORE THAN FOUR DAYS, IN 1928

Industry	Number of work-ers	Number killed	Number injured (disability lasting more than 4 days)	Total killed and injured	Fatality rate per 10,000 workers
Coal mines:					
Underground workers.....	209,600	243	89,974	90,217	11.59
Surface workers.....	82,500	62	11,685	11,747	7.52
Other mines (metal and other minerals):					
Underground workers.....	38,600	133	16,591	16,724	34.45
Surface workers.....	18,500	23	2,589	2,612	12.43
Other mining works ( <i>recherches des mines</i> ):					
Underground workers.....	400	-----	8	8	-----
Surface workers.....	500	-----	8	8	-----
Underground quarries:					
Underground workers.....	10,000	27	2,548	2,575	27.00
Surface workers.....	9,900	2	1,034	1,036	2.00
Open quarries.....	81,100	104	6,683	6,787	12.82
Total.....	451,100	594	131,120	131,714	13.17

<sup>1</sup> Bulletin du Ministère du Travail et de l'Hygiene, Paris, April-May-June, 1930, p. 148.



The following table, giving the total number of employees and accidents in all mines and quarries for the years 1923 to 1928, shows the marked increase in the fatality rate since 1924.

NUMBER OF WORKERS IN FRENCH MINES AND QUARRIES, NUMBER OF KILLED AND OF INJURED, AND FATALITY RATES, 1923 TO 1928, BY YEARS

Year	Number of employees	Number killed	Number injured (disability lasting more than 4 days)	Total killed and injured	Fatality rate per 10,000 workers
1923	272,669	245	72,623	72,868	9.00
1924	345,058	311	87,138	87,449	9.00
1925	318,118	370	94,157	94,527	11.63
1926	459,839	567	126,395	126,962	12.33
1927	470,250	580	136,343	136,863	12.33
1928	451,100	594	131,120	131,714	13.17

Serious or fatal accidents to employees on French railroads which resulted only from train operations and did not include accidents at the shops or in stations numbered 1,041 in 1927. Of this number, 309 were fatalities and 732 caused disability lasting 20 days or longer.

### Mine Accidents in Mexico, 1929

MINE accident statistics in the year 1929 published by the Mexican Department of Mines show a marked decrease as compared with those in previous years, according to a report from the American consul at Mexico City, Dudley G. Dwyre, dated September 23, 1930.

The following table shows the fatal and "serious" accidents in the Mexican mining industry for each of the five years, 1925 to 1929. By "serious" accident is meant one causing a loss of more than 15 working-days.

NUMBER OF ACCIDENTS AND NUMBER OF 8-HOUR SHIFTS IN MEXICAN MINES, 1925 TO 1929

Year	Number of accidents			Number of individual 8-hour shifts
	Fatal	Serious	Total	
1925	378	4,195	27,163	25,426,362
1926	269	2,321	27,574	25,005,598
1927	227	1,995	26,865	22,942,044
1928	221	1,483	17,546	21,976,216
1929:				
Metal mines	178	1,091	11,448	16,211,598
Coal mines	9	54	674	892,214
Mills	15	166	2,308	6,792,580
Total, 1929	202	1,311	14,430	23,896,392

# WORKMEN'S COMPENSATION

## Recent Workmen's Compensation Reports

### Iowa

THE ninth biennial report of the Workmen's Compensation Service of Iowa, covering the period ending June 30, 1930, contains recommendations by the industrial commissioner, statistics of administrative activities, and decisions of the department in disputed cases.

A partial summary of departmental activities for each of the two fiscal years follows:

WORKMEN'S COMPENSATION EXPERIENCE IN IOWA, 1928-29 AND 1929-30

Item	July 1, 1928, to June 30, 1929	July 1, 1929, to June 30, 1930
Fatal injuries reported.....	143	152
Nonfatal injuries reported.....	11, 207	11, 401
Total.....	11, 350	11, 553
Settlements reported.....	4, 902	4, 888
Compensation paid in reported settlements.....	\$671, 356. 43	\$712, 395. 87
Medical and hospital service reported paid.....	\$123, 688. 75	\$131, 779. 61
Requests for arbitration.....	210	258
Expense of administration.....	\$18, 013. 20	\$18, 126. 16

Recommendations submitted for amendments to the compensation laws are as follows:

That the law be extended to include volunteer firemen, who are now excluded because no contract of employment exists and there is no showing of weekly earnings upon which to base the weekly payments. Payments of \$15 per week are suggested, to be made by the municipality or its insurance carrier.

That farmers or owners of farms, now exempt from the compulsory application of the act, be permitted to take out compensation insurance if desired, as the growing use of power machinery on the farm is increasing the hazards of farm work.

That State farm employees be brought under the compensation act.

That the method of computing weekly earnings for 7-day workers be changed by using 335 days as a yearly basis for these, in place of the 300 days now used and which really applies only to 6-day workers.

That a principal employer or contractor be made liable for compensation to the employees of a subcontractor, in case the latter does not carry compensation insurance or is not financially responsible.

In addition, the commissioner states that recommendations previously made but not accepted are still thought desirable, such as providing coverage for occupational diseases, reduction of the waiting period, revision of the statute as to dependency, etc.

Attention is called to the benefits of safety prevention, as practiced by many of the larger plants, though unfortunately neglected by some

of the smaller employers, who seemingly have a tendency to let the workers and the insurance carriers take the serious consequences. A large packing plant is cited, in which a safety campaign had been conducted for about a year. The report of this plant for June, 1930, stated that the 839 men had worked 21,045 days without a lost-time accident.

#### North Carolina

THE first annual report of the North Carolina Industrial Commission refers briefly to the organization of the commission and its preparatory work before July 1, 1929, when the new workmen's compensation act became effective, and describes the experience under the act during its first year of administration.

The activity of the commission is shown by the fact that of a total of 12,571 employers, apparently subject to the act, only 345 had failed to reject or insure. During the year reports were received of 37,370 accidents, 8,501 voluntary agreements for compensation were approved, and 647 hearings were held by individual commissioners in 749 disputed claims filed. Appeals were made from the decision of the commissioner to the full commission in 98 cases, and from the commission to the superior court in 27 of the 78 cases that were heard, while 9 cases were appealed direct from the commissioner's award. Only 10 of the appeals were heard by the superior court, which sustained the commission in 5 of them. Four of the decisions reversing the award of the commission, and two affirming it, were carried to the supreme court, which affirmed the original award of the commission in all six.

A detailed statement of claim experience and other administrative features follows. The compensation cost shown includes total amounts awarded in cases where a definite period of compensation is specified in the act.

Number of employers subject to act.....	12, 571
Proofs filed of insurance with carriers.....	11, 396
Private self-insurers approved.....	98
Public self-insurers.....	56
Rejections of act filed.....	676
Proof of insurance or rejection of act not filed.....	345
Number of employees subject to act.....	<sup>1</sup> 1, 250, 000
Rejections of act filed.....	576
Total number of accidents reported.....	37, 370
Compensable accidents.....	9, 681
Noncompensable accidents (involving medical aid only).....	24, 350
Noncompensable accidents involving no payment or time loss.....	3, 339
Average medical cost, medical-aid cases.....	\$7
Compensable cases:	
Average medical cost.....	\$43. 38
Average compensation cost.....	\$122. 84
Average weekly rate of compensation.....	\$11. 69
Average weekly wage.....	\$20. 13
Total number of disputed claims.....	749
Compensation awarded.....	376
Compensation denied.....	182
Decisions pending.....	89
Claims withdrawn.....	21
Claims not heard.....	81
Expense of administration.....	\$93, 330

<sup>1</sup> Estimated.

In addition to tabulating the 37,370 accidents reported, the commission has been actively engaged in compiling and tabulating compensation, medical and hospital costs, to assist the insurance commissioner in verifying the reasonableness and adequacy of the premium rates submitted to him for approval. Mention is made of the provision in the act for study of accident prevention, but it is stated that insufficient appropriations for administration limited the commission greatly in that important duty. During the fiscal year the State collected approximately \$142,000 through the premium tax on insurance carriers and self-insurers, provided in the act, but lack of available funds forced the commission to discontinue services of three field men and a surgeon.

Summaries follow of published data on accidents, with compensation and medical costs, by industry and by nature.

NUMBER OF ACCIDENTS REPORTED IN NORTH CAROLINA, YEAR ENDING JUNE 30, 1930, WITH COMPENSATION AND MEDICAL COST, BY INDUSTRY GROUPS AND BY NATURE OF INJURY

Industry and nature of injury	Number of employers	Number of accidents	Compensation and medical cost
<b>Industry:</b>			
Agriculture.....	167	138	\$14,672
Mining and quarrying.....	88	766	48,360
Manufacturing.....	3,204	22,686	813,250
Construction and erection.....	1,667	5,623	271,404
Transportation and public utilities.....	446	2,208	157,692
Salesmen and agents.....	3,875	4,175	268,740
Service.....	1,808	1,774	215,707
Total.....	11,255	37,370	1,789,825
<b>Nature of injury:</b>			
Loss or amputation.....		493	218,316
Fractures.....		1,847	459,056
Stiffness, contraction and other loss of function, partial or total.....		133	57,828
Dislocations.....		221	20,223
Cuts, lacerations, and punctures.....		12,823	292,867
Sprains and strains.....		3,662	126,062
Bruises, contusions, and abrasions.....		9,118	240,111
Burns and scalds.....		1,238	111,578
All other.....		4,496	263,784
No payments and no time lost.....		3,339	
Total.....		37,370	1,789,825

### New Classification of Permanent Injuries in Pennsylvania

THE Pennsylvania Department of Labor and Industry, in the September, 1930, issue of its official journal, *Labor and Industry*, calls attention to a change in the classification of permanent injuries for compensation purposes. The workmen's compensation law does not provide for compensation payments according to percentage of permanent partial disability, and injuries which did not result in full permanent partial disability were previously classed as temporary total disabilities or temporary partial disabilities. It was found that where payments in temporary total disability cases ran close to the maximum limit of 500 weeks, or where payments in temporary partial disability cases ran close to the maximum limit of 300 weeks, compensation payments were often equal to or exceeded payments which ordinarily would be made for permanent total or permanent partial disability cases.

Consequently it was decided to classify all cases previously considered temporary total or temporary partial disability as permanent total or permanent partial disabilities whenever the compensation payments in such cases amount to 75 per cent or more of the equivalent award for permanent disability. Beginning with July 23, 1930, a separate column is added to the permanent disability table, designated as miscellaneous permanent partial disability cases and including all cases which can not properly be placed in the specific classifications (such as eyes, arms, legs, etc.), and are not severe enough to warrant classification as miscellaneous permanent total disability cases.

# LABOR LAWS AND COURT DECISIONS

## Regulations Regarding Importation of Convict-Made Goods

**B**Y THE provisions of section 307 of the tariff act of 1930, chapter 497 (46 Stat. 590), approved by the President on June 17, 1930, the importation of goods made by convict labor or forced or indentured labor is prohibited.

Section 307 of the 1930 tariff act in part provides that: "All goods, wares, articles, and merchandise mined, produced, or manufactured wholly or in part in any foreign country by convict labor or/and forced labor or/and indentured labor under penal sanctions shall not be entitled to entry at any of the ports of the United States, and the importation thereof is hereby prohibited, and the Secretary of the Treasury is authorized and directed to prescribe such regulations as may be necessary for the enforcement of this provision."

The provisions of the section relating to goods, wares, articles, and merchandise mined, manufactured, or produced by forced or indentured labor will not become effective until January 1, 1932. There is also a limitation that the provision will not be applicable if production of such goods in the United States is not equal to consumptive demands. Under the terms of the provision "forced labor" is defined to mean "all work or service which is exacted from any person under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily."

Under date of November 24, 1930, the Treasury Department by authority granted in section 307 of the tariff act promulgated regulations against the importation of convict-made goods. The regulations in general provide that all importers and shippers must show that importations from all countries are not produced by convict labor. On account of the importance of the subject and of the widespread interest to both employer and employee, the regulations prescribed by the Treasury Department are herewith reproduced in full:

1. *Findings of commissioner.*—If after investigation upon complaint of American manufacturers, producers, wholesalers, or importers, representatives of American labor organizations, or other interested persons, or upon his own initiative, the Commissioner of Customs ascertains that convict labor is used in any locality in a foreign country in the mining, production, or manufacture of any class of merchandise, he shall, with the approval of the Secretary of the Treasury, publish a finding to that effect. Any merchandise of that class imported after such publication directly or indirectly from that locality shall be held to be an importation prohibited by section 307 of the tariff act of 1930 unless the importer establishes by a preponderance of evidence that the merchandise was not mined, produced, or manufactured, wholly or in part, by convict labor.

2. *Bonding of merchandise covered by such findings.*—No merchandise of the class specified in such a finding, imported after the publication thereof directly or indirectly from the locality specified therein, shall be admitted to entry or released from customs custody (except for exportation) unless the importer files with the collector a bond conditioned that he shall return the merchandise to customs custody within 30 days after demand of the collector if (1) the importer fails to submit to the commissioner within three months from the date of entry

the certificate or certificates required by paragraph 4, or (2) the commissioner decides that the merchandise was mined, produced, or manufactured, wholly or in part, by convict labor. Such bond shall be in an amount equal to the estimated domestic value (as defined in section 340 of the tariff act of 1930) of such merchandise, the full amount to be paid as liquidated damages; shall be a single bond for each importation; and shall be acceptable only with qualified corporate surety or sureties. Liquidation of the entry shall be suspended and the facts reported to the commissioner for decision as to the admissibility of the merchandise.

3. *Action of collector in absence of such a finding.*—When the collector has reason to believe that convict labor is used in the mining, production, or manufacture of any class of merchandise in any locality in a foreign country and no finding to that effect has been made by the commissioner with the approval of the secretary, he shall report to the commissioner any merchandise of that class imported directly or indirectly from that locality, offered for entry in his district, setting forth in detail the basis of his belief, and hold such merchandise for the commissioner's instructions as to whether there is sufficient ground for requiring the bond provided for in paragraph 2, or whether the merchandise shall be released from customs custody without the giving of such bond.

4. *Certificates of origin.*—The importer of merchandise bonded under paragraph 2 or 3 or held in customs custody because of failure to file a bond under paragraph 2 or 3, shall within three months from the date of entry submit to the commissioner a certificate of origin in the form set forth below, signed by the foreign seller or owner of the merchandise under oath or affirmation before an American consular officer, or if the place where the certificate is executed is so remote from an American consulate as to render impracticable its execution before an American consulate officer, then under an oath or affirmation for falsity of which he will be punishable under the laws of the jurisdiction where it is made. If the merchandise was mined, produced, or manufactured, wholly or in part, in a country other than that from which it was exported to the United States a similar certificate so signed by the last owner or seller in such other country, substituting the facts of transportation from such other country for the statements with respect to shipment from the country of exportation, shall be so submitted.

*Certificate of origin*

I, \_\_\_\_\_,  
foreign seller or owner of the merchandise hereinafter described, do solemnly  
swear (affirm) that the same, consisting of \_\_\_\_\_  
\_\_\_\_\_ of \_\_\_\_\_  
(quantity) (kind)  
in \_\_\_\_\_  
(number and kind of packages)  
bearing the following marks and numbers \_\_\_\_\_  
\_\_\_\_\_ was mined, produced, or  
manufactured by \_\_\_\_\_  
(name)  
at or near \_\_\_\_\_  
(location of mine, mill, or factory)  
and was laden on board \_\_\_\_\_  
(name of vessel or initials and  
number of car in which transported to the United States)  
at \_\_\_\_\_;  
(places actually laden)  
that such vessel or car departed from \_\_\_\_\_  
(port of such departure in the country of exportation)  
on \_\_\_\_\_;  
(date of departure)

and that convict labor was not employed in any stage of the mining, producing, or manufacturing of the merchandise, including the raw materials therein.

5. *Investigation by ultimate consignee.*—The ultimate consignee of merchandise bonded under paragraph 2 or 3, or held in customs custody because of failure to file a bond under paragraph 2 or 3, shall make every reasonable effort to determine

the source of the merchandise, including the raw materials therein, and ascertain the character of labor used in its mining, production, or manufacture, and shall within three months from the date of entry submit to the commissioner a statement, under oath, setting forth his efforts, the result thereof, and his belief with respect to the use of convict labor in any of the processes of mining, production, or manufacture of the merchandise.

6. *Decision of commissioner—action of collector.*—If the commissioner's decision is in favor of the admissibility of the merchandise and the certificate or certificates required by paragraph 4 are submitted within the time prescribed, the collector shall cancel the bond or release the merchandise. If the commissioner's decision is against the admissibility of the merchandise or if such certificate or certificates are not submitted within the time prescribed, the collector shall, in cases where the merchandise has been released under bond, make demand upon the importer for return of the merchandise to customs custody for exportation. If the merchandise is not exported within 60 days from the date of return, or, if the merchandise was held in customs custody, within 60 days from notice of the commissioner's decision, the merchandise shall, unless the importer files a protest against the decision, be treated as abandoned and shall be destroyed.

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### Indefinite Employment May be Terminated at Will

THE Supreme Court of Alabama held, in a recent case involving the interpretation of the terms of a contract, that unless custom or the nature of employment shows a different intention, indefinite employment is presumed to be terminable at the will of either party. (*Peacock v. Virginia-Carolina Chemical Co.*, 130 So. 411.)

The case involved a contract of employment made by A. J. Peacock with the Virginia-Carolina Chemical Co. The contract was for a position as salesman, "salary to be at the rate of \$2,000 per annum, payable monthly, beginning October 1, 1926." On May 9, 1927, Peacock was paid for the first half of May, 1927, and discharged, although the company said his work was entirely satisfactory.

He filed suit in the Circuit Court of Montgomery County to collect damages for the alleged breach of the contract. He alleged that until October 1, 1927, he was able, ready, and willing to continue in the performance of his duties under said contract but the company had not paid him any salary for the period from May 16, 1927, to September 30, 1927.

The Circuit Court rendered a decision in favor of the Virginia-Carolina Chemical Co., and Peacock appealed the case to the Alabama Supreme Court. The latter court said that "under the early English decisions, dealing with relations of master and servant under conditions then prevailing, an indefinite employment was presumed to continue for a year," however, "this general presumption has been generally departed from in America and the opposing presumption indulged"—that an indefinite employment is a hiring at will. The court cited several cases in which the decision showed the distinction between the phrase "at a certain salary per month" and the phrase "at the rate of a certain salary per month." In continuing the opinion the court said:

It can not be said that men, in making their contracts, would always observe a distinction between a salary of a stated amount for a given period and a salary of a fixed rate per period.

But when contracts are couched in very brief terms, and courts come to seek their meaning from these words alone, they must note the real difference in the terms employed.



Here we have a contract "at the rate of" so much per annum, "payable monthly." It can not be an entire contract for the year in the sense that no pay would be due unless the employee served a full year. \* \* \*

Contracts of employment, payable only by the year, are so unusual in modern times and conditions, that courts avoid a construction leading to such result, a result attempting a definite term at a fixed wage.

"At the rate of so much per annum, payable monthly," may obviously mean merely the fixing of the rate, not the duration of employment.

Indulging the presumption heretofore recognized, and looking to the writing alone, in the absence of averment of custom or accompanying circumstances indicating a different intent, it will be so construed.

The decision of the circuit court was therefore affirmed.

### Compensation Not Assignable in Payment of Prior Debt

**A**LTHOUGH the Tennessee compensation act does not forbid an employer and employee from contracting in good faith, pending settlement of a claim, for advance payment by the employer to the employee to be deducted from compensation when awarded, it does provide that an employee can not assign a portion of the compensation claim to the employer in payment of an antecedent debt, according to a recent decision of the Tennessee Supreme Court. (*Gregg v. New Careyville Coal Co.*, 31 S. W. (2d) 693.)

The decision of the court was based upon section 18 of the Tennessee workmen's compensation law (Pub. Acts, 1919, ch. 123) which provides that, "No claims for compensation under this act shall be assignable, and all compensation and claims therefor shall be exempt from claims of creditors." The facts, as shown by record, are in brief as follows:

Gregg, an employee of the coal company, was injured. The coal company recognized its liability to its injured employee but expected the insurance company that carried its compensation insurance to settle the claim. Gregg understood this and understood, too, that the insurance company was delaying the settlement. Pending settlement Gregg needed supplies for himself and family but was unable to obtain credit. In order to obtain the needed supplies, he entered into a written agreement with his employer that when the amount of his compensation was fixed that any sum then due for goods purchased by him from the defendant should be paid out of the award, and that as much as \$12 a week should be deducted if the award was settled in partial payments. He accordingly executed a written order to the defendant to this effect. Upon the faith of this agreement and written assignment, Gregg bought goods and was extended credit by the defendant for the sum of \$285.05. He also agreed that the company should deduct from his compensation so awarded the further sum of \$28.90 on account of supplies furnished before he was injured.

Gregg, being unable to adjust the claim of compensation with the insurance company, filed suit against the coal company to obtain an award under the compensation act. After the suit was commenced the insurance company agreed to an adjustment of the case and compensation was fixed at \$900. It appears that \$228 was paid Gregg in weekly installments prior to the date of the award. Therefore a judgment for the lump sum of \$672 was entered in favor of Gregg against the New Careyville Coal Co. From this award the employer deducted the amount of \$285.05 and also the \$28.90 according to the agreement between the employer and employee. Thereupon the employee filed suit to recover these amounts, contending that the

company had no authority to retain the money to cover its account for supplies. The suit was dismissed by the Chancery Court, Campbell County, and upon appeal the Court of Appeals, taking the view that the money could not be retained under the assignment made by Gregg to his employer because violative of the compensation law, reversed the decree.

On appeal to the Tennessee Supreme Court, the court said that "the compensation act does not forbid the employer and employee from contracting in good faith, pending a settlement for the claim for compensation, for advancement by the employer to the employee either in money or merchandise, nor does it forbid them contracting that such advancement shall be deducted from the amount of compensation when awarded. But such an agreement and assignment could not cover antecedent debts of the employer [sic] without violating the letter and the spirit of the compensation act."

The deduction of the employee's antecedent debt of \$28.90 was declared by the court to be in direct contravention of the compensation law and therefore void. The judgment of the lower court was therefore modified and affirmed.

# LABOR TURNOVER

## Labor Turnover in American Factories, November, 1930

THE Bureau of Labor Statistics presents herewith its labor turnover indexes for manufacturing as a whole and for eight separate manufacturing industries in November, 1930. The indexes for manufacturing as a whole are made up from representative establishments in over 75 industries employing at this time about 1,250,000 people.

In the eight industries for which separate indexes are presented reports were received from representative plants employing more than 25 per cent of the employees in such industries as shown by the Census of Manufactures of 1927. In the automotive industry schedules were received from plants employing nearly 200,000 people. Firms reporting for boots and shoes and cotton manufacturing employed 100,000 people in each industry. The foundry and machine shop firms reporting had approximately 175,000 people on their pay rolls. The furniture industry is represented by firms having over 40,000 people, and iron and steel by firms employing approximately 225,000 people. Reports were received from representative sawmill and slaughtering and meat packing firms who had between 65,000 and 75,000 employees per industry.

The form of average used in the following tables is the unweighted median of company rates. In determining the median rate the rates for the several establishments reporting are arranged in order from lowest to highest. The rate falling in the center of this arrangement of rates is the median. In other words, it is the rate that has as many company rates above it as below it. The number of employees used as a basis for computing these rates is the average number on the company pay rolls during the month of November.

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

The net turnover rate for manufacturing as a whole has been the same as the accession rate since November, 1929.

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

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

## A.—Monthly rates

Month	Separation rates								Accession rate		Net turnover rate	
	Quit		Lay-off		Discharge		Total <sup>1</sup>		1929	1930	1929	1930
	1929	1930	1929	1930	1929	1930	1929	1930				
January.....	2.26	1.11	0.35	1.04	0.45	0.24	3.06	2.39	4.98	2.01	3.06	2.01
February.....	2.28	1.23	.36	1.06	.46	.25	3.20	2.53	4.36	2.06	3.20	2.06
March.....	3.12	1.38	.48	1.03	.57	.30	4.17	2.71	5.20	1.95	4.17	1.95
April.....	3.56	1.45	.45	1.16	.57	.27	4.58	2.88	5.77	2.00	4.58	2.00
May.....	3.46	1.50	.48	1.18	.48	.26	4.42	2.94	5.09	2.10	4.42	2.10
June.....	3.25	1.22	.44	1.12	.51	.20	4.20	2.54	5.01	1.62	4.20	1.62
July.....	3.03	1.00	.42	1.31	.49	.18	3.94	2.49	5.21	1.48	3.94	1.48
August.....	3.26	.95	.41	1.30	.45	.13	4.12	2.38	4.61	1.25	4.12	1.25
September.....	3.14	1.13	.52	1.18	.50	.16	4.16	2.47	4.91	1.82	4.16	1.82
October.....	2.42	.82	.80	1.44	.40	.10	3.62	2.36	3.91	1.49	3.62	1.49
November.....	1.59	.57	1.26	1.21	.30	.08	3.15	1.86	1.95	.84	1.95	.84
December.....	1.08	.....	1.21	.....	.20	.....	2.49	.....	1.24	.....	1.24	.....
<b>Average..</b>	<b>2.71</b>	<b>.....</b>	<b>.60</b>	<b>.....</b>	<b>.45</b>	<b>.....</b>	<b>3.76</b>	<b>.....</b>	<b>4.35</b>	<b>.....</b>	<b>3.76</b>	<b>.....</b>

## B.—Equivalent annual rates

January.....	26.7	13.1	4.2	12.2	5.3	2.8	36.2	28.1	58.6	23.7	36.2	23.7
February.....	31.0	16.0	4.7	13.8	6.0	3.2	41.7	33.0	56.9	26.9	41.7	26.9
March.....	36.8	16.3	5.7	12.1	6.7	3.5	49.2	31.9	61.2	23.0	49.2	23.0
April.....	43.3	17.7	5.5	14.1	6.9	3.3	55.7	35.1	70.2	24.3	55.7	24.3
May.....	40.8	17.7	5.7	13.9	5.6	3.1	52.1	34.7	59.9	24.7	52.1	24.7
June.....	39.5	14.8	5.4	13.6	6.2	2.4	51.1	30.8	60.9	19.7	51.1	19.7
July.....	35.7	11.8	5.0	15.4	5.8	2.1	46.5	29.3	61.4	17.4	46.5	17.4
August.....	38.4	11.2	4.8	15.3	5.3	1.5	48.5	28.0	54.3	14.7	48.5	14.7
September.....	38.2	13.7	6.3	14.3	6.1	2.0	50.6	30.0	59.7	22.2	50.0	22.2
October.....	28.5	9.6	9.4	17.0	4.7	1.2	42.8	27.8	46.0	17.6	42.8	17.6
November.....	19.4	6.9	15.3	14.7	3.7	1.0	38.4	22.6	23.7	10.2	23.7	10.2
December.....	12.7	.....	14.2	.....	2.4	.....	29.3	.....	14.6	.....	14.6	.....
<b>Average..</b>	<b>32.6</b>	<b>.....</b>	<b>7.2</b>	<b>.....</b>	<b>5.4</b>	<b>.....</b>	<b>45.2</b>	<b>.....</b>	<b>52.3</b>	<b>.....</b>	<b>45.2</b>	<b>.....</b>

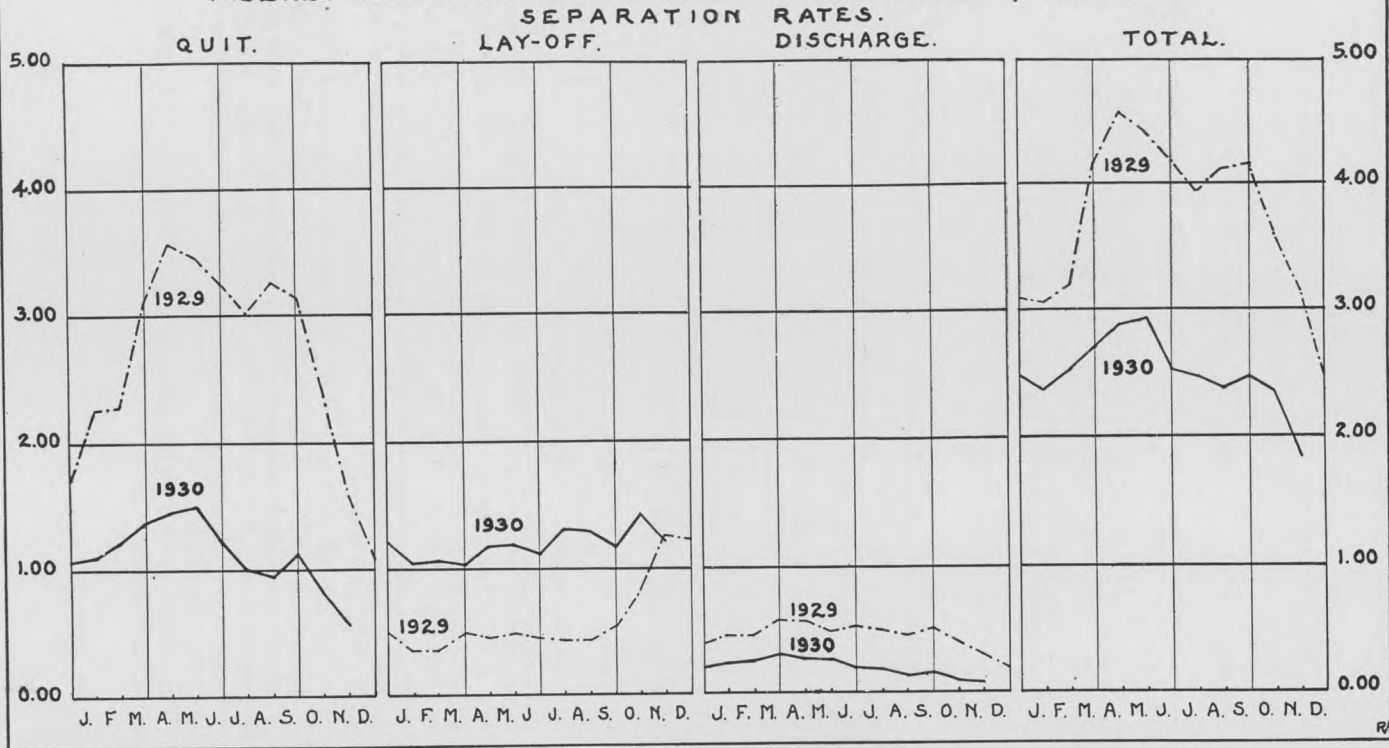
<sup>1</sup> Arithmetic sum of quit, lay-off, and discharge rates.

Comparing November, 1930, rates with those for October, 1930, there is a decrease in the quit, lay-off, discharge, and accession rates. The quit rate, the discharge rate, and the accession rate are all lower than for any month since the compilation of these figures by the Bureau of Labor Statistics. While the lay-off rate is lower than for October, it is higher than for every other month of this calendar year except July and August.

The November quit rate, 0.57, was about one-third of the quit rate for November, 1929. The lay-off rate, 1.21, was a little lower than the lay-off rate for November, 1929. This is the first month in 1930 showing a lower lay-off rate than the corresponding month of the previous year. The accession rate is less than one-half the November, 1929, accession rate.

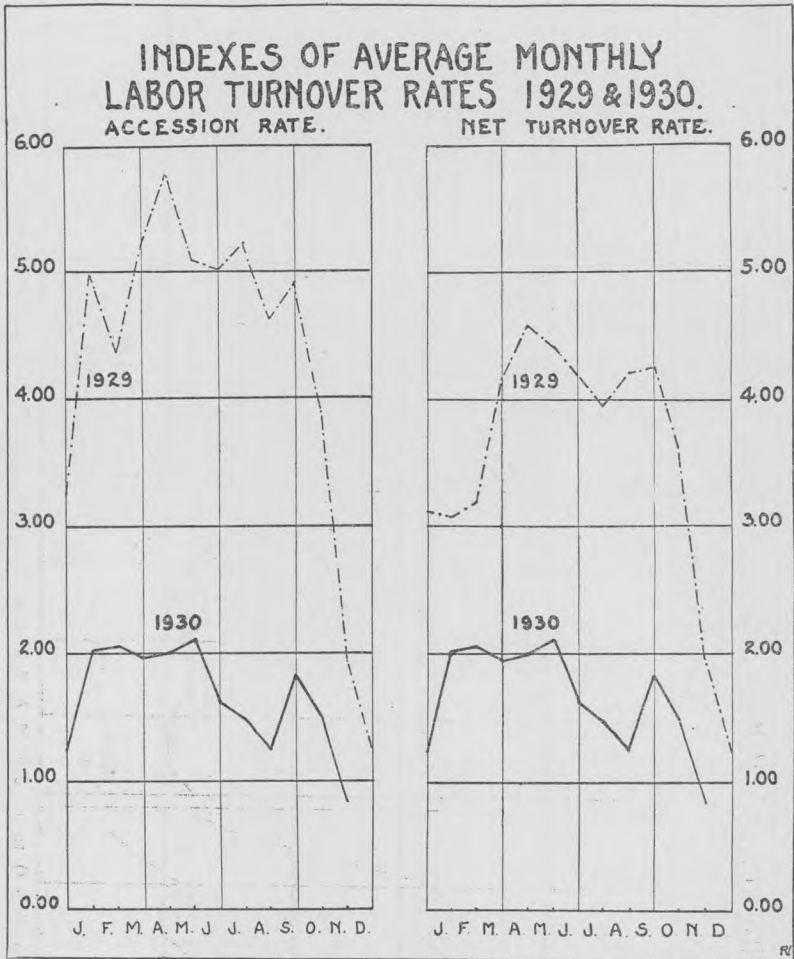
The charts following show in graphic form the information contained in Table 1.

# INDEXES OF AVERAGE MONTHLY LABOR TURNOVER RATES, 1929 & 1930.



[135]

LABOR TURNOVER



## Turnover Rates by Industries

TABLE 2 shows the quit, discharge, lay-off, accession, and net turnover rates for automobiles, boots and shoes, cotton manufacturing, iron and steel, sawmills, and slaughtering and meat packing for the months January to November, inclusive; for the foundry and machine shop industry for the months February to November, inclusive; and for the furniture industry for the months April to November, inclusive, presented both on a monthly and equivalent annual basis.

TABLE 2.—AVERAGE LABOR TURNOVER RATES IN SPECIFIED INDUSTRIES

Industry, year and month, 1930	Separation rates						Accession rates		Net turnover rate			
	Quits		Discharges		Lay-offs		Total		Monthly	Equivalent annual		
	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual				
<b>Automobiles:</b>												
January	1.27	15.0	0.59	7.0	2.22	26.2	4.08	48.2	8.20	96.9	4.08	48.2
February	1.10	14.3	.15	1.9	1.86	24.3	3.11	40.5	3.40	44.3	3.11	40.5
March	1.56	18.4	.42	4.9	1.95	23.0	3.93	46.3	5.31	66.6	3.93	46.3
April	1.84	22.4	.33	4.0	2.70	32.8	4.87	59.2	4.06	49.4	4.06	49.4
May	1.39	16.4	.27	3.2	3.68	43.3	5.34	62.9	2.74	32.3	2.74	32.3
June	1.17	14.2	.25	3.0	3.82	46.5	5.24	63.7	1.91	23.2	1.91	23.2
July	1.00	11.8	.10	1.2	4.53	53.4	5.63	66.4	1.39	16.4	1.39	16.4
August	1.02	12.0	.12	1.5	3.10	36.5	4.27	50.3	2.65	31.2	2.65	31.2
September	1.14	13.9	.16	2.0	3.60	43.8	4.90	59.7	2.70	32.9	2.70	32.9
October	.70	8.2	.08	1.0	2.60	30.6	3.38	39.8	2.10	24.7	2.10	24.7
November	.51	6.2	.10	1.2	1.64	20.0	2.25	27.4	1.50	18.2	1.50	18.2
<b>Boots and shoes:</b>												
January	1.51	17.8	.46	5.4	.28	3.3	2.25	26.5	5.26	61.9	2.25	26.5
February	1.23	16.0	.39	5.1	.72	9.4	2.34	30.5	2.06	26.9	2.06	26.9
March	1.56	18.4	.36	4.2	.44	5.2	2.36	27.8	2.79	27.8	2.36	27.8
April	1.73	21.1	.32	3.9	1.01	12.3	3.06	37.8	2.11	25.7	2.11	25.7
May	1.45	17.1	.25	2.9	.71	8.4	2.41	28.4	2.16	25.4	2.16	25.4
June	1.25	15.2	.32	3.9	.87	10.6	2.44	29.7	2.17	26.4	2.17	26.4
July	.96	11.3	.28	3.3	.75	8.8	1.99	23.4	2.50	29.5	1.99	23.4
August	1.32	15.5	.36	4.2	1.33	15.7	3.01	35.4	2.53	29.8	2.53	29.8
September	1.46	17.8	.25	3.0	.81	9.8	2.52	30.6	1.98	24.1	1.98	24.1
October	1.10	13.0	.15	1.8	1.39	16.4	2.65	16.4	1.85	21.8	1.85	21.8
November	.44	5.4	.08	1.0	1.27	15.4	1.79	21.8	.81	9.9	.81	9.9
<b>Cotton manufacturing:</b>												
January	1.20	14.2	.11	1.3	.29	3.4	1.60	18.9	2.40	28.3	1.60	18.9
February	1.20	15.6	.19	2.5	.14	1.8	1.53	19.9	1.62	21.1	1.53	19.9
March	1.59	18.7	.28	3.3	.25	2.9	2.12	24.9	2.53	29.8	2.12	24.9
April	1.34	16.3	.09	1.1	.14	5.4	1.87	22.8	2.34	28.5	1.87	22.8
May	1.40	16.5	.20	2.3	.59	6.9	2.19	25.7	2.25	26.5	2.19	25.7
June	1.04	12.6	.16	1.9	.90	11.0	2.10	25.5	1.75	21.3	1.75	21.3
July	.95	11.2	.11	1.3	.67	7.9	1.73	20.4	1.44	17.0	1.44	17.0
August	1.00	11.8	.14	1.6	.84	9.9	1.98	23.3	1.37	16.1	1.37	16.1
September	.95	11.5	.09	1.1	.47	5.7	1.50	18.3	2.06	25.1	1.50	18.3
October	.98	11.5	.08	1.0	.50	5.9	1.56	18.4	2.32	27.3	1.56	18.4
November	.67	8.2	.07	.9	.48	5.8	1.22	14.9	1.67	20.3	1.22	14.9
<b>Foundries and machine shops:</b>												
February	.77	10.1	.05	.7	.80	10.4	1.62	21.2	2.26	29.5	1.62	21.2
March	1.12	13.2	.16	1.9	1.21	14.2	2.49	29.3	2.33	27.4	2.33	27.4
April	1.26	15.3	.09	1.1	1.12	13.6	2.47	30.0	2.42	29.5	2.42	29.5
May	1.23	14.5	.25	2.9	1.88	22.1	3.36	39.5	1.83	21.6	1.83	21.6
June	.76	9.3	.15	1.8	1.99	24.2	2.90	35.3	1.30	15.8	1.30	15.8
July	.54	6.4	.16	1.9	1.79	21.1	2.49	29.4	1.23	14.5	1.23	14.5
August	.53	6.2	.13	1.5	2.00	23.6	2.66	31.3	1.04	12.2	1.04	12.2
September	.49	6.0	.08	1.0	2.00	24.3	2.57	31.3	1.00	12.2	1.00	12.2
October	.42	5.0	.09	1.1	1.85	21.8	2.37	27.9	1.21	14.2	1.21	14.2
November	.29	3.5	.07	.9	1.69	20.5	2.05	24.9	.48	5.8	.48	5.8
<b>Furniture:</b>												
April	1.22	14.8	.10	1.2	1.29	15.7	2.61	31.7	1.33	16.2	1.33	16.2
May	.76	8.9	.23	2.7	2.01	23.7	3.00	35.3	1.15	13.5	1.15	13.5
June	.39	4.7	.13	1.6	2.38	28.9	2.90	35.2	1.07	13.0	1.07	13.0
July	.42	4.9	.20	2.4	1.32	15.5	1.94	22.8	1.59	18.7	1.59	18.7
August	.62	7.3	.22	2.6	.76	8.9	1.60	18.8	2.01	23.7	1.60	18.8
September	.35	4.2	.19	2.3	.70	8.5	1.24	15.0	2.70	32.9	1.24	15.0
October	.43	5.1	.10	1.2	.88	10.4	1.42	16.7	1.66	19.6	1.42	16.7
November	.29	3.5	.09	1.1	2.18	26.5	2.56	31.1	.67	8.1	.67	8.1

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

Industry, year and month, 1930	Separation rates								Accession rates		Net turn- over rate			
	Quits		Discharges		Lay-offs		Total		Monthly	Equivalent annual	Monthly	Equivalent annual		
	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual	Monthly	Equivalent annual						
<b>Iron and steel:</b>														
January	1.37	16.1	0.23	2.8	1.63	19.2	3.23	38.1	3.87	45.6	3.23	38.1	3.23	38.1
February	1.07	14.0	.18	2.4	.74	9.7	1.99	26.1	2.97	38.7	1.99	26.1	1.99	26.1
March	1.35	15.9	.20	2.3	.45	5.3	2.00	23.5	2.54	29.9	2.00	23.5	2.00	23.5
April	1.51	18.4	.19	2.3	.30	3.7	2.00	24.4	2.43	29.6	2.00	24.4	2.00	24.4
May	1.40	16.5	.17	2.0	.87	10.3	2.44	28.8	2.06	24.3	2.06	24.3	2.06	24.3
June	1.36	16.6	.23	2.8	.64	7.8	2.33	27.2	2.38	28.9	2.23	27.2	2.23	27.2
July	.90	10.6	.15	1.8	.73	8.6	1.78	21.0	1.37	16.1	1.37	16.1	1.37	16.1
August	.95	11.2	.11	1.3	1.13	13.3	2.19	25.8	1.15	13.6	1.15	13.6	1.15	13.6
September	1.07	13.0	.09	1.1	1.00	12.2	2.16	26.3	1.32	16.1	1.32	16.1	1.32	16.1
October	.80	9.4	.08	.9	1.49	17.6	2.37	27.9	.80	9.4	.80	9.4	.80	9.4
November	.74	9.0	.05	.6	.96	11.7	1.75	21.3	.56	6.8	.56	6.8	.56	6.8
<b>Sawmills:</b>														
January	1.57	18.5	.44	5.2	1.77	20.9	3.78	44.6	2.54	29.9	2.54	29.9	2.54	29.9
February	1.77	23.1	.18	2.4	1.81	23.6	3.76	49.1	4.38	57.1	3.76	49.1	3.76	49.1
March	1.90	22.4	.11	1.3	1.10	13.0	3.11	36.7	4.86	57.2	3.11	36.7	3.11	36.7
April	1.62	19.7	.19	2.3	1.21	14.7	3.02	36.7	4.46	54.3	3.02	36.7	3.02	36.7
May	1.33	15.7	.11	1.3	1.46	17.2	2.90	34.2	3.48	41.0	2.90	34.2	2.90	34.2
June	1.10	13.4	.23	2.8	2.16	26.3	3.49	42.5	2.78	33.8	2.78	33.8	2.78	33.8
July	.82	9.6	.24	2.8	2.28	26.9	3.34	39.3	3.65	43.0	3.34	39.3	3.34	39.3
August	.67	7.9	.26	3.1	2.34	27.6	3.27	38.6	2.04	24.1	2.04	24.1	2.04	24.1
September	1.52	18.5	.16	2.0	2.67	32.5	4.35	53.0	3.07	37.4	3.07	37.4	3.07	37.4
October	.87	10.3	.20	2.3	2.09	24.6	3.16	37.2	3.32	39.1	3.16	37.2	3.16	37.2
November	.25	3.0	.16	1.9	3.15	38.3	3.55	43.2	1.27	15.4	1.27	15.4	1.27	15.4
<b>Slaughtering and meat packing:</b>														
January	1.00	18.9	.51	6.0	1.52	17.9	3.63	42.8	4.08	48.1	3.63	42.8	3.63	42.8
February	1.54	20.1	.45	5.9	4.33	56.5	6.32	82.5	2.92	38.2	2.92	38.1	2.92	38.1
March	1.89	22.3	.48	5.6	2.62	30.9	4.99	58.8	2.84	33.5	2.84	33.5	2.84	33.5
April	1.90	23.1	.46	5.6	1.91	23.3	4.27	52.0	4.28	52.1	4.27	52.0	4.27	52.0
May	2.38	28.0	.54	6.4	1.52	17.9	4.44	52.3	6.10	71.9	4.44	52.3	4.44	52.3
June	2.12	25.8	.44	5.3	1.13	13.7	3.69	44.8	6.12	74.4	3.69	44.8	3.69	44.8
July	1.52	17.9	.48	5.7	2.90	34.1	4.90	57.7	4.80	56.5	4.80	56.5	4.80	56.5
August	1.32	15.6	.36	4.2	1.35	15.9	3.03	35.7	3.66	43.1	3.03	35.7	3.03	35.7
September	1.85	22.5	.35	4.3	1.41	17.2	2.61	44.0	5.38	65.5	3.61	44.0	3.61	44.0
October	.97	11.4	.37	4.4	1.57	18.5	2.91	34.3	4.47	52.7	2.91	34.3	2.91	34.3
November	.93	11.3	.39	4.7	1.44	17.5	2.75	33.5	4.83	58.7	2.75	33.5	2.75	33.5

The November total separation rate for the automotive industry was 2.25. The accession rate was 1.50. The November quit, lay-off, and accession rates were lower than the corresponding rates for October. There was a slight increase, however, in the discharge rate.

In the boot and shoe industry the November separation rate was 1.79, and the accession rate 0.81. Comparing November rates with October rates, there was a decrease in the quit, discharge, lay-off, and accession rates.

The accession rate for the cotton-manufacturing industry was one-half of 1 per cent higher than the total separation rate for November, the former rate being 1.67 and the latter 1.22. The quit, discharge, lay-off, and accession rates were all lower for November than for October.

The foundry and machine-shop industry had a total separation rate of 2.05 and an accession rate of only 0.48. The quit, discharge, lay-off, and accession rates were all lower for November than for October.

The total separation rate for the furniture industry was 2.56, while the accession rate was 0.67. The quit, discharge, and acces-



sion rates were lower for November than for October. The November lay-off rate, however, was nearly two and one-half times as high as the October rate.

The November separation rate in the iron and steel industry was 1.75. The accession rate was 0.56. There were fewer quits, discharges, lay-offs, and accessions in this industry during November than during October.

Sawmills had a total separation rate of 3.55, and an accession rate of 1.27. The November quit, discharge, and accession rates were lower than the corresponding rates for October. The lay-off rate was 50 per cent higher for November than for October.

In the slaughtering and meat-packing industry the excess of accessions over separations was 2.08 per cent, the accession rate being 4.83 and the total separation rate 2.75. Quits and lay-offs were lower during November than during October. Discharges and accessions were higher during the latter month than during the former.

Cotton manufacturing, iron and steel, and slaughtering and meat packing had a higher quit rate than that shown for manufacturing as a whole. Automobiles, boots and shoes, foundries and machine shops, furniture, and sawmills had a lower quit rate than the all-industry quit rate.

The discharge rate for automobiles, furniture, sawmills, and slaughtering and meat packing was higher than the all-manufacturing discharge rate. Cotton manufacturing, foundries and machine shops, and iron and steel had a lower discharge rate, and boots and shoes had the same discharge rate as that shown for all industries.

The following industries had a higher lay-off rate than that shown for manufacturing as a whole: Automobiles, boots and shoes, foundries and machine shops, furniture, and slaughtering and meat packing. The lay-off rate for cotton manufacturing and for iron and steel was lower than for all manufacturing. The highest quit rate, 0.93, was shown by the slaughtering and meat-packing industry and the lowest, 0.25, for the sawmill industry. The slaughtering and meat-packing industry also had the highest discharge rate, 0.39. The lowest discharge rate, 0.05, was shown in the iron and steel industry. The lay-off rate for sawmills was 3.15. It was much higher than the lay-off rate for any other industry for which separate indexes are shown. The lowest lay-off rate shown was 0.48 in cotton manufacturing. The highest accession rate was in the slaughtering and meat-packing industry. The accession rate for this industry was 4.83. Foundries and machine shops, with 0.48, showed the lowest accession rate for the month of November.

# INDUSTRIAL DISPUTES

## Strikes and Lockouts in the United States in November, 1930

**D**ATA regarding industrial disputes in the United States for November, 1930, with comparable data for preceding months, are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

Table 1 shows the number of disputes beginning in 1927, 1928, and 1929, number of workers involved, and man-days lost for these years, the number of industrial disputes for each of the months—January, 1928, to November, 1930, 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.

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

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost during month or year
	Beginning in month or year	In effect at end of month	Beginning in month or year	In effect at end of month	
1927: Total.....	734		349,434		37,799,394
1928: Total.....	629		357,145		31,556,947
1929: Total.....	903		230,463		9,975,213
<b>1928</b>					
January.....	48		18,850	81,880	2,128,028
February.....	52	58	33,441	103,496	2,145,342
March.....	41	47	7,459	76,069	2,291,337
April.....	71	48	143,700	129,708	4,806,232
May.....	80	56	15,640	133,546	3,455,499
June.....	44	46	31,381	143,137	3,670,878
July.....	59	42	18,012	132,187	3,337,386
August.....	54	42	8,887	105,760	3,553,750
September.....	52	34	8,897	62,862	2,571,982
October.....	61	42	27,866	41,474	1,304,913
November.....	44	38	37,840	38,745	1,300,362
December.....	23	29	5,172	35,842	991,238
<b>1929</b>					
January.....	45	36	14,783	39,569	951,914
February.....	54	35	22,858	40,306	926,679
March.....	77	37	14,031	40,516	1,074,468
April.....	117	53	32,989	52,445	1,429,437
May.....	115	73	13,668	64,853	1,727,694
June.....	73	57	19,989	58,152	1,627,565
July.....	80	53	36,152	15,589	1,062,428
August.....	78	43	25,616	6,714	358,148
September.....	98	49	20,233	8,132	244,864
October.....	69	31	16,315	6,135	272,018
November.....	61	32	10,443	6,067	204,457
December.....	33	21	3,386	2,343	95,541
<b>1930</b>					
January.....	42	21	8,879	5,316	182,202
February.....	44	33	37,301	6,562	436,788
March.....	49	34	15,017	5,847	289,470
April.....	60	41	5,814	5,711	180,445
May.....	64	30	9,281	4,640	192,201
June.....	54	34	13,791	8,499	150,627
July.....	76	31	14,219	5,039	148,982
August.....	51	32	15,902	7,161	144,530
September.....	69	41	15,946	13,409	202,874
October <sup>1</sup> .....	46	34	10,972	15,776	336,492
November <sup>1</sup> .....	37	27	4,963	8,464	313,649

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

## Occurrence of Industrial Disputes, by Industries

TABLE 2 gives by industry the number of strikes beginning in September, October, and November, 1930, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN SEPTEMBER, OCTOBER, AND NOVEMBER, 1930

Industry	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	September	October	November	September	October	November
Building trades.....	15	13	7	691	703	779
Chauffeurs and teamsters.....	1	2	1	23	43	120
Clerks.....	1			19		
Clothing.....	10	7	16	4,302	257	513
Farm labor.....	1	1		400	100	
Fishermen.....	1			600		
Food workers.....			1			290
Furniture.....	5			575		
Leather.....		1			27	
Light, heat, and power.....	2	2		209	300	
Longshoremen.....		1			3,000	
Metal trades.....	4	2		110	22	
Miners.....	11	14	3	3,676	6,410	965
Motion-picture operators, actors, and theatrical employees.....	10	1	2	778	25	40
Printing and publishing.....	1			13		
Stone.....			1			11
Municipal workers.....	1			200		
Textiles.....	4	2	6	4,220	85	2,245
Tobacco.....	1			100		
Other occupations.....	1			30		
Total.....	69	46	37	15,946	10,972	4,963

## Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in November, 1930, classified by number of workers and by industries.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN NOVEMBER, 1930, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIES

Industry	Number of disputes beginning in November, 1930, 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
Building trades.....	2	1	4		
Chauffeurs and teamsters.....			1		
Clothing.....	8	7	1		
Food workers.....			1		
Miners.....			2	1	
Motion-picture operators, actors, and theatrical employees.....	1	1			
Stone.....	1				
Textiles.....			4	1	1
Total.....	12	9	13	2	1

In Table 4 are shown the number of industrial disputes ending in November, 1930, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN NOVEMBER, 1930, BY INDUSTRIES AND CLASSIFIED DURATION

Industry	Classified duration of strikes ending in November			
	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
Building trades.....	6		3	1
Chauffeurs and teamsters.....	1	1		
Clothing.....	5	9	2	
Food workers.....	1			
Furniture.....				1
Longshoremen.....	1			
Miners.....	2	2	2	
Motion-picture operators, actors, and theatrical employees.....	1			2
Stone.....	1			
Textiles.....	3			
Total.....	21	12	7	4

#### Principal Strikes and Lockouts beginning in November, 1930

*Anthracite coal miners, Pennsylvania.*—The Bast Colliery of the Philadelphia & Reading Coal & Iron Co., located between Ashland and Girardville, was, according to reports, affected by a strike of some 570 miners, beginning November 8 and ending November 13, because of grievances growing out of the refusal of certain employees to obey instructions of the management.

The men, it is said, returned to work on the same basis as before the strike.

*Textile silk workers, Pennsylvania.*—Approximately half of the 2,000 silk workers employed by the Duplan Silk Corporation of Hazleton refused to work on November 17 because of wage reductions. The trouble, it is said, began with the walkout Friday evening, November 14, of the night-shift Jacquard weavers, and these were joined Monday morning by other operatives. According to press reports, those reporting for work on the morning of the 17th were dismissed and the plant closed indefinitely.

*Hosiery workers, Pennsylvania.*—A “general strike” of the workers in the full-fashioned hosiery knitting mills “throughout all the shops in Reading and vicinity,” sponsored by the American Federation of Full-Fashioned Hosiery Workers, was called to begin November 17. In the affected area in Berks County, which includes Reading, there are said to be 28 mills, most of which have been operating on either an open-shop or nonunion basis. When the strike began, these mills were employing about 14,000 workers, of whom only a comparatively few are reported to have joined the strike movement. A number of the smaller mills, however, closed down temporarily during the disturbance. The purpose of the strike, it is understood, was to secure recognition of the union by all the mills in the county and to improve the wage status of the workers, a spokesman for whom stated that “within the last year there have been wage cuts of from 20 to 50 per cent. It is our effort to induce employers to revise wages to within 10 per cent of the level prevailing January 1.” Other press reports gave the demands as recognition of the union by all the mills and the adoption of the national agreement on wage scales. A statement by representatives of the manufacturers on November 18

said: "A survey of the 9 mills in Reading, and of the 10 largest outside the city limits shows that there are 12,184 persons regularly employed at the mills, and 495 are on strike." The number of actual strikers in all of the 28 mills that were affected directly or indirectly probably did not exceed 700.

The strike was called off at noon November 28.

#### Principal Strikes and Lockouts Continuing into November, 1930

*Women's tailors and dressmakers, New York City.*—No report of the ending of the strike of approximately 2,500 workers which began September 25 has been received as regards the seven associated Fifth Avenue firms. According to reports from union sources, the strike against these firms still continues. The manufacturers, however, have stated that since the walkout in their plants, the work has been satisfactorily done by others.

On November 15 the attorney for the association issued a statement in which he said that the total number of men who left their employ was 252, that the association had taken on other employees in place of those who left, and that "production is now being maintained on a full basis."

*Textile workers, Virginia.*—The strike at the Riverside and Dan River Cotton Mills (Inc.), which began on September 29, still continues.

Toward the close of the month troops were sent by the governor to maintain order at the Dan River mill, which is located just across the Dan River, in the village of Schoolfield, Pittsylvania County. This mill, it is understood, resumed operations with a partial force of nonunion workers on November 24. Just how many operatives are now working in the plants of the company is unknown.

Press reports state that notices of eviction from company houses were served on the families of 47 strikers on December 5.

*Anthracite coal miners, Pennsylvania.*—A strike of approximately 1,137 miners affecting the Philadelphia & Reading Coal & Iron Co. of Pottsville began on October 30 and is said to have been the outgrowth of the refusal of some of the men to obey instructions of the management.

This strike ended on November 17, the miners resuming work on the same basis as before they went out.

#### Conciliation Work of the Department of Labor in November, 1930

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 34 labor disputes during November, 1930. These disputes affected a known total of 28,470 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 December, 1, 1930, there were 34 strikes before the department for settlement and in addition 17 controversies which had not reached the strike stage. The total number of cases pending was 51.

LABOR DISPUTES HANDLED DURING THE MONTH OF NOVEMBER, 1930

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
Immigration Building, Blaine, Wash.	Controversy	Building	Asked union wages for laborers.	Adjusted. Laborers to receive union wages; all union employees.	1930 Oct. 31	1930 Nov. 6	12	40
Mine workers, Madisonville, Ky.	Strike	Miners	Asked union wages and recognition.	Pending	do	do	10,000	do
Wright Aeronautical Corp., Paterson, N. J.	Controversy	Aeronautical workers	Proposed 10 per cent wage cut.	Adjusted. Wage cut accepted	Nov. 1	Nov. 13	1,200	do
New York Coal Co., Crooksville, Ohio.	Strike	Miners	Wages cut 80 cents per day	Adjusted. Compromised on reduction of 40 cents per day or 2 cents per ton.	Oct. 29	Nov. 14	200	do
Grigsby-Grunow Co., Chicago, Ill.	Lockout	Tool and die makers	Protest 12-hour day without overtime pay.	Pending	Nov. 5	do	92	do
Hosiery Knitting Mills, Reading, Pa., and vicinity.	Strike	Hosiery knitters	Wage dispute	Adjusted. Strike declared off.	Nov. 17	Nov. 28	700	do
Building, Elwood, Ind.	Lockout	Carpenters and joiners	Nonunion carpenters employed.	Unable to adjust	Oct. 15	Nov. 1	12	do
Marine Engineering Co., Wilmington, Calif.	do	Asbestos workers	Wages cut \$2 per day	Pending	Nov. 9	do	8	7
Building, Klamath Falls, Oreg.	Controversy	Laborers	Asked prevailing wages for laborers.	do	Oct. 31	do	15	75
Arctic Creamery, Dairy & Ice Cream Co., Detroit, Mich.	Threatened strike	Engineers and firemen	Engineers reduced \$2 per week; firemen, \$5.	do	Nov. 1	do	16	500
Detroit Creamery, Dairy & Ice Cream Co., Detroit, Mich.	do	do	do	do	do	do	18	500
Palmer Dress Works, Philadelphia, Pa.	do	Dress workers	Wage dispute	Unclassified. Company's terms accepted before arrival of commissioner.	Oct. 1	Nov. 1	11	do
Woodlawn Farm & Dairy Co., Scranton, Pa.	do	Dairy workers	Company refused to make new agreement.	Adjusted. Some concessions made and agreement concluded.	Nov. 12	Nov. 15	290	do
Mitchell & Pierson, Philadelphia, Pa.	Controversy	Leather tanners	Proposed 10 per cent wage cut.	Adjusted. Proposal withdrawn and no cut made.	Nov. 10	Nov. 12	160	750
Duplan Silk Corp., Hazleton, Pa.	Strike	Weavers	Wage cut	Pending	Nov. 14	do	1,000	1,000
Building, Pittsburgh, Pa.	do	Steel workers, pile drivers, carpenters, and sheet-iron workers	Ironworkers claimed sheet-steel piling being done by carpenters.	Adjusted. All pulling and burning on piling to be done by ironworkers.	do	Nov. 19	125	250
Malleable Range Co., South Bend, Ind.	Controversy	Stove workers	Wage cut	Pending. Men will make 2-week test of company's plan.	Nov. 17	do	6	30
Monessen Granite Quarry Co., Leominster, Mass.	Strike	Granite workers	Asked prevailing wage scale	Unclassified. Others employed before commissioner's arrival.	Nov. 7	Nov. 18	11	do

[144]

Broadway Theater, Los Angeles, Calif.	Lockout.....	Operators.....	Reduction in force from 5 to 2 men.	Pending.....	Nov. 17		5	10
Rialto Theater, Los Angeles, Calif.	do.....	do.....	do.....	do.....	do.....		5	10
Phillips Petroleum Building, Monsanto, Ill.	Strike.....	Building.....	Union or nonunion conditions in the construction of oil tanks.	do.....	Nov. 18		250	700
Sheepskin clothing companies, New York City.	do.....	Clothing workers.....	Asked 44-hour week and 10 per cent increase.	Adjusted. Allowed 49-hour week and \$1.90 per day increase; union working conditions.	Nov. 1	Nov. 18	56	
Shell Oil Co., Pittsburg, Calif.	Controversy.....	Electrical workers.....	Company refused to pay union wages.	Pending.....	Nov. 24		6	100
English Raincoat Co., New York City.	Strike.....	Raincoat makers.....	Asked union recognition, 44-hour week, and wage increase.	Adjusted. Allowed 44-hour week, 15 per cent increase on piecework, and union conditions.	Nov. 1	Nov. 24	10	5
Competent Fur Dressers (Inc.), Mount Vernon, N. Y.	do.....	Fur workers.....	Asked union conditions.....	Pending.....	Nov. 19		50	6
Paramount Theater, Seattle, Wash.	Controversy.....	Musicians.....	Musicians discharged and replaced by mechanical music.	do.....	Nov. 21		20	
Wanamaker Building, Philadelphia, Pa.	Strike.....	Ironworkers.....	Dispute relative to union recognition by certain contractors.	Unclassified. All union workers employed. (Conciliation not required.)	Nov. 24	Nov. 26	4	700
Building, Detroit, Mich.	do.....	Bricklayers.....	Alleged violation of agreement.	Adjusted. Conditions restored as before dispute.	Nov. 17	Dec. 8	75	2,625
I. Miller & Sons, Haverhill, Mass.	Controversy.....	Shoe workers.....	New working conditions.....	Adjusted. Accepted changes proposed by company.	Nov. 1	Nov. 26	800	5,400
Buffalo & Susquehanna Coal Co., Tyler, Pa.	Strike.....	Miners.....	Wages cut 20 per cent.....	Unable to adjust. (Mine closed indefinitely.)	Nov. 19	Nov. 29	195	5
C. B. Connelley School, Pittsburgh, Pa.	Controversy.....	Electrical workers.....	Objection to electrical work being done by nonunion workers.	Adjusted. All work to be done by union men in future.	Nov. 20	Dec. 9	(1)	
Art Loom Mills, Philadelphia, Pa.	Strike.....	Textile workers.....	Wages cut about 25 per cent on rug weaving; dyers cut from 75 to 60 cents per hour.	Pending.....	Nov. 3		125	200
Guyon's Paradise Ballroom, Chicago, Ill.	do.....	Musicians, both for radio and dance music.	Salary rebates.....	Adjusted. Agreed to arbitration by assistant State's attorney.	Nov. 8	Nov. 25	(1)	
Baber & Goodman Hat Co., Danbury, Conn.	do.....	Hat makers.....	Piece rates.....	Adjusted. Satisfactorily arranged.	Nov. 26	Nov. 29	60	20
Total.....							15,537	12,933

<sup>1</sup> Not reported.

### Work of United States Board of Mediation, 1929-30

THE United States Board of Mediation was constituted under the terms of the railroad labor act of 1926, to handle cases of dispute which the carriers and employees have been unable to settle in conference. When disputes between carriers and their employees can not be settled through mediation proceedings, the law directs that the Board of Mediation shall endeavor to induce the parties to submit their controversy to arbitration. The arbitration board shall be composed of three or of six members, as the parties may determine, one-third of whom shall represent the carriers, one-third the employees, and one-third shall be neutral. If the representatives of the carriers and employees fail to name the neutral member or members of the board, it becomes the duty of the Board of Mediation to appoint such member or members.

The board began operations in July, 1926, since which time 540 cases involving rates of pay, rules, and working conditions have been submitted to the board. During this period the board has also received 291 applications for its services in the adjustment of grievances which had not been decided by an appropriate adjustment board by which they had been considered.

The fourth annual report of the board, covering the year July 1, 1929, to June 30, 1930, recently issued, shows that in this period the board acted upon 65 cases involving rates of pay, rules, and working conditions. Of these 65 cases, 25 were settled through mediation, 7 were submitted to arbitration, 18 were withdrawn through mediation, 2 were withdrawn without mediation consideration, and 13 were retired without mediation proceedings by action of the board. At the end of the year covered by the report, 3 of the 7 cases submitted to arbitration had been concluded. In the remaining 4 cases the interested parties had not met in an effort to agree upon the appointment of the remaining arbitrator or arbitrators. During this period the board also received 222 applications for its services in the adjustment of grievances involving the interest of employees as affected by the application of rules or of discipline. Of these cases, 120 were disposed of during the year, 9 of which were submitted to arbitration, involving two arbitration proceedings.

The accompanying table shows the number of cases handled during the year for each specified class of workers, and the number of workers involved.

MEDIATION AND ARBITRATION CASES, AND NUMBER OF WORKERS INVOLVED,  
UNDER RAILWAY LABOR ACT, JULY 1, 1929, TO JUNE 30, 1930

Class of employees	Number of cases	Number of employees involved	Class of employees	Number of cases	Number of employees involved
Brakemen, road, train, and yard.....	2	3,948	Maintenance of way employees and signalmen.....	2	306,800
Bridge and building mechanics, helpers, and steam-equipment operators.....	1	678	Masters, mates, and pilots.....	1	35
Clerical workers.....	9	144,983	Power-house employees.....	1	163
Clerical, maintenance of way and signalmen.....	1	220,717	Shopmen.....	4	3,795
Conductors and trainmen.....	1	3,903	Signalmen.....	5	1,506
Engine and train service.....	1	549	Station, tower, and telegraph service.....	9	64,642
Engine, train, and yard service.....	3	3,825	Stationary engineers and firemen.....	1	3
Locomotive engineers.....	1	3,600	Train dispatchers.....	7	339
Locomotive firemen.....	2	952	Yardmasters.....	2	427
Maintenance of way employees.....	11	56,941	Yardmen.....	1	120



In this report the board comments on the changed attitude of carriers and employees toward each other since the creation of the board, as follows:

Each element, as a whole, entertained almost to a controlling extent doubt or suspicion, or both, in respect of the bona fides of the other.

Such considerations have almost disappeared and a general and proper appreciation of reasonable attitude, one side in respect of the other, is in evidence—a highly desirable state of affairs.

Discussions are now carried on and conclusions are reached, based on the merits of questions under consideration in a temperate and businesslike way.

The public, for which the railway labor act was primarily passed by Congress, has been the special beneficiary of the application of and the splendid results obtained from this law.

No disturbing situations involving carriers and employees now exist in railroad industry.

# HOUSING

## Building Permits in Principal Cities, November, 1930

THE Bureau of Labor Statistics has received building permit reports from 288 identical cities having a population of 25,000 and over for the months of October and November, 1930, and from 282 identical cities for the months of November, 1929, and November, 1930. The reports from these cities cover the amount of building done in the corporate limits of the cities enumerated; hence the cost figures presented in the following tables cover erection costs of the buildings for which permits were issued in the specified cities. No land costs are included.

The States of Illinois, Massachusetts, New Jersey, New York, and Pennsylvania, through their departments of labor, are cooperating with the Bureau of Labor Statistics in the collection of these data.

Table 1 shows the estimated cost of new residential buildings, of new nonresidential buildings, and of total building operations in 288 cities of the United States by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS IN 288 CITIES AS SHOWN BY PERMITS ISSUED IN OCTOBER AND NOVEMBER, 1930

Geographic division	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		October, 1930	November, 1930	October, 1930	November, 1930
	October, 1930	November, 1930	October, 1930	November, 1930				
New England.....	\$3,947,400	\$3,075,250	643	576	\$4,902,780	\$7,193,904	\$10,666,692	\$11,443,127
Middle Atlantic.....	25,421,335	27,922,834	5,425	5,781	11,024,980	22,645,925	44,223,401	55,293,381
East North Central.....	9,427,421	5,708,653	1,861	1,009	16,850,461	11,672,172	29,925,074	19,689,193
West North Central.....	1,915,111	2,684,210	517	484	3,983,623	1,288,040	6,980,745	4,703,565
South Atlantic.....	2,392,752	1,950,190	530	457	3,176,155	3,342,906	7,243,546	6,521,917
South Central.....	3,797,418	2,898,677	1,063	797	6,926,045	3,973,519	11,715,626	7,587,332
Mountain and Pacific.....	6,239,770	6,078,164	2,018	1,844	8,249,372	5,947,589	16,812,105	13,710,564
Total.....	53,141,207	50,317,978	12,057	10,948	55,113,416	56,064,055	127,566,989	118,949,079
Per cent of change.....		-5.3		-9.2		+1.7		-6.8

Building permits were issued during November, 1930, in these 288 cities for building projects to cost \$118,949,079, a decrease of 6.8 per cent from the estimated cost of the building projects for which permits were issued during October. The estimated cost of new residential building decreased 5.3 per cent, comparing November with October. However, the estimated cost of new nonresidential building increased 1.7 per cent, comparing permits issued in these two periods. According to permits issued during November 10,743 family dwelling units were provided in new residential buildings.

This is a decrease of 9.2 per cent as compared with the new dwelling units provided by permits issued during October.

Increases in estimated costs of residential buildings occurred in the Middle Atlantic States and the West North Central States. Decreases in residential building were registered in the other geographic divisions.

The following geographic divisions registered increases in new nonresidential buildings: New England States, Middle Atlantic States, and the South Atlantic States. The estimated costs of total building increased in the New England States and in the Middle Atlantic States, comparing November permits issued with those issued during October. The other geographic divisions showed decreases in total building, comparing these two periods.

Table 2 shows the estimated cost of additions, alterations, and repairs as shown by permits issued, together with the percentage of decrease in November, 1930, as compared with October, 1930, in 288 cities, by geographic divisions.

TABLE 2.—ESTIMATED COST OF ADDITIONS, ALTERATIONS, AND REPAIRS IN 288 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN OCTOBER AND NOVEMBER, 1930, BY GEOGRAPHIC DIVISIONS

Geographic division	Estimated cost		Per cent of decrease, November, compared with October
	October, 1930	November, 1930	
New England.....	\$1, 816, 512	\$1, 173, 973	35. 4
Middle Atlantic.....	7, 777, 086	4, 724, 622	39. 2
East North Central.....	3, 647, 192	2, 308, 368	36. 7
West North Central.....	1, 082, 011	731, 315	32. 4
South Atlantic.....	1, 674, 439	1, 228, 821	26. 6
South Central.....	992, 163	715, 136	27. 9
Mountain and Pacific.....	2, 322, 963	1, 684, 811	27. 5
Total.....	19, 312, 366	12, 567, 046	34. 9

There was an indicated expenditure of \$12,567,046 for additions, alterations, and repairs according to permits issued during November, 1930. This was a decrease of 34.9 per cent as compared with the estimated cost of repairs for which permits were issued during October, 1930. Decreases in estimated expenditures were registered in all geographic divisions, comparing November permits with October permits. These decreases ranged from 26.6 per cent in the South Atlantic States to 39.2 per cent in the Middle Atlantic States.

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

TABLE 3.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE ESTIMATED COST OF BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES OF THE UNITED STATES

[Monthly average, 1929=100]

Month	Families provided for	Estimated costs of—			
		New residential buildings	New non-residential buildings	Additions, alterations, and repairs	Total building operations
1929					
November.....	51.7	44.8	89.6	95.2	68.1
December.....	35.9	30.2	74.3	66.1	51.7
1930					
January.....	34.2	29.4	64.3	55.1	46.1
February.....	43.0	34.7	51.8	57.5	44.1
March.....	57.1	47.2	87.1	77.5	66.4
April.....	62.0	51.0	100.1	81.8	73.8
May.....	59.6	48.5	90.7	84.5	69.3
June.....	54.4	45.1	82.5	74.6	63.3
July.....	49.9	44.1	86.7	77.4	64.8
August.....	48.7	43.4	67.2	58.6	54.4
September.....	51.3	44.4	73.8	64.2	58.2
October.....	58.3	44.9	53.5	58.1	49.7
November.....	52.9	42.5	54.4	37.8	46.3

The index number of families provided for decreased to 52.9, which is 5.4 points lower than the index number for October, 1930, but 1.2 points higher than for November, 1929. The index number of estimated expenditures for new residential building stood at 42.5 for November, 1930, which is 2.4 points lower than for October, 1930, and 2.3 points lower than for November, 1929.

The November, 1930, index number for expenditures for new nonresidential buildings was nine-tenths of a point higher than for October, 1930, but 35.2 points lower than for November, 1929. The index number for total building operations was 3.4 points lower than for October, 1930, and 21.8 points lower than for November, 1929. The chart on page 152 shows in graphic form the indicated expenditures for new residential buildings, new nonresidential buildings, and for total building operations.

Table 4 shows the estimated cost of new residential buildings, new nonresidential buildings, and of total building operations in 282 identical cities having a population of 25,000 or over for November, 1929, and November, 1930, by geographic divisions.

TABLE 4.—ESTIMATED COST OF NEW BUILDINGS IN 282 CITIES AS SHOWN BY PERMITS ISSUED IN NOVEMBER, 1929, AND NOVEMBER, 1930

Geographic division	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		November, 1929	November, 1930	November, 1929	November, 1930
	November, 1929	November, 1930	November, 1929	November, 1930				
New England.....	\$4,959,850	\$3,075,250	706	576	\$3,791,513	\$7,193,904	\$10,552,251	\$11,443,127
Middle Atlantic.....	19,812,331	27,924,834	2,842	5,786	41,027,903	22,775,488	74,278,871	55,378,028
East North Central.....	14,087,065	5,708,653	2,352	1,009	27,237,242	11,672,172	45,037,770	19,689,193
West North Central.....	2,696,075	2,684,210	766	484	4,406,243	1,288,040	8,711,295	4,703,565
South Atlantic.....	2,618,267	1,944,190	598	454	2,899,828	3,341,906	7,741,952	6,511,217
South Central.....	2,725,784	2,653,103	919	730	3,213,082	3,775,036	6,724,119	6,993,252
Mountain and Pacific.....	7,785,710	6,078,164	2,276	1,844	6,969,258	5,947,589	17,258,657	13,710,564
Total.....	54,685,082	50,068,404	10,459	10,883	89,545,069	55,994,135	170,304,915	118,428,946
Per cent of change.....		-8.4		+4.1		-37.5		-30.5

Comparing permits issued during November, 1930, with those issued during November, 1929, there was a decrease in indicated expenditures for new residential building of 8.4 per cent, and in indicated expenditures for new nonresidential building of 37.5 per cent. The estimated cost of total building projects for which permits were issued in these two periods decreased 30.5 per cent, comparing November, 1930, with November, 1929. There was an increase of 4.1 per cent in the number of family dwelling units provided during November, 1930, over those provided during November, 1929.

The Middle Atlantic was the only geographic division showing an increase in new residential buildings, comparing November, 1930, with November, 1929. Increases in the estimated costs of new nonresidential buildings for which permits were issued occurred in the New England States, the South Atlantic States, and the South Central States. Permits issued during November, 1930, for total building projects in the New England States and the South Central States showed an increase over those issued during November, 1929. Decreases were registered in all the other geographic divisions in the estimated costs of total building.

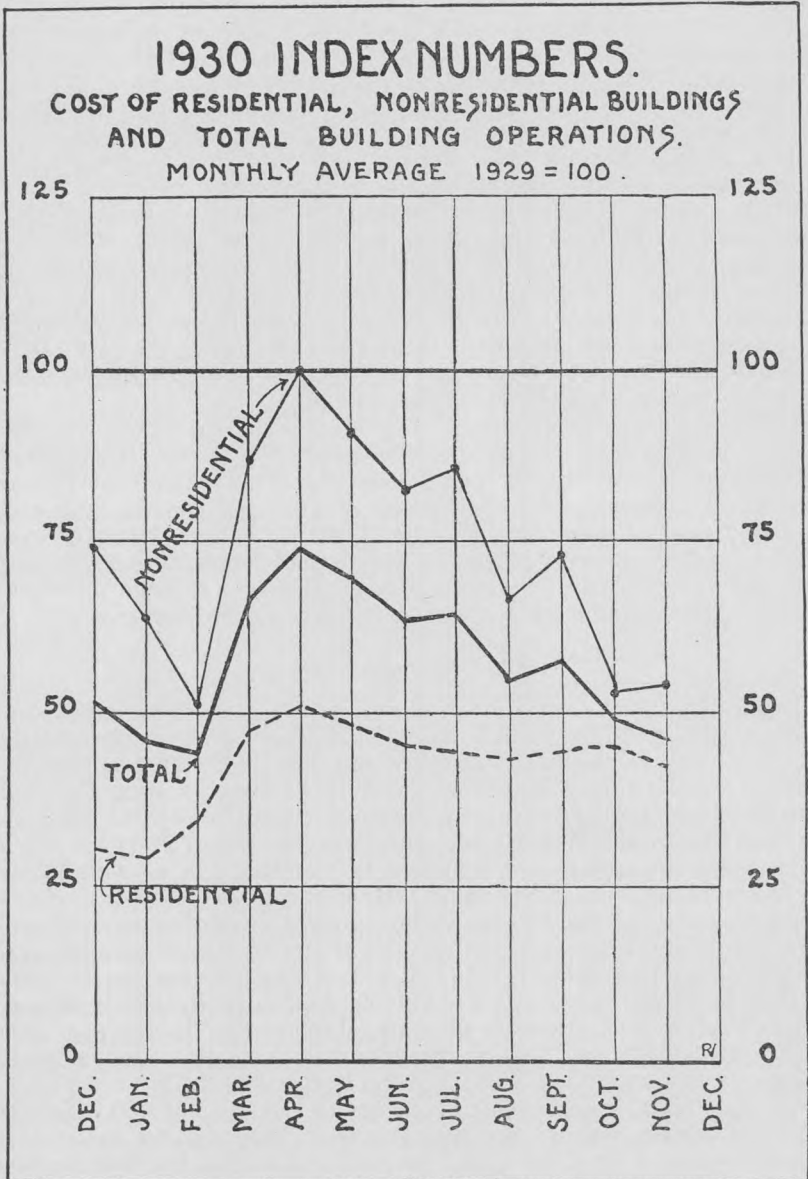
Table 5 shows the estimated cost of additions, alterations, and repairs as shown by permits issued, together with the per cent of decrease in November, 1930, as compared with November, 1929.

TABLE 5.—ESTIMATED COST OF ADDITIONS, ALTERATIONS, AND REPAIRS IN 282 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN NOVEMBER, 1929, AND NOVEMBER, 1930

Geographic division	Estimated cost		Per cent of decrease, November, 1930, compared with November, 1929
	November, 1929	November, 1930	
New England.....	\$1,800,888	1,173,973	34.8
Middle Atlantic.....	13,438,637	4,677,706	65.2
East North Central.....	3,713,463	2,308,368	37.8
West North Central.....	1,608,977	731,315	54.5
South Atlantic.....	2,223,857	1,225,121	44.9
South Central.....	785,253	565,113	28.0
Mountain and Pacific.....	2,503,689	1,684,811	32.7
Total.....	26,074,764	12,366,407	52.6

Permits issued for additions, alterations, and repairs during November, 1930, showed a decrease of 52.6 per cent as compared with permits issued for this class of work during November, 1929. Decreases in the estimated costs of repairs were shown in all geographic districts, comparing November, 1930, with November, 1929. These decreases ranged from 28.0 per cent in the South Central division to 65.2 per cent in the Middle Atlantic division.

Table 6 shows the estimated cost of new residential building, new nonresidential building, and total building operations, together with the number of families provided for in new dwellings, in 288 identical cities for November, 1930, and October, 1930. Reports were received from 48 cities in the New England States; 63 cities in the Middle Atlantic States; 72 cities in the East North Central States; 23 cities in the West North Central States; 32 cities in the South Atlantic States; 24 cities in the South Central States; and 26 cities in the Mountain and Pacific States.



## New England States

THERE was an increase of 7.3 per cent in the total amount of building for which permits were issued in November as compared with the buildings for which permits were issued during October in the New England States. New residential building decreased 22.1 per cent, while new nonresidential building increased 46.7 per cent. The number of families provided with dwelling places in new buildings decreased 10.4 per cent, comparing November permits issued with October permits issued. Increases in total building operations were registered in 21 cities in this district. Decreases were registered in 27 cities.

Permits were issued during November for the following large structures in the New England States: In Lewiston, Me., a permit was issued for a high-school building to cost \$400,000. In Boston permits were issued for two public-school buildings to cost nearly \$900,000. In Cambridge a permit was issued for a laboratory to cost \$1,500,000. In Somerville permits were issued for two school buildings to cost over \$600,000. In Pawtucket a contract was let for a new post-office building to cost \$153,000.

No report was received from New London, Conn.

Comparing permits issued in November, 1930, with those issued in November, 1929, there was a decrease of 38.0 per cent in new residential buildings, but an increase of 89.7 per cent in estimated expenditures for new nonresidential building. The estimated cost of total projects for which permits were issued increased 8.4 per cent. The number of housing units provided in new buildings decreased 18.4 per cent, comparing November, 1930, with November, 1929.

## Middle Atlantic States

IN THE Middle Atlantic States there was an increase of 9.8 per cent in residential buildings; an increase of 105.4 per cent in nonresidential buildings; and an increase of 25.0 per cent in total building, comparing permits issued during November with those issued during October. The number of family housing units provided for increased 6.6 per cent. Increases in total building operations were shown in 26 cities, while decreases were shown in 37 cities. In the Borough of Manhattan there was an increase of over \$17,000,000 in the estimated cost of new buildings for which permits were issued during November, as compared with the estimated cost of the new buildings for which permits were issued during October; over \$5,000,000 of this increase was for residential buildings and nearly \$12,000,000 for nonresidential buildings.

In Camden, N. J., permits were issued for factory buildings to cost nearly \$400,000. In Newark permits were issued for 6 apartment houses to cost over \$1,175,000. In the Borough of the Bronx applications were filed for 4 school buildings to cost \$2,600,000. In the Borough of Manhattan applications were filed for 13 apartment houses to cost over \$9,000,000; for an institutional building to cost over \$1,500,000, and for an office building to cost over \$9,000,000. A permit was issued for a school building in Syracuse to cost over \$350,000, and for one in Philadelphia to cost nearly \$250,000. In Pittsburgh a permit was issued for an office building to cost \$400,000.

No reports were received from Hazleton and Reading, Pa.

Comparing November, 1930, with November, 1929, permits, there was an increase of 40.9 per cent in the estimated cost of new residential buildings, a decrease of 44.5 per cent in the estimated cost of new nonresidential buildings, and a decrease of 25.4 per cent in total building operations. The number of families provided with dwelling places in new buildings increased 103.6 per cent.

#### East North Central States

DECREASES were registered all along the line in the East North Central States, comparing November permits issued with October permits issued. In the case of new residential buildings, the decrease was 39.4 per cent; new nonresidential building operations decreased 30.7 per cent, while the estimated cost of total building projects decreased 34.2 per cent, and the number of family dwelling units provided in new buildings decreased 45.8 per cent. Increases in the estimated cost of total building projects occurred in 25 cities and decreases occurred in 47 cities.

In Chicago permits were issued for two public-school buildings to cost nearly \$2,000,000. In Quincy a permit was issued for a new hotel building to cost \$400,000. In Hammond a new public-school building is to be erected at a cost of over \$500,000. In Cleveland permits were issued for three school buildings to cost nearly \$2,000,000, and in Lima a contract was let for a sewage-disposal plant to cost over \$500,000. In Milwaukee a permit was issued for a public-school building to cost \$360,000.

No reports were received from East Chicago and South Bend, Ind.; Battle Creek and Port Huron, Mich.; Zanesville, Ohio; and Superior, Wis.

The estimated cost of the new residential buildings for which permits were issued during November, 1930, decreased 59.5 per cent as compared with the cost of the new residential buildings for which permits were issued during November, 1929. The estimated cost of new nonresidential buildings decreased 57.1 per cent, comparing November, 1930, with November, 1929, while the estimated cost of all buildings decreased 56.3 per cent, comparing these two periods.

Total families provided with dwelling places decreased 57.1 per cent, comparing November, 1930, with the same month of 1929.

#### West North Central States

IN THE West North Central States permits issued during November indicated an increase of 40.2 per cent in the estimated expenditures for new residential buildings. There was, however, a decrease of 67.7 per cent in the indicated expenditure for new nonresidential building. Total building, as indicated by permits issued, decreased 32.6 per cent, comparing November, 1930, with October, 1930. Permits issued for new residential buildings indicated a decrease of 6.4 per cent in the number of family dwelling units provided. Increases in total building operations were shown in 6 cities, while decreases were shown in 17 cities in this district.

A permit was issued for a bus terminal building in Sioux City to cost \$145,000 and for a school building in Waterloo to cost \$140,000.

No report was received from Des Moines, Iowa.



Comparing the records for November, 1930, with those for November, 1929, it was found that there was a decrease of four-tenths of 1 per cent in the estimated cost of new residential buildings for which permits were issued; a decrease of 70.8 per cent in the estimated cost of the new nonresidential buildings for which permits were issued, and a decrease of 46.0 per cent in the total building operations for which permits were issued. There was a decrease of 36.8 per cent in the number of dwelling units provided, comparing November, 1930, permits with November, 1929, permits.

#### South Atlantic States

INDICATED expenditures for new residential buildings in the South Atlantic States decreased 18.5 per cent, comparing permits issued during November, 1930, with those issued during October, 1930. In contrast, the indicated expenditures for new nonresidential buildings increased 5.3 per cent during this period. The estimated cost of the total building projects in this district during November was 10.0 per cent under the estimated cost of total building projects for which permits were issued during October. The number of family dwelling units for which permits were issued during November decreased 13.8 per cent as compared with those for which permits were issued during October. Permits issued showed increases in total building in 16 cities in this district and decreases in 16 cities.

Permits were issued in Baltimore for four school buildings to cost \$625,000, for an office building in Lynchburg to cost \$320,000, and for a store building in Newport News to cost nearly \$250,000.

No reports were received from Pensacola, Fla.; Augusta, Ga.; Spartanburg, S. C.; and Charleston, W. Va.

There was a decrease of 15.9 per cent in the estimated cost of total building projects for which permits were issued during November, 1930, as compared with the building projects for which permits were issued during November, 1929. The estimated cost of new residential building decreased 25.8 per cent during this period, but the estimated cost of new nonresidential building increased 15.2 per cent. Family dwelling units provided decreased 24.1 per cent.

#### South Central States

PERMITS issued in the South Central States indicated decreases in estimated cost of new residential buildings, new nonresidential buildings, and total construction comparing November, 1930, with October, 1930. The estimated cost of new residential buildings decreased 23.7 per cent, new nonresidential buildings 42.6 per cent, and total construction 35.2 per cent. There was a decrease of 25.0 per cent in the number of families provided with dwelling places in new buildings, comparing the permits issued during November with those issued during October, 1930. There were increases in total construction in seven cities, and decreases in 17 cities. In New Orleans a permit was issued for an office building to cost \$150,000. In Oklahoma City permits were issued for 13 oil derricks to cost \$1,300,000 and for 2 public utilities buildings to cost nearly \$400,000. In Dallas, Tex., permits were issued for store buildings to cost over \$600,000.

No reports were received from Birmingham, Ala.; Fort Smith, Ark.; Covington and Newport, Ky.; Muskogee, Okla.; Austin, El Paso, Galveston, and Laredo, Tex.

Comparing November, 1930, with November, 1929, building permits issued showed an increase of 4.0 per cent in estimated expenditures for total building operations; an increase of 17.5 per cent in estimated expenditures for new nonresidential buildings; and a decrease of 2.7 per cent in estimated expenditures for new residential building. Families provided for in new dwelling units decreased 20.6 per cent.

#### Mountain and Pacific States

RECORDS of permits issued in the Mountain and Pacific States for November, 1930, showed a decrease of 2.6 per cent in estimated expenditures for new residential buildings; of 27.9 per cent for new nonresidential buildings; and of 18.4 per cent for total building operations, as compared with the records of permits issued during October, 1930.

Family dwelling units in new residential buildings decreased 8.6 per cent, comparing November permits with October permits. Increases in total construction occurred in 10 cities, comparing November with October, while decreases occurred in 16 cities.

In Los Angeles permits were issued for apartments to cost over \$1,200,000. In Seattle a permit was issued for four office buildings to cost over \$2,000,000.

No reports were received from Vallejo, Calif., and Butte, Mont.

There was a decrease of 20.6 per cent in total building operations for which permits were issued, comparing November, 1930, with November, 1929. New residential buildings decreased 21.9 per cent in estimated cost and new nonresidential buildings 14.7 per cent, comparing these periods. The number of family dwelling units provided decreased 19.0 per cent, comparing the record of permits issued during November, 1930, with those issued during November, 1929.

#### Hawaii

THERE was an increase of 40.6 per cent in the estimated expenditures for new residential building in Honolulu, comparing permits issued during November, 1930, with those issued during October, 1930. New nonresidential building increased 4.3 per cent, and total indicated building operations increased 7.5 per cent, comparing these two periods. There was an increase of 16.3 per cent in the number of families provided with dwelling places in new residential buildings, comparing November permits with October permits.

TABLE 6.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1930

## New England States

State and city	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings*		October	November	October	November
	October	November	October	November				
<b>Connecticut:</b>								
Bridgeport.....	\$139,450	\$90,200	35	26	\$110,433	\$21,311	\$270,463	\$134,151
Greenwich.....	265,000	122,000	16	32	121,250	21,950	442,650	187,500
Hartford.....	37,300	35,503	6	5	20,920	332,067	230,919	501,548
Meriden.....	29,850	36,650	7	9	13,698	4,200	56,893	63,835
New Britain.....	11,100	34,500	2	4	8,750	24,575	26,652	75,358
New Haven.....	362,500	135,000	19	24	84,450	31,680	477,880	215,438
Norwalk.....	142,000	49,000	19	7	16,200	52,850	188,110	120,850
Stamford.....	31,500	57,500	4	9	43,175	15,050	85,610	105,340
Waterbury.....	74,500	47,600	12	12	14,700	9,400	108,650	67,650
<b>Maine:</b>								
Bangor.....	17,700	10,500	5	4	39,130	650	61,830	11,300
Lewiston.....	6,000	5,000	1	1	0	400,900	20,000	406,300
Portland.....	68,400	37,850	12	10	14,101	36,150	98,269	89,239
<b>Massachusetts:</b>								
Boston.....	419,300	436,000	98	107	2,338,520	1,345,845	3,055,222	2,038,911
Brookton.....	52,000	68,100	10	5	76,205	10,275	141,803	91,119
Brookline.....	254,500	85,500	27	6	8,995	22,400	269,355	130,200
Cambridge.....	86,000	25,000	5	6	124,300	1,662,205	234,145	1,610,908
Chelsea.....	0	0	0	0	0	1,450	9,525	8,885
Chicopee.....	1,800	13,500	1	3	6,500	17,050	12,800	31,225
Everett.....	7,000	26,000	2	8	151,900	20,000	163,170	50,775
Fall River.....	3,200	7,800	1	2	13,585	7,685	22,305	23,100
Fitchburg.....	11,300	9,000	3	2	21,675	29,800	33,715	44,895
Haverhill.....	11,200	13,900	4	4	3,710	38,225	26,580	58,590
Holyoke.....	9,000	6,000	2	1	375,150	5,200	395,300	11,800
Lawrence.....	5,000	5,500	1	1	20,727	31,375	45,477	43,170
Lowell.....	17,000	32,800	4	6	14,595	93,450	49,780	131,485
Lynn.....	89,600	12,000	19	3	110,545	4,194	234,935	47,194
Malden.....	24,000	115,000	5	29	5,150	22,690	38,100	145,565
Medford.....	194,500	110,500	39	19	119,925	8,440	321,275	129,565
New Bedford.....	35,000	5,500	1	1	12,925	19,200	62,900	37,025
Newton.....	328,700	443,400	32	46	51,285	12,920	685,564	487,880
Pittsfield.....	108,900	106,600	23	18	151,693	30,700	271,293	152,090
Quincy.....	136,500	83,700	31	19	29,655	136,165	192,077	236,633
Revere.....	14,200	19,500	3	4	8,800	15,170	36,875	42,495
Salem.....	17,500	17,000	3	4	10,800	8,450	113,785	83,775
Somerville.....	0	6,000	0	2	8,835	649,767	36,855	675,957
Springfield.....	118,350	64,100	25	14	26,025	1,762,525	265,575	1,864,225
Taunton.....	2,000	8,850	1	3	12,338	1,025	24,133	13,837
Waltham.....	26,000	46,500	6	9	12,285	7,925	40,615	57,700
Watertown.....	45,800	40,500	8	8	21,175	4,320	68,600	52,020
Worcester.....	124,400	261,100	24	38	460,740	15,730	664,742	296,985
<b>New Hampshire:</b>								
Manchester.....	51,700	12,200	13	5	14,360	7,270	90,674	41,758
<b>Rhode Island:</b>								
Central Falls.....	5,500	12,500	2	5	950	14,750	7,060	27,650
Cranston.....	207,300	53,500	47	12	20,900	11,235	236,350	70,950
East Providence.....	36,500	42,100	6	7	13,625	6,950	64,876	68,207
Newport.....	9,500	59,000	2	7	25,050	95,310	40,760	173,135
Pawtucket.....	103,300	55,300	19	13	20,720	162,900	146,390	221,880
Providence.....	199,800	110,000	34	16	119,405	59,700	480,890	254,304
Woonsocket.....	5,750	0	4	0	2,925	825	15,285	9,225
<b>Total.....</b>	<b>3,947,400</b>	<b>3,075,250</b>	<b>643</b>	<b>576</b>	<b>4,902,780</b>	<b>7,193,904</b>	<b>10,666,692</b>	<b>11,443,127</b>
Per cent of change.....		-22.1		-10.4		+46.7		+7.3

\* Applications filed.

TABLE 6.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1930—Continued

## Middle Atlantic States

State and city	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs,) estimated cost	
	Estimated cost		Families provided for in new dwellings		October	November	October	November
	October	November	October	November				
New Jersey:								
Atlantic City.....	\$6,250	0	1	0	\$4,210	\$2,925	\$218,491	\$70,660
Bayonne.....	31,000	0	12	0	10,350	25,000	49,900	30,200
Bloomfield.....	145,000	\$112,000	31	26	18,000	7,000	164,000	120,000
Camden.....	27,000	34,200	9	18	154,962	367,850	213,307	417,475
Clifton.....	100,400	40,000	22	10	11,775	53,950	119,225	97,480
East Orange.....	28,000	28,000	7	6	41,660	41,250	516,716	100,479
Elizabeth.....	78,000	70,000	19	14	28,000	74,500	106,000	144,500
Hoboken.....	0	0	0	0	19,775	14,150	81,005	54,590
Irvington.....	0	38,500	0	10	25,215	21,340	35,675	68,465
Jersey City.....	127,000	62,500	31	14	44,180	114,925	236,810	220,725
Kearny.....	46,000	6,500	13	2	16,031	5,325	64,081	15,250
Montclair.....	107,500	17,500	5	1	15,925	18,025	159,139	59,975
Newark.....	146,500	1,876,500	22	443	208,300	201,277	447,125	2,168,490
New Brunswick.....	0	0	0	0	4,050	5,650	16,800	14,306
Passaic.....	25,500	10,000	4	1	18,300	11,775	107,912	38,473
Paterson.....	70,900	24,000	13	7	39,804	37,114	165,215	102,948
Perth Amboy.....	19,750	0	3	0	42,206	27,520	85,836	40,810
Plainfield.....	80,475	37,625	12	5	32,355	36,600	139,656	83,760
Trenton.....	7,500	0	1	0	28,783	55,543	59,104	69,098
Union City.....	0	8,000	0	1	1,300	216,800	17,870	236,203
West New York.....	8,500	0	1	0	150	1,200	19,350	5,675
New York:								
Albany.....	565,200	86,800	72	9	41,800	157,122	657,971	296,553
Amsterdam.....	4,000	5,000	1	1	11,500	10,800	16,000	17,100
Auburn.....	22,000	21,600	4	5	3,235	3,970	26,530	32,120
Binghamton.....	61,850	21,000	16	4	27,000	21,101	145,297	68,805
Buffalo.....	563,800	141,400	168	31	488,442	484,760	1,143,728	688,238
Elmira.....	7,900	8,500	2	2	17,670	11,929	49,233	28,376
Jamestown.....	39,100	54,900	10	13	4,800	13,200	82,830	73,460
Kingston.....	35,000	32,000	5	6	7,880	4,935	71,060	44,095
Mount Vernon.....	351,000	577,900	40	75	8,043	69,108	410,808	669,883
Newburgh.....	18,800	28,050	3	2	2,740	500	26,690	29,130
New Rochelle.....	205,500	372,090	16	22	434,172	59,947	672,427	487,372
New York City—								
Bronx <sup>1</sup> .....	2,327,200	3,300,200	504	934	684,800	2,915,440	3,627,595	6,794,945
Brooklyn <sup>1</sup> .....	5,181,250	5,161,550	1,245	1,268	690,150	6,562,465	6,562,205	6,277,619
Manhattan <sup>1</sup> .....	3,948,000	9,410,000	783	1,411	552,650	12,251,980	5,112,790	22,870,685
Queens <sup>1</sup> .....	6,487,400	3,846,600	1,557	1,021	3,237,444	542,532	10,305,141	4,669,119
Richmond <sup>1</sup> .....	265,700	180,600	83	44	115,120	226,720	454,031	467,071
Niagara Falls.....	110,266	72,229	23	19	574,488	53,036	722,980	163,631
Poughkeepsie.....	63,500	54,800	6	10	13,840	5,100	90,940	63,580
Rochester.....	84,900	138,700	17	20	89,141	121,220	272,901	315,779
Schnectady.....	40,500	53,500	7	9	117,200	45,550	182,550	135,650
Syracuse.....	191,700	237,700	36	42	147,475	406,593	457,530	947,449
Troy.....	69,500	33,000	12	6	12,000	69,100	101,105	118,735
Utica.....	78,500	54,500	11	12	7,276	13,510	98,711	72,010
Watertown.....	3,500	4,500	1	2	2,950	4,520	16,497	17,986
White Plains.....	228,000	221,400	14	21	433,219	28,620	776,054	273,865
Yonkers.....	1,584,250	301,200	240	41	63,460	159,855	1,697,135	480,380
Pennsylvania:								
Allentown.....	140,500	8,000	20	1	97,275	4,500	244,525	42,250
Altoona.....	12,500	32,200	3	6	13,896	14,956	49,494	55,745
Bethlehem.....	9,700	88,100	3	14	4,425	99,225	21,075	194,975
Butler.....	3,500	2,000	1	1	450	800	5,150	5,800
Chester.....	4,000	13,000	2	2	4,200	9,912	15,025	34,112
Easton.....	31,000	23,500	3	2	5,795	615	45,355	31,103
Erie.....	241,500	83,000	31	17	73,595	27,940	356,860	125,210
Harrisburg.....	24,800	33,500	4	5	179,295	12,725	227,373	83,760
Johnstown.....	16,000	2,500	3	1	19,645	6,155	57,405	43,855
Lancaster.....	10,000	0	2	0	11,375	109,545	39,094	121,839
McKeesport.....	27,700	25,200	5	4	9,250	6,170	57,620	45,445
New Castle.....	21,500	10,100	4	2	4,715	22,415	27,440	39,265
Norristown.....	0	60,000	0	8	12,725	3,863	20,130	78,228
Philadelphia.....	802,300	248,400	162	44	1,339,205	1,638,304	4,850,145	2,257,099
Pittsburgh.....	424,000	407,250	79	78	126,635	678,065	806,088	1,296,990
Seranton.....	8,000	14,400	2	4	20,376	14,343	300,269	39,615
Wilkes-Barre.....	13,444	0	10	0	83,130	108,127	129,028	133,921
Wilkesburg.....	9,000	9,000	1	1	16,175	3,000	35,403	17,200
Williamsport.....	10,300	72,000	5	1	37,872	4,158	56,653	80,468
York.....	18,000	6,000	3	2	41,120	289,775	75,313	303,276
Total.....	25,421,335	27,922,834	5,425	5,781	11,024,980	22,645,925	44,223,401	55,293,381
Per cent of change.....		+9.8		+6.6		+105.4		+25.0

<sup>1</sup> Applications filed.

## HOUSING

159

TABLE 6.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1930—Continued

## East North Central States

State and city	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		October	November	October	November
	October	November	October	November				
<b>Illinois:</b>								
Alton	\$3,000	\$8,300	1	3	\$4,742	\$1,850	\$17,324	\$22,735
Atrora	38,959	33,020	7	5	28,550	39,927	135,956	83,128
Belleville	49,450	24,000	14	6	8,062	70,250	60,952	95,800
Bloomington	2,000	15,000	1	3	10,000	13,000	13,000	31,000
Chicago	1,698,300	544,800	330	81	4,798,750	3,271,800	6,763,995	4,099,500
Cicero	0	0	0	0	60,580	2,965	67,900	56,965
Danville	33,293	29,000	4	4	1,800	1,365	36,845	39,876
Decatur	17,300	17,200	4	2	62,725	198,075	83,075	218,175
East St. Louis	36,600	31,500	16	9	63,085	2,450	100,835	36,375
Elgin	35,400	29,000	7	6	7,975	29,825	53,740	66,600
Evanston	83,000	32,000	6	3	16,500	9,500	165,950	91,000
Joliet	33,500	50,000	6	7	15,880	159,850	93,980	217,750
Moline	36,800	50,800	11	11	20,255	38,800	67,470	98,368
Oak Park	29,300	69,000	3	9	24,635	5,035	71,935	80,635
Peoria	156,600	151,600	32	22	152,515	7,700	309,115	175,550
Quincy	15,800	409,500	6	3	22,480	2,240	38,795	412,990
Rockford	83,000	109,000	22	32	13,515	29,000	310,405	184,255
Rock Island	37,800	27,700	11	7	6,825	2,040	63,085	43,157
Springfield	55,200	32,900	13	10	13,357	12,070	92,305	58,120
<b>Indiana:</b>								
Anderson	5,750	6,350	3	3	1,380	575	7,130	7,258
Elkhart	5,940	10,800	3	4	3,310	2,250	29,310	20,425
Evansville	68,400	20,000	10	5	14,050	25,350	124,450	51,773
Fort Wayne	92,535	87,350	16	20	75,442	26,368	208,195	129,177
Gary	48,000	10,000	9	3	38,230	30,250	109,430	68,650
Hammond	60,280	31,500	15	7	17,405	521,721	87,835	561,331
Indianapolis	225,000	164,650	49	52	204,333	110,690	513,861	342,410
Kokomo	3,200	0	2	0	1,472	742	8,952	7,817
Marion	9,000	0	2	0	48,300	10,600	114,600	11,300
Muncie	14,400	1,600	4	1	23,160	5,350	52,949	11,846
Richmond	33,000	17,500	12	5	24,600	3,200	61,000	25,850
Terre Haute	350	2,000	1	1	8,535	6,150	93,415	17,490
<b>Michigan:</b>								
Bay City	7,000	12,000	2	2	4,240	2,200	48,750	24,110
Detroit	1,606,259	1,259,250	308	182	1,059,485	824,505	2,970,393	2,587,493
Flint	66,227	88,927	12	19	48,152	33,732	184,149	146,424
Grand Rapids	62,800	47,500	18	12	16,455	103,195	402,110	165,880
Hamtramck	0	5,500	0	1	7,950	66,150	18,600	75,215
Highland Park	0	0	0	0	1,400	1,400	5,830	10,175
Jackson	21,500	0	4	0	10,420	6,235	47,565	74,345
Kalamazoo	44,400	13,300	7	4	9,218	131,913	65,190	152,596
Lansing	37,500	33,000	6	8	131,500	17,585	202,435	56,220
Muskegon	16,400	3,500	5	1	132,210	3,110	166,567	21,340
Pontiac	15,800	1,040	3	2	32,095	37,445	54,970	40,425
Saginaw	21,800	20,800	6	6	25,209	18,845	68,034	43,956
<b>Ohio:</b>								
Akron	104,500	28,600	18	5	102,396	130,981	281,630	178,123
Ashtabula	18,300	2,600	5	1	3,130	21,150	25,098	30,700
Canton	34,000	15,200	5	3	25,067	169,660	81,784	193,135
Cincinnati	1,330,980	780,550	159	148	1,495,770	559,725	2,964,430	1,491,065
Cleveland	379,500	194,500	68	38	6,489,217	2,057,800	7,187,642	2,491,700
Columbus	421,600	142,600	83	24	218,900	48,400	949,000	275,500
Dayton	137,734	45,600	32	13	106,765	67,492	291,109	149,679
East Cleveland	0	0	0	0	7,260	1,192	12,685	8,302
Hamilton	18,150	4,000	6	1	32,923	212,020	64,588	218,180
Lakewood	36,500	72,000	4	21	16,672	7,535	59,217	83,705
Lima	0	0	0	0	6,730	512,642	9,914	513,514
Lorain	15,100	12,300	4	4	24,427	3,620	45,567	17,595
Mansfield	27,500	49,400	6	12	5,715	2,905	51,282	54,317
Marion	5,000	4,500	2	1	10,055	640	15,305	7,140
Newark	1,400	0	2	0	425	325	2,725	1,900
Portsmouth	66,800	0	4	0	33,000	4,327	103,073	6,255
Springfield	19,700	11,800	7	3	3,425	14,350	51,345	27,540
Steubenville	50,000	4,000	4	1	6,950	151,900	64,275	158,050
Toledo	100,100	65,600	21	18	42,750	831,436	224,405	952,831
Warren	14,360	16,770	5	5	7,970	3,685	49,780	27,325
Youngstown	52,700	69,375	16	15	210,635	138,345	273,937	219,100

TABLE 6.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1930—Continued

## East North Central States—Continued

State and city	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		October	November	October	November
	October	November	October	November				
Wisconsin:								
Fond du Lac.....	\$68, 150	\$5, 200	4	1	\$21, 535	\$8, 565	\$96, 385	\$17, 595
Green Bay.....	22, 350	36, 500	7	11	78, 572	1, 550	114, 022	40, 060
Kenosha.....	12, 000	19, 430	2	4	69, 488	4, 800	88, 963	29, 330
Madison.....	61, 000	75, 700	15	15	21, 940	8, 010	121, 740	90, 903
Milwaukee.....	1, 313, 654	402, 311	341	79	449, 471	778, 851	2, 115, 965	1, 376, 830
Oshkosh.....	15, 100	24, 785	3	7	6, 665	16, 968	32, 618	56, 363
Racine.....	121, 100	71, 645	32	7	74, 313	14, 125	217, 668	134, 445
Sheboygan.....	69, 300	52, 800	13	11	7, 713	11, 870	136, 540	71, 856
Total.....	9, 427, 421	5, 708, 653	1, 861	1, 009	16, 850, 461	11, 672, 172	29, 925, 074	19, 689, 193
Per cent of change.....		-39. 4		-45. 8		-30. 7		-34. 2

## West North Central States

Iowa:								
Burlington.....	\$7, 900	\$2, 130	2	1	\$241, 685	\$2, 825	\$254, 835	\$5, 830
Cedar Rapids.....	16, 700	49, 900	8	14	23, 820	26, 700	74, 857	86, 831
Council Bluffs.....	5, 000	1, 000	1	1	40, 650	12, 250	54, 150	17, 250
Davenport.....	56, 700	765, 300	15	5	22, 628	6, 412	106, 777	793, 018
Dubuque.....	9, 661	6, 000	11	2	26, 696	2, 600	44, 063	20, 400
Ottumwa.....	28, 500	12, 000	5	2	5, 000	8, 000	58, 250	20, 500
Sioux City.....	58, 700	210, 200	17	20	107, 495	12, 685	172, 895	232, 535
Waterloo.....	22, 800	35, 200	5	11	12, 150	150, 475	48, 000	187, 295
Kansas:								
Hutchinson.....	26, 400	5, 000	7	2	212, 345	1, 725	244, 060	17, 605
Kansas City.....	100, 900	33, 300	25	16	0	32, 300	123, 465	71, 625
Topeka.....	32, 900	13, 500	8	2	7, 210	5, 375	46, 765	24, 465
Wichita.....	116, 085	140, 150	48	37	165, 725	115, 738	329, 558	287, 246
Minnesota:								
Duluth.....	28, 800	23, 700	7	7	33, 500	6, 865	93, 525	51, 907
Minneapolis.....	485, 855	403, 600	125	112	255, 020	211, 665	951, 140	676, 535
St. Paul.....	196, 410	230, 700	45	42	279, 917	104, 418	597, 058	390, 053
Missouri:								
Joplin.....	19, 000	11, 700	4	3	2, 200	200	27, 550	22, 500
Kansas City.....	136, 000	102, 500	34	35	2, 020, 350	112, 691	2, 315, 600	361, 991
Springfield.....	35, 500	10, 400	14	6	66, 195	10, 750	109, 070	25, 475
St. Joseph.....	30, 250	20, 900	12	8	9, 225	131, 325	43, 000	155, 520
St. Louis.....	255, 450	446, 530	63	112	296, 206	228, 063	765, 100	962, 926
Nebraska:								
Lincoln.....	15, 700	13, 500	8	4	71, 902	22, 000	91, 167	44, 675
Omaha.....	128, 275	50, 600	29	9	63, 560	81, 108	291, 360	146, 233
South Dakota:								
Sioux Falls.....	101, 625	96, 400	24	33	20, 144	1, 875	138, 500	101, 150
Total.....	1, 915, 111	2, 684, 210	517	484	3, 983, 623	1, 288, 040	6, 980, 745	4, 703, 565
Per cent of change.....		+40. 2		-6. 4		-67. 7		-32. 6

## South Atlantic States

Delaware:								
Wilmington.....	\$126, 750	\$136, 840	29	23	\$66, 049	\$15, 651	\$240, 770	\$190, 870
District of Columbia:								
Washington.....	843, 350	956, 500	133	223	909, 173	488, 825	2, 058, 425	1, 562, 430
Florida:								
Jacksonville.....	63, 100	23, 250	23	13	62, 170	18, 860	185, 695	78, 040
Miami.....	13, 200	32, 050	6	6	81, 195	32, 240	158, 524	112, 288
St. Petersburg.....	44, 500	18, 600	9	3	8, 700	4, 900	74, 100	55, 200
Tampa.....	12, 300	7, 800	11	5	2, 980	8, 544	39, 173	31, 558
Georgia:								
Atlanta.....	109, 385	39, 700	51	28	842, 102	53, 125	1, 026, 092	154, 949
Columbus.....	29, 850	25, 800	8	11	8, 225	482	42, 120	33, 222
Macon.....	0	8, 850	0	8	112, 850	38, 425	137, 548	71, 070
Savannah.....	13, 500	33, 500	3	9	2, 350	400	20, 575	33, 900

TABLE 6.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1930—Continued

## South Atlantic States—Continued

State and city	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		October	November	October	November
	October	November	October	November				
Maryland:								
Baltimore.....	\$607,000	\$232,000	119	45	\$341,200	\$1,024,875	\$1,617,800	\$1,786,175
Cumberland.....	6,300	20,850	2	5	2,320	2,015	12,935	23,540
Hagerstown.....	19,500	22,500	5	3	24,450	3,840	48,370	26,340
North Carolina:								
Asheville.....	7,400	0	2	0	6,320	7,260	18,845	19,760
Charlotte.....	61,560	66,600	11	8	19,798	75,070	92,431	158,753
Durham.....	20,950	130,400	5	7	47,000	51,624	76,100	186,074
Greensboro.....	50,400	11,000	6	2	19,224	6,300	83,710	31,065
Wilmington.....	29,000	6,000	7	3	300	1,000	35,700	10,700
Winston-Salem.....	32,700	11,650	6	5	18,405	2,295	66,903	32,591
South Carolina:								
Charleston.....	18,500	11,100	3	5	175,910	219,875	207,905	237,640
Columbia.....	11,825	17,800	9	4	300	89,250	32,780	115,980
Greenville.....	3,500	7,750	4	3	14,795	22,345	29,385	35,480
Virginia:								
Lynchburg.....	72,900	7,100	17	4	3,630	320,350	110,210	331,190
Newport News.....	18,412	2,000	7	2	47,326	233,817	80,497	253,239
Norfolk.....	51,100	23,650	15	6	36,290	269,270	119,486	316,502
Petersburg.....	16,000	3,000	3	1	1,365	5,000	17,665	13,500
Portsmouth.....	17,700	3,200	7	1	9,625	7,150	34,575	19,630
Richmond.....	33,900	47,400	8	14	232,943	282,463	405,696	448,649
Roanoke.....	14,670	13,800	4	3	32,670	1,990	54,355	20,375
West Virginia:								
Clarksburg.....	9,500	0	3	0	5,440	9,315	17,870	19,115
Huntington.....	9,500	16,000	3	4	10,000	1,795	21,500	35,695
Wheeling.....	24,500	13,500	3	3	31,050	44,555	75,606	76,397
Total.....	2,392,752	1,950,190	530	457	3,176,155	3,342,906	7,243,346	6,521,917
Per cent of change.....		-18.5		-13.8		+5.3		-10.0

## South Central States

Alabama:								
Mobile.....	\$36,050	\$13,275	15	11	\$9,300	\$65,910	\$69,012	\$146,231
Montgomery.....	30,300	16,400	18	13	8,275	4,015	66,258	29,070
Arkansas:								
Little Rock.....	49,375	54,000	17	20	2,251	2,968	76,729	64,548
Kentucky:								
Lexington.....	8,550	21,950	4	10	144,060	15,785	169,906	48,585
Louisville.....	246,500	141,250	41	27	80,400	34,490	385,825	247,490
Paducah.....	16,150	300	6	1	950	150	17,725	975
Louisiana:								
Baton Rouge.....	4,440	30,224	4	11	570	82,575	14,694	118,846
New Orleans.....	70,975	305,725	22	18	635,775	211,792	786,379	572,621
Shreveport.....	24,225	5,675	11	8	8,760	12,922	66,516	45,448
Oklahoma:								
Oklahoma City.....	900,700	588,750	200	159	3,112,260	1,789,800	4,107,010	2,405,650
Okmulgee.....	0	0	0	0	2,000	4,500	3,500	4,500
Tulsa.....	369,340	271,815	98	89	70,384	316,742	490,196	629,239
Tennessee:								
Chattanooga.....	28,500	20,100	11	9	60,896	78,450	125,989	163,196
Knoxville.....	27,916	13,800	10	8	120,272	3,850	158,144	26,416
Memphis.....	197,600	165,300	64	49	39,650	63,900	356,500	289,900
Nashville.....	43,550	58,200	23	21	334,450	24,300	450,522	112,345
Texas:								
Beaumont.....	39,438	24,685	18	11	16,733	4,812	87,706	58,629
Dallas.....	203,850	146,600	73	64	282,965	674,355	605,872	889,004
Fort Worth.....	197,875	211,600	51	40	149,904	44,796	412,525	297,784
Houston.....	967,200	690,500	241	142	355,728	471,200	1,340,318	1,182,850
Port Arthur.....	20,650	10,150	10	4	2,923	275	62,720	13,071
San Antonio.....	284,400	111,795	117	75	1,414,360	11,155	1,754,680	156,170
Waco.....	29,334	4,333	9	3	72,853	43,767	103,754	63,167
Wichita Falls.....	0	2,200	0	4	326	10,950	13,056	20,997
Total.....	3,797,418	2,898,677	1,063	797	6,926,045	3,973,519	11,715,626	7,587,332
Per cent of change.....		-23.7		-25.0		-42.6		-35.2

TABLE 6.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1930—Continued

*Mountain and Pacific States*

State and city	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwellings		October	November	October	November
	October	November	October	November				
Arizona:								
Phoenix.....	\$39,650	\$42,900	14	12	\$16,062	\$68,695	\$69,950	\$127,130
Tucson.....	88,400	27,000	29	10	12,557	80,530	131,949	119,507
California:								
Alameda.....	38,200	5,000	9	1	1,548	4,500	63,255	16,300
Berkeley.....	49,750	67,850	13	13	21,577	9,660	104,081	96,199
Fresno.....	31,100	35,300	11	11	68,095	62,255	143,762	140,055
Long Beach.....	383,920	311,950	157	132	1,567,945	231,060	1,957,565	593,900
Los Angeles.....	2,856,685	2,531,139	1,052	905	2,989,609	1,682,145	6,559,181	4,734,444
Oakland.....	251,450	114,250	84	27	130,694	118,440	478,412	345,101
Pasadena.....	81,191	64,000	16	14	15,015	88,844	177,244	209,031
Sacramento.....	64,774	84,750	15	27	26,915	13,890	185,051	140,454
San Diego.....	258,050	134,300	62	38	82,290	20,190	424,795	190,886
San Francisco.....	680,250	979,900	169	188	1,325,062	175,226	2,254,117	1,308,422
San Jose.....	32,850	42,525	8	13	11,435	41,330	50,850	100,805
Stockton.....	14,700	25,550	5	6	39,690	2,365	68,955	37,488
Colorado:								
Colorado Springs..	25,100	8,500	6	2	31,761	2,403	63,623	19,673
Denver.....	343,600	203,500	72	79	79,250	55,050	574,500	369,200
Pueblo.....	4,000	14,500	2	3	6,115	9,595	21,968	28,270
Montana:								
Great Falls.....	22,350	23,100	7	5	37,010	5,903	65,400	36,078
Oregon:								
Portland.....	174,000	572,850	36	114	128,270	234,145	604,310	992,960
Utah:								
Ogden.....	13,950	27,000	6	16	500	286,118	28,600	328,218
Salt Lake City....	117,750	47,400	30	14	37,277	36,110	194,757	117,115
Washington:								
Bellingham.....	60,350	19,200	28	7	7,850	52,610	75,320	76,718
Everett.....	13,450	12,750	9	5	3,095	9,055	21,735	29,995
Seattle.....	356,050	584,550	111	172	1,041,065	2,340,205	1,533,340	3,024,525
Spokane.....	200,700	67,900	53	20	549,875	26,865	800,000	121,265
Tacoma.....	37,500	30,500	14	10	78,780	290,400	159,385	356,845
Total.....	6,239,770	6,078,164	2,018	1,844	8,249,372	5,947,589	16,812,105	13,710,564
Per cent of change.....		-2.6		-8.6		-27.9		-18.4

*Hawaii*

Hawaii:								
Honolulu.....	\$99,547	\$139,984	49	57	\$520,116	\$542,302	\$652,839	\$701,881
Per cent of change.....		+40.6		+16.3		+4.3		+7.5

**Housing Situation in Philadelphia**

IN ITS annual report for 1929 the Philadelphia Housing Association calls attention to the fact that there was a marked falling off during the year in the number of houses and of family accommodations under permit.

For dwellings of all types this number was 4,196, as contrasted with 7,834 in 1928 and 13,067 in 1925, the peak year of building. In 1929 there were 5,918 family accommodations provided as against 11,192 and 15,308, respectively, for the other two years. Thus in 1929 new houses under permit reached only 53.5 per cent of 1928 and 32.1 per cent of 1925. In family accommodations provided the respective percentages were 52.9 and 38.6. Family accommodations under construction permits for 257 cities of the United States, as reported by the Bureau of Labor Statistics, totaled 62.8 per cent of 1928 construction and 49.6 per cent of



1925. It is apparent that dwelling construction in Philadelphia fell off more markedly than was average in cities throughout the country. But on the other hand, the completion of the 1929 construction program will close two remarkable decades in dwelling construction in Philadelphia. The gross addition in all types of houses for the twenty-year period was about 160,000 family accommodations, or housing for 800,000 persons. Of these accommodations, 84 per cent were in dwellings.

The single-family type of housing still holds the leading position in Philadelphia, since 4,057 brick or stone houses under construction during the year were for one family only, as against 80 two-family dwellings and 41 apartment houses. Of the family accommodations provided 68.8 per cent were in 1-family houses, 2.7 per cent in 2-family houses, and 28.4 per cent in apartment houses. In other words, practically 7 of every 10 families who occupy the 1929 housing will live in 1-family dwellings. The average number of family accommodations in the apartment houses was 41 per building. Since 1925 there has been a falling off in the amount annually spent for housing, and this has been relative as well as absolute.

While there was a steady decline in money spent for all construction, the shrinkage, both relative and actual, in housing expenditures and the expansion in the proportion expended for commercial building is most noticeable in 1929. In 1928, housing expenditures accounted for 47.9 per cent of all construction, whereas in 1929 they totaled only 26.2 per cent.

#### Dwelling Costs

THE average cost of 1-family dwellings under construction in Philadelphia during 1929 was \$4,459, the average in different sections ranging from \$3,330 to \$10,656. A study of sales prices, based on 2,955 one-family brick or stone dwellings showed an average for the city of \$6,339, the average in different sections ranging from \$4,895 to \$7,937. The lowest price found was \$4,500. The average sales price was 36 per cent in excess of the average construction cost, but here again there was considerable variation.

Including only districts where sales prices were obtained for more than 100 houses, that is, districts 4 to 8, and district 11, four showed a lower percentage of sales price above construction cost than the city average. Thus the sixth district showed 31.6 per cent, the eighth district 33.1 per cent, the fifth district 33.2 per cent, and the ninth district 36.5 per cent. The excess of sales price over construction cost does not represent net profit but is profit plus the land and improvements and the cost of selling. The difference in land values in different sections may account for wide variations between estimated cost and sales price, as may also faulty judgment in estimating costs. Builders report wide variations in cost of improvements, arising from differences in street and lot widths, grading, and subdividing. In one area where the percentage of difference was very low, it is alleged that the builders cut their profits to a minimum in order to expedite sales.

Sales were more frequent in the lower range of prices, ranging from 25 per cent of the houses in the \$8,000 to \$9,000 class to 54.6 per cent for the group costing \$5,000 or under. An analysis of construction during the past seven years shows a steady decline in the average sales price of 1-family houses, following a decline in the average estimated cost, and shows also that the percentage of total construction in the lower price ranges has increased. In 1923, less than 45 per cent of the houses were placed on the market at a sales price of \$7,000 and under. In 1929, on the basis of incomplete data, this figure approximated 79 per cent.

## Acute Problems in the Housing Fields

THREE serious situations have become evident during the year 1929. First, housing construction fell off sharply, with a prospect that this decline would continue; second, real estate sales declined; and third, the number of forced sales of houses reached a peak for the 10-year period. A study of vacancies, rentals, and population growth makes it seem probable that the falling off in building is not due to an oversupply of family accommodations.

It is much more likely that present abnormal conditions can be attributed to faulty judgment in the distribution of construction in sales-price ranges beyond the reach of the average buyer, to unemployment, and to the culpable practices resorted to in forcing sales and in calling mortgages. There is abundant proof that these factors have been operative.

During the decade just closed, the report points out, the demand for houses led many inexperienced builders into the field, who, lacking technique in mass construction or sales promotion or both and being without credit rating so that they were unable to secure money at reasonable rates, built under a heavy handicap as to economical construction. Many of these houses were placed on the market at a price beyond the means of the prospective buyers, who were led to buy through a belief that cheaper houses would not again be built in Philadelphia and who, in order to secure shelter, took houses which they could not carry. Heavy building brought down rents and prices, speculative builders were forced out of the field, and many of those who had bought found themselves in difficulties. "Unemployment and part-time employment found many such owners unable to meet their taxes, interest, and building and loan association dues. Many mortgagees have not helped the situation. They declined to renew mortgages when due unless the mortgagors increased their equity and substantially reduced their first mortgages. Lacking available funds to meet such demands and faced with added fees charged for renewals, the mortgagors found themselves trapped."

Analyzing the situation in detail, the conclusions are reached that the confidence of the public in dwellings and mortgages for investment purposes has been undermined, and that return to normal conditions will be delayed until that confidence is restored; that there is little if any oversupply of dwellings in Philadelphia, as the vacancy rate is still below 5 per cent; that the difficulties now experienced can be traced directly to definite factors, such as the faulty practices of builders and sellers during the past decade, unemployment, and the like; and that there is much need of a reliable bureau of information.

An outstanding need in the construction field is an adequately financed statistical service to assemble and interpret data pertaining to construction, sales, buying-power capacity, population trends, cost-reducing methods and like information to put dwelling construction and sales on a more reliable basis. Such data would enable builders, banks, mortgagors, buyers, and sellers to act in their several capacities with more intelligence and would reduce materially the misinformation now disseminated with such injurious results. More sales would be made, more lower priced dwellings would be erected, mortgage investment would be protected, and fewer losses to home owners would result if such service were established.

## Rental Changes

THE usual annual survey of rental changes showed a marked tendency toward stabilization. The following table gives the results of these surveys for eight years past:

RENTAL CHANGES IN PHILADELPHIA DURING AN 8-YEAR PERIOD

Year of survey	Number of properties	Per cent showing—			Per cent of change
		Increase	Decrease	No change	
1922	1,159	28.0		72.0	+5.3
1923	1,055	64.45		35.55	+20.99
1924	1,689	56.0	2.66	41.3	+14.27
1925	2,082	25.8	5.6	68.6	+4.46
1926	2,346	21.0	7.0	72.0	+3.01
1927	2,665	11.22	18.8	69.98	-1.55
1928	2,935	6.45	33.25	60.3	-4.9
1929	2,043	5.0	29.5	65.5	-3.9

The percentage of properties showing rental increases, it will be noticed, has fallen steadily since 1923; the percentage showing decreases changed very little up to 1927, when it first became important. There were fewer changes in 1929 than in the preceding year, and the net change was smaller.

Rents on the average are still 104 per cent greater than they were in 1914, although for properties occupied by white tenants the rate above 1914 is 92.7 per cent as against 116 per cent for those occupied by negro tenants. The lowest increase in rents during the 1914-1929 period among white tenants appears in the southeast district, where among the properties studied it is now only 73 per cent above the earlier date.

The most pronounced rent decreases during 1929 were found in the higher rental ranges. However, for the first time since rents reached their peaks, a decrease appeared in the average rent of properties in the group letting for less than \$20 a month. Fewer houses were vacated than in the preceding year, and fewer tenants moved from one dwelling to another. The vacancy rate was higher than shown in the 1928 study, but an analysis of the vacant houses showed that they were lacking in modern conveniences. About 62 per cent lacked indoor toilets, 68.5 per cent lacked bathtubs, 72 per cent were without furnaces, and in 16 per cent the artificial lighting was by means of kerosene lamps. The report strongly urges bringing such properties up to standard, for the benefit of both landlords and tenants.

Most of these dwellings are structurally sound and are located near industrial or commercial establishments, making them desirable homes for workingmen because of their location. Owners of vacant houses would benefit from installing needed equipment, for by bringing their dwellings nearer to new housing standards they would make them more readily rentable. \* \* \*

The suggestion frequently made by the association that landlords should cater to the legitimate needs of their tenants is particularly valuable at the present time in view of the so-called depression throughout the real estate market. Property maintenance would be more economical, tenants would be less likely to move, and net returns would be much more advantageous for the owners of rental properties.

# WAGES AND HOURS OF LABOR

## Wages and Hours of Labor in the Hosiery and Underwear Industries, 1928 and 1930

THIS article presents the results of the study of wages and hours of labor of wage earners in the hosiery and underwear industries in the United States made by the Bureau of Labor Statistics in 1930, together with comparative figures for certain specified years from 1910 to 1928. The 1930 data in more detail will be published later in bulletin form.

The wage figures used in compiling the article were taken by agents of the bureau directly from the records of 122 representative hosiery mills in 19 States for 33,827 wage earners, and of 74 underwear mills in 15 States for 15,155 wage earners making a total of 48,982 employees in the two industries.

### Trend of Hours and Earnings, 1910 to 1930

TABLE 1 shows average full-time hours per week, earnings per hour and full-time earnings per week for each year from 1910 to 1914 and for 1919, for wage earners in selected occupations only and for wage earners in all occupations in the two industries combined for 1914 and for each even year from 1922 to 1930. Index numbers of these averages with the 1913 average taken as a base, or 100 per cent, are also shown in the table.

The index numbers furnish comparable data, one year with another, from 1910 to 1930. The averages for employees in selected occupations are of course not comparable with those for employees in all occupations.

The index numbers for the years from 1910 to 1919 were computed from the averages of the combined data for selected occupations only, with the 1913 average as the base. Those for each of the specified years from 1922 to 1930 were computed by increasing or decreasing the 1914 index for selected occupations in proportion to the increase or decrease in the average for each year as compared with the 1914 average for employees in all occupations.

Average full-time hours increased from 51.3 in 1928 to 51.6 per week in 1930. Average earnings per hour increased from 44.4 cents in 1928 to 45.5 cents in 1930 and average full-time earnings per week increased from \$22.78 in 1928 to \$23.48 in 1930. These changes expressed in index numbers show an increase in full-time hours from an index of 92.4 in 1928 to 92.9 in 1930, in earnings per hour from 267.2 in 1928 to 273.8 in 1930, and in full-time earnings per week from 246.1 in 1928 to 253.7 in 1930. Between 1913 and 1930 full-time hours have been reduced 7.1 per cent, earnings per hour increased 173.8 per cent while the full-time earnings per week increased only

153.7 per cent the difference being due to the reduction of full-time hours.

TABLE 1.—AVERAGE HOURS AND EARNINGS WITH INDEX NUMBERS, 1910 TO 1930

Year	Number of establishments	Number of wage earners	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Index numbers (1913=100) of—		
						Full-time hours per week	Earnings per hour	Full-time earnings per week
Selected occupations:								
1910	15	13, 132	57.6	\$0.141	\$8.10	104.2	82.0	85.2
1911	62	13, 885	57.4	.144	8.28	103.8	83.7	87.1
1912	62	16, 249	56.4	.153	8.62	102.0	89.0	90.6
1913	69	18, 198	55.3	.172	9.51	100.0	100.0	100.0
1914 <sup>1</sup>	82	19, 396	54.6	.178	9.70	98.7	103.5	102.0
1919	51	16, 073	52.1	.315	16.44	94.2	183.1	172.9
All occupations:								
1914 <sup>1</sup>	82	29, 631	54.8	.172	9.44			
1922	107	32, 178	51.0	.354	18.05	91.9	213.0	195.0
1924	143	38, 549	50.7	.409	20.74	91.3	246.1	224.1
1926	190	45, 594	51.3	.443	22.73	92.4	266.6	245.6
1928	192	43, 501	51.3	.444	22.78	92.4	267.2	246.1
1930	196	48, 982	51.6	.455	23.48	92.9	273.8	253.7

<sup>1</sup> 2 sets of averages are shown for 1914—1 for selected occupations and the other for all occupations in the hosiery and underwear industries. The averages for selected occupations are not comparable with those for all occupations.

### Hours and Earnings, 1928 and 1930, by Occupations and Sex

TABLE 2 shows for 1928 and 1930 average full-time hours per week, earnings per hour, and full-time earnings per week by occupation and sex.

The 1930 average full-time hours of males in the hosiery industry ranged from 50.6 for knitters, leggers of full-fashioned hose, to 55.5 for automatic knitters, and those of females from 49.9 for boarders to 53.8 for mock seamers. Average earnings per hour of males ranged from 26.9 cents for winders to \$1.451 for knitters, footers of full-fashioned hose, and those of females from 27 cents for welters to 54.6 cents for toppers of full-fashioned hose. Average full-time earnings per week of males ranged from \$13.91 for winders to \$73.57 for knitters, footers of full-fashioned hose, and those of females from \$14.50 for welters to \$27.57 for toppers of full-fashioned hose.

In the underwear industry average full-time hours of males in 1930 ranged from 49.5 for press hands to 52.5 for web or tube knitters, and of females ranged from 48.6 for press hands to 50.9 for cutters. Average earnings per hour of males ranged from 42.4 cents for winders to 70.4 cents for machine fixers and of females from 27 cents for inspectors to 45.5 cents for knitters of cuffs and ankles. Average full-time earnings per week of males ranged from \$21.33 for winders and press hands to \$35.69 for machine fixers, and of females from \$13.47 for inspectors to \$23.07 for knitters of cuffs and ankles.

The number of establishments was increased in 1930. However, with but few exceptions the same establishments were canvassed in 1930 as in 1928. In the cases of a few large plants data are used for only a representative fraction of the employees in the plant, because the inclusion of all employees in such plants would have tended to distort the representative character of the averages for the States in which these large plants are located.

TABLE 2.—AVERAGE HOURS AND EARNINGS, 1928 AND 1930, BY OCCUPATION AND SEX

*Hosiery industry*

Occupation	Sex	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time earnings per week	
		1928	1930	1928	1930	1928	1930	1928	1930	1928	1930
		Boarders.....	M	81	82	1,433	1,619	53.8	53.7	\$0.521	\$0.488
	F	38	38	516	639	50.0	49.9	.486	.498	24.30	24.85
Folders.....	F	76	82	595	701	52.4	52.3	.337	.356	17.66	18.62
Inspectors.....	F	106	116	1,897	2,115	52.3	52.8	.313	.307	16.37	16.21
Knitters:											
Footers, full-fashioned.....	M	39	53	749	1,075	50.1	50.7	1.546	1.451	77.45	73.57
Leggers, full-fashioned.....	M	39	53	1,911	2,795	50.7	50.6	1.329	1.212	67.38	61.33
Automatic.....	M	42	40	640	519	55.8	55.5	.414	.392	23.10	21.76
	F	30	35	291	541	52.1	52.8	.359	.312	18.70	16.47
Rib.....	M	40	38	120	130	54.0	53.7	.333	.399	17.98	21.43
	F	20	19	74	49	51.5	52.3	.342	.325	17.61	17.00
Transfer.....	M	18	17	205	221	53.8	54.8	.817	.292	17.05	16.00
	F	58	54	2,483	2,113	53.1	53.7	.294	.273	15.61	14.66
Knitters' helpers, full-fashioned.....	M	33	46	1,231	1,692	51.1	51.8	.346	.340	17.68	17.61
Loopers.....	F	105	119	3,607	4,086	53.0	53.1	.385	.386	20.41	20.50
Machine fixers.....	M	99	117	810	958	53.7	53.6	.760	.775	40.81	41.54
Menders.....	F	103	116	1,294	1,663	51.4	51.7	.387	.362	19.89	18.72
Pairers or maters.....	F	82	93	1,219	1,438	52.2	52.1	.367	.363	19.16	18.91
Seamers, full-fashioned.....	F	40	55	954	1,555	49.8	50.2	.604	.497	25.10	24.95
Seamers, mock.....	F	39	34	336	288	53.5	53.8	.806	.277	16.37	14.90
Toppers, full-fashioned.....	M		8		109		51.4		.484		24.88
	F	39	54	1,512	2,071	49.9	50.5	.561	.546	27.99	27.57
Welters.....	F	30	30	144	240	53.4	53.7	.316	.270	16.87	14.50
Winders.....	M	19	15	121	64	53.1	51.7	.337	.269	17.89	13.91
	F	84	86	691	658	51.4	51.0	.366	.323	18.81	16.47
Other employees.....	M	106	118	2,181	2,956	52.6	53.3	.411	.392	21.62	20.89
	F	103	118	3,431	3,532	51.5	52.0	.258	.280	13.29	14.56
All occupations.....	M	108	122	9,401	12,138	52.4	52.4	.724	.707	37.94	37.05
	F	108	122	19,044	21,689	51.9	52.1	.360	.366	18.68	19.07
Sexes combined.....		108	122	28,445	33,827	52.1	52.2	.488	.497	25.42	25.94

*Underwear industry*

Buttonhole makers.....	F	76	69	369	376	50.1	50.3	\$0.340	\$0.330	\$17.03	\$16.60
Button sewers.....	F	76	64	376	363	50.7	50.5	.302	.306	15.31	15.45
Cutters, hand, layers-up, and markers.....	M	48	40	284	268	51.1	50.9	.448	.452	22.89	23.01
	F	54	46	455	447	50.4	50.4	.344	.364	17.34	18.35
Cutters, power.....	M	68	58	157	174	50.8	50.9	.510	.531	25.91	27.03
	F	12	12	41	31	50.0	50.9	.356	.393	17.80	20.00
Finishers.....	F	84	74	3,175	3,520	50.2	50.5	.341	.341	17.12	17.22
Finishers:											
Edge.....	F		69		770		50.6		.339		17.15
Face.....	F		73		761		50.3		.343		17.25
Neck.....	F		73		750		50.6		.357		18.06
Miscellaneous.....	F		71		1,239		50.5		.331		16.72
Folders.....	F	66	61	488	711	50.3	50.3	.343	.322	17.25	16.20
Hemmers.....	F	46	51	209	325	48.9	49.4	.376	.343	18.39	16.94
Inspectors.....	F	83	72	1,314	1,296	50.1	49.9	.278	.270	13.93	13.47
Knitters, cuff and ankle.....	M	28	15	42	35	49.7	50.4	.538	.536	26.74	27.01
	F	8	9		16	49.7	50.7	.469	.455	23.31	23.07
Knitters, web or tube.....	M	73	61	446	412	52.2	52.5	.490	.515	25.58	27.04
	F	35	34	198	197	49.7	49.5	.378	.406	18.79	20.10
Machine fixers.....	M	74	68	223	243	50.1	50.7	.728	.704	36.47	35.69
Menders.....	F	65	53	282	303	50.3	50.4	.298	.305	14.99	15.37
Pressers.....	M	43	38	84	82	50.9	50.9	.401	.436	20.41	22.96
	F	46	45	235	287	50.3	50.8	.376	.357	18.91	18.14
Press hands.....	M	10	12	29	45	49.1	49.5	.408	.431	20.77	21.33
	F	17	15	112	95	49.1	48.6	.294	.348	14.44	16.91
Seamers.....	F	84	74	2,425	2,345	50.2	50.0	.355	.354	17.82	17.71
Winders.....	M	13	14	37	42	52.8	50.3	.365	.424	19.27	21.33
	F	60	50	731	537	49.3	48.8	.354	.357	17.45	17.42
Other employees.....	M	83	74	1,503	1,609	50.1	50.6	.396	.400	19.84	20.24
	F	82	72	1,832	1,396	48.2	50.5	.282	.287	13.59	14.49
All occupations.....	M	83	74	2,805	2,910	50.6	50.9	.453	.458	22.92	23.31
	F	84	74	12,251	12,245	49.8	50.2	.329	.330	16.38	16.57
Sexes combined.....		84	74	15,056	15,155	50.0	50.3	.354	.357	17.70	17.96

## Hours and Earnings, 1928 and 1930, by Sex and State

TABLE 3 shows for 1928 and 1930 the average full-time hours per week, earnings per hour, and full-time earnings per week by sex and State, all occupations combined.

The figures for 1928 covered 9,401 males and 19,044 females, or a total of 28,445 employees in the hosiery industry, while those for 1930 cover 12,138 males and 21,689 females, a total of 33,827 employees. In the underwear industry the figures are: 1928—2,805 males and 12,251 females, total 15,056; 1930—2,910 males and 12,245 females, total 15,155.

To avoid revealing the identity of any one mill, certain combinations of data have been made. Thus, in the hosiery industry, combined figures are given for Alabama and Louisiana, Maryland and West Virginia, Minnesota and Wisconsin, and New Hampshire and Vermont. In the underwear industry, combined figures are given for Connecticut and Rhode Island, Minnesota and Wisconsin, and New Hampshire and Vermont.

*Hosiery industry.*—As Table 3 shows, average full-time hours of males in 1930 ranged in the various States from 47.7 to 55.8, those of females from 47.8 to 55.8, and those of both sexes combined, from 47.8 to 55.8. The average hours of all males remained unchanged, at 52.4, from 1928 to 1930, while those of females rose slightly, from 51.9 to 52.1; a slight increase also took place in the average for both sexes, from 52.1 to 52.2.

The average earnings per hour of males in 1930, by States, ranged from 33.7 cents to \$1.217, those of females from 19.4 to 53 cents, and those of both sexes from 23.7 to 83.1 cents. The average for the whole group of males dropped from 72.4 cents in 1928 to 70.7 cents in 1930, while that of females rose from 36 to 36.6 cents; for the entire number of employees the average rose from 48.8 to 49.7 cents.

The average full-time earnings of males in 1930 by States ranged from \$17.76 to \$58.05, those of females from \$10.71 to \$25.65, and those of both sexes from \$13.11 to \$39.72. The average full-time weekly earnings of all males fell from \$37.94 in 1928 to \$37.05 in 1930, while those of females rose slightly, from \$18.68 to \$19.07, as did also the average for both sexes, from \$25.42 to \$25.94.

The 1930 study has brought out some apparent discrepancies in several localities. For example, although the average earnings per hour of males in Alabama and Louisiana show a decrease since 1928 of 2 cents, and those of females a decrease of 1 cent, the average earnings of both sexes combined show an increase of 1.5 cents. This is due to the fact that the number of males covered in these States increased 269 per cent while the number of females increased only 15 per cent. As the men received higher wages than the women the increased number in this higher-earnings group operated to raise the average of the whole number of workers.

To the same cause is due the increase in average earnings per hour for the entire hosiery industry in the face of a decrease for males and only a small increase for females.

In the hosiery industry the increasing proportion of males seems to be due to the increasing production of full-fashioned hose. In the manufacture of full-fashioned hosiery it is an almost universal custom

to employ men and not women in the operation of knitting machines. These full-fashioned knitters are usually paid higher rates than are most other occupations in the hosiery industry, and hence any material increase in their number will affect the averages for both sexes combined. The number of males covered in the 1930 study was 29.1 per cent greater than in 1928, while the number of females was only 13.9 per cent greater.

The average earnings per hour of males in the hosiery industry in Indiana were 21.9 cents higher than in 1928, while the average earnings in Massachusetts and in New York for males decreased 30 cents and 13.1 cents respectively, between 1928 and 1930. In Indiana this change was due to an increase of 43 per cent in the number of males as against an increase of only 27 per cent in females, because of the increase in full-fashioned manufacture. In Massachusetts, wage agreements had some effect on the decrease in earnings per hour, but probably the most important factor was the unusually long periods of idle time, spent by the pieceworkers in several plants, waiting for the supplies of work. This had the effect of showing a greater number of hours at work than would have been the case under normal conditions and consequently reduced considerably the earnings per hour for the time recorded as having been worked.

In New York the sole cause for the reduced earnings appears to have been wage adjustments made either in individual cases or throughout the plant. In some plants general decreases of from 4 to 8 per cent have been made which usually applied to the higher-paid occupations and therefore had a greater effect on the final averages than the same per cent of change would have had if applied to the same number of lower-paid workers.

*Underwear industry.*—Average full-time hours of males in the underwear industry in 1930 ranged in the various States from 48 to 55.1, those of females from 46.7 to 54.9, and those of both sexes combined from 46.9 to 55. The average working time of males in all occupations rose from 50.6 hours in 1928 to 50.9 hours in 1930, that of females from 49.8 to 50.2 hours, and that of both sexes from 50 to 50.3 hours.

Average earnings per hour of males in 1930 ranged from 32.6 to 61.5 cents, those of females from 24.1 to 45.9 cents, and of both sexes combined from 26.4 to 48.8 cents. Average earnings of males in all occupations increased from 45.3 cents in 1928 to 45.7 in 1930, those of females from 32.9 to 33 cents, and those of both sexes combined, from 35.4 to 35.7 cents.

Average full-time earnings per week of males in 1930 ranged from \$17.41 to \$29.58, those of females from \$12.87 to \$21.76, and those of both sexes combined from \$14.10 to \$23.18. The averages for males in all occupations were \$22.92 in 1928 and \$23.26 in 1930, those for females \$16.38 in 1928 and \$16.57 in 1930, and those for both sexes combined \$17.70 in 1928 and \$17.96 in 1930.



WAGES AND HOURS OF LABOR

171

TABLE 3.—NUMBER OF ESTABLISHMENTS AND OF WAGE EARNERS AND AVERAGE HOURS AND EARNINGS, 1928 AND 1930, BY SEX AND STATE

*Hosiery industry*

State	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time earnings per week	
	1928	1930	1928	1930	1928	1930	1928	1930	1928	1930
<i>Males</i>										
Alabama and Louisiana	4	4	85	298	54.4	55.6	\$0.359	\$0.339	\$19.53	\$18.85
Georgia	7	5	353	482	55.4	54.3	.347	.369	19.22	20.04
Illinois	6	6	327	227	55.9	55.0	.451	.422	25.21	23.21
Indiana	3	3	267	383	49.9	49.5	.731	.950	36.48	47.03
Maryland and West Virginia	4	5	130	316	53.2	55.1	1.374	.351	19.90	19.34
Massachusetts	7	8	437	554	48.5	49.0	1.152	.852	55.87	41.75
Michigan	3	3	62	32	53.8	51.1	.563	.656	30.29	33.52
Minnesota and Wisconsin	6	5	772	783	50.8	49.7	.745	.793	37.85	39.41
New Hampshire and Vermont	6	5	99	124	52.4	51.4	.482	.477	25.26	24.52
New Jersey	4	5	382	534	49.2	47.7	1.184	1.217	58.25	58.05
New York	4	4	275	281	49.5	55.8	1.247	1.116	61.73	55.47
North Carolina	14	16	1,330	1,562	55.8	55.8	.420	.450	23.44	25.11
Pennsylvania	24	36	3,846	5,283	51.4	51.9	.869	.841	44.67	43.65
Tennessee	13	13	923	1,075	54.6	55.1	.403	.419	22.00	23.09
Virginia	3	4	113	204	53.1	52.7	.370	.337	19.65	17.76
Total	108	122	9,401	12,138	52.4	52.4	.724	.707	37.94	37.05
<i>Females</i>										
Alabama and Louisiana	4	4	646	744	54.6	55.2	.204	.194	11.14	10.71
Georgia	7	5	1,055	932	55.1	54.6	.207	.205	11.41	11.19
Illinois	6	6	701	730	54.1	54.8	.300	.246	16.23	13.48
Indiana	3	3	570	724	49.6	49.7	.412	.452	20.44	22.46
Maryland and West Virginia	4	5	527	716	53.6	55.0	.238	.286	12.76	15.73
Massachusetts	7	8	717	827	48.0	48.0	.436	.392	20.93	18.82
Michigan	3	3	271	147	50.8	51.0	.369	.379	18.75	19.33
Minnesota and Wisconsin	6	5	1,580	1,675	49.7	49.5	.408	.411	20.28	20.34
New Hampshire and Vermont	6	5	324	350	50.1	49.6	.334	.338	16.73	16.76
New Jersey	4	5	615	793	47.4	47.8	.531	.530	25.17	25.33
New York	4	4	505	523	48.1	49.7	.541	.516	26.02	25.65
North Carolina	14	16	2,568	2,409	55.5	55.8	.286	.295	15.87	16.46
Pennsylvania	24	36	6,089	7,801	50.5	51.0	.453	.456	22.88	23.26
Tennessee	13	13	2,484	2,737	54.1	54.7	.248	.248	13.42	13.57
Virginia	3	4	392	581	52.8	52.1	.217	.234	11.46	12.19
Total	108	122	19,044	21,689	51.9	52.1	.360	.366	18.68	19.07
<i>Males and females</i>										
Alabama and Louisiana	4	4	731	1,042	54.6	55.3	.222	.237	12.12	13.11
Georgia	7	5	1,408	1,414	55.1	54.5	.244	.265	13.44	14.44
Illinois	6	6	1,028	957	54.6	54.9	.352	.292	19.22	16.03
Indiana	3	3	837	1,107	49.7	49.6	.518	.624	25.74	30.95
Maryland and West Virginia	4	5	657	1,032	53.5	55.0	.268	.309	14.34	17.00
Massachusetts	7	8	1,154	1,381	48.2	48.4	.722	.594	34.80	28.75
Michigan	3	3	333	179	51.4	51.0	.414	.439	21.28	22.39
Minnesota and Wisconsin	6	5	2,352	2,458	50.0	49.6	.528	.542	26.40	26.88
New Hampshire and Vermont	6	5	423	474	50.6	50.0	.373	.377	18.87	18.85
New Jersey	4	5	997	1,327	48.1	47.8	.796	.831	38.29	39.72
New York	4	4	780	804	48.6	49.7	.802	.748	38.98	37.18
North Carolina	14	16	3,898	3,971	55.6	55.8	.334	.359	18.57	20.03
Pennsylvania	24	36	9,935	13,084	50.8	51.3	.625	.624	31.75	32.01
Tennessee	13	13	3,407	3,812	54.3	54.8	.292	.302	15.86	16.55
Virginia	3	4	505	785	52.8	52.2	.252	.264	13.31	13.78
Total	108	122	28,445	33,827	52.1	52.2	.488	.497	25.42	25.94

TABLE 3.—NUMBER OF ESTABLISHMENTS AND OF WAGE EARNERS AND AVERAGE HOURS AND EARNINGS, 1928 AND 1930, BY SEX AND STATE—Continued

*Underwear industry*

State	Number of establishments		Number of employees		Average full-time hours per week		Average earnings per hour		Average full-time earnings per week	
	1928	1930	1928	1930	1928	1930	1928	1930	1928	1930
<i>Males</i>										
Connecticut and Rhode Island	6	5	97	117	50.2	51.0	\$0.539	\$0.509	\$27.06	\$25.96
Illinois	3	3	86	63	46.4	48.1	.530	.615	24.59	29.58
Indiana	3	2	86	43	50.7	48.0	.494	.604	25.05	28.99
Massachusetts	4	5	191	198	48.5	48.2	.578	.563	28.03	27.14
Michigan	3	2	66	58	51.0	51.2	.520	.511	26.52	26.16
Minnesota and Wisconsin	4	4	127	50	48.9	48.7	.534	.572	26.11	27.86
New Hampshire and Vermont	3	3	113	184	49.6	49.6	.508	.533	25.20	26.44
New York	27	23	1,191	1,238	49.3	49.2	.448	.466	22.09	22.93
North Carolina	4	3	162	294	54.3	53.4	.350	.326	19.01	17.41
Pennsylvania	19	16	323	270	53.2	54.8	.443	.456	23.57	24.99
Tennessee	5	5	257	357	55.2	55.1	.336	.352	18.55	19.40
Virginia	3	3	106	38	52.2	52.1	.413	.464	21.56	24.17
Total	84	74	2,805	2,910	50.6	50.9	.453	.457	22.92	23.26
<i>Females</i>										
Connecticut and Rhode Island	6	5	512	670	50.9	50.9	.356	.354	18.12	18.02
Illinois	3	3	358	373	45.6	47.4	.446	.459	20.34	21.76
Indiana	3	2	307	333	49.4	46.7	.367	.406	18.13	18.96
Massachusetts	4	5	1,371	1,299	45.9	48.0	.370	.379	16.98	18.19
Michigan	3	2	461	627	51.4	51.9	.297	.292	15.27	15.15
Minnesota and Wisconsin	4	4	932	940	48.6	48.5	.424	.417	20.61	20.22
New Hampshire and Vermont	3	3	501	601	49.3	49.4	.400	.383	19.72	18.92
New York	27	23	4,111	3,840	48.7	48.6	.315	.305	15.34	14.82
North Carolina	4	3	478	738	54.0	53.4	.222	.241	11.99	12.87
Pennsylvania	19	16	1,869	1,390	52.0	52.7	.317	.333	16.48	17.55
Tennessee	5	5	1,034	1,169	54.8	54.9	.260	.274	14.25	15.04
Virginia	3	3	317	265	51.6	52.4	.261	.262	13.47	13.73
Total	84	74	12,251	12,245	49.8	50.2	.329	.330	16.38	16.57
<i>Males and females</i>										
Connecticut and Rhode Island	6	5	609	787	50.8	50.9	.390	.380	19.81	19.34
Illinois	3	3	444	436	45.8	47.5	.465	.488	21.30	23.18
Indiana	3	2	393	376	49.7	46.9	.397	.433	19.73	20.31
Massachusetts	4	5	1,562	1,497	46.2	48.0	.398	.404	18.39	19.39
Michigan	3	2	527	685	51.4	51.9	.327	.313	16.81	16.24
Minnesota and Wisconsin	4	4	1,059	990	48.6	48.5	.438	.426	21.29	20.66
New Hampshire and Vermont	3	3	614	785	49.4	49.4	.422	.417	20.85	20.60
New York	27	23	5,302	5,078	48.8	48.7	.350	.351	17.08	17.09
North Carolina	4	3	640	1,032	54.1	53.4	.257	.264	13.90	14.10
Pennsylvania	19	16	2,192	1,660	52.2	53.1	.337	.357	17.59	18.96
Tennessee	5	5	1,291	1,526	54.9	55.0	.276	.294	15.15	16.17
Virginia	3	3	423	303	51.8	52.4	.301	.288	15.59	15.09
Total	84	74	15,056	15,155	50.0	50.3	.354	.357	17.70	17.96

Table 4 presents for each State or group of States, data for 1930—average full-time hours per week, earnings per hour, and full-time earnings per week—in six representative occupations in the hosiery industry and five in the underwear industry.

The purpose of this table is to show the variations in hours and earnings in the different States. For example, the average full-time hours of boarders (males), the first occupation in the table, ranged in the different States from 48 to 55.8, and for all States averaged 53.7. Average earnings per hour in this occupation ranged from 23.9 cents to 74.4 cents, and for all States averaged 48.8 cents. Average full-time earnings per week ranged from \$12.69 to \$38.84, and for all States averaged \$26.21.

TABLE 4.—AVERAGE HOURS AND EARNINGS IN 11 REPRESENTATIVE OCCUPATIONS, 1930, BY SEX AND STATE

*Hosiery industry*

Occupation	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
<b>Boarders, male:</b>					
Alabama and Louisiana	3	89	55.3	\$0.336	\$18.58
Georgia	5	127	54.3	.380	20.63
Illinois	2	25	55.4	.405	22.44
Indiana	3	72	50.0	.518	25.90
Maryland and West Virginia	2	38	55.0	.457	25.14
Massachusetts	5	38	48.0	.651	31.25
Michigan	2	3	51.5	.695	35.79
Minnesota and Wisconsin	3	30	50.0	.489	24.45
New Hampshire and Vermont	5	29	50.7	.397	20.13
New Jersey	1	(1)	(1)	(1)	(1)
New York	1	(1)	(1)	(1)	(1)
North Carolina	13	399	55.8	.403	22.49
Pennsylvania	22	474	52.2	.744	38.84
Tennessee	12	229	55.1	.317	17.47
Virginia	3	47	53.1	.239	12.69
Total	82	1,619	53.7	.488	26.21
<b>Boarders, female:</b>					
Illinois	2	29	57.1	.229	13.08
Indiana	1	(1)	(1)	(1)	(1)
Maryland and West Virginia	1	(1)	(1)	(1)	(1)
Massachusetts	3	16	48.0	.447	21.46
Michigan	2	11	51.1	.425	21.72
Minnesota and Wisconsin	5	149	49.6	.502	24.90
New Jersey	4	77	48.1	.549	26.41
New York	4	43	48.4	.558	27.01
North Carolina	1	(1)	(1)	(1)	(1)
Pennsylvania	13	233	49.4	.637	31.47
Tennessee	2	33	55.0	.173	9.52
Total	38	639	49.9	.498	24.85
<b>Knitters, footers, full-fashioned, male:</b>					
Illinois	1	(1)	(1)	(1)	(1)
Indiana	2	56	49.6	1.309	64.93
Maryland and West Virginia	1	(1)	(1)	(1)	(1)
Massachusetts	8	69	48.0	1.450	69.60
Minnesota and Wisconsin	3	104	49.4	1.168	57.70
New Jersey	5	88	47.5	1.702	80.85
New York	4	49	49.8	1.605	79.93
North Carolina	3	67	55.0	.828	45.54
Pennsylvania	26	628	51.3	1.558	79.92
Total	53	1,075	50.7	1.451	73.57
<b>Knitters, leggers, full-fashioned, male:</b>					
Illinois	1	(1)	(1)	(1)	(1)
Indiana	2	175	49.1	1.120	54.99
Maryland and West Virginia	1	(1)	(1)	(1)	(1)
Massachusetts	8	285	49.5	.985	48.76
Minnesota and Wisconsin	3	294	50.1	.973	48.75
New Jersey	5	275	47.8	1.412	67.49
New York	4	147	49.5	1.358	67.22
North Carolina	3	192	55.0	.618	33.99
Pennsylvania	26	1,384	51.1	1.373	70.16
Total	53	2,795	50.6	1.212	61.33
<b>Knitters, transfer, male:</b>					
Alabama and Louisiana	2	47	56.4	.213	12.01
Georgia	1	(1)	(1)	(1)	(1)
Maryland and West Virginia	1	(1)	(1)	(1)	(1)
Minnesota and Wisconsin	1	(1)	(1)	(1)	(1)
North Carolina	4	19	55.5	.204	11.32
Tennessee	7	111	55.4	.320	17.73
Virginia	1	(1)	(1)	(1)	(1)
Total	17	221	54.8	.292	16.00

<sup>1</sup> Data included in total.

TABLE 4.—AVERAGE HOURS AND EARNINGS IN 11 REPRESENTATIVE OCCUPATIONS, 1930, BY SEX AND STATE—Continued

*Hosiery industry—Continued*

Occupation	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
<b>Knitters, transfer, female:</b>					
Alabama and Louisiana	3	129	55.2	\$0.216	\$11.92
Georgia	3	112	56.2	.143	8.04
Illinois	3	59	52.2	.269	14.04
Maryland and West Virginia	4	210	55.0	.335	18.43
Michigan	2	12	49.8	.359	17.88
Minnesota and Wisconsin	3	115	49.6	.362	17.96
New Hampshire and Vermont	4	73	49.9	.384	19.16
North Carolina	6	170	56.8	.187	10.62
Pennsylvania	13	553	52.6	.339	17.83
Tennessee	9	577	54.3	.245	13.30
Virginia	4	103	52.5	.247	12.97
Total	54	2,113	53.7	.273	14.66
<b>Loopers, female:</b>					
Alabama and Louisiana	4	190	55.6	.174	9.67
Georgia	4	239	54.9	.215	11.80
Illinois	6	170	56.0	.245	13.72
Indiana	3	93	49.8	.530	26.39
Maryland and West Virginia	4	123	55.0	.327	17.99
Massachusetts	8	111	48.0	.483	23.18
Michigan	3	23	50.7	.504	25.55
Minnesota and Wisconsin	5	253	49.7	.447	22.22
New Hampshire and Vermont	5	92	51.0	.353	18.00
New Jersey	5	117	47.9	.584	27.97
New York	4	62	49.5	.636	31.48
North Carolina	16	710	55.9	.336	18.78
Pennsylvania	35	1,091	51.2	.556	28.47
Tennessee	13	658	54.9	.274	15.04
Virginia	4	154	52.4	.259	13.57
Total	119	4,086	53.1	.336	20.50
<b>Menders, female:</b>					
Alabama and Louisiana	3	25	54.9	.199	10.93
Georgia	5	100	54.3	.225	12.22
Illinois	5	59	54.4	.230	12.51
Indiana	3	92	49.9	.451	22.50
Maryland and West Virginia	5	63	55.0	.271	14.91
Massachusetts	7	68	48.0	.367	17.62
Michigan	3	10	50.6	.388	19.63
Minnesota and Wisconsin	5	162	49.6	.409	20.29
New Hampshire and Vermont	5	29	51.3	.335	17.19
New Jersey	4	101	48.3	.522	25.21
New York	3	33	47.9	.645	30.50
North Carolina	15	99	56.2	.248	13.94
Pennsylvania	36	555	50.6	.447	22.62
Tennessee	13	224	54.7	.225	12.31
Virginia	4	43	51.2	.198	10.14
Total	116	1,663	51.7	.362	18.72

*Underwear industry*

<b>Buttonhole makers, female:</b>					
Connecticut and Rhode Island	5	12	50.9	\$0.331	\$19.90
Illinois	3	16	47.7	.494	23.56
Indiana	2	10	47.6	.392	18.66
Massachusetts	5	39	48.0	.398	19.10
Michigan	2	19	50.8	.293	14.88
Minnesota and Wisconsin	4	19	48.9	.376	18.39
New Hampshire and Vermont	3	21	49.5	.399	19.75
New York	23	121	48.5	.332	16.10
North Carolina	3	32	53.4	.228	12.18
Pennsylvania	11	30	53.1	.290	15.40
Tennessee	5	46	54.8	.249	13.65
Virginia	3	11	52.0	.377	19.60
Total	69	376	50.3	.330	16.60

TABLE 4.—AVERAGE HOURS AND EARNINGS IN 11 REPRESENTATIVE OCCUPATIONS, 1930, BY SEX AND STATE—Continued

*Underwear industry—Continued*

Occupation	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
<b>Folders, female:</b>					
Connecticut and Rhode Island	4	24	51.0	\$0.365	\$18.62
Illinois	3	27	46.7	.437	20.41
Indiana	2	14	47.0	.423	19.88
Massachusetts	5	68	48.0	.386	18.53
Michigan	2	46	53.2	.267	14.20
Minnesota and Wisconsin	3	34	48.2	.363	17.50
New Hampshire and Vermont	3	19	49.5	.405	20.05
New York	23	276	48.8	.314	15.32
North Carolina	3	33	53.9	.250	13.48
Pennsylvania	5	53	51.8	.334	17.30
Tennessee	5	106	54.7	.273	14.63
Virginia	3	11	52.0	.273	14.20
Total	61	711	50.3	.322	16.20
<b>Knitters, web or tube, male:</b>					
Connecticut and Rhode Island	3	11	52.5	.461	24.20
Illinois	3	8	49.1	.581	28.53
Indiana	2	10	48.2	.548	26.41
Massachusetts	3	31	49.1	.541	26.56
Michigan	1	(1)	(1)	(1)	(1)
Minnesota and Wisconsin	2	8	48.3	.634	30.62
New Hampshire and Vermont	3	35	49.7	.960	47.71
New York	20	147	50.1	.543	27.20
North Carolina	3	31	54.4	.371	20.18
Pennsylvania	13	58	60.1	.459	27.59
Tennessee	5	57	55.3	.381	21.07
Virginia	3	14	52.4	.501	26.25
Total	61	412	52.5	.515	27.04
<b>Knitters, web or tube, female:</b>					
Connecticut and Rhode Island	5	42	50.2	.370	18.57
Illinois	1	(1)	(1)	(1)	(1)
Indiana	2	13	44.5	.461	20.51
Massachusetts	4	30	48.0	.417	20.02
Michigan	2	19	52.4	.374	19.60
Minnesota and Wisconsin	4	35	48.7	.460	22.40
New York	8	22	49.2	.436	21.45
North Carolina	1	(1)	(1)	(1)	(1)
Pennsylvania	6	26	52.3	.377	19.72
Tennessee	1	(1)	(1)	(1)	(1)
Total	34	197	49.5	.406	20.10
<b>Pressers, male:</b>					
Connecticut and Rhode Island	2	6	50.0	.740	37.00
Illinois	1	(1)	(1)	(1)	(1)
Indiana	1	(1)	(1)	(1)	(1)
Massachusetts	1	(1)	(1)	(1)	(1)
Minnesota and Wisconsin	1	(1)	(1)	(1)	(1)
New Hampshire and Vermont	3	16	49.8	.460	22.91
New York	16	28	49.0	.451	22.10
North Carolina	3	7	55.0	.335	18.43
Pennsylvania	7	8	53.9	.384	20.70
Tennessee	2	8	55.3	.296	16.37
Virginia	1	(1)	(1)	(1)	(1)
Total	38	82	50.9	.436	22.96
<b>Pressers, female:</b>					
Connecticut and Rhode Island	2	13	52.6	.408	21.46
Illinois	2	7	49.4	.366	19.56
Indiana	2	11	45.6	.489	22.30
Massachusetts	4	34	48.0	.351	16.85
Michigan	2	22	52.4	.313	16.40
Minnesota and Wisconsin	3	34	49.0	.391	19.16
New Hampshire and Vermont	3	16	49.0	.395	19.36
New York	11	52	48.8	.326	15.91
Pennsylvania	11	57	52.7	.370	19.50
Tennessee	5	40	55.9	.301	16.83
Virginia	1	(1)	(1)	(1)	(1)
Total	45	287	50.8	.357	18.14

† Data included in total.

TABLE 4.—AVERAGE HOURS AND EARNINGS IN 11 REPRESENTATIVE OCCUPATIONS, 1930, BY SEX AND STATE—Continued

*Underwear industry—Continued*

Occupation	Number of establishments	Number of employees	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week
Seamers, female:					
Connecticut and Rhode Island.....	5	96	51.0	\$0.381	\$19.43
Illinois.....	3	95	46.7	.536	25.03
Indiana.....	2	55	47.1	.402	18.93
Massachusetts.....	5	233	48.0	.397	19.06
Michigan.....	2	121	51.4	.298	15.32
Minnesota and Wisconsin.....	4	139	48.7	.452	22.01
New Hampshire and Vermont.....	3	108	49.3	.411	20.26
New York.....	23	819	48.6	.339	16.48
North Carolina.....	3	177	53.3	.261	13.91
Pennsylvania.....	16	269	52.7	.365	19.24
Tennessee.....	5	180	54.7	.294	16.08
Virginia.....	3	53	52.0	.276	14.35
Total.....	74	2,345	50.0	.354	17.71

**Recent Changes in Wages and Hours of Labor**

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

**Part 1. Wage Changes in Manufacturing Industries**

FOUR ESTABLISHMENTS in three manufacturing industries reported wage-rate increases during the month ending November 15. These increases averaged 12 per cent and affected 243 people or 44 per cent of all employees in the establishments concerned.

One hundred and nineteen establishments in 35 manufacturing industries reported wage-rate decreases during the same period. These decreases averaged 10.5 per cent and affected 12,287 employees or 83 per cent of all employees in the establishments concerned. Fifteen of the 119 wage-rate decreases were in the textile industries and affected 2,234 employees; 33 decreases were in the lumber group of industries and affected 5,255 employees.

## WAGE ADJUSTMENTS OCCURRING BETWEEN OCTOBER 15 AND NOVEMBER 15, 1930

Industry	Establishments		Per cent of increase or decrease in wage rate		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
<i>Increases</i>							
Lumber, millwork.....	335	1	33.3	33.3	65	77	(1)
Paper boxes.....	309	1	10.0	10.0	14	10	(1)
Printing, newspapers.....	407	2	3.7- 3.8	3.7	164	50	(1)
<i>Decreases</i>							
Confectionery.....	333	2	10.0	10.0	83	100	(1)
Ice cream.....	356	4	8.0-10.0	9.6	51	100	(1)
Flour.....	350	1	10.0	10.0	10	32	(1)
Baking.....	728	3	10.0-15.0	11.1	32	41	(1)
Cotton goods.....	457	4	5.0-15.0	8.1	1,420	98	1
Hosiery and knit goods.....	359	2	1.0-25.0	14.1	110	73	(1)
Silk goods.....	271	4	5.0-10.0	8.4	398	64	1
Woolen and worsted goods.....	185	2	10.0	10.0	53	24	(1)
Clothing, men's.....	348	1	10.0	10.0	114	100	(1)
Millinery and lace goods.....	122	2	10.0-25.0	15.9	139	25	1
Iron and steel.....	199	1	1.6	1.6	42	8	(1)
Structural ironwork.....	181	4	10.0	10.0	119	100	(1)
Foundry and machine-shop products.....	1,099	9	2.5-15.0	9.7	1,355	79	1
Machine tools.....	154	1	12.5	12.5	10	100	(1)
Stoves.....	137	1	5.0	5.0	360	86	2
Lumber, sawmills.....	618	21	3.0-20.0	10.9	4,357	97	4
Lumber, millwork.....	335	5	8.0-20.0	13.7	336	97	1
Furniture.....	408	7	5.0-20.0	10.4	562	92	1
Leather.....	134	1	10.0	10.0	229	100	1
Boots and shoes.....	320	2	10.0	10.0	236	100	(1)
Paper and pulp.....	216	1	10.0	10.0	775	100	1
Paper boxes.....	309	1	11.0	11.0	9	20	(1)
Printing, book and job.....	442	1	20.0	20.0	6	40	(1)
Fertilizers.....	181	9	8.8-20.0	10.9	190	82	2
Brick, tile, and terra cotta.....	719	11	8.0-25.0	10.1	361	72	1
Pottery.....	121	3	10.0-11.1	10.7	300	100	2
Brass, bronze, and copper products.....	162	1	8.0	8.0	10	100	(1)
Automobiles.....	204	2	3.1-25.0	24.7	278	99	(1)
Carriages and wagons.....	48	1	10.0	10.0	7	47	1
Car building and repairing, steam-railroad.....	550	3	10.0	10.0	30	20	(1)
Pianos.....	64	1	10.0	10.0	94	100	2
Automobile tires.....	41	1	12.0	12.0	12	36	(1)
Paint and varnish.....	183	1	10.0	10.0	20	39	(1)
Rubber goods, other than rubber boots, shoes, tires, and tubes.....	72	3	10.0	10.0	124	96	1
Beverages.....	155	3	9.0-29.0	18.4	49	62	1

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

## Part 2. Wage Changes Reported by Trade-Unions since September, 1930

WAGE and hour changes reported in part 2 principally affect union workers. Since September 1, 1930, changes of wages or hours have been reported for 10,590 workers, of which number 1,835 were reported as having adopted the short work week. In one instance, that of electricians in Philadelphia, the week was shortened from a 5-day to a 4-day week for the purpose of affording work to more men. The shortening of the working week was confined entirely to building trades and municipal workers.

Only two wage changes were reported in building trades, one an increase of 12½ cents per hour for electrical workers in Portsmouth, Ohio, and the other a decrease of the same amount for carpenters in Havre, Mont.

Slight increases ranging from \$1 to \$2 per week in the printing trades occurred in scattered localities but the greatest increases were received by fur workers in and about New York, N. Y., ranging from \$7.50 to \$9 per week, and for teachers in Detroit, from \$100 to \$2,500 per annum.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, SEPTEMBER TO DECEMBER, 1930

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
<b>Building trades:</b>					
<b>Carpenters—</b>					
Havre, Mont. ....	Sept. 16	<i>Per hour</i> \$1.12½	<i>Per hour</i> \$1.00	48	48
Springfield, Ill., and vicinity.....	Nov. 1	1.25	1.25	44	40
Wilmington, Del., and vicinity.....	Nov. 17	1.00	1.00	44	40
<b>Electrical workers—</b>					
Philadelphia, Pa., and vicinity.....	Nov. 26	1.37½	1.37½	40	1 32
Portsmouth, Ohio.....	Oct. 1	1.25	1.37½	40	40
<b>Painters, decorators, and paperhangers, Wil-</b>					
ington, Del.....	Nov. 3	1.00	1.00	44	40
<b>Plumbers and steamfitters, Wilmington, Del.</b>					
.....	Dec. 1	1.10	1.10	44	40
<b>Clothing:</b>					
Children's dressmakers, New York, N. Y....	Sept. 1	<i>Per week</i> (2)	<i>Per week</i> (3)	42	42
<b>Fur workers—</b>					
<b>Brooklyn, N. Y.—</b>					
First class.....	Oct. 15	55.00	64.00	40	40
Second class.....	..do.	50.00	58.00	40	40
Third class.....	..do.	43.50	51.00	40	40
<b>Newark, N. J.—</b>					
First class.....	..do.	55.00	64.00	40	40
Second class.....	..do.	50.00	58.00	40	40
Third class.....	..do.	43.50	51.00	40	40
<b>New York, N. Y.—</b>					
First class.....	..do.	55.00	64.00	40	40
Second class.....	..do.	50.00	58.00	40	40
Third class.....	..do.	43.50	51.00	40	40
Furniture: Carpet sewers, Washington, D. C....	Oct. 4	16.50-20.00	22.50-25.00	48	44
<b>Motion-picture operators, actors and theatrical workers:</b>					
Operators, Abilene, Tex.....	Sept. 1	4 55.00	4 57.50	30	30
<b>Printing and publishing:</b>					
<b>Compositors—</b>					
<b>Alamogordo, N. Mex.—</b>					
Newspaper, day.....	Oct. 1	50.00	51.00	46	45
Newspaper, night.....	..do.	53.00	54.00	46	45
<b>El Paso, Tex.—</b>					
Newspaper, day.....	..do.	50.00	51.00	46	45
Newspaper, night.....	..do.	53.00	54.00	46	45
Grand Junction, Colo., Newspaper.....	..do.	43.00	44.00	48	48
Henderson, Ky., Job work.....	Dec. 1	34.00	35.00	44	44
Electrotype finishers, New York, N. Y.....	Oct. 1	64.00	66.00	44	44
<b>Stereotypers—</b>					
New York, N. Y.....	..do.	64.00	66.00	44	44
Pawtucket, R. I.....	Dec. 1	48.00	50.00	45	45
Providence, R. I.....	..do.	49.00	51.00	42	42
<b>Municipal workers:</b>					
<b>Public school teachers, Detroit, Mich.—</b>					
Kindergarten teachers.....	Sept. 1	<i>Per year</i> 1,400-2,400	<i>Per year</i> 1,500-2,500	(2)	(2)
Elementary teachers.....	..do.	1,400-2,800	1,500-3,000	(2)	(2)
Special education teachers.....	..do.	1,600-3,000	1,700-3,100	(2)	(2)
Intermediate principals.....	..do.	3,750-5,700	3,900-5,950	(2)	(2)
High-school principals.....	..do.	4,000-6,500	4,250-6,750	(2)	(2)
College professors.....	..do.	1,800-4,500	2,000-4,750	(2)	(2)
Supervisors.....	..do.	2,500-6,600	2,700-7,200	(2)	(2)
Administration department.....	..do.	4,200-8,500	4,800-11,000	(2)	(2)
<b>Construction workers, Fort Worth, Tex.....</b>					
.....	Nov. 10	<i>Per hour</i> .40	<i>Per hour</i> .40	48	40

1 Emergency measure.

2 Not reported.

3 \$1 per week increase.

4 Average.



### Average Wages and Hours of Members of Standard National and International Unions, 1929

THE average wages and hours of members of standard national and international unions for 1929 are given in the following table, which also includes data on the 5-day week and vacations with pay for such membership. These statistics were presented in the report of the executive council of the American Federation of Labor to the fiftieth annual convention of that body, which was held in Boston, October 6 to 17, 1930.

AVERAGE WAGES AND WORKING HOURS PER DAY AND PER WEEK OF MEMBERS OF STANDARD NATIONAL AND INTERNATIONAL UNIONS, 1929

Organization	Average wage		Average hours per day	Average work week		Number having—	
	Rate	Unit		Hours	Days	5-day week	Vacation with pay
Asbestos Workers, Int. Assn. of H. and F. I.	\$1.25	Hour	8	40	5	1,215	-----
Bakery and Confectionery Workers, I. U. of A.	-----	-----	8	48	6	-----	-----
Bill Posters and Billers of Am., Int. All. of.	50.00	Week	8	44	5½	-----	-----
Blacksmiths, Drop Forgers, and H., Int. Bro. of.	.90	Hour	8	44	5½	300	247
Boiler Makers, Iron Ship Builders, and H. of A., I. B. of:	-----	-----	-----	-----	-----	-----	-----
Mechanics.....	.80-1.625	} do	8	44	5½	1,021	-----
Helpers.....	.51-1.525						
Bookbinders, International Brotherhood of:	-----	-----	-----	-----	-----	-----	-----
Men.....	44.00	} Week	8	44	5½	779	3,000
Women.....	20.50						
Boot and Shoe Workers' Union.....	1.00	Hour	8	48	5½	-----	-----
Brewery, Flour, Cereal, and S. D. W. of A., I. U. of U.	32.00	Week	8	46	5¾	-----	4,000
Bricklayers, Masons, and Plasterers' I. U. of A.	1.50	Hour	8	44	5½	45,735	-----
Brick and Clay Workers of Am., The United.	.85	do	8¼	44	5¼	3,000	-----
Bridge and Structural Iron Workers Int. Assn.	1.625	do	8	40	5	10,000	-----
Broom and Whisk Makers' Union, International.	7.40	Day	-----	-----	-----	-----	-----
Carmen of America, Brotherhood Railway.	7.00	do	8	48	6	-----	15,533
Carpenters and Joiners of America, U. B. of.	9.00	do	8	42	5¼	100,000	-----
Carvers' Assn. of N. A., Int. Wood	11.00	do	8	40	5	700	-----
Cigarmakers' Int. Union of America	(1)	do	8	48	6	-----	-----
Clerks, National Federation of Post Office.	2,150.00	Year	8	48	6	-----	32,000
Clerks, Brotherhood of Railway	2.34-7.52	Day	8	44-48	5½-6	-----	-----
Clerks' Int. Protective Assn., Retail	22.50	Week	8	48	6	-----	6,000
Cloth, Hat, Cap, and Millinery Workers' Int. Union:	-----	-----	-----	-----	-----	-----	-----
Cap makers.....	45.00	do	8	40	5	3,575	-----
Millinery workers.....	65.00	do	9	44	5	-----	-----
Conductors, Order of Sleeping Car	179.00	Month	9	56	6	-----	-----
Coopers' International Union of N. A.	38.50	Week	8	44	5½	-----	-----
Diamond Workers' Protective Union of Am.	75.00	do	8	44	5½	-----	-----
Draftsmen's Union, I. F. of T. E. A. and Electrical Workers of America, Int. Bro. of.	8.00	Day	7	42	6	-----	1,000
of.....	1.17	Hour	8	40-44	5-5½	39,952	3,000
Elevator Constructors, Int. Union of	12.50	Day	8	44	5½	2,645	2,500
Engineers, Int. Union of Operating	58.50	Week	8	44	5½	11,245	2,500
Engravers' Union, International Metal	58.00	do	8	46	5½	40	-----
of.....	-----	-----	-----	-----	-----	-----	-----
Engravers' Union, of N. A., Int. Photo	-----	-----	8	40-44	5-5½	4,946	-----
Fire Fighters, International Assn. of	2,300.00	Year	12	84	7	-----	20,000
Firemen and Oilers, Int. Bro. of Stationary.	.80	Hour	8	48	6	-----	-----
Foundry Employees, Int. Bro. of.....	2.51	do	8	48	6	-----	-----

<sup>1</sup> Piecework.

<sup>2</sup> Minimum.

## AVERAGE WAGES AND WORKING HOURS PER DAY AND PER WEEK OF MEMBERS OF STANDARD NATIONAL AND INTERNATIONAL UNIONS, 1929—Continued

Organization	Average wage		Average hours per day		Average work week		Number having—	
	Rate	Unit	Hours	Days	5-day week	Vacation with pay		
Fur Workers' Union of the U. S. and Can., Int.	\$2,200.00	Year	8	41	5	9,500	-----	
Garment Workers of America, United			8	44	5½	5,000	-----	
Garment Workers' Union, Int. Ladies'	50.00	Week	8	40	5	50,000	-----	
Glass Bottle Blowers' Assn. of the U. S. and Can.	8.32	Day	8	44	5½	365	-----	
Glass Cutters League of America, Window.	50.00	Week	8	48	6		-----	
Glass Workers' Union, American Flint	45.00	do	8½	46¾	5½	75	-----	
Glove Workers' Union of America, Int.:								
Men	33.00	do	8	44	5½	100	-----	
Women	22.50	do	8	44	5½		-----	
Granite Cutters' International Assn. of A.	10.00	Day	8	40	5	5,000	-----	
Hod Carriers', Bldg. and Com. Lab., U. of A., Int.	.875	Hour	8			19,660	-----	
Horse Shoers of U. S. and Can., I. U. of Journeymen.	8.00	Day	8	44	5½		-----	
Jewelry Workers' Union, International:								
Platinum workers	1.50	Hour	8	44	5½		-----	
Gold workers	35.00	Week	8				-----	
Lathers', Int. Union of Wood, Wire and Metal.	10.56	Day	8	42.8	5¼	8,500	-----	
Laundry Workers International Union	15.00-35.00	Week	8½	48	5½	40	-----	
Leather Workers United, Int. Union	40.00	do	8	44	5½		-----	
Letter Carriers, National Association of	2,070.00	Year	8	48	6		-----	53,000
Letter Carriers, National Fed. of Rural	1,800.00	do	8				-----	800
Lithographers, I. P. and B. A. of the U. S. and Canada.	35.00-65.00	Week	8	46	5½		-----	
Longshoremen's Association, International.	.85	Hour	8	44	5½		-----	
Machinists, International Association of Maintenance of Way Employees, Bro. of	.90	do	8	44	5½	7,500	-----	10,000
Marble, Slate and Stone P. R. and S., T. and M. S. H., I. A.	86.40-175.00	Month	8	48	6		-----	(4)
Masters, Mates and Pilots of Am. Nat. Org.	7.50	Day	8	44	5½	4,000	-----	
Meat Cutters and Butcher Workmen of N. A., Amal.	160.00-375.00	Month					-----	
Metal Workers, Sheet, International Assn.	45.00	Week	9	54	6	1,000	-----	5,000
Mine, Mill and Smelter Workers, Int. Union of	1.25	Hour	8	44	5½	7,674	-----	
Mine Workers of America, United:	5.50	Day	8	48	6		-----	15
Bituminous	6.10	do	8				-----	
Anthracite	4.62-5.96	do	8				-----	
Molders' Union of N. A., International	7.50	Day	8	48	6		-----	
Oil Field, Gas Well and Refinery Workers of America:								
In California			8				-----	
Elsewhere			12				-----	
Painters, Decorators and Paperhangers of A., Brotherhood of			8	40	5	85,000	-----	
Paper Makers, International Bro. of	48.00	Week	8	48	6	550	-----	550
Pattern Makers' League of North America.	1.04	Hour	8	40-50	5-6	200	-----	
Pavers, Rammers, F. B. and S. C. S., I. U. of	-12.00	Day	8	44	5½	125	-----	350
Paving Cutters Unions of the U. S. of A. and Can.	(1)	do	8	44	5½	225	-----	
Plasterers International Assn. of the U. S. and Can., Operative.	11.50	Day	8	43	5½	27,591	-----	
Plumbers and Steamfitters of the U. S. and Can., U. A. of			8			39,000	-----	
Polishers, Metal, International Union	1.00	Hour	8	48	5½	100	-----	860
Printers, D. S. and E. Union of N. A., I. Plate.	45.00	Week	8	44	5½		-----	53
Printing Pressmen and Assistants U. of N. A., Int.:								
Commercial	7.00	Day	7½	44	5½		-----	
News	7.00	do	7½	45	6		-----	
Pulp, Sulphite and Paper Mill W. of the U. S. and Canada., Int. Bro. of	4.00	do	8	48	6		-----	

<sup>3</sup> Temporary on railroads.

<sup>4</sup> All foremen on 5 roads and all monthly rated employees on all Canadian roads.

AVERAGE WAGES AND WORKING HOURS PER DAY AND PER WEEK OF MEMBERS OF STANDARD NATIONAL AND INTERNATIONAL UNIONS, 1929—Continued

Organization	Average wage		Average hours per day	Average work week		Number having—	
	Rate	Unit		Hours	Days	5-day week	Vacation with pay
Quarry Workers, Int. Union of N. A.	\$0.63	Hour	8	44	5½		
Railroad Trainmen, Brotherhood of			8				
Railway Conductors of America, Order of:							
Freight	7.14	}100 mi.	8				
Passenger	4.76						
Railway Employees of A., A. A. of Street and Electric.	.65	Hour	8	54	7		15,200
Railway Mail Association	2,586.00	Year	8	48	6		20,100
Roofers, Damp and Waterproof W. A. U. S. T. and C.	1.425	Hour	8	44	5½	3,000	
Seamen's Union of America, International			8-12	56-84	7		
Siderographers, International Assn. of			8½	46	5¼	40	
Stage Employees and M. P. M. O. of the U. S. and Can.			8	56	7		
Stereotypers and Electrotypers Union of N. A., Int.:							
Commercial			8	44	5½		
News			8	48	6		
Stonemasons' Assn. of N. A., Journeymen.	1.25	Hour	8	44	5½	1,000	
Stone Mounters' International Union:							
Day rate	.84	}do.	8	748	76	300	
Piece rate	1.03						
Switchmen's Union of North America	6.62	Day	8	48	6		
Tailors' Union of America, Journeymen	1.00	Hour	8	48	6	50	950
Teachers, American Federation of	2,400.00	Year	5¼	26¼	5	6,000	
Teamsters, Chauffeurs, S. and H. of A. I. B. of	42.00	Week	9	50	6	100	20,000
Telegraphers, Order of Railroad	.667	Hour	8	48-56	6-7		7,987
Telegraphers' Union of N. A., The Commercial	145.00-260.00	Month	8	42-45	5½-6		3,800
Textile Workers of America, United	18.00-20.00	Week	8	50	5½		
Tobacco Workers' International Union	14.00-30.00	do.	9	48	5½		
Typographical Union, International:							
News	}53.90-56.00	}do.	{7½	45	6	94,585	
Book and job				{8	44		
Upholsters' International Union of N. A.	60.00	Week	8½	44	5½	4,000	
Wall Paper Crafts of N. A., United	52.50	do.	8	49	6	150	
Weavers' Protective Assn., American Wire.			9	50	5½	351	
Total						10 514,679	10 225,660

5 Or less.  
6 Plus \$277 travel allowance.  
7 44 hours, 5½ days in summer months.  
8 During summer months.  
9 5-night week obtains in 18 locals on job work.  
10 Not the exact sum of the items, but is as given in the report.

### Arbitration Award in the Dress Industry of New York City

THE Association of Children's Dress Manufacturers and the Children's Dress and Housedress Makers' Union, Local No. 91, of the International Ladies' Garment Workers' Union, of New York City, submitted the following matters to arbitration:

First. The demand of the union for a flat increase of \$2 for all week workers and 10 per cent for all pieceworkers.

Second. To determine upon a minimum wage scale in the industry, the establishment of which was agreed upon by both parties to the agreement.

No argument was presented by either party on the subject of a minimum wage scale; therefore, the decision of the arbitrator deals only with the requested wage increase.

As an outcome of the first hearing it was agreed that detailed information be submitted to the arbitrator as to the wages paid in the association shops and in the independent union shops, which had recently put into effect an increase of wages of \$1 per week for week workers and of 5 per cent for pieceworkers. A comparison of the wage rates paid by the association shops with those paid by the independent shops showed that the wage rates were not far apart.

The representatives of the association contended that the present is not an opportune time for a wage increase, when the industry is suffering from the general business depression, and stressed the fact of the steady employment of the workers in some of their shops. On examination of the annual earnings the arbitrator found employment unusually steady for a needle industry; however, considerable part-time employment was found, which had the effect of reducing the average earnings below the weekly rate paid the worker.

The union stated that it had secured an increase of \$1 per week for week workers and 5 per cent for pieceworkers for its members employed in the independent union shops, on condition that the workers in the association shops would be awarded a similar increase under the proposed arbitration proceedings; and, if no increase is awarded the members in the association shops by arbitration, the increase secured for members employed in the independent shops is to be nullified. This would result in a reduction of wages for more than 600 workers employed in the independent shops.

The findings and award of the arbitrator, N. I. Stone, impartial chairman of the dress industry, under date of October 23, 1930, are as follows:

#### *Findings*

After a careful study of the facts and data submitted and giving full consideration to the arguments presented by both sides, the arbitrator makes the following findings and award:

1. As appears from the figures previously cited, the wages of the workers in the association shops do not, on the whole, substantially differ from those in the independent union shops. In some operations, such as operators, pressers (female), the earnings are a little higher in the association shops; in others, such as finishers, cutters, pressers (male), they are higher in the independent shops.
2. The arbitrator has no information as to what the earnings are in the non-union shops. The statement has been made, however, at the hearings by the representatives of the union and not denied by the representatives of the association, that nonunion employers have recently reduced hours and increased wages of their workers as an inducement to keep them from joining the strike called by the union.
3. On general principles, the arbitrator is in accord with the contention of the employers that a depression period is not the time for an increase of wages and that everything should be done to avoid adding to the cost of production and to the burdens of the manufacturer.
4. On the other hand, it is equally true that leading business men, heads of large corporations employing large numbers of workers, economists, and men who have been giving serious study to the problems of the business cycle, of whom President Hoover is an outstanding spokesman, are in accord that the policy pursued in the past, of reducing wages in times of depression, was wrong and only served to aggravate an already bad situation; that one of the most effective methods of overcoming depression is to stimulate consumption and that everything that helps to maintain a high standard of living will stimulate mass consumption.
5. Had there been no increase in wages granted by the independent manufacturers, the arbitrator, bearing in mind the present business conditions and the fact that most of the workers are fairly well paid, although this can not be said of a considerable minority of the workers in the association shops, would be disposed to deny the demand of the union for a general increase in wages. But with

the situation as it is, to deny entirely the union demand for an increase for the regular employees of the association shops involves an actual reduction of present wages of more than four times that number of workers employed in independent shops, 60 per cent of whom are employed in contract shops. The workers in those shops can ill afford a reduction from their none too high earnings, particularly in the present state of part-time employment.

#### *Award*

In view of these considerations, the arbitrator, while finding it necessary to deny the demand of the union for an increase of wages of \$2 per week for week workers and 10 per cent for pieceworkers, feels obliged to grant the workers employed in the association shops a flat increase of \$1 per week, the increase to apply equally to workers paid by the week and those paid on a piecework basis. This decision leaves the present piece rates unchanged and calls for an addition of \$1 for a full week of 42 hours to the piecework earnings of the workers.

This award is to take effect this week, that is from Monday, October 20, 1930.

### Wages and Hours in Texas, 1929-30

THE accompanying data concerning the labor force, the wages paid, and the hours worked in 12,015 establishments in Texas for the fiscal year ending August 31, 1930, are taken from the eleventh biennial report of the bureau of labor statistics of the State, covering that year and the preceding one.

Table 1 shows the distribution of 220,928 workers in various classes of establishments, by sex and marital status:

TABLE 1.—NUMBER, SEX, AND MARITAL STATUS OF EMPLOYEES IN INSPECTED INDUSTRIAL ESTABLISHMENTS, YEAR ENDING AUGUST 31, 1930

Class of establishment	Number of establishments	Total number of employees	Men		Women		Children <sup>1</sup>
			Married	Single	Married	Single	
Barber shops and beauty parlors.....	496	2,181	1,117	423	218	407	16
Hospitals.....	152	5,856	1,141	995	677	3,040	3
Hotels and cafés.....	1,726	19,533	6,253	5,731	2,966	4,369	214
Laundries.....	670	14,114	3,628	1,404	4,624	4,386	72
Manufacturing and wholesale.....	1,226	68,256	39,575	15,003	7,183	5,898	597
Mercantile.....	5,112	49,052	17,461	9,323	7,819	13,117	1,332
Printing and publishing.....	398	7,669	4,054	1,728	491	1,052	344
Public utilities.....	428	25,102	10,833	4,930	3,479	5,299	561
Miscellaneous.....	1,807	29,165	17,357	6,714	1,455	3,214	425
Total.....	12,015	220,928	101,419	46,251	28,912	40,782	3,564

<sup>1</sup> Includes boys under 21 and girls under 18.

Of the 220,928 employees reported upon in the above tabulation, 67 per cent were men; 31 per cent, women; and less than 2 per cent, children. Nearly 69 per cent of the men and about 41 per cent of the women were married.

The number of men, women, and children in specified wage groups and the average weekly hours of such workers in various classes of industrial establishments in Texas for the year ending August 31, 1930, are given in Table 2.

TABLE 2.—WEEKLY WAGES AND AVERAGE HOURS PER WEEK OF MEN, WOMEN, AND CHILDREN IN INSPECTED ESTABLISHMENTS FOR YEAR ENDING AUGUST 31, 1930

Class of establishment	Number receiving each classified amount per week									Average hours per week		
	Men			Women			Children			Men	Women	Children <sup>1</sup>
	Under \$10	\$10 and under \$15	\$15 and over	Under \$10	\$10 and under \$15	\$15 and over	Under \$10	\$10 and under \$15	\$15 and over			
Barber shops and beauty parlors.....	41	137	1,362	65	94	466	11	5	-----	63	52	54
Hospitals.....	473	610	1,053	1,363	845	1,509	3	-----	-----	58	54	42
Hotels and cafés.....	2,389	2,827	6,768	2,319	3,169	1,847	136	51	27	70	53	65
Laundries.....	76	291	4,665	3,283	3,714	2,013	26	22	24	54	51	50
Manufacturing and wholesale.....	320	2,817	51,441	1,727	4,781	6,573	112	252	233	56	48	47
Mercantile.....	615	1,921	24,248	2,960	5,401	12,575	793	438	101	60	52	54
Printing and publishing.....	36	153	5,593	123	146	1,274	240	84	20	48	48	30
Public utilities.....	82	728	14,953	197	2,031	6,550	294	152	115	56	47	52
Miscellaneous.....	331	1,069	22,671	397	1,050	3,222	217	128	80	54	50	46
Total.....	4,363	10,553	132,754	12,434	21,231	36,029	1,832	1,132	600	58	51	49

<sup>1</sup> Includes boys under 21 and girls under 18 years of age.

Of the 147,670 male employees, about 3 per cent received under \$10 per week; 7.1 per cent \$10 and under \$15; and about 89.9 per cent were paid \$15 or more. The women were distributed in the three wage groups as follows: Approximately 18 per cent received less than \$10; 51.7 per cent, \$15 and over; and 30.5 per cent \$10 and under \$15. Only 17 per cent of the children were in the group receiving \$15 and over, while more than half were being paid less than \$10 per week. The hours of labor of men averaged 58 per week; those of women, 51; and those of children, 49.

In Table 3 a comparison is made between the fiscal year 1929-30, for which the above figures are presented, and the preceding year with reference to the number of establishments inspected in the various industrial groups and the number of workers in specified wage groups:

TABLE 3.—INCREASE OR DECREASE IN NUMBER OF INSPECTED ESTABLISHMENTS AND IN NUMBER OF MEN AND WOMEN IN SPECIFIED WEEKLY WAGE GROUPS IN 1929-30 AS COMPARED WITH 1928-29

Class of establishment	Increase or decrease from 1928-29 to 1929-30 in—						
	Number of establishments	Number of men receiving weekly wage of—			Number of women receiving weekly wage of—		
		Under \$10	\$10 and under \$15	\$15 and over	Under \$10	\$10 and under \$15	\$15 and over
Barber shops and beauty parlors.....	+58	-10	+10	+77	+41	+39	-1
Hospitals.....	+31	+232	+210	+385	+594	+247	+508
Hotels and cafés.....	+117	+97	-236	+2,357	-342	+884	+364
Laundries.....	+193	+8	+76	+975	+157	+991	+510
Manufacturing and wholesale.....	+151	-10	-257	+8,965	-1,417	-444	+657
Mercantile.....	+853	+89	+297	+4,251	+1,083	-1,075	+1,239
Printing and publishing.....	+163	-70	-24	+1,837	+59	-11	+600
Public utilities.....	+143	-215	+53	+5,406	+83	+1,183	+4,108
Miscellaneous.....	+462	-3	-135	+869	+2	+463	-51
Total.....	+2,171	+118	-6	+25,122	+260	+2,277	+7,934

As indicated in Table 3, there was an increase in the number of industrial establishments in 1929-30 as compared with 1928-29 and also in the number of workers in all establishments. This would, of course, to some extent account for the additional numbers in certain wage groups but it would not explain the decreases in the numbers of workers in other wage groups. The figures in Table 3 combined with those in Table 2 are analyzed in some detail in the report under review.

Among the indications shown from such analysis are the following:

*Barber and beauty shops.*—An apparent tendency to raise the wages of men and to reduce those of women.

*Hospitals.*—No improvement in women's wages.

*Hotels and restaurants.*—A tendency toward slightly higher wages for women.

*Laundries.*—No improvement in women's wages.

*Manufacturing and wholesale establishments.*—Increased wages for men and a tendency to raise women's wages.

*Mercantile establishments.*—A definite tendency toward higher wages for men and no improvement in wages for women.

*Printing and publishing establishments.*—Unmistakably higher wages for men. A general tendency toward higher wages for women, but not in proportion to the increases for men.

*Public utilities.*—A trend toward higher wages for men. A similar trend in women's wages, despite a slight increase in the number of women receiving under \$10 per week.

*Miscellaneous group.*—A tendency to increase men's wages without giving equal consideration to women.

*All classes of establishments.*—Only a very slight advance in wages for men in all classes of employment, but a large proportion of the total increase in the number of women occurred in the highest wage group. This latter development would seem to overthrow the theory that women have not benefited in equal ratio to men in the matter of wage advances, but it must be noted that while the number of men in the lower wage groups has been stationary the total number of workers has expanded. On the other hand, the number of women in the lower wage groups has shown a substantial increase.

According to a summary of inspection reports for the biennium ending August 31, 1930, there were 240,386, or 89 per cent of the men employed who received \$15 or over per week, while only 49 per cent of the women received as much as \$15 per week.

These figures prove conclusively the fact so often pointed out by the department that more than half of the woman employees in the industries of the State work for wages insufficient to meet the bare necessities of life. This is a problem that has long pressed for solution, and the situation is rapidly becoming acute and threatens incalculable harm to the moral fiber of our people. Something should be done immediately to provide further protection for the woman workers of Texas, and a minimum wage law carefully and properly administered appears to be the only solution.

### Wages and Wage Trends in Australia

THE Australian Labor Report for 1929, issued under date of September, 1930, is the twentieth of the series published by the Commonwealth Bureau of Census and Statistics. Considerable space is devoted to wages, including a survey of the movement of wages over a period of years, more especially since 1914. The following

table shows the weighted average rate of wages for a full week's work, as of December 31, 1929, for each of the States and for the Commonwealth, for adult males and females separately, with the average weekly hours of labor:

TABLE 1.—AVERAGE WEEKLY WORKING HOURS AND WEIGHTED AVERAGE WEEKLY WAGE RATES IN AUSTRALIA, DEC. 31, 1929

[Conversions into U. S. currency on basis of shilling=24.33 cents, penny=2.03 cents]

State	Adult males			Adult females		
	Wage rates per week		Hours per week	Wages rate per week		Hours per week
	English currency	U. S. currency		English currency	U. S. currency	
	<i>s</i>	<i>d</i>		<i>s</i>	<i>d</i>	
New South Wales.....	102	11	\$25.04	44	14	43.93
Victoria.....	101	1	24.59	46	83	45.40
Queensland.....	101	2	24.61	43	96	44.01
South Australia.....	97	2	23.64	46	83	46.03
West Australia.....	100	7	24.47	45	58	45.57
Tasmania.....	94	8	23.03	47	09	46.07
Total.....	101	2	24.61	45	34	44.79

In calculating the above data as to hours, no account was taken of shipping, nor of agricultural and pastoral occupations, since hours in these are usually not fixed by awards and differ so widely according to seasonal and emergency demands that sufficiently definite particulars for the calculation of average working time can not be obtained. It will be seen that in the case of adult males only one State, New South Wales, rises above the average weekly wage rate for the Commonwealth, and that in average weekly hours it sinks below this standard, while Tasmania, with a weekly wage rate much below the average, exceeds the average in the length of the working week.

The variations in the average full week's wage rate at specified dates is shown for adult males and females in the following table, together with index numbers of the wage rates.

TABLE 2.—WEIGHTED AVERAGE WEEKLY WAGE RATES AND INDEX NUMBERS THEREOF, IN AUSTRALIA, AT SPECIFIED DATES

[Conversions into U. S. currency on basis of shilling=24.33 cents, penny=2.03 cents]

Date	Adult males			Adult females		
	Rate		Index numbers (1911=100.0)	Rate		Index numbers (Apr. 30, 1914=100)
	English currency	U. S. currency		English currency	U. S. currency	
	<i>s.</i>	<i>d.</i>		<i>s.</i>	<i>d.</i>	
June 30, 1914.....	55	3	\$13.44	27	2	100.0
Dec. 31, 1914.....	55	7	13.52	27	5	100.8
Dec. 31, 1925.....	96	9	23.54	188	7	186.1
Dec. 31, 1926.....	99	4	24.17	193	8	190.2
Dec. 31, 1927.....	100	2	24.37	195	5	194.5
Dec. 31, 1928.....	100	5	24.43	195	9	198.0
Mar. 31, 1929.....	100	4	24.41	195	8	198.0
June 30, 1929.....	100	4	24.66	197	7	198.0
Sept. 30, 1929.....	101	5	24.68	197	9	199.2
Dec. 31, 1929.....	101	2	24.61	197	4	199.0



The index numbers in the above table are not comparable as between the sexes, since those for males are based on the average wage for the year 1911, while those for females are based on the rates prevailing April 30, 1914. In both cases, however, the wage rates show comparatively little change from the end of 1926 onward, and for both sexes September 30, 1929, showed the highest average wage rates yet recorded, followed by a slight fall at the end of the year.

Meanwhile, there had been a change in working hours, less marked than the movement of wage rates. The following table shows the average weekly hours, by sex of worker, on April 30, 1914, and at the end of the years 1921 to 1929. In calculating the hours of male workers, shipping and agricultural and pastoral occupations are not included.

TABLE 3.—AVERAGE WEEKLY HOURS OF LABOR IN AUSTRALIA APRIL 30, 1914, AND 1921 TO 1929, BY YEARS

Date	Adult males	Adult females	Date	Adult males	Adult females
April 30, 1914.....	48.93	49.08	December 31—		
December 31—			1925.....	46.44	45.78
1921.....	46.22	45.69	1926.....	45.57	44.94
1922.....	46.38	45.82	1927.....	45.46	44.94
1923.....	46.70	45.98	1928.....	45.27	44.79
1924.....	46.66	46.02	1929.....	45.34	44.79

It will be seen that on the whole the movement has been downward, but during 1922 and 1923 certain increases in the hours of labor occurred. In Queensland a 44-hour week became operative in 1925, and in New South Wales it went into effect in 1926. Slight increases occurred in hours for adult male employees in 1929 in Victoria, South Australia, West Australia, and Tasmania, but no changes were reported in hours for adult females. During 1930, there was a movement in the direction of longer hours, Queensland and New South Wales having both reestablished the 48-hour week. (See Labor Review, September, 1930, p. 165.)

#### Trend of Wage Rates and Real Wages

A CHANGE in a wage rate gives no information as to its effect upon the worker until it is compared with some standard, usually a cost-of-living figure, by which the purchasing power can be learned and the real wage determined. Obviously, if prices rise more rapidly than wage rates, an increase in the latter may be coincident with a fall in the real wage. Again, changes in the employment situation may affect the worker quite as seriously as changes in the wage rate; if wages go up and the chance of employment goes down, his real position may be worse rather than better. Taking these factors into consideration, the report gives the following table, showing for specified periods index numbers of nominal wages, index numbers of retail prices, and index numbers of real wages, first, if full-time work should be obtained, and secondly, allowing for unemployment, and the per cent unemployed. This table is based upon the wages of adult males only. For the years prior to 1914 the nominal wages index numbers and the percentage unemployed relate to the end of the

year only, but from 1914 onward these figures and those relating to retail prices are averages for the whole year. The year 1911 is taken as the base year throughout.

TABLE 4.—INDEX NUMBERS OF NOMINAL AND REAL WAGES AND RETAIL PRICES, AND PER CENT UNEMPLOYED, IN AUSTRALIA, 1901 TO 1929

[1911=100.0]

Year	Nominal wage	Retail prices	Real wages		Per cent unemployed	Year	Nominal wage	Retail prices	Real wages		Per cent unemployed
			For full-time work	Allowing for unemployment					For full-time work	Allowing for unemployment	
1901	84.8	88.0	96.4	94.5	6.6	1918	127.0	136.2	93.2	92.1	5.8
1906	86.6	90.2	96.0	94.0	6.7	1919	137.0	151.0	90.7	88.9	6.6
1907	89.3	89.7	99.6	98.6	5.7	1920	162.7	178.5	91.1	89.4	6.5
1908	90.0	95.1	94.6	93.4	6.0	1921	182.6	169.7	107.6	100.2	11.2
1909	92.3	94.8	97.4	96.3	5.8	1922	180.1	160.0	112.6	107.2	9.3
1910	95.5	97.0	98.5	97.4	5.6	1923	180.5	170.0	106.2	103.5	7.1
1911	100.0	100.0	100.0	100.0	4.7	1924	184.0	168.1	109.5	104.6	8.9
1912	105.1	110.1	95.5	94.6	5.5	1925	186.1	172.2	108.1	103.4	8.8
1913	107.6	110.4	97.5	97.0	5.3	1926	191.4	178.6	107.2	104.5	7.1
1914	108.1	114.0	94.8	91.2	8.3	1927	194.6	176.6	110.2	107.5	7.0
1915	109.2	127.8	85.4	81.3	9.3	1928	196.3	176.0	111.5	104.4	10.8
1916	114.4	132.4	86.4	85.4	5.8	1929	197.2	182.2	108.2	100.9	11.1
1917	122.6	131.8	93.0	90.7	7.1						

This table shows in striking fashion how the worker's economic position may be going down while wage rates are going up. Between 1911 and 1920 the index of the wage rate rose from 100.0 to 162.7, but the index of the worker's real wage, even making no allowance for unemployment, sank from 100.0 to 91.1, and in 1920 he was relatively in a worse position even than in 1901. From 1921 onward his position improved, but to only a relatively small degree.

The first occasion on which the effective wage was higher than in 1911 was in 1921, when wages increased considerably while prices declined, the increase in effective wages being 7.6 per cent, but only 0.2 per cent allowing for unemployment. Unemployment reached its peak during 1921. Both wages and prices fell in 1922, but the former less than the latter, resulting in a further increase in the effective wage. As wages remained practically stationary while prices rose, the effective wage for 1923 showed a decline. A rise in wages coincided with a fall in prices during 1924, and the effective wage increased, but as the average unemployment was higher than in the previous year, the increase in the effective wage was greater for full work than allowing for unemployment.

Wages and prices both rose during 1925 and 1926, the latter in 1926 reaching their highest point up to that date. Unemployment remained stationary in 1925, but, as prices rose more rapidly than the rise in nominal wages, effective wages decreased. In 1926, unemployment decreased, and, although prices again rose more rapidly than nominal wages, the effective wage allowing for unemployment increased. Effective wages for full-time work, however, again decreased. During 1927 nominal wages rose whilst prices fell, and as the percentage of unemployment showed a slight decline the result was a rise in the effective wage index number for full work, and also in the index number allowing for unemployment. During the year 1928 there was a further rise in the effective wage index number for full work. Unemployment, however, increased and the effective wage index number, after allowing for unemployment, showed a decline as compared with the previous year. The increase in prices during 1929 was greater than the increase in nominal wages, with the result that the effective wage index number for full work declined from 111.5 to 108.2, and as unemployment increased also during the period the effective wage index number allowing for unemployment declined sharply from 104.4 to 100.9, the lowest point recorded since the year 1921. Comparison with 1911 shows that the effective wage for full-time work was 8.2 per cent, and, allowing for unemployment, 0.9 per cent higher during 1929.

[188]

## Hours and Other Conditions in English Factories, 1929

THE 1929 report of the Chief Inspector of Factories and Workshops of Great Britain covers 152,453 factories and 108,323 workshops which were registered with the department at the close of the year, being an increase of 2,921 factories and a decrease of 3,726 workshops as compared with the figures of the preceding year. Employment generally was unsatisfactory, but varied according to industry and locality. Rationalization, as well as trade depression, had its effect in increasing the number of persons out of work. In an endeavor to meet the unemployment situation there was a movement to widen the field of production, to vary the kinds of products turned out, and generally to adapt plants and workers to the changing conditions.

For instance, some employers made arrangements for changing over from cotton to artificial silk; beet-sugar factories, which formerly worked for a short season only during the winter, utilized their plants during the summer in refining imported sugar; agricultural implement makers widened their scope of production by making motor-car parts, etc., and general joinery works turned over to furniture.

### 5-Day Week

SOME additional firms, it is stated, adopted the 5-day week, and no reports were received of its having been given up by those who had in earlier years introduced it, but no comprehensive data are given as to the number of establishments in which it prevails, nor of the number of workers affected. Reference is made to an automobile factory, employing 1,000 persons, in which the plan has been used for over two years and in which it is regarded as an unqualified success by workers and employers alike. In general, employers approve it on the ground that it means a larger output with lower costs.

A managing director of a large firm of constructional engineers in an outlying suburb of North London stated recently that the 5-day week had been worked in their factory at the men's request since the general strike. He said that in consequence the output had gone up 22-26 per cent, and the overhead charges were decreased by 6 to 7 per cent. On no account would they return to the old arrangement.

Another case mentioned is that of a large engineering firm which a few years ago reduced its working week from 6 days or 47 hours to 5 days or 43 hours, and in which the employers are emphatic in their approval of the shorter week.

They found that, after a few weeks, production definitely went up, improvement being shown not only in the output per hour, but also in the total output per week. It has been necessary occasionally to keep their men a few hours overtime or to bring them in on Saturdays, in order to deal with an exceptional rush of work, but the carefully kept figures of production show that employment beyond 43 hours a week is not economical.

Occasionally employees seemed at first to dislike the system, and some adroitness was needed to bring them to an approval of the shorter hours.

A large tube works employing 3,000, of which about 150 are young persons, experimented with this method of working for the last two months of 1928. At the end of the time they held a secret ballot at which practically every worker voted, and to the surprise of the officials there was a large majority for reverting to the six-day week. The firm had been expecting and hoping for the opposite result. They carefully considered the matter and came to the conclusion that the winter

was the wrong time of the year to take for the experiment. The very short amount of daylight, and the depressing and dismal weather, unsuitable for outdoor pursuits, usually experienced here in November and December, was not attractive enough to the men to compensate for the three-quarters of an hour extra working time on the other five days. The firm went back to the 6-day week on January 1st, according to their agreement, and then made another trial of the 5-day week, starting on June 1st. It has proved a complete success and is still in force, and now the darkest month is past without complaint, it looks as if it will become a permanent all-the-year-round method of working

### Two-Shift System for Women and Minors

THE two-shift system, under which it is permissible to employ women and young persons under carefully regulated conditions at any time between 6 a. m. and 10 p. m. (2 p. m. on Saturday), was authorized by legislative action in 1920 for a period of five years, but it has been continued year by year since the expiration of that period. Before the system may be introduced a special order must be secured from the Secretary of State and this will be given only on joint application by the employers and workers, with a statement of the conditions which are felt to justify the appeal. During the year covered, 113 such orders were issued for different classes of factories, including those carrying on the manufacture of hosiery, silk and cotton, rubber goods, toys, cake and confectionery, paper making, brick making, and electrical apparatus. Emphasis is placed on the care with which such orders are granted.

All applications for permission to work on this system have been, as in the past, very carefully scrutinized and in some cases refused because it was not proved that the workers were really willing parties to the application, or because the welfare conditions were unsatisfactory. In factories where the system resulted in men being replaced by women in certain processes it was made a condition in granting the order that the men should be absorbed in other departments, while in other works in which some of the workers lived near the factory and others a good distance away a condition was attached to the order that the latter should not be put on shifts.

Apparently there is no great demand for these orders, and quite a number of those obtained seem to have been desired only for some temporary use. A survey of the matter showed that from 1921, when the act permitting this system became effective, up to June 30, 1929, the total number of orders issued was 852. Of these, 168 had become permanently inoperative, either because the establishment in respect of which they were issued had closed down, or because they had been superseded by later orders; 351 were still effective, but it was considered improbable that they would be used again; 191 were used only occasionally, but it was considered probable that they would be used in the future; and 142 were used more or less continuously

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### Wage Reductions in Italy

**A** NATIONAL deficit of 729,000,000 lire (\$38,345,400) caused the Council of Ministers in Italy, acting on the recommendation of Premier Mussolini, to reduce the wages of all State employees beginning December 1, 1930, in order to avoid an increase in the general taxes of the country. A royal decree, printed in *Il Lavoro Fascista*

for November 19, 1930, but issued the day before, provided for a reduction of 35 per cent in the wages of Government employees receiving more than 60,000 lire (\$3,156) per year, of 25 per cent for those receiving 40,000 to 60,000 lire (\$2,104 to \$3,156), and of 12 per cent for those receiving less than 40,000 lire. The decree covers the army, navy, air force, police, school teachers and officers, postal employees, railroad employees, tobacco workers, and all other government, municipal, and provincial employees.

In taking this action the ministers had in mind that the cost of living had been slowly decreasing in Italy during the past year and their expectation was that it could be further reduced so as to balance the wage reduction. Various efforts have, in fact, been made toward this end. Il Lavoro Fascista reports numerous instances of retail price reductions. The price of bread, water, gas, and rents has been very generally reduced throughout Italy. The price of rice, macaroni, flour, lard, pork, sausage, and cheese has been reduced in Bologna. The prices of dry goods were reduced at Aquila. The prices of books were reduced 10 per cent in the book shops in Littorio. Prices in the city opera house at Lucca have been reduced 15 per cent. Lawyers in Modena and Trieste have reduced their fees 12 per cent, physicians at Trieste 15 per cent and at Turin 20 per cent, architects in Trieste 15 per cent, and pharmacists 10 per cent. Naples has reduced the fares on its street railways and its fees for licenses by 15 per cent. Parma and other cities have reduced their communal taxes and many groups have called meetings to discuss lowering their fees and salaries.

### Wages in Tangier, Morocco

THE following table, taken from a report by Donald F. Bigelow, American consul at Tangier, Morocco, dated October 27, 1930, shows the approximate average wages paid in Tangier to the classes of workers specified. The consul states that there is no cost-of-living index available to aid in making a comparison of the effective buying power, or real wages, at the present time with previous years. Wages are paid in either French Moroccan francs or Spanish pesetas.

WAGES IN TANGIER, MOROCCO

Occupation	European workers	Moorish workers	Occupation	European workers	Moorish workers
	<i>Per day</i>	<i>Per day</i>		<i>Per month</i>	<i>Per month</i>
Carpenters.....	\$1.25-\$1.50	\$1.00	Chauffeurs.....	\$25.00-\$50.00	\$25.00-\$40.00
Masons and bricklayers.....	1.50	1.00- 1.50	Store clerks, male.....	30.00- 50.00	-----
Painters.....	1.20- 1.50	-----	Telephone operators.....	25.00- 30.00	-----
Plumbers.....	1.50- 2.00	-----	Shop girls.....	11.76- 31.36	-----
Electricians.....	1.50- 2.00	-----		<i>Per day</i>	<i>Per day</i>
Factory hands.....	.50- 1.00	-----	Dock laborers.....	-----	.59- .98
			Day laborers.....	.78- 1.18	-----

## Wages in Provincial Capitals of Spain, 1928

THE Spanish Statistical Yearbook <sup>1</sup> for 1928 contains a table giving average daily wage rates for various occupations in the capitals of the Provinces of Spain in 1928, which is reproduced below.

## AVERAGE DAILY WAGES OF VARIOUS OCCUPATIONS IN THE PROVINCIAL CAPITAL OF SPAIN IN 1928

[Conversions on basis of average exchange rate of peseta for 1928=16.6 cents]

Locality	Masons	Carpenters	Stonecutters	Painters	Shoemakers	Tailors
Albacete	\$0.66-\$1.25	\$0.91-\$1.33	-----	\$0.83-\$1.25	\$0.66-\$1.16	\$0.83-\$1.33
Alicante	1.00-1.49	1.00-1.33	-----	1.49-1.66	1.00-1.16	.66-1.33
Almeria	.58-1.33	.58-1.16	\$0.58-\$1.00	1.16-1.33	.42-.66	.66-1.33
Avila	.79-1.25	.79-1.33	.79-1.74	.83-1.00	.66-.83	.66-.83
Badajoz	.83-1.12	.83-1.00	.83-.91	.79-.91	1.00-1.16	1.25-1.33
Barcelona	1.66-2.32	1.66-2.32	.66-1.66	1.49-2.32	1.16-2.16	1.33-1.99
Bilbao	1.49-1.83	1.49-1.91	1.83-1.99	1.33-1.49	1.33-1.49	1.33-1.58
Burgos	1.08-1.16	1.08-1.16	1.16-1.49	1.00-1.16	.66-.91	.75-.91
Caceres	.66-1.25	.62-1.25	.62-1.49	.42-1.16	.58-.83	.42-.83
Cadiz	.91-1.25	1.00-1.25	-----	1.16-1.25	.83-1.00	.83-1.66
Castellon	1.49-1.66	1.16-1.66	.83-1.49	1.00-1.99	.66-1.33	.50-1.16
Ciudad Real	.58-1.16	.66-1.33	.66-1.33	.66-1.33	.50-1.00	.50-1.00
Cordoba	.75-1.33	1.00-1.33	1.00-2.10	1.00-1.49	.66-.83	.83-1.41
Coruna	1.00-1.49	.83-1.66	.83-1.49	.66-1.33	.66-1.33	.58-1.49
Cuenca	1.16-1.66	.83-1.00	.75-1.74	1.00-1.33	1.00-1.66	.75-.83
Gerona	1.33-1.66	1.33-1.66	1.33-1.99	1.16-1.66	1.08-1.33	1.00-1.33
Granada	.58-1.29	1.33-1.49	1.33-1.49	1.41-1.58	1.00-1.16	1.16-1.20
Guadalajara	1.04-1.41	1.08-1.49	.91-1.66	.83-1.33	.50-1.00	.42-1.33
Huelva	.75-1.16	.83-1.33	-----	.83-1.33	.75-1.16	.83-1.33
Huesca	1.08-1.49	1.08-1.45	1.25-1.41	.83-1.25	.75-1.08	.75-1.16
Jaen	.75-1.20	.66-1.16	.83-1.33	.66-1.16	.50-1.00	.50-.66
Loen	1.00-1.99	1.00-1.66	1.00-1.99	1.00-1.66	.83-1.33	.83-1.33
Lerida	1.00-1.66	.83-1.49	-----	1.00-1.49	1.16-1.66	1.16-1.66
Logrono	1.16-1.49	.83-1.16	.83-1.16	.83-1.33	.66-1.16	.83-1.33
Lugo	.83-1.33	.83-1.33	.83-1.33	.83-1.33	.66-1.16	.58-1.00
Malaga	.91-1.49	1.16-1.33	.83-1.37	1.00-1.33	.91-1.25	1.66-1.99
Murcia	.75-1.25	.66-1.00	.83-1.16	.66-1.00	.83-1.00	.83-1.16
Orense	.71-1.41	.83-1.41	1.00-1.41	.66-1.41	.83-1.41	.66-1.00
Oviedo	1.16-1.99	1.33-1.83	1.08-1.83	.83-1.83	.83-1.99	1.08-1.99
Palencia	1.16-1.49	1.16-1.33	.75-.83	1.16-1.49	1.08-1.33	1.00-1.16
Palma de Mallorca	.83-1.25	.83-1.25	.83-1.25	.83-1.33	.83-1.00	-----
Palmas	1.33-1.99	1.33-1.99	-----	1.33-1.83	.66-1.49	.83-1.66
Pamplona	.66-1.33	.50-1.66	.66-1.49	.50-1.49	.50-1.33	.42-1.00
Pontevedra	.66-1.33	.83-1.33	.83-1.33	.83-1.33	.50-.83	.83-1.16
Salamanca	.91-1.66	.91-1.66	1.00-1.99	.75-2.49	.58-1.00	.42-.83
San Sebastian	1.41-1.49	1.41-1.49	1.49-1.83	1.33-1.58	1.16-1.66	1.49-1.99
Santa Cruz de Tenerife	1.25-2.49	1.16-2.32	1.66	1.25-2.66	.91-1.33	1.16-2.49
Santander	1.58-1.83	1.49-1.66	1.58-1.83	1.33-1.66	1.16-1.66	1.33-1.99
Segovia	.83-1.41	1.16-1.33	1.16-1.33	1.00-1.33	.66-1.00	.83-1.16
Sevilla	.91-1.99	1.08-1.58	1.00-1.25	1.08-1.49	1.16-1.83	1.33-1.83
Soria	1.16-1.66	1.16-1.53	1.49-1.99	1.33-1.66	1.00-1.16	1.00-1.16
Tarragona	1.66-1.99	1.66-1.83	1.66-1.83	1.66-1.99	1.49-1.66	1.49-1.66
Teruel	1.66-1.99	1.60-1.33	1.66-2.32	1.16-1.66	.75-1.00	1.00-1.49
Toledo	1.16-1.25	.83-1.25	1.66-1.99	1.00-1.33	1.00-1.16	1.00-1.33
Valencia	1.00-1.58	.91-1.58	1.16-1.66	1.58-1.74	.66-1.16	.83-1.33
Valladolid	.91-1.28	.83-1.25	.87-1.29	.83-1.33	.75-1.16	1.00-1.25
Vitoria	.83-1.25	1.00-1.33	.83-1.25	.66-1.00	.66-.81	.66-1.00
Zamora	1.00-1.33	1.16-1.66	.83-1.16	.83-1.16	.71-.91	.75-1.00
Zaragoza	1.33-1.99	1.08-1.66	1.41-1.99	1.33-1.83	.83-1.49	1.00-1.49

<sup>1</sup> Spain. Ministerio de Trabajo y Prevision, Servicio General de Estadística. Anuario Estadístico de España, 1928. Madrid, 1930, pp. 537, 538.

WAGES AND HOURS OF LABOR

193

AVERAGE DAILY WAGES OF VARIOUS OCCUPATIONS IN THE PROVINCIAL CAPITALS OF SPAIN IN 1928—Continued

Locality	Seamstresses and modistes	Agricultural workers			Blacksmiths	Miners
		Men	Women	Children		
Albacete	\$0.25-\$0.33				\$0.83-\$1.33	\$0.91-\$1.33
Alicante	.33-.65	\$0.75-\$1.00			.83-1.16	
Almeria	.17-.42	.75-1.00			.66-1.00	.50-1.41
Avila	.04-.50				.75-1.08	
Badajoz	.17-.21	.58-.91			1.00-1.08	
Barcelona	.50-1.49	1.16-1.49	\$0.33-\$1.00	\$0.25-\$0.66	1.33-1.99	1.16-1.99
Bilbao	.58-.83	1.00-1.16			1.49-2.08	1.00-1.16
Burgos	.33-.50	.75-.91	.50-.66	.25-.50	1.00-1.33	
Caceres	.17-.50				.50-.83	.42-1.33
Cadiz	.17-.83	.83-1.00		.17-.25	.83-1.33	
Castellon	.33-.66	.66-1.99	.33-.50	.25-.75	.83-1.16	
Ciudad Real	.33-.50	.42-1.33	.25-.66	.12-.42	.58-1.16	
Cordoba	.33-.75	.33-1.25	.17-.33	.08-.17	.66-1.22	
Cortuna	.50-1.00	.75-1.08	.42-.58	.17-.29	.83-1.49	
Cuenca	.08-.17	.66-.83		.12-.25	.83-1.33	
Gerona	.50-1.00	.83-1.33		.17-.33	.83-1.33	
Granada	.33-.50	.62-.75	.25-.29	.12-.17	1.16-1.25	1.16-1.83
Guadalajara	.17-.66	.42-1.00		.17-.33	.83-1.33	
Huelva	.33-.83	.66-.91	.25-.58	.17-.33	1.00-1.33	.83-1.33
Huesca	.46-.75	.66-1.25	.37-.58	.21-.33	.91-1.33	
Jaen	.08-.42	.58-1.16	.17-.42	.17-.33	.58-1.16	.66-1.49
Leon	.25-.66	1.50-.75	1.50		1.00-1.49	
Lerida	.50-.83	.66-2.49		.17-1.00	.83-1.49	
Logrono	.33-.66	.83-1.16	.42-.66	.25-.50	.83-1.33	
Lugo	.33-.58	.66-1.16	.25-.66	.08-.25	.66-1.16	
Malaga	.33-.50	.58-.91	.29-.50	.12-.21	1.00-1.25	1.58-1.91
Murcia	.33-.58	.58-1.00		.17-.33	.66-1.00	
Orense	.33-.50	.66-.91		.12-.33	.83-1.33	
Oviedo	.66-1.41	.75-1.49	.50-1.00	.17-.50	1.00-1.83	1.49-1.91
Palencia	.42-.50				1.16-1.33	
Palma de Mallorca	.12-.75	.66-1.00	.29-.42	.17-.25	.83-1.99	
Palmas	.33-.66	.66-1.00		.17-.25	1.33-1.99	
Pamplona	.12-.50	.91-1.66	.29-.58	.29-.58	.66-1.16	
Pontevedra	.17-.33	1.50-.66	.33-.42		.33-1.33	
Salamanca	.42-.66	.33-.50	.17-.29	.08-.12	.75-1.66	
San Sebastian	.42-1.16	.62-.95			1.33-1.58	
Santa Cruz de Tenerife	.50-.83	.42-.83	.33-.50	.12-.37	1.25-2.49	
Santander	.25-1.08				1.16-1.66	
Segovia	.29-.42	.83-1.00		.33-.42	.87-1.16	
Sevilla	.42-.66	.83-1.33		.17-.33	1.04-1.49	
Soria	.50-.58	.83-1.00			1.33-1.66	
Tarragona	.83-1.33	1.00-1.33	.42-.66	.42-.66	1.66-1.83	
Teruel	.33-.83	.66-1.00			.83-1.49	
Toledo	.17-.33	.50-.66		.25-.17	.66-1.16	
Valencia	.42-1.00	.66-.83	.33-.42	.25-.42	.83-1.16	.75-1.00
Valladolid	.04-.42	1.54-.79	.08-.33	.08	.75-1.33	
Vitoria	.33-.58	.66-.83	.42-.58	.17-.25	.66-1.00	
Zamora	.21-.25	.42-.58			.66-.83	
Zaragoza	.25-.66	.83-2.49		.33-.83	1.16-1.83	

<sup>1</sup> And sustenance.

<sup>2</sup> And breakfast and lunch.

<sup>3</sup> During harvest, 8 pesetas (\$1.33) and sustenance.

## AVERAGE DAILY WAGES OF VARIOUS OCCUPATIONS IN THE PROVINCIAL CAPITALS OF SPAIN IN 1928—Continued

Locality	Metal workers	Textile workers	Sawyers	Cabinet-makers	Paper makers	Ceramic workers
Albacete		\$0. 83-\$1. 25	\$0. 75-\$1. 25			
Alicante	\$1. 33-\$1. 99	1. 33- 1. 49	. 83- 1. 33	\$0. 83-\$1. 16		\$0. 75-\$1. 00
Almeria	1. 16- 1. 66		. 66- . 83	. 54- 1. 33		. 42- . 83
Badajoz	1. 00- 1. 08		1. 00- 1. 25	. 91- 1. 08		
Barcelona	1. 49- 2. 32	1. 16- 1. 99	1. 33- 2. 16	1. 49- 2. 32	\$1. 16-\$2. 32	1. 16- 1. 99
Bilbao	1. 49- 1. 99	1. 16- 1. 49	1. 99- 2. 32	1. 58- 1. 99	1. 25- 1. 74	1. 25- 1. 49
Burgos		. 66- 1. 00	. 91- 1. 16	1. 08- 1. 16	. 83- 1. 16	
Caceres	. 50- 1. 08	. 17- . 83	. 50- 1. 66	. 83- 1. 25	. 50- 1. 16	. 42- . 66
Cadiz	. 91- 1. 41		. 75- . 91	1. 00- 1. 49	. 83- 1. 08	
Castellon	1. 16- 1. 49	. 42- . 66	1. 00- 1. 66	. 83- 1. 33		. 42- 1. 00
Ciudad Real			. 66- 1. 33	. 83- 1. 33		. 66- 1. 16
Cordoba	. 75- 1. 66		. 66- 1. 16	. 83- 1. 66	. 66- 1. 16	
Coruna	. 83- 1. 58	. 73- 1. 08	1. 33- 1. 66	. 83- 1. 33		
Cuenca			1. 16- 1. 83	1. 16- 1. 83	1. 00- 1. 33	. 83- 1. 33
Gerona	1. 08- 1. 49	1. 08- 1. 41	1. 00- 1. 49	1. 41- 1. 66	1. 08- 1. 16	1. 33- 1. 49
Granada	1. 00- 1. 83	1. 49- 1. 66	1. 16- 1. 33			
Guadalajara	1. 00- 1. 99			1. 08- 1. 49		
Huelva	1. 00- 1. 49		1. 00- 1. 41	1. 08- 1. 49		1. 08- 1. 16
Jaen	. 66- 1. 33	. 58- 1. 00	. 83- 1. 66	1. 66- 1. 49		. 58- 1. 00
Leon	1. 16- 1. 66	. 33	. 91- 1. 08	1. 33- 1. 49		. 75- 1. 00
Lerida	. 83- 1. 66	1. 00- 1. 66	1. 16- 1. 99	. 83- 1. 99		
Logrono	1. 00- 1. 66	. 83- 1. 00	1. 00- 1. 66	. 83- 1. 33	1. 00- 1. 66	. 83- 1. 66
Lugo			. 58- 1. 00	. 83- 1. 33		
Malaga	1. 00- 1. 45		1. 49- 1. 66	1. 16- 1. 41		
Murcia	. 66- 1. 16	. 66- 1. 00	. 66- 1. 00	. 66- 1. 00	. 66- 1. 25	
Orense	. 83- 1. 66		. 58- 1. 16	. 71- 1. 41		
Oviedo	1. 49- 1. 99		1. 33- 1. 83	1. 33- 1. 99		1. 33- 1. 99
Palencia	1. 49- 1. 66	. 83- 1. 16	. 83- 1. 00	1. 33- 1. 49		. 83- 1. 16
Palma de Mallorca	1. 49- 1. 99	. 83- 1. 49	. 83- 1. 16	. 83- 1. 33		
Palmas	1. 33- 1. 99		1. 33- 1. 99	1. 33- 2. 49		
Pamplona	. 91- 1. 49		. 50- 1. 00	. 50- 1. 33		
Pontevedra	. 75- 1. 49		. 75- 1. 16	. 50- 1. 33		. 58
Salamanca		. 58- 1. 16	. 75- 1. 41	. 62- 1. 41	. 50- 1. 33	. 58- 1. 00
San Sebastian	1. 41- 1. 49		1. 41- 1. 58	1. 33- 1. 49		1. 00- 1. 41
Santander	1. 25- 2. 08		1. 25- 1. 99	1. 49- 1. 83		1. 25- 1. 49
Segovia		. 91- 1. 33	. 91- 1. 33	1. 00- 1. 41	. 75- 1. 00	1. 00- 1. 33
Sevilla	1. 54- 2. 08		1. 04- 1. 41	1. 45- 1. 91	. 66- 1. 49	1. 45- 1. 99
Soria		. 75- 1. 00	1. 33- 1. 66	1. 49- 1. 66		1. 33- 1. 66
Tarragona	1. 66- 1. 83		1. 66- 1. 83	1. 66- 1. 83		
Toledo	. 83- 1. 64		1. 49- 1. 66	1. 33- 1. 49		1. 66- 1. 99
Valencia	. 83- 1. 66		. 91- 1. 66	. 83- 1. 33	1. 00- 1. 40	. 83- 1. 66
Valladolid	. 75- 1. 33		1. 41- 1. 66	. 75- 1. 33		. 83- 1. 49
Vitoria	. 83- 1. 58	. 83- 1. 08	1. 00- 1. 33	1. 16- 1. 49		
Zamora	1. 33- 1. 66		1. 49	. 66- 1. 33		
Zaragoza	1. 33- 1. 99	1. 16- 1. 91	1. 00- 1. 49	1. 08- 1. 66	1. 16- 1. 66	1. 00- 1. 49



## Wages in Madrid, Spain, 1927

AVERAGE daily and hourly wages and hours of labor in Madrid, Spain, for the year 1927, for specified occupations, are shown in the following table, which is taken from the Spanish Statistical Year-book.<sup>a</sup>

## AVERAGE DAILY WAGES AND HOURS OF LABOR IN MADRID, SPAIN, 1927, BY OCCUPATION

[Conversions on basis of average exchange rate of peseta for 1927=17.1 cents]

Occupation	Hours per day	Daily wages	Occupation	Hours per day	Daily wages
Masons.....	8	\$1.28-\$1.71	Cap makers, female.....	8	\$0.17-\$0.86
Potters.....	8	1.03-1.71	Cap makers, male.....	8	.17-1.37
Power-saw operators.....	8	.68-2.57	Engravers.....	8	.17-2.05
Copyholders (printing).....	8	2.20	Switchmen.....	8	.97
Candy makers.....	8	.34-1.71	Gatekeepers, male.....	8	.88
Embroiderers.....	8	.13-1.03	Gatekeepers, female.....	8	.56
Cruller and waffle makers.....	8	1.28-1.71	Brakemen.....	(1)	1.07-1.13
Compositors.....	8	2.20	Harness makers.....	8	1.71-2.57
Upholsterers.....	8	.26-2.05	Horseshoers.....	8	.77-1.71
Stone cutters.....	8	1.54-2.16	Pressmen.....	8	1.28-2.44
Railroad conductors.....	8	1.08-1.27	Electricians, installation.....	8	2.05-2.57
Caramel makers.....	8	.51-1.54	Jewelers.....	8	.77-2.74
Carpenters, mill.....	8	1.85	Footmen.....	(1)	1.03
Postmen.....	(1)	1.11	Linotype operators.....	8	1.37
Locksmiths.....	8	2.05	Lithographers.....	8	1.54-2.57
Mattress makers.....	10-12	.86-1.57	Housekeepers.....	8	.60
Conductors, street railway.....	8	1.20-1.54	Machinists, railroad.....	(1)	1.94-2.37
Confectioners, pastry cooks.....	8	.73-2.31	Sculptors.....	8	1.88-2.39
Cart builders.....	8	1.03-1.54	Metal workers.....	8	.26-2.05
Carriage builders.....	8	.43-2.14	Miners.....	8	1.45
Mosaic makers.....	8	1.28-1.75	Molders, iron.....	8	.26-2.05
Proofreaders.....	8	2.48	Molders, metal.....	8	.26-1.71
Cutters, boots and shoes.....	8	.77-1.71	Porters, train.....	(1)	.91
Tanners.....	8	1.03-1.41	Iron workers.....	8	.26-2.05
Chauffeurs, private.....	(1)	<sup>2</sup> 25.65-85.50	Artificial-stone workers.....	8	1.54-2.22
Chocolate makers.....	8	.34-1.03	Photographers.....	8	1.71
Clerks, shoe.....	8	<sup>2</sup> 34.20-68.40	Shovelers.....	8	1.37
Clerks, coal yards.....	8	.86-1.20	Bakers.....	7	1.20-2.39
Clerks, commercial.....	8	<sup>3</sup> 205.20-1,197.00	Pavers, wood.....	8	1.97-2.60
Clerks, barber shops.....	8	<sup>4</sup> .77-1.03	Furriers.....	8	1.20-1.71
Clerks, fish market.....	8	.68-1.54	Reinforced-concrete workers.....	8	1.44
Clerks, undertaking firms.....	(1)	1.40	Unskilled workers.....	8	.16-1.28
Clerks, dairy.....	10-12	1.20-1.54	Painters.....	8	.34-2.14
Clerks, wine stores.....	8	.86-1.03	Silversmiths.....	8	.68-2.74
Gilders.....	8	.34-2.14	Sewermen.....	8	1.45-1.88
Cabinetmakers.....	8	.26-2.22	Pharmacists, experienced.....	8-9	<sup>2</sup> 25.65-85.50
Floor tilers.....	8	1.54-2.14	Watchmakers.....	8	.86-3.42
Stone pavers.....	8	.77-1.97	Distributors of periodicals.....	(1)	.34-1.15
Bookbinders.....	8	2.39	Butlers.....	8	<sup>2</sup> 17.00-51.30
Coffee-cake makers.....	8	.73-2.01	Tailors, military.....	8	.68
Sculptors, ornamental.....	8	2.57-3.08	Engravers.....	8	1.37-2.57
Stereotypers.....	8	1.69-3.29	Tile makers.....	8	.86-1.03
Stucco plasterers.....	8	1.54-2.14	Telephone operators.....	8	.51-2.57
Firemen, railroad.....	(1)	1.32-1.55	Stage machinists.....	(1)	.68-1.88
Pipe layers.....	8	1.41-1.84	Tramway workers.....	8	.68-2.05
Plumbers.....	8	.26-2.05	Watchmen.....	8	1.37
Type foundry.....	8	.34-4.62	Tapestry makers, female.....	8	.86-1.20
Biscuit makers.....	8	.34-1.28	Tapestry makers, male.....	8	1.37-2.57
Gas fitters.....	8	.77-2.14			

<sup>1</sup> Hours vary.<sup>2</sup> Per month.<sup>3</sup> Per year.<sup>4</sup> Plus 15 per cent on the services performed.

<sup>a</sup> Spain. Ministerio de Trabajo y Prevision. Servicio General de Estadística. Anuario Estadístico de España, 1928. Madrid, 1930, pp. 535, 536.

# TREND OF EMPLOYMENT

## Summary for November, 1930

**E**MPLOYMENT decreased 2.5 per cent in November, 1930, as compared with October, and pay-roll totals decreased 5.1 per cent, according to reports made to the Bureau of Labor Statistics.

The industrial groups surveyed, the number of establishments reporting in each group, the number of employees covered, and the total pay rolls for one week, for both October and November, together with the per cent of change in November, are shown in the following summary:

SUMMARY OF EMPLOYMENT AND PAY-ROLL TOTALS, OCTOBER AND NOVEMBER, 1930

Industrial group	Estab-lish-ments	Employment		Per cent of change	Pay roll in 1 week		Per cent of change
		October, 1930	Novem-ber, 1930		October, 1930	November, 1930	
<b>1. Manufacturing</b> .....	14, 008	3, 066, 250	2, 993, 327	1-2.7	\$75, 362, 531	\$71, 017, 068	1-6.1
<b>2. Coal mining</b> .....	1, 481	321, 163	321, 092	-(?)	8, 565, 748	7, 931, 705	-7.4
Anthracite.....	147	102, 072	100, 236	-1.8	3, 765, 449	3, 149, 583	-16.4
Bituminous.....	1, 334	219, 091	220, 856	+0.8	4, 800, 299	4, 782, 122	-0.4
<b>3. Metalliferous mining</b> .....	331	49, 431	46, 621	-5.7	1, 328, 581	1, 227, 399	-7.6
<b>4. Quarrying and nonmetallic mining</b> .....	771	36, 725	33, 967	-7.5	902, 510	761, 172	-15.7
<b>5. Crude petroleum produc-ing</b> .....	568	22, 418	22, 002	-1.9	804, 536	778, 411	-3.2
<b>6. Public utilities</b> .....	11, 522	731, 246	719, 843	-1.6	22, 055, 631	21, 561, 684	-2.2
Telephone and telegraph.....	7, 934	334, 262	328, 934	-1.6	9, 697, 414	9, 404, 806	-3.0
Power, light, and water.....	3, 118	246, 593	243, 343	-1.3	7, 742, 153	7, 605, 755	-1.8
Electric railroad operation and maintenance, exclu-sive of car shops.....	470	150, 391	147, 571	-1.9	4, 616, 114	4, 551, 123	-1.4
<b>7. Trade</b> .....	9, 644	351, 375	358, 769	+2.1	8, 869, 547	8, 955, 107	+1.0
Wholesale.....	1, 983	64, 761	63, 634	-1.7	2, 001, 751	1, 961, 572	-2.0
Retail.....	7, 661	286, 614	295, 135	+3.0	6, 867, 796	6, 993, 535	+1.8
<b>8. Hotels</b> .....	1, 979	148, 118	144, 575	-2.4	3, 489, 217	3, 440, 613	-2.0
<b>9. Canning and preserving</b> .....	1, 002	87, 399	51, 339	-41.3	1, 371, 667	812, 620	-40.8
<b>10. Laundries</b> .....	166	18, 649	18, 322	-1.8	371, 406	366, 679	-1.3
<b>11. Dyeing and cleaning</b> .....	53	2, 325	2, 220	-4.5	56, 285	52, 772	-6.2
<b>Total</b> .....	41, 525	4, 835, 099	4, 712, 082	-2.5	122, 177, 709	115, 905, 230	-5.1

## RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION	October, 1930	November, 1930	Per cent of change	October, 1930	November, 1930	Per cent of change	
North Atlantic <sup>4</sup> .....	3, 176	450, 224	439, 753	-2.3	\$10, 670, 533	\$10, 144, 541	-4.9
Middle Atlantic <sup>5</sup> .....	7, 198	1, 470, 270	1, 443, 291	-1.8	40, 533, 988	38, 293, 796	-5.5
East North Central <sup>6</sup> .....	9, 786	1, 336, 751	1, 297, 630	-2.9	34, 841, 551	33, 081, 469	-5.1
West North Central <sup>7</sup> .....	4, 580	314, 831	307, 852	-2.2	7, 734, 538	7, 401, 516	-4.3
South Atlantic <sup>8</sup> .....	4, 544	483, 881	477, 426	-1.3	9, 812, 726	9, 528, 119	-2.9
East South Central <sup>9</sup> .....	2, 348	203, 079	196, 865	-3.1	3, 740, 563	3, 547, 187	-5.2
West South Central <sup>10</sup> .....	3, 168	175, 190	170, 254	-2.8	4, 126, 777	3, 919, 585	-5.0
Mountain <sup>11</sup> .....	1, 634	108, 362	105, 613	-2.5	2, 881, 608	2, 807, 259	-2.6
Pacific <sup>12</sup> .....	5, 091	292, 511	273, 398	-6.5	7, 835, 425	7, 181, 758	-8.3
<b>All divisions</b> .....	41, 525	4, 835, 099	4, 712, 082	-2.5	122, 177, 709	115, 905, 230	-5.1

<sup>1</sup> Weighted per cent of change for the combined 54 manufacturing industries, repeated from Table 2, p. 202; the remaining per cents of change, including total, are unweighted.

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

<sup>3</sup> Cash payments only; see text, p. 217.

<sup>4</sup> Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

<sup>5</sup> New Jersey, New York, Pennsylvania.

<sup>6</sup> Illinois, Indiana, Michigan, Ohio, Wisconsin.

<sup>7</sup> Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

<sup>8</sup> Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia.

<sup>9</sup> Alabama, Kentucky, Mississippi, Tennessee.

<sup>10</sup> Arkansas, Louisiana, Oklahoma, Texas.

<sup>11</sup> Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming.

<sup>12</sup> California, Oregon, Washington.

The combined totals of these 15 industrial groups showed a decrease of 2.5 per cent in employment from October to November and a decrease of 5.1 per cent in employees' earnings. Excluding manufacturing, the remaining 14 groups in November showed a drop in employment of 2.8 per cent and a drop in employees' earnings of 4.1 per cent.

It should be noted that while the per cent of decrease in employment in manufacturing industries in November is given in the summary table as 2.7, this is a weighted per cent of change. The unweighted per cent of change based upon the actual numbers of employees reported in October and November is 2.4 per cent.

The per cents of change shown for the total figures represent only the changes in the establishments reporting, as the figures of the several groups are not weighted according to the relative importance of each industry.

Increased employment was shown in November in 2 of the 15 industrial groups; bituminous coal mining gained 0.8 per cent and retail trade gained 3.0 per cent.

Decreased employment was shown in November in 13 of the 15 industrial groups: Manufacturing, 2.7 per cent; anthracite mining, 1.8 per cent; metalliferous mining, 5.7 per cent; quarrying, 7.5 per cent; crude petroleum producing, 1.9 per cent; telephone-telegraph, 1.6 per cent; power-light-water, 1.3 per cent; electric railroads, 1.9 per cent; wholesale trade, 1.7 per cent; hotels, 2.4 per cent, canning, 41.3 per cent; laundries, 1.8 per cent; dyeing and cleaning, 4.5 per cent.

Decreased employment and decreased pay roll totals in November as compared with October were shown in each of the 9 geographic divisions, the decreases in employment ranging from 1.3 per cent in the South Atlantic division to 6.5 per cent in the Pacific division.

PER CAPITA EARNINGS IN NOVEMBER, 1930, AND COMPARISON WITH OCTOBER, 1930, AND NOVEMBER, 1929

Industrial group	Actual per capita weekly earnings in November, 1930	Per cent of change November, 1930, compared with—	
		October, 1930	November, 1929
1. Manufacturing.....	23.69	-3.5	-11.0
2. Coal mining:			
Anthracite.....	31.42	-14.8	+4.3
Bituminous.....	21.65	-1.2	-18.6
3. Metalliferous mining.....	26.33	-2.0	-12.2
4. Quarrying and nonmetallic mining.....	22.41	-8.8	-12.4
5. Crude petroleum producing.....	35.38	-1.4	(1)
6. Public utilities:			
Telephone and telegraph.....	28.59	-1.4	+6.0
Power, light, and water.....	31.26	-0.4	+0.9
Electric railroads.....	30.84	+0.5	-0.8
7. Trade:			
Wholesale.....	30.83	-0.3	-0.7
Retail.....	23.70	-1.1	-0.2
8. Hotels (cash payments only) <sup>2</sup> .....	16.88	+0.4	-1.5
9. Canning and preserving.....	15.83	+0.9	-11.0
10. Laundries.....	20.01	+0.5	(1)
11. Dyeing and cleaning.....	23.77	-1.8	(1)
Total.....	24.60	-2.7	(1)

<sup>1</sup> Data not available.

<sup>2</sup> The additional value of board, room, tips, and other perquisites can not be computed.

Per capita earnings for November, 1930, given in the preceding table must not be confused with *full-time weekly rates of wages*; they are actual *per capita weekly earnings* computed by dividing the total number of employees reported into the total amount of pay roll in the week reported, and the "number of employees" includes all persons who worked any part of the period reported, that is, *part-time workers* as well as *full-time workers*.

Comparisons are made with per capita earnings in October, 1930, and with November, 1929, where data are available.

For convenient reference the latest data available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are shown in the following statement. These reports are for the months of September and October instead of for October and November, consequently the figures can not be combined with those presented in the foregoing table.

EMPLOYMENT AND PAY-ROLL TOTALS, CLASS I RAILROADS

Industry	Employment		Per cent of change	Amount of pay roll in entire month		Per cent of change
	Sept. 15, 1930	Oct. 15, 1930		September, 1930	October, 1930	
Class I railroads.....	1,469,521	1,438,744	-2.1	\$200,817,972	\$206,065,981	+2.6

The total number of employees included in this summary is approximately 6,150,000 whose combined earnings in one week amounted to about \$162,000,000.

### 1. Employment in Selected Manufacturing Industries in November, 1930

#### Comparison of Employment and Pay-Roll Totals in Manufacturing Industries, October and November, 1930

**E**MPLOYMENT in manufacturing industries decreased 2.7 per cent in November as compared with October, and pay-roll totals decreased 6.1 per cent. These changes are based upon returns made by 13,280 establishments in 54 of the principal manufacturing industries of the United States. These establishments in November had 2,837,854 employees whose combined earnings in one week were \$67,242,656.

The bureau's weighted index of employment for November, 1930, is 76.5, as compared with 78.6 for October, 79.7 for September, and 94.8 for November, 1929; the index of pay-roll totals for November, 1930, is 68.3, as compared with 72.7 for October, 74.2 for September, and 95.1 for November, 1929. The monthly average for 1926 equals 100.

Each of the 12 groups of industries had fewer employees in November than in October, the notable decreases being 7.3 per cent in leather, 4.2 per cent in lumber, and 3.8 per cent in stone-clay-glass; the smallest decrease was 0.3 per cent in the paper group.

Twelve of the 54 separate industries, upon which the manufacturing index is based, reported more employees in November than in October. Silk goods employees increased 4.5 per cent, slaughtering and meat packing and dyeing and finishing textiles each increased 1.5 per cent, and cotton goods employees increased 1.3 per cent; each of

the increases in the remaining 8 industries reporting increases was less than 1 per cent.

Outstanding decreases in employment in November as compared with October, most of which were largely seasonal, were 16.8 per cent in carriages and wagons, 9.9 per cent in millinery, 8.7 per cent in fertilizers, 8.3 per cent each in boots and shoes and women's clothing, 7.8 per cent each in men's clothing and cement, 7.3 per cent each in ice cream and cast-iron pipe. Employment was 1.9 per cent lower in November in the iron and steel industry, 2.4 per cent lower in the automobile industry, 5.1 per cent lower in automobile tires, 5.8 per cent lower in shipbuilding, 5.6 per cent lower in machine tools, 4 per cent in petroleum refining, 3.3 per cent in woolen and worsted goods, 2.8 per cent in electrical machinery, apparatus, and supplies, and 3.3 per cent lower in foundry and machine-shop products.

Nine additional industries have been taken up during 1929 and 1930 and are not included in the bureau's indexes of employment or pay rolls, no data for 1926, the index-base year, being available. Increases in employment in these industries were reported in November as follows: Aircraft, 2.1 per cent; beet sugar, 26.7. Decreased employment was reported in the remaining 7 industries as follows: 0.6 per cent in rayon, 10.3 per cent in radio, 3.5 per cent in jewelry, 1.8 per cent in paint and varnish, 1.2 per cent in rubber goods, 7.4 per cent in beverages, and 0.2 per cent in cash registers, adding machines, and calculating machines.

Decreased employment and pay rolls were shown in each of nine geographic divisions except the Mountain division, which again showed increased employment, due to the inclusion of the beet sugar industry. This industry's refining season begins in October and requires considerable numbers of additional employees while it lasts. Omitting beet sugar there would have been a decrease of 1.7 per cent in employment and a decrease of 4.4 per cent in pay-roll totals in the Mountain division.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930, BY INDUSTRIES

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
<b>Food and kindred products.</b>	<b>1,990</b>	<b>236,127</b>	<b>233,650</b>	( <sup>1</sup> )	<b>\$6,079,832</b>	<b>\$5,968,654</b>	( <sup>1</sup> )
Slaughtering and meat packing.....	207	86,687	88,013	+1.5	2,291,393	2,321,079	+1.3
Confectionery.....	333	39,653	38,464	-3.0	726,100	682,110	-6.1
Ice cream.....	356	14,036	13,013	-7.3	461,296	432,796	-6.2
Flour.....	350	15,909	15,376	-3.4	424,616	399,938	-5.8
Baking.....	728	69,632	68,520	-1.6	1,875,257	1,837,778	-2.0
Sugar refining, cane.....	16	10,210	10,294	+0.8	301,170	294,753	-2.1
<b>Textiles and their products.</b>	<b>2,396</b>	<b>539,242</b>	<b>533,340</b>	( <sup>1</sup> )	<b>9,945,480</b>	<b>9,455,926</b>	( <sup>1</sup> )
Cotton goods.....	457	165,005	167,110	+1.3	2,382,262	2,381,188	-( <sup>2</sup> )
Hosiery and knit goods.....	359	92,014	92,373	+0.4	1,689,131	1,674,458	-0.9
Silk goods.....	271	55,340	57,854	+4.5	1,084,437	1,091,940	+0.7
Woolen and worsted goods.....	185	51,633	49,921	-3.3	1,056,473	991,844	-6.1
Carpets and rugs.....	30	17,841	17,222	-3.5	386,773	367,350	-5.0
Dyeing and finishing textiles.....	109	31,632	32,098	+1.5	767,067	776,906	+1.3
Clothing, men's.....	348	61,112	56,374	-7.8	1,132,073	956,585	-15.5
Shirts and collars.....	112	18,442	18,224	-1.2	267,579	256,605	-4.1
Clothing, women's.....	403	32,052	29,398	-8.3	873,232	706,955	-19.0
Millinery and lace goods.....	122	14,171	12,766	-9.9	306,453	252,065	-17.7

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930, BY INDUSTRIES—Continued

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
<b>Iron and steel and their products</b>	<b>1,994</b>	<b>585,549</b>	<b>569,674</b>	( <sup>1</sup> )	<b>\$15,351,964</b>	<b>\$13,950,059</b>	( <sup>1</sup> )
Iron and steel	199	234,732	230,365	-1.9	6,418,601	5,797,436	-9.7
Cast-iron pipe	41	10,464	9,699	-7.3	234,230	207,339	-11.5
Structural ironwork	181	28,204	27,245	-3.4	802,540	729,581	-9.1
Foundry and machine-shop products	1,099	210,656	203,649	-3.3	5,407,655	4,896,058	-9.5
Hardware	72	25,531	25,012	-2.0	540,076	519,828	-3.7
Machine tools	154	27,777	26,210	-5.6	718,039	636,426	-11.4
Steam fittings and steam and hot-water heating apparatus	111	28,158	28,196	+0.1	739,790	706,590	-4.5
Stoves	137	20,027	19,298	-3.6	521,033	456,801	-12.3
<b>Lumber and its products</b>	<b>1,361</b>	<b>178,603</b>	<b>171,138</b>	( <sup>1</sup> )	<b>3,639,606</b>	<b>3,298,372</b>	( <sup>1</sup> )
Lumber, sawmills	618	103,105	98,043	-4.9	1,976,254	1,792,012	-9.3
Lumber, millwork	335	25,421	24,909	-2.0	561,642	529,261	-5.8
Furniture	408	50,077	48,186	-3.8	1,101,710	977,099	-11.3
<b>Leather and its products</b>	<b>454</b>	<b>127,055</b>	<b>117,665</b>	( <sup>1</sup> )	<b>2,428,392</b>	<b>1,911,481</b>	( <sup>1</sup> )
Leather	134	24,668	23,753	-3.7	587,188	552,471	-5.9
Boots and shoes	320	102,387	93,912	-8.3	1,841,204	1,359,010	-26.2
<b>Paper and printing</b>	<b>1,374</b>	<b>216,754</b>	<b>216,109</b>	( <sup>1</sup> )	<b>6,993,999</b>	<b>6,971,851</b>	( <sup>1</sup> )
Paper and pulp	216	57,346	55,994	-2.4	1,452,678	1,400,910	-3.6
Paper boxes	309	26,694	26,494	-0.7	606,713	592,153	-2.4
Printing, book and job	442	53,001	53,187	+0.4	1,754,771	1,708,376	+0.8
Printing, newspapers	407	79,713	80,434	+0.9	3,179,837	3,210,412	+1.0
<b>Chemicals and allied products</b>	<b>414</b>	<b>102,844</b>	<b>99,382</b>	( <sup>1</sup> )	<b>2,977,739</b>	<b>2,841,089</b>	( <sup>1</sup> )
Chemicals	149	39,248	38,804	-1.1	1,064,356	1,044,048	-1.9
Fertilizers	181	10,310	9,414	-8.7	189,542	170,184	-10.2
Petroleum refining	84	53,286	51,164	-4.0	1,723,832	1,626,857	-5.6
<b>Stone, clay, and glass products</b>	<b>1,098</b>	<b>116,585</b>	<b>112,003</b>	( <sup>1</sup> )	<b>2,816,526</b>	<b>2,578,921</b>	( <sup>1</sup> )
Cement	118	22,989	21,202	-7.8	658,451	550,431	-16.4
Brick, tile and terra cotta	719	36,449	34,490	-5.4	806,587	715,232	-11.3
Pottery	121	18,174	18,225	+0.3	408,727	412,489	+0.9
Glass	140	38,973	38,086	-2.3	942,761	900,769	-4.5
<b>Metal products other than iron and steel</b>	<b>239</b>	<b>44,628</b>	<b>44,249</b>	( <sup>1</sup> )	<b>1,043,387</b>	<b>1,004,186</b>	( <sup>1</sup> )
Stamped and enameled ware	77	16,537	16,444	-0.6	367,280	352,362	-4.1
Brass, bronze, and copper products	162	28,091	27,805	-1.0	676,107	651,824	-3.6
<b>Tobacco Products</b>	<b>225</b>	<b>61,714</b>	<b>61,161</b>	( <sup>1</sup> )	<b>947,391</b>	<b>934,170</b>	( <sup>1</sup> )
Chewing and smoking tobacco and snuff	27	8,832	8,744	-1.0	132,180	134,383	+1.7
Cigars and cigarettes	198	52,882	52,417	-0.9	815,211	799,787	-1.9
<b>Vehicles for land transportation</b>	<b>1,242</b>	<b>407,012</b>	<b>396,560</b>	( <sup>1</sup> )	<b>10,990,372</b>	<b>10,719,968</b>	( <sup>1</sup> )
Automobiles	204	270,848	264,461	-2.4	7,073,871	6,966,704	-1.5
Carriages and wagons	48	1,019	848	-16.8	21,512	18,146	-15.6
Car building and repairing, electric-railroad	440	29,470	29,180	-1.0	886,113	885,332	-0.1
Car building and repairing, steam-railroad	550	105,675	102,071	-3.4	3,008,876	2,849,786	-5.3
<b>Miscellaneous industries</b>	<b>493</b>	<b>292,063</b>	<b>282,893</b>	( <sup>1</sup> )	<b>8,030,860</b>	<b>7,607,979</b>	( <sup>1</sup> )
Agricultural implements	82	17,817	17,950	+0.7	414,166	411,911	-0.5
Electrical machinery, apparatus, and supplies	211	173,205	168,362	-2.8	4,983,769	4,727,872	-5.1
Pianos and organs	64	6,428	6,262	-2.6	176,963	171,396	-3.1
Rubber boots and shoes	10	15,195	15,225	+0.2	304,856	295,564	-3.0
Automobile tires and inner tubes	41	40,282	38,234	-5.1	1,045,955	910,406	-13.0
Shipbuilding	85	39,136	36,860	-5.8	1,105,151	1,090,830	-1.3
<b>Total</b>	<b>13,280</b>	<b>2,908,176</b>	<b>2,837,854</b>	( <sup>1</sup> )	<b>71,275,539</b>	<b>67,242,656</b>	( <sup>1</sup> )

See footnotes at end of table.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930, BY INDUSTRIES—Continued

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
<b>Industries added in 1929 and 1930, for which data for the index-base year (1926) are not available</b> .....	<b>728</b>	<b>158,074</b>	<b>155,473</b>	( <sup>1</sup> )	<b>\$4,086,992</b>	<b>\$3,774,412</b>	( <sup>1</sup> )
Rayon.....	17	21,703	21,572	-0.6	432,862	429,730	-0.7
Radio.....	45	46,013	41,257	-10.3	1,231,928	906,533	-26.4
Aircraft.....	45	8,322	8,495	+2.1	276,021	272,484	-1.3
Jewelry.....	119	13,514	13,043	-3.5	322,234	290,104	-7.2
Paint and varnish.....	183	12,588	12,365	-1.8	342,535	328,686	-4.0
Rubber goods, other than boots, shoes, tires, and inner tubes.....	72	14,181	14,007	-1.2	350,501	330,250	-5.8
Beet sugar.....	63	14,137	17,916	+26.7	308,840	435,966	+41.2
Beverages.....	155	10,250	9,495	-7.4	318,440	290,002	-8.9
Cash registers, adding machines, and calculating machines.....	29	17,366	17,323	-0.2	503,631	481,657	-4.4
<b>All industries</b> .....	<b>14,008</b>	<b>3,066,250</b>	<b>2,993,327</b>	( <sup>1</sup> )	<b>75,362,531</b>	<b>71,017,068</b>	( <sup>1</sup> )

## RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION <sup>2</sup>							
New England.....	1,557	346,377	339,713	-1.9	\$7,707,978	\$7,271,619	-5.7
Middle Atlantic.....	3,556	923,880	900,647	-2.5	24,575,078	23,078,832	-6.1
East North Central.....	3,475	964,466	938,616	-2.7	24,975,648	23,543,915	-5.7
West North Central.....	1,254	168,483	165,230	-1.9	4,064,917	3,865,846	-4.9
South Atlantic.....	1,641	315,698	311,529	-1.3	6,009,401	5,786,614	-3.7
East South Central.....	630	108,269	104,377	-3.6	1,960,053	1,797,771	-8.3
West South Central.....	741	86,729	83,293	-4.0	1,978,969	1,839,512	-7.0
Mountain.....	290	36,630	38,628	+5.5	950,925	965,694	+1.6
Pacific.....	864	115,718	111,294	-3.8	3,139,562	2,867,265	-8.7
<b>All divisions</b> .....	<b>14,008</b>	<b>3,066,250</b>	<b>2,993,327</b>	( <sup>1</sup> )	<b>75,362,531</b>	<b>71,017,068</b>	( <sup>1</sup> )

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

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

<sup>3</sup> Total—54 industries upon which indexes of employment and pay rolls are based.

<sup>4</sup> The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting.

<sup>5</sup> See footnotes 4 to 12, p. 196.

TABLE 2.—PER CENT OF CHANGE, OCTOBER TO NOVEMBER, 1930—12 GROUPS OF MANUFACTURING 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 change October to No- vember, 1930		Group	Per cent of change October to No- vember, 1930	
	Num- ber on pay roll	Amount of pay roll		Num- ber on pay roll	Amount of pay roll
Food and kindred products.....	-1.3	-2.0	Metal products, other than iron and steel .....	-0.8	-3.7
Textiles and their products.....	-1.7	-6.4	Tobacco products .....	-1.0	-1.5
Iron and steel and their products.....	-2.8	-9.3	Vehicles for land transportation.....	-2.9	-3.4
Lumber and its products.....	-4.2	-9.3	Miscellaneous industries.....	-3.2	-5.4
Leather and its products.....	-7.3	-20.9			
Paper and printing.....	-0.3	-0.4			
Chemicals and allied products.....	-3.2	-4.2	<b>All industries .....</b>	<b>-2.7</b>	<b>-6.1</b>
Stone, clay, and glass products.....	-3.8	-8.1			

#### Comparison of Employment and Pay-Roll Totals in Manufacturing Industries, November, 1930, with November, 1929

THE level of employment in manufacturing industries in November, 1930, was 19.3 per cent below the level of November, 1929, and pay-roll totals were 28.2 per cent lower.

Both employment and pay rolls were lower in November, 1930, than in November, 1929, in each of the 54 separate manufacturing industries upon which the indexes are based.

Among the 12 groups of industries the smallest decreases in employment over this 12-month interval—7.7 per cent, 8 per cent, and 9.3 per cent—were in the paper, food, and tobacco groups, and the greatest decrease—29 per cent—was in the lumber group. The textile group reported a falling off in employment of 17.8 per cent, the iron and steel group of 21.9 per cent, the leather group of 18.5 per cent, the chemical group of 14.4 per cent, the stone-clay-glass group of 20.8 per cent, the other metals group of 21.5 per cent, the vehicles group of 22.7 per cent, and the group of miscellaneous industries of 22.8 per cent.

Decreased employment was reported in each of the nine geographic divisions ranging from 14.4 per cent in the South Atlantic division to 27.2 per cent in the West South Central division; 5 of the 9 divisions reported curtailments of more than 20 per cent each.



TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1930, WITH NOVEMBER, 1929

[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 November, 1930, compared with November, 1929		Industry	Per cent of change November, 1930, compared with November, 1929	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
<b>Food and kindred products.</b>	-8.0	-8.5	<b>Chemicals and allied products.</b>	-14.4	-17.1
Slaughtering and meat packing.....	-6.2	-5.3	Chemicals.....	-9.2	-15.6
Confectionery.....	-12.8	-16.9	Fertilizers.....	-16.9	-20.4
Ice cream.....	-5.3	-6.1	Petroleum refining.....	-19.2	-18.3
Flour.....	-9.4	-11.2	<b>Stone, clay, and glass products.</b>	-20.8	-29.5
Baking.....	-7.7	-8.8	Cement.....	-12.2	-22.2
Sugar refining, cane.....	-3.1	-3.8	Brick, tile, and terra cotta.....	-25.4	-35.4
<b>Textiles and their products.</b>	-17.8	-25.5	Pottery.....	-13.9	-22.5
Cotton goods.....	-19.6	-25.4	Glass.....	-22.7	-30.1
Hosiery and knit goods.....	-14.8	-23.1	<b>Metal products, other than iron and steel.</b>	-21.5	-29.3
Silk goods.....	-13.8	-20.0	Stamped andenameled ware.....	-18.5	-21.1
Woolen and worsted goods.....	-23.4	-29.2	Brass, bronze, and copper products.....	-22.8	-32.2
Carpets and rugs.....	-33.9	-45.7	<b>Tobacco products.</b>	-9.3	-18.4
Dyeing and finishing textiles.....	-7.9	-8.7	Chewing and smoking tobacco and snuff.....	-0.8	-3.9
Clothing, men's.....	-21.3	-35.2	Cigars and cigarettes.....	-10.3	-19.8
Shirts and collars.....	-18.2	-30.6	<b>Vehicles for land transportation.</b>	-22.7	-33.6
Clothing, women's.....	-12.2	-22.4	Automobiles.....	-18.9	-31.8
Millinery and lace goods.....	-12.2	-21.8	Carriages and wagons.....	-42.4	-44.0
<b>Iron and steel and their products.</b>	-21.9	-36.1	Car building and repairing, electric-railroad.....	-9.4	-13.0
Iron and steel.....	-16.8	-31.2	Car building and repairing, steam-railroad.....	-27.1	-36.6
Cast-iron pipe.....	-18.6	-23.9	<b>Miscellaneous industries.</b>	-22.8	-28.7
Structural ironwork.....	-18.4	-28.0	Agricultural implements.....	-36.0	-48.5
Foundry and machine-shop products.....	-25.3	-40.6	Electrical machinery, apparatus, and supplies.....	-24.9	-29.7
Hardware.....	-18.7	-33.7	Pianos and organs.....	-26.9	-36.1
Machine tools.....	-38.5	-53.6	Rubber boots and shoes.....	-23.4	-39.5
Steam fittings and steam apparatus.....	-19.7	-29.8	Automobile tires.....	-19.2	-29.0
Stoves.....	-23.1	-34.8	Shipbuilding.....	-6.0	-8.2
<b>Lumber and its products.</b>	-29.0	-38.4	<b>All industries.....</b>	-19.3	-28.2
Lumber, sawmills.....	-29.8	-39.0			
Lumber, millwork.....	-22.6	-28.8			
Furniture.....	-29.9	-42.0			
<b>Leather and its products.</b>	-18.5	-34.3			
Leather.....	-15.0	-21.4			
Boots and shoes.....	-19.4	-38.9			
<b>Paper and printing.</b>	-7.7	-10.3			
Paper and pulp.....	-11.6	-19.0			
Paper boxes.....	-12.7	-17.2			
Printing, book and job.....	-7.8	-9.2			
Printing, newspapers.....	-1.8	-4.1			

## RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION <sup>1</sup>			GEOGRAPHIC DIVISION—cont'd.		
New England.....	-17.8	-26.4	West South Central.....	-27.2	-30.4
Middle Atlantic.....	-15.4	-24.7	Mountain.....	-22.3	-26.7
East North Central.....	-21.4	-31.7	Pacific.....	-20.7	-27.8
West North Central.....	-14.9	-21.5	<b>All divisions.....</b>	<b>-19.3</b>	<b>-28.2</b>
South Atlantic.....	-14.4	-20.5			
East South Central.....	-23.8	-30.6			

<sup>1</sup> See footnotes 4 to 12, p. 196.

## Per Capita Earnings in Manufacturing Industries

ACTUAL per capita weekly earnings in November, 1930, for each of the 63 manufacturing industries surveyed by the Bureau of Labor Statistics, together with per cents of change in November, 1930, as compared with October, 1930, and November, 1929, are shown in Table 4.

Per capita earnings in November, 1930, for the combined 54 chief manufacturing industries of the United States, upon which the bureau's indexes of employment and pay rolls are based, were 3.5 per cent lower than in October, 1930, and 11.0 per cent lower than in November, 1929.

The actual average per capita weekly earnings in November, 1930, for the 54 manufacturing industries were \$23.69; the average per capita earnings for all of the 63 manufacturing industries combined were \$23.73.

TABLE 4.—PER CAPITA EARNINGS IN MANUFACTURING INDUSTRIES IN NOVEMBER, 1930, AND COMPARISON WITH OCTOBER, 1930, AND NOVEMBER, 1929

Industry	Actual per capita weekly earnings in November, 1930	Per cent of change November, 1930, compared with—	
		October, 1930	November, 1929
<b>Food and kindred products:</b>			
Slaughtering and meat packing	\$26.37	- 0.2	+ 1.3
Confectionery	17.73	- 3.2	- 4.9
Ice cream	33.26	+ 1.2	- 0.9
Flour	26.01	- 2.5	- 1.9
Baking	26.82	- 0.4	- 1.2
Sugar refining, cane	28.63	- 2.9	- 1.0
<b>Textiles and their products:</b>			
Cotton goods	14.25	- 1.3	- 7.2
Hosiery and knit goods	18.13	- 1.3	- 9.8
Silk goods	18.87	- 3.7	- 7.1
Woolen and worsted goods	19.87	- 2.9	- 7.2
Carpets and rugs	21.33	- 1.6	-18.1
Dyeing and finishing textiles	24.20	- 0.2	- 1.1
Clothing, men's	16.97	- 8.4	-17.8
Shirts and collars	14.08	- 3.0	-15.2
Clothing, women's	24.05	-11.7	-11.6
Millinery and lace goods	19.75	- 8.7	-10.9
<b>Iron and steel and their products:</b>			
Iron and steel	25.17	- 7.9	-17.3
Cast-iron pipe	21.38	- 4.5	- 6.3
Structural ironwork	26.78	- 5.9	-12.1
Foundry and machine-shop products	24.04	- 6.3	-20.4
Hardware	20.78	- 1.7	-18.5
Machine tools	24.28	- 6.1	-24.5
Steam fittings and steam and hot-water heating apparatus	25.06	- 4.6	-12.6
Stoves	23.67	- 9.0	-14.8
<b>Lumber and its products:</b>			
Lumber, sawmills	18.28	- 4.6	-12.9
Lumber, millwork	21.25	- 3.8	- 7.8
Furniture	20.28	- 7.8	-17.3
<b>Leather and its products:</b>			
Leather	23.26	-2.3	-7.8
Boots and shoes	14.47	-19.5	-24.2
<b>Paper and printing:</b>			
Paper and pulp	25.02	-1.2	-8.8
Paper boxes	22.35	-1.7	-4.8
Printing, book and job	33.25	+0.4	-1.7
Printing, newspapers	39.91	+0.1	-2.2
<b>Chemicals and allied products:</b>			
Chemicals	26.91	-0.8	-6.8
Fertilizers	18.08	-1.6	-4.2
Petroleum refining	31.80	-1.7	+1.0
<b>Stone, clay, and glass products:</b>			
Cement	25.96	-9.4	-11.3
Brick, tile, and terra cotta	20.74	-6.3	-13.3
Pottery	22.63	+0.6	-9.8
Glass	23.65	-2.2	-9.3

TABLE 4.—PER CAPITA EARNINGS IN MANUFACTURING INDUSTRIES IN NOVEMBER, 1930, AND COMPARISON WITH OCTOBER, 1930, AND NOVEMBER, 1929—Continued

Industry	Actual per capita weekly earnings in November, 1930	Per cent of change November, 1930, compared with—	
		October, 1930	November, 1929
Metal products, other than iron and steel:			
Stamped and enameled ware	\$21.43	-3.5	-3.0
Brass, bronze, and copper products	23.44	-2.6	-12.4
Tobacco products:			
Chewing and smoking tobacco and snuff	15.37	+2.7	-2.7
Cigars and cigarettes	15.26	-1.0	-10.8
Vehicles for land transportation:			
Automobiles	26.34	+0.8	-15.6
Carriages and wagons	21.40	+1.4	-2.6
Car building and repairing, electric-railroad	30.34	+0.9	-3.7
Car building and repairing, steam-railroad	27.92	-1.9	-12.8
Miscellaneous industries:			
Agricultural implements	22.95	-1.3	-19.8
Electrical machinery, apparatus, and supplies	28.08	-2.4	-6.2
Pianos and organs	27.37	-0.6	-12.8
Rubber boots and shoes	19.41	-3.2	-21.2
Automobile tires and inner tubes	23.81	-8.3	-12.2
Shipbuilding	29.59	+4.8	-2.3
Industries added in 1929 and 1930, for which data for the index-base year (1926) are not available:			
Rayon	19.92	-0.1	-4.4
Radio	21.97	-17.9	+7.6
Aircraft	32.08	-3.3	(1)
Jewelry	22.93	-3.8	(1)
Paint and varnish	26.58	-2.3	(1)
Rubber goods, other than boots, shoes, tires, and inner tubes	23.58	-4.6	(1)
Beet sugar	24.33	+11.4	(1)
Beverages	30.54	-1.7	(1)
Cash registers, adding machines, and calculating machines	27.80	-4.1	(1)

<sup>1</sup> Data not available.

### Index Numbers of Employment and Pay-Roll Totals in Manufacturing Industries

TABLE 5 shows the general index of employment in manufacturing industries and the general index of pay-roll totals, by months, from January, 1923, to November, 1930, together with average indexes for each of the years 1923 to 1929, inclusive.

TABLE 5.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY, 1923, TO NOVEMBER, 1930

[Monthly average, 1926=100]

Month	Employment								Pay-roll totals							
	1923	1924	1925	1926	1927	1928	1929	1930	1923	1924	1925	1926	1927	1928	1929	1930
January	106.6	103.8	97.9	100.4	97.3	91.6	95.2	90.2	95.8	98.6	93.9	98.0	94.9	89.6	94.5	87.6
February	108.4	105.1	99.7	101.5	99.0	93.0	97.4	90.3	99.4	103.8	99.3	102.2	100.6	93.9	101.8	90.7
March	110.8	104.9	100.4	102.0	99.5	93.7	98.6	89.8	104.7	103.3	100.8	103.4	102.0	95.2	103.9	90.8
April	100.8	102.8	100.2	101.0	98.6	93.3	99.1	89.1	105.7	101.1	98.3	101.5	100.8	93.8	104.6	89.8
May	110.8	98.8	98.9	99.8	97.6	93.0	99.2	87.7	109.4	96.5	98.5	99.8	99.8	94.1	104.8	87.6
June	110.9	95.6	98.0	99.3	97.0	93.1	98.8	85.5	109.3	90.8	95.7	99.7	97.4	94.2	102.8	84.1
July	109.2	92.3	97.2	97.7	95.0	92.2	98.2	81.6	104.3	84.3	93.5	95.2	93.0	91.2	98.2	75.9
August	108.5	92.5	97.8	98.7	95.1	93.6	98.6	79.9	103.7	87.2	95.4	98.7	95.0	94.2	102.1	73.9
September	108.6	94.3	98.9	100.3	95.8	95.0	99.3	79.7	104.4	89.8	94.4	99.3	94.1	95.4	102.6	74.2
October	108.1	95.6	100.4	100.7	95.3	95.9	98.3	78.6	106.8	92.4	100.4	102.9	95.2	99.0	102.3	72.7
November	107.4	95.5	100.7	99.5	93.5	95.4	94.8	76.5	105.4	91.4	100.4	99.6	91.6	96.1	95.1	68.3
December	105.4	97.3	100.8	98.9	92.6	95.5	91.9	-----	103.2	95.7	101.6	99.8	93.2	97.7	92.0	-----
<b>Average</b>	<b>108.8</b>	<b>98.2</b>	<b>99.2</b>	<b>100.0</b>	<b>96.4</b>	<b>93.8</b>	<b>97.5</b>	<b>84.4</b>	<b>104.3</b>	<b>94.6</b>	<b>97.7</b>	<b>100.0</b>	<b>96.5</b>	<b>94.5</b>	<b>100.4</b>	<b>81.4</b>

<sup>1</sup> Average for 11 months.

Index numbers showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 manufacturing industries surveyed by the Bureau of Labor Statistics and in each of the 12 groups of industries, and also general indexes for the combined 12 groups of industries, are shown in Table 6 for November, 1929, and for September, October, and November, 1930.

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

Following Table 6 are two charts which represent the 54 separate industries combined and show the course of pay-roll totals as well as the course of employment for each month of the years 1926 to 1929, inclusive, and for the months of January to November, inclusive, in 1930.

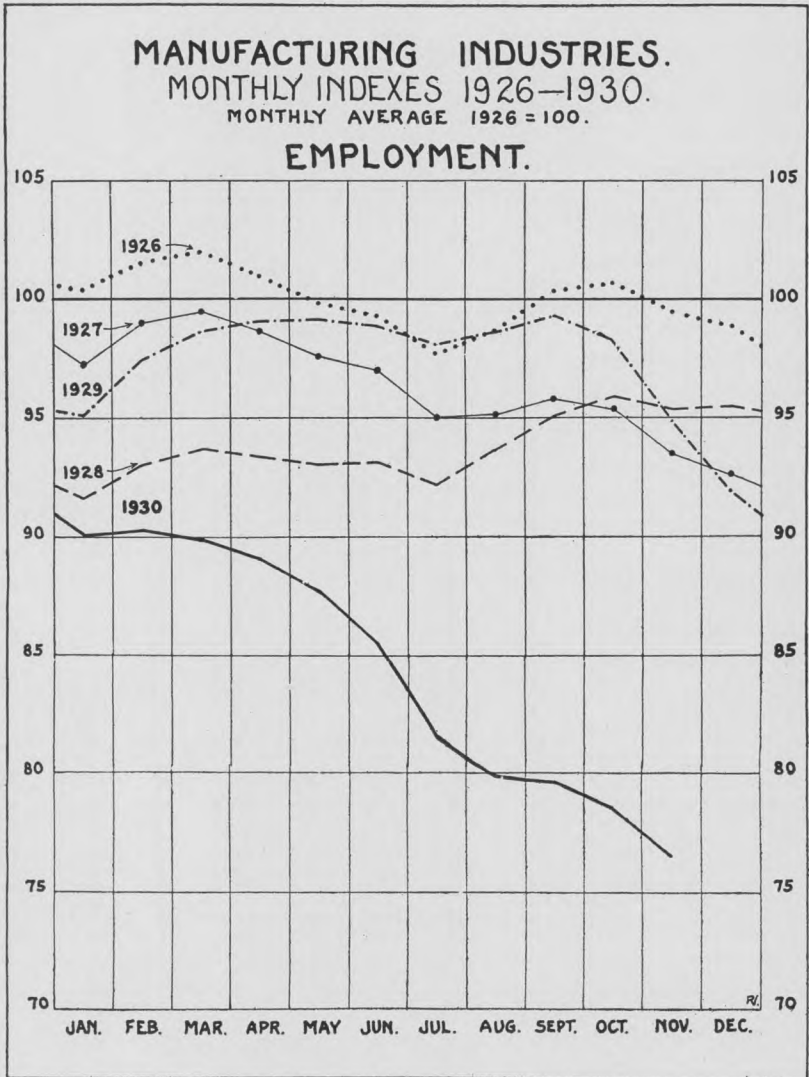
TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1929, AND SEPTEMBER, OCTOBER, AND NOVEMBER, 1930

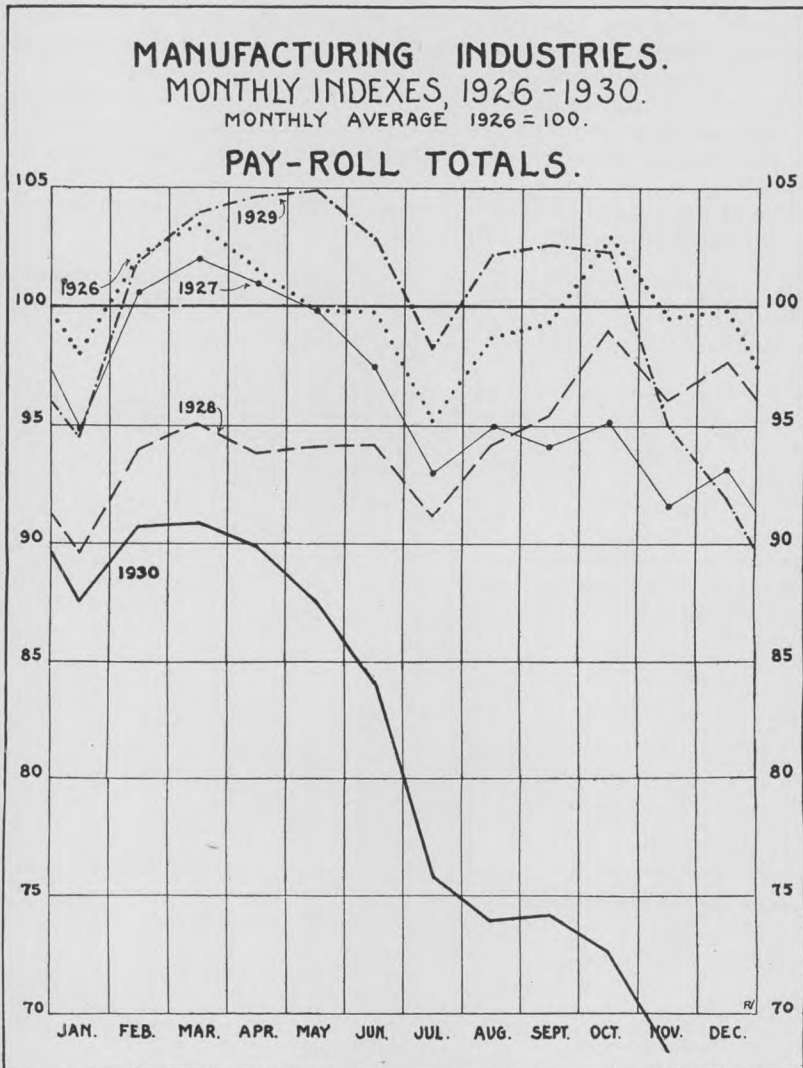
[Monthly average, 1926=100]

Industry	Employment				Pay-roll totals			
	1929	1930			1929	1930		
	November	September	October	November	November	September	October	November
<b>General index</b> .....	<b>94.8</b>	<b>79.7</b>	<b>78.6</b>	<b>76.5</b>	<b>95.1</b>	<b>74.2</b>	<b>72.7</b>	<b>68.3</b>
<b>Food and kindred products</b> .....	<b>101.4</b>	<b>94.9</b>	<b>94.5</b>	<b>93.3</b>	<b>102.7</b>	<b>98.1</b>	<b>95.9</b>	<b>94.0</b>
Slaughtering and meat packing.....	101.8	94.3	94.1	95.5	104.4	98.9	97.6	98.9
Confectionery.....	106.1	91.2	95.3	92.5	105.4	93.9	93.3	87.6
Ice cream.....	82.3	92.0	84.1	77.9	83.7	92.6	83.8	78.6
Flour.....	103.5	97.6	97.1	93.8	105.4	101.0	99.4	93.6
Baking.....	102.5	97.1	96.1	94.6	104.3	99.2	97.0	95.1
Sugar refining, cane.....	90.8	91.3	87.3	88.0	90.5	95.5	89.0	87.1
<b>Textiles and their products</b> .....	<b>95.8</b>	<b>79.9</b>	<b>80.1</b>	<b>78.7</b>	<b>92.6</b>	<b>73.6</b>	<b>73.7</b>	<b>69.0</b>
Cotton goods.....	93.8	74.5	74.5	75.4	89.6	64.6	66.8	66.8
Hosiery and knit goods.....	102.6	84.1	87.0	87.4	111.2	79.0	86.3	85.5
Silk goods.....	96.7	76.2	79.8	83.4	95.5	70.2	75.9	76.4
Woolen and worsted goods.....	93.6	78.1	74.1	71.7	89.8	73.4	67.7	63.6
Carpets and rugs.....	108.3	71.3	74.2	71.6	106.7	55.2	60.9	57.9
Dyeing and finishing textiles.....	100.8	85.5	91.4	92.8	96.5	79.9	86.9	88.1
Clothing, men's.....	90.1	81.3	77.0	70.9	78.3	69.2	60.0	50.7
Shirts and collars.....	94.3	77.0	78.1	77.1	94.3	65.5	68.2	65.4
Clothing, women's.....	101.1	95.4	96.9	88.8	98.1	93.6	94.0	76.1
Millinery and lace goods.....	85.2	85.7	83.1	74.8	78.3	85.0	74.4	61.2
<b>Iron and steel and their products</b> .....	<b>96.6</b>	<b>79.4</b>	<b>77.6</b>	<b>75.4</b>	<b>97.2</b>	<b>69.7</b>	<b>68.5</b>	<b>62.1</b>
Iron and steel.....	92.3	79.0	78.3	76.8	92.3	70.0	70.3	63.5
Cast-iron pipe.....	74.1	67.1	65.1	60.3	72.7	65.5	62.5	55.3
Structural ironwork.....	103.8	91.0	87.7	84.7	105.4	85.7	88.5	75.9
Foundry and machine-shop products.....	101.2	81.3	78.2	75.6	102.5	70.5	67.3	60.9
Hardware.....	88.8	74.1	73.7	72.2	88.8	60.2	61.2	58.9
Machine tools.....	132.0	88.8	86.0	81.2	137.4	74.9	71.9	63.7
Steam fittings and steam and hot-water heating apparatus.....	78.5	62.4	62.9	63.0	76.5	53.8	56.2	53.7
Stoves.....	92.6	72.7	73.9	71.2	87.4	63.1	65.0	57.0
<b>Lumber and its products</b> .....	<b>86.3</b>	<b>64.2</b>	<b>64.0</b>	<b>61.3</b>	<b>87.4</b>	<b>59.8</b>	<b>59.3</b>	<b>53.8</b>
Lumber, sawmills.....	83.8	62.7	61.8	58.8	85.6	59.0	57.5	52.2
Lumber, millwork.....	74.5	58.2	58.9	57.7	72.3	55.2	54.7	51.5
Furniture.....	99.9	71.9	72.8	70.0	101.1	64.5	66.0	58.6

TABLE 6.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1929, AND SEPTEMBER, OCTOBER, AND NOVEMBER, 1930—Continued

Industry	Employment				Pay-roll totals			
	1929	1930			1929	1930		
	November	September	October	November	November	September	October	November
<b>Leather and its products</b> .....	<b>93.5</b>	<b>85.1</b>	<b>82.2</b>	<b>76.2</b>	<b>81.1</b>	<b>73.6</b>	<b>67.4</b>	<b>53.3</b>
Leather.....	94.2	84.1	83.2	80.1	94.9	81.5	79.3	74.6
Boots and shoes.....	93.3	85.4	82.0	75.2	77.2	71.4	64.0	47.2
<b>Paper and printing</b> .....	<b>103.7</b>	<b>95.9</b>	<b>96.0</b>	<b>95.7</b>	<b>108.5</b>	<b>98.5</b>	<b>97.7</b>	<b>97.3</b>
Paper and pulp.....	96.0	88.0	87.0	84.9	98.8	83.6	82.9	80.0
Paper boxes.....	104.1	90.6	91.5	90.9	112.2	93.6	95.2	92.9
Printing, book and job.....	104.0	95.3	95.6	95.9	106.8	98.4	96.3	97.0
Printing, newspapers.....	111.2	107.5		108.2	116.4	110.8	110.5	111.6
<b>Chemicals and allied products</b> .....	<b>100.9</b>	<b>91.0</b>	<b>89.3</b>	<b>86.4</b>	<b>104.4</b>	<b>92.2</b>	<b>90.3</b>	<b>86.5</b>
Chemicals.....	103.0	93.9	94.5	93.5	107.8	91.5	92.8	91.0
Fertilizers.....	88.6	84.4	80.6	73.6	87.4	86.3	77.5	69.6
Petroleum refining.....	102.4	89.9	86.2	82.7	104.1	93.8	90.1	85.1
<b>Stone, clay, and glass products</b> .....	<b>86.0</b>	<b>72.1</b>	<b>70.8</b>	<b>68.1</b>	<b>84.8</b>	<b>65.0</b>	<b>65.1</b>	<b>59.8</b>
Cement.....	77.9	77.6	74.1	68.4	77.6	75.1	72.2	60.4
Brick, tile, and terra cotta.....	78.5	64.8	61.9	58.6	74.6	57.0	54.4	48.2
Pottery.....	95.3	80.4	81.8	82.1	93.8	65.8	72.1	72.7
Glass.....	96.6	75.4	76.4	74.7	99.4	70.1	72.7	69.5
<b>Metal products, other than iron and steel</b> .....	<b>93.4</b>	<b>74.4</b>	<b>73.9</b>	<b>73.3</b>	<b>91.1</b>	<b>65.9</b>	<b>66.9</b>	<b>64.4</b>
Stamped and enameled ware.....	90.6	73.9	74.2	73.8	84.2	64.6	69.2	66.4
Brass, bronze, and copper products.....	94.7	74.6	73.8	73.1	93.8	66.4	66.0	63.6
<b>Tobacco products</b> .....	<b>98.2</b>	<b>89.8</b>	<b>90.0</b>	<b>89.1</b>	<b>99.6</b>	<b>84.7</b>	<b>82.5</b>	<b>81.3</b>
Chewing and smoking tobacco and snuff.....	88.2	88.6	88.4	87.5	84.3	87.2	79.7	81.0
Cigars and cigarettes.....	99.5	89.9	90.2	89.3	101.4	84.4	82.8	81.3
<b>Vehicles for land transportation</b> .....	<b>85.9</b>	<b>71.9</b>	<b>68.4</b>	<b>66.4</b>	<b>88.8</b>	<b>64.2</b>	<b>61.1</b>	<b>59.0</b>
Automobiles.....	85.7	75.0	71.2	69.5	82.0	60.7	56.8	55.9
Carriages and wagons.....	76.4	53.8	52.9	44.0	83.0	55.7	55.1	46.5
Car building and repairing, electric-railroad.....	92.7	85.5	84.8	84.0	94.5	83.2	82.3	82.2
Car building and repairing, steam-railroad.....	85.7	68.3	64.7	62.5	95.5	66.4	63.9	60.5
<b>Miscellaneous industries</b> .....	<b>108.9</b>	<b>88.0</b>	<b>86.9</b>	<b>84.1</b>	<b>107.9</b>	<b>83.8</b>	<b>81.3</b>	<b>76.9</b>
Agricultural implements.....	111.2	69.8	70.7	71.2	111.1	56.0	57.5	57.2
Electrical machinery, apparatus, and supplies.....	122.3	95.5	94.4	91.8	123.8	93.3	91.7	87.0
Pianos and organs.....	66.8	47.0	50.1	48.8	66.5	39.9	43.8	42.5
Rubber boots and shoes.....	99.1	72.7	75.7	75.9	103.0	63.1	64.2	62.3
Automobile tires and inner tubes.....	82.2	73.4	69.9	66.4	72.5	66.1	59.2	51.5
Shipbuilding.....	110.9	113.3	110.6	104.2	114.1	111.6	106.1	104.7





**Force Employed and Time Worked in Manufacturing Industries in November, 1930**

REPORTS as to force employed in November and working time of employees were received from 10,677 establishments in 54 manufacturing industries. Twenty-three per cent of the establishments had a full normal force of employees, 76 per cent were working with reduced forces, and 1 per cent were idle; employees in 58 per cent of the establishments were working full time and employees in 41 per cent were working part time.

The establishments in operation had an average of 76 per cent of a full normal force of employees, who were working an average of 90 per cent of full time; the percentages for October were 77 and 92, respectively.

The 41 per cent of the establishments working part time in November averaged 76 per cent of full time.

**TABLE 7.—PROPORTION OF FULL NORMAL FORCE EMPLOYED IN MANUFACTURING INDUSTRIES IN NOVEMBER, 1930, AND PROPORTION OF FULL TIME WORKED BY EMPLOYEES**

Industry	Establishments reporting		Per cent of establishments in which employees worked—		Average per cent of full time worked by employees in establishments operating	Per cent of establishments operating with—		Average per cent of full normal force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
<b>Food and kindred products.....</b>	<b>1,649</b>	<b>(1)</b>	<b>85</b>	<b>15</b>	<b>97</b>	<b>37</b>	<b>63</b>	<b>88</b>
Slaughtering and meat packing.....	169		83	17	98	46	54	90
Confectionery.....	267		72	28	94	26	74	81
Ice cream.....	225	(1)	84	16	97	5	94	67
Flour.....	318	(1)	81	19	95	41	59	85
Baking.....	657	(1)	94	6	99	49	51	92
Sugar refining, cane.....	13		77	23	99	31	69	93
<b>Textiles and their products.....</b>	<b>1,874</b>	<b>2</b>	<b>58</b>	<b>40</b>	<b>91</b>	<b>24</b>	<b>74</b>	<b>78</b>
Cotton goods.....	437	2	48	51	88	14	84	76
Hosiery and knit goods.....	304	(1)	63	37	93	29	71	84
Silk goods.....	256	2	71	27	95	38	59	85
Woolen and worsted goods.....	174	3	43	54	87	9	88	69
Carpets and rugs.....	23		22	78	84	13	87	63
Dyeing and finishing textiles.....	96		53	47	87	23	77	85
Clothing, men's.....	230	3	60	37	90	29	68	76
Shirts and collars.....	82		70	30	94	35	65	92
Clothing, women's.....	197	6	70	25	95	25	70	82
Millinery and lace goods.....	75	1	64	35	92	20	79	75
<b>Iron and steel and their products.....</b>	<b>1,725</b>	<b>1</b>	<b>31</b>	<b>68</b>	<b>80</b>	<b>12</b>	<b>87</b>	<b>73</b>
Iron and steel.....	124	4	52	44	83	6	90	79
Cast-iron pipe.....	38	3	5	92	65	8	89	61
Structural ironwork.....	165		49	51	91	15	85	82
Foundry and machine-shop products.....	985	1	30	69	80	11	88	69
Hardware.....	53		9	91	77	6	94	64
Machine tools.....	142	2	16	82	74	15	82	76
Steam fittings and steam and hot-water heating apparatus.....	102		26	74	80	19	81	74
Stoves.....	116		32	68	80	19	81	79
<b>Lumber and its products.....</b>	<b>1,030</b>	<b>2</b>	<b>45</b>	<b>53</b>	<b>86</b>	<b>11</b>	<b>87</b>	<b>66</b>
Lumber, sawmills.....	453	4	51	45	87	9	87	65
Lumber, millwork.....	259		41	59	86	8	92	66
Furniture.....	318	1	38	61	84	16	84	68
<b>Leather and its products.....</b>	<b>382</b>	<b>1</b>	<b>46</b>	<b>53</b>	<b>84</b>	<b>24</b>	<b>75</b>	<b>83</b>
Leather.....	115	1	60	39	92	22	75	81
Boots and shoes.....	267	1	40	58	80	23	75	83

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



TABLE 7.—PROPORTION OF FULL NORMAL FORCE EMPLOYED IN MANUFACTURING INDUSTRIES IN NOVEMBER, 1930, AND PROPORTION OF FULL TIME WORKED BY EMPLOYEES—Continued

Industry	Establishments reporting		Per cent of establishments in which employees worked—		Average per cent of full time worked by employees in establishments operating	Per cent of establishments operating with—		Average per cent of full normal force employed in establishments operating
	Total number	Per cent idle	Full time	Part time		Full normal force	Part normal force	
<b>Paper and printing</b> .....	<b>1,023</b>	<b>1</b>	<b>74</b>	<b>25</b>	<b>96</b>	<b>45</b>	<b>54</b>	<b>94</b>
Paper and pulp.....	135	2	63	35	92	27	70	87
Paper boxes.....	168	1	61	38	94	34	65	87
Printing, book and job.....	368	(1)	66	33	94	37	63	93
Printing, newspapers.....	352	-----	93	7	99	65	35	101
<b>Chemicals and allied products</b> .....	<b>300</b>	<b>(1)</b>	<b>77</b>	<b>23</b>	<b>95</b>	<b>18</b>	<b>82</b>	<b>75</b>
Chemicals.....	126	1	69	30	94	28	71	88
Fertilizers.....	131	-----	78	22	95	6	94	47
Petroleum refining.....	43	-----	98	2	100	26	74	77
<b>Stone, clay, and glass products</b> .....	<b>770</b>	<b>6</b>	<b>60</b>	<b>34</b>	<b>91</b>	<b>14</b>	<b>81</b>	<b>75</b>
Cement.....	98	9	84	7	98	6	85	71
Brick, tile, and terra cotta.....	459	7	54	39	89	8	85	63
Pottery.....	102	1	49	50	88	31	68	91
Glass.....	111	3	76	22	95	28	69	82
<b>Metal products, other than iron and steel</b> .....	<b>214</b>	-----	<b>45</b>	<b>55</b>	<b>87</b>	<b>14</b>	<b>86</b>	<b>75</b>
Stamped and enameled ware.....	71	-----	54	46	88	18	82	81
Brass, bronze, and copper products.....	143	-----	41	59	87	12	88	71
<b>Tobacco products</b> .....	<b>206</b>	<b>1</b>	<b>44</b>	<b>55</b>	<b>89</b>	<b>38</b>	<b>61</b>	<b>96</b>
Chewing and smoking tobacco and snuff.....	26	4	42	54	89	35	62	96
Cigars and cigarettes.....	180	1	44	55	89	38	61	96
<b>Vehicles for land transportation</b> .....	<b>1,162</b>	<b>(1)</b>	<b>60</b>	<b>40</b>	<b>91</b>	<b>17</b>	<b>83</b>	<b>64</b>
Automobiles.....	169	1	35	64	82	15	85	61
Carriages and wagons.....	39	-----	46	54	87	10	90	46
Car building and repairing, electric-railroad.....	395	-----	91	9	99	36	64	90
Car building and repairing, steam-railroad.....	499	(1)	44	56	89	4	96	65
<b>Miscellaneous industries</b> .....	<b>402</b>	<b>(1)</b>	<b>51</b>	<b>49</b>	<b>88</b>	<b>18</b>	<b>82</b>	<b>76</b>
Agricultural implements.....	75	1	31	68	81	9	89	64
Electrical machinery, apparatus, and supplies.....	159	-----	52	48	89	20	80	79
Pianos and organs.....	52	-----	42	58	83	12	88	74
Rubber boots and shoes.....	7	-----	43	57	90	57	43	81
Automobile tires and inner tubes.....	34	-----	26	74	82	6	94	68
Shipbuilding.....	75	-----	85	15	97	29	71	84
<b>All industries</b> .....	<b>10,677</b>	<b>1</b>	<b>58</b>	<b>41</b>	<b>90</b>	<b>23</b>	<b>76</b>	<b>76</b>

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

## 2. Employment in Coal Mining in November, 1930

EMPLOYMENT in coal mining—anthracite and bituminous coal combined—remained practically the same in November as in October, and pay-roll totals decreased 7.4 per cent. The pronounced decrease in employees' earnings in November was due largely to the observance of Armistice Day and Election Day.

The 1,481 mines reported in November had 321,092 employees whose combined earnings in one week were \$7,931,705.

## Anthracite

IN ANTHRACITE mining in November there was a decrease in employment of 1.8 per cent, as compared with October, and a decrease of 16.4 per cent in pay-roll totals.

Employment in November, 1930, was 6.6 per cent lower than in November, 1929, and pay-roll totals were 2.5 per cent less.

All anthracite mines reported are in Pennsylvania—the Middle Atlantic geographic division. The details for October and November are shown in Table 1.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ANTHRACITE MINES IN OCTOBER AND NOVEMBER, 1930

Geographic division	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
Middle Atlantic.....	147	102, 072	100, 236	-1.8	\$3, 765, 449	\$3, 149, 583	-16.4

## Bituminous Coal

EMPLOYMENT in bituminous coal mining increased 0.8 per cent in November as compared with October, and pay-roll totals decreased 0.4 per cent, as shown by reports from 1,334 mines in which there were in November 220,856 employees whose combined earnings in one week were \$4,782,122.

Employment in November, 1930, was 8.4 per cent lower than in November, 1929, and pay-roll totals were 25.4 per cent lower.

Details for each geographic division except the New England division, for which no coal mining is reported, are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL BITUMINOUS COAL MINES IN OCTOBER AND NOVEMBER, 1930

Geographic division	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
Middle Atlantic.....	393	62, 881	63, 837	+1.5	\$1, 377, 939	\$1, 356, 737	-1.5
East North Central.....	158	29, 618	29, 516	-0.3	705, 493	708, 961	+0.5
West North Central.....	55	5, 506	5, 507	+(1)	124, 987	116, 265	-7.0
South Atlantic.....	341	54, 792	55, 172	+0.7	1, 157, 824	1, 155, 062	-0.2
East South Central.....	229	45, 733	45, 423	-0.7	804, 037	810, 970	+0.9
West South Central.....	26	2, 495	2, 357	-5.5	51, 428	47, 630	-7.4
Mountain.....	122	16, 661	17, 605	+5.7	535, 368	539, 371	+0.7
Pacific.....	10	1, 405	1, 439	+2.4	43, 223	47, 126	+9.0
<b>All divisions.....</b>	<b>1, 334</b>	<b>219, 091</b>	<b>220, 856</b>	<b>+0.8</b>	<b>4, 800, 299</b>	<b>4, 782, 122</b>	<b>-0.4</b>

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

### 3. Employment in Metalliferous Mining in November, 1930

**M**ETALLIFEROUS mines in November showed a decrease in employment of 5.7 per cent as compared with October, and a decrease of 7.6 per cent in pay-roll totals. The 331 mines covered had in November 46,621 employees whose combined earnings in one week were \$1,227,399.

Employment in November, 1930, was 29.3 per cent lower than in November, 1929, and pay-roll totals were 38.0 per cent lower.

Details for each geographic division from which metalliferous mining is reported are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **METALLIFEROUS MINES** IN OCTOBER AND NOVEMBER, 1930

Geographic division	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
Middle Atlantic.....	7	1,402	1,382	-1.4	\$36,671	\$36,120	-1.5
East North Central.....	43	11,566	11,444	-1.1	268,258	252,670	-5.8
West North Central.....	50	7,628	7,014	-8.0	229,476	196,968	-14.2
East South Central.....	14	3,436	3,465	+0.8	66,671	67,506	+1.3
West South Central.....	64	2,848	2,383	-16.3	65,891	55,909	-15.1
Mountain.....	118	20,176	18,625	-7.7	590,465	549,752	-6.9
Pacific.....	35	2,375	2,308	-2.8	71,149	68,474	-3.8
<b>All divisions.....</b>	<b>331</b>	<b>49,431</b>	<b>46,621</b>	<b>-5.7</b>	<b>1,328,581</b>	<b>1,227,399</b>	<b>-7.6</b>

### 4. Employment in Quarrying and Nonmetallic Mining in November, 1930

**A** DECREASE of 7.5 per cent in employment and a decrease in earnings of 15.7 per cent from October to November were shown by reports received from 771 establishments in this industrial group.

These establishments had in November 33,967 employees whose combined pay roll in one week was \$761,172.

Employment in November, 1930, was 20.6 per cent lower than in November, 1929, and pay-roll totals were 30.4 per cent lower.

Details for each geographic division are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **QUARRIES AND NONMETALLIC MINES** IN OCTOBER AND NOVEMBER, 1930

Geographic division	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	105	4,713	4,509	-4.3	\$133,239	\$122,856	-7.8
Middle Atlantic.....	130	7,075	6,429	-9.1	191,112	146,559	-23.3
East North Central.....	227	9,683	8,773	-9.4	272,056	216,817	-20.3
West North Central.....	73	2,356	1,993	-15.4	52,807	45,422	-14.0
South Atlantic.....	96	5,603	5,416	-3.3	101,196	91,594	-9.5
East South Central.....	59	3,012	2,710	-10.0	48,164	38,137	-20.8
West South Central.....	40	2,713	2,673	-1.5	60,099	59,001	-1.8
Mountain.....	5	76	65	-14.5	2,219	2,589	+16.7
Pacific.....	36	1,494	1,399	-6.4	41,618	38,197	-8.2
<b>All divisions.....</b>	<b>771</b>	<b>36,725</b>	<b>33,967</b>	<b>-7.5</b>	<b>902,510</b>	<b>761,172</b>	<b>-15.7</b>

### 5. Employment in Crude Petroleum Producing in November, 1930

REPORTS received from 568 crude petroleum producing establishments in November showed a decrease of 1.9 per cent in employment with a decrease of 3.2 per cent in pay-roll totals as compared with October. The establishments reporting had in November 22,002 employees whose combined earnings in one week were \$778,411.

As data for this industry were not collected for the months prior to January, 1930, no comparison with November, 1929, can be made at this time.

Details for each geographic division except New England, for which no production is reported, are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **CRUDE PETROLEUM PRODUCING** COMPANIES IN OCTOBER AND NOVEMBER, 1930

Geographic division	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
Middle Atlantic.....	42	691	677	-2.0	\$19,446	\$19,188	-1.3
East North Central.....	5	63	61	-3.2	1,516	1,420	-6.3
West North Central.....	22	125	189	+51.2	3,445	3,547	+3.0
South Atlantic.....	13	577	574	-0.5	15,930	15,476	-2.8
East South Central.....	4	518	233	-55.0	8,473	5,686	-32.9
West South Central.....	388	12,125	12,106	-0.2	411,199	399,348	-2.9
Mountain.....	18	351	324	-7.7	12,832	12,154	-5.3
Pacific.....	76	7,968	7,838	-1.6	331,695	321,592	-3.0
<b>All divisions.....</b>	<b>568</b>	<b>22,418</b>	<b>22,002</b>	<b>-1.9</b>	<b>804,536</b>	<b>778,411</b>	<b>-3.2</b>

### 6. Employment in Public Utilities in November, 1930

EMPLOYMENT in 11,522 establishments—telephone and telegraph companies, power, light, and water companies, and electric railroads, combined—decreased 1.6 per cent in November as compared with October, and pay-roll totals decreased 2.2 per cent. These establishments had in November 719,848 employees whose combined earnings in one week were \$21,561,684.

Employment in public utilities was 6.7 per cent lower in November, 1930, than in November, 1929, while pay-roll totals were 4.3 per cent lower.

Data for the three groups into which public utilities have been separated follow.

#### Telephone and Telegraph

EMPLOYMENT in telephone and telegraph companies was 1.6 per cent lower in November than in October, and earnings were 3 per cent lower. The 7,934 establishments reporting had in November 328,934 employees whose combined earnings in one week were \$9,404,806.

Employment in November, 1930, was 8.7 per cent below the level of November, 1929, and pay-roll totals were 3.3 per cent lower.

Details for each geographic division are shown in Table 1.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL TELEPHONE AND TELEGRAPH ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930

Geographic division	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	726	29,573	29,066	-1.7	\$909,702	\$883,443	-2.9
Middle Atlantic.....	1,224	106,685	104,811	-1.8	3,445,662	3,370,927	-2.2
East North Central.....	1,434	75,664	74,777	-1.2	2,111,218	2,039,949	-3.4
West North Central.....	1,315	31,253	30,554	-2.2	771,490	746,834	-3.2
South Atlantic.....	561	21,669	21,523	-0.7	587,376	574,834	-2.1
East South Central.....	593	10,710	10,656	-0.5	237,088	231,114	-2.5
West South Central.....	688	18,659	18,189	-2.5	428,206	407,277	-4.9
Mountain.....	482	8,134	8,018	-1.4	198,684	192,060	-3.3
Pacific.....	911	31,915	31,340	-1.8	1,007,988	958,368	-4.9
<b>All divisions.....</b>	<b>7,934</b>	<b>334,262</b>	<b>328,934</b>	<b>-1.6</b>	<b>9,697,414</b>	<b>9,404,806</b>	<b>-3.0</b>

## Power, Light, and Water

EMPLOYMENT in power, light, and water plants was 1.3 per cent lower in November than in October, and pay-roll totals were 1.8 per cent lower. The 3,118 establishments reporting had in November 243,343 employees whose combined earnings in one week were \$7,605,755.

Employment in November, 1930, was 1.2 per cent lower than in November, 1929, and pay-roll totals were 0.4 per cent lower.

Details for each geographic division are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL POWER, LIGHT, AND WATER COMPANIES IN OCTOBER AND NOVEMBER, 1930

Geographic division	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	254	22,268	21,922	-1.6	\$720,969	\$706,866	-2.0
Middle Atlantic.....	351	67,163	66,756	-0.6	2,186,920	2,147,203	-1.8
East North Central.....	648	57,721	56,257	-2.5	1,911,328	1,882,147	-1.5
West North Central.....	425	30,548	30,348	-0.7	889,698	879,087	-1.2
South Atlantic.....	262	24,755	24,062	-2.8	739,854	723,736	-2.2
East South Central.....	169	7,692	7,377	-4.1	193,125	182,656	-5.4
West South Central.....	543	15,454	15,420	-0.2	435,525	426,558	-2.1
Mountain.....	126	6,546	6,508	-0.6	200,525	194,361	-3.1
Pacific.....	340	14,446	14,693	+1.7	464,209	463,141	-0.2
<b>All divisions.....</b>	<b>3,118</b>	<b>246,593</b>	<b>243,343</b>	<b>-1.3</b>	<b>7,742,153</b>	<b>7,605,755</b>	<b>-1.8</b>

## Electric Railroads

EMPLOYMENT in the operation and maintenance of electric railroads, exclusive of car shops, decreased 1.9 per cent from October to November, and pay-rolls totals decreased 1.4 per cent. The 470 establishments reporting had in November 147,571 employees, whose combined earnings in one week were \$4,551,123.

Employment in November, 1930, was 10.2 per cent lower than in November, 1929, and pay-roll totals were 10.9 per cent lower.

Details for each geographic division are shown in Table 3.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN THE OPERATION AND MAINTENANCE OF IDENTICAL **ELECTRIC RAILROADS** IN OCTOBER AND NOVEMBER, 1930

Geographic division	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	49	14,455	14,411	-0.3	\$515,057	\$510,414	-0.9
Middle Atlantic.....	111	39,424	39,014	-1.0	1,171,101	1,182,579	+1.0
East North Central.....	110	46,317	45,047	-2.7	1,479,985	1,448,011	-2.2
West North Central.....	66	14,350	14,040	-2.2	435,387	420,482	-3.4
South Atlantic.....	48	11,006	10,716	-2.6	297,231	287,527	-3.3
East South Central.....	11	3,650	3,667	+0.5	99,853	97,404	-2.5
West South Central.....	30	5,515	5,162	-6.4	140,664	134,289	-4.5
Mountain.....	14	2,181	2,112	-3.2	60,997	58,680	-3.8
Pacific.....	31	13,493	13,402	-0.7	415,839	411,737	-1.0
<b>All divisions.....</b>	<b>470</b>	<b>150,391</b>	<b>147,571</b>	<b>-1.9</b>	<b>4,616,114</b>	<b>4,551,123</b>	<b>-1.4</b>

### 7. Employment in Wholesale and Retail Trade in November, 1930

**E**MPLOYMENT in 9,644 establishments—wholesale and retail trade combined—increased 2.1 per cent in November as compared with October, and pay-roll totals increased 1.0 per cent. These establishments had in November 358,769 employees whose combined earnings in one week were \$8,955,107.

#### Wholesale Trade

EMPLOYMENT in wholesale trade decreased 1.7 per cent in November as compared with October, and pay-roll totals decreased 2.0 per cent. The 1,983 establishments reporting had in November 63,634 employees and pay-rolls totals in one week of \$1,961,572.

Employment in November, 1930, was 10.0 per cent lower than in November, 1929, and pay-roll totals were 10.7 per cent lower.

Details for each geographic division are shown in Table 1.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **WHOLESALE TRADE** ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930

Geographic division	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	175	4,114	3,972	-3.5	\$114,014	\$111,812	-1.9
Middle Atlantic.....	320	10,369	10,010	-3.5	332,459	327,873	-1.4
East North Central.....	273	11,764	11,417	-2.9	365,952	355,604	-2.8
West North Central.....	267	14,135	14,129	-0.0	422,727	416,237	-1.5
South Atlantic.....	196	4,112	4,147	+0.9	117,409	116,315	-0.9
East South Central.....	64	1,823	1,784	-2.1	51,465	49,610	-3.6
West South Central.....	246	5,598	5,534	-1.1	166,962	162,869	-2.5
Mountain.....	83	1,965	1,951	-0.7	66,423	65,524	-1.4
Pacific.....	359	10,881	10,690	-1.8	364,340	355,728	-2.4
<b>All divisions.....</b>	<b>1,983</b>	<b>64,761</b>	<b>63,634</b>	<b>-1.7</b>	<b>2,001,751</b>	<b>1,961,572</b>	<b>-2.0</b>

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

## Retail Trade

EMPLOYMENT in retail trade establishments increased 3.0 per cent in November and pay-roll totals increased 1.8 per cent. These changes are in continuation of the regular autumn increases which began in September.

The 7,661 establishments from which reports were received in November had 295,135 employees whose combined earnings in one week were \$6,993,535.

Employment in November, 1930, was 7.8 per cent lower than in November, 1929, and pay-roll totals were 8.0 per cent lower.

Details by geographic divisions are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL RETAIL TRADE ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930

Geographic division	Estab- lish- ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	115	14, 596	14, 960	+2. 5	\$338, 891	\$352, 700	+4. 1
Middle Atlantic.....	398	80, 109	83, 825	+4. 6	2, 160, 458	2, 253, 736	+4. 3
East North Central.....	2, 737	79, 513	82, 052	+3. 2	1, 919, 106	1, 934, 895	+0. 8
West North Central.....	688	20, 939	21, 591	+3. 1	452, 070	451, 749	-0. 1
South Atlantic.....	1, 057	22, 003	22, 452	+2. 0	470, 769	481, 058	+2. 2
East South Central.....	429	9, 395	8, 985	-4. 4	167, 047	166, 820	-0. 1
West South Central.....	203	11, 972	12, 519	+4. 6	246, 868	249, 779	+1. 2
Mountain.....	191	5, 047	4, 991	-1. 1	110, 808	107, 523	-3. 0
Pacific.....	1, 843	43, 040	43, 760	+1. 7	1, 001, 779	995, 275	-0. 6
<b>All divisions.....</b>	<b>7, 661</b>	<b>286, 614</b>	<b>295, 135</b>	<b>+3. 0</b>	<b>6, 867, 796</b>	<b>6, 993, 535</b>	<b>+1. 8</b>

## 8. Employment in Hotels in November, 1930

EMPLOYMENT in hotels decreased 2.4 per cent in November as compared with October, and pay-roll totals decreased 2 per cent. The 1,979 hotels reporting had in November 144,575 employees whose earnings in one week were \$2,440,613.

Slight gains were reported by the South Atlantic and East South Central geographic divisions, both in employment and in pay-roll totals, while the greatest decreases again occurred in the New England and Mountain divisions. The remaining five districts reported small decreases.

Employment in November, 1930, was 4.8 per cent lower than in November 1929, and pay-roll totals were 6.2 per cent lower.

Per capita earnings, obtained by dividing the total number of employees into the total amount of pay roll, should not be interpreted as being the entire earnings of hotel employees. The pay-roll totals here reported are cash payments only, with no regard to the value of room or board furnished employees, and of course no satisfactory estimate can be made of additional recompense in the way of tips. The additions to the money wages granted vary greatly, not only among localities but among hotels in one locality and among employees in one hotel. Some employees are furnished board and room, others are given board only for 1, 2, or 3 meals, while the division of tips is made in many ways. Per capita earnings are further reduced by the considerable amount of part-time employment in hotels caused by conventions and banquets or other functions.

The details for each geographic division are shown in the table following.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **HOTELS** IN OCTOBER AND NOVEMBER, 1930

Geographic division	Hotels	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	96	8,451	8,005	-5.3	\$140,161	\$130,694	-6.8
Middle Atlantic.....	338	47,643	46,339	-2.7	846,095	831,413	-1.7
East North Central.....	381	31,410	30,440	-3.1	550,216	537,873	-2.2
West North Central.....	292	13,975	13,961	-0.1	205,335	202,095	-1.6
South Atlantic.....	168	11,940	12,055	+1.0	178,129	179,650	+0.9
East South Central.....	91	5,641	5,656	+0.3	70,598	70,936	+0.5
West South Central.....	140	8,543	8,286	-3.0	112,939	110,635	-2.0
Mountain.....	114	3,721	3,428	-7.9	63,920	59,448	-7.0
Pacific.....	359	16,794	16,405	-2.3	321,824	317,879	-1.2
<b>All divisions.....</b>	<b>1,979</b>	<b>148,118</b>	<b>144,575</b>	<b>-2.4</b>	<b>2,489,217</b>	<b>2,440,613</b>	<b>-2.0</b>

**9. Employment in Canning and Preserving in November, 1930**

**C**ANNING and preserving establishments reported a decrease of 41.3 per cent in employment in November as compared with October and a decrease of 40.8 per cent in pay-roll totals. This seasonal decrease is general throughout the country, and five geographic divisions, namely—New England, East North Central, West North Central, Mountain, and Pacific—show decreases in both employees and pay-roll totals of approximately 50 per cent each.

Reports were received from 1,002 establishments having in November 51,339 employees and pay-roll totals in one week of \$812,620. One hundred and twenty of these establishments were closed in November, while nine other plants which were closed in October reopened in November. Sixty plants not included in this tabulation were closed in both October and November.

Employment in November, 1930, was 1.7 per cent higher than in November, 1929, and pay-roll totals were 9.5 per cent lower.

Details by geographic divisions are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **CANNING AND PRESERVING** ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930

Geographic division	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	88	5,064	2,594	-48.8	\$74,683	\$38,981	-47.8
Middle Atlantic.....	89	11,688	10,369	-11.3	226,426	197,920	-12.6
East North Central.....	266	17,732	8,010	-54.8	256,660	135,506	-47.2
West North Central.....	74	3,507	1,324	-62.2	46,857	23,112	-50.7
South Atlantic.....	143	9,749	7,822	-19.8	103,357	82,257	-20.4
East South Central.....	43	2,611	1,947	-25.4	24,678	19,464	-21.1
West South Central.....	41	1,410	1,277	-9.4	9,217	8,706	-5.5
Mountain.....	54	5,782	2,282	-60.5	68,761	40,472	-41.1
Pacific.....	204	29,856	15,714	-47.4	561,028	266,202	-52.6
<b>All divisions.....</b>	<b>1,002</b>	<b>87,399</b>	<b>51,339</b>	<b>-41.3</b>	<b>1,371,667</b>	<b>812,620</b>	<b>-40.8</b>



### 10. Employment in Laundries in November, 1930

**E**MPLOYMENT in laundries decreased 1.8 per cent in November and pay-roll totals decreased 1.3 per cent, as shown by reports from 166 establishments which had in November 18,322 employees whose earnings in one week were \$366,679.

There were slight increases in employment in the New England and Pacific geographic divisions and decreases in each of the remaining 7 divisions.

As data for November, 1929, are not available no comparison of employment over the 12-month period can be made.<sup>1</sup>

Details for each geographic division appear in the table following.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL LAUNDRIES IN OCTOBER AND NOVEMBER, 1930

Geographic division	Laundries	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	9	455	456	+0.2	\$10,781	\$10,820	+0.4
Middle Atlantic.....	52	8,460	8,251	-2.5	179,594	176,467	-1.7
East North Central.....	24	1,023	1,001	-2.2	19,144	18,805	-1.8
West North Central.....	18	1,661	1,645	-1.0	27,422	26,921	-1.8
South Atlantic.....	14	1,835	1,830	-0.3	31,398	31,389	-( <sup>1</sup> )
East South Central.....	8	418	414	-1.0	6,193	6,147	-0.7
West South Central.....	12	973	901	-7.4	15,707	14,790	-5.8
Mountain.....	10	1,004	996	-0.8	17,482	17,626	+0.8
Pacific.....	19	2,820	2,828	+0.3	63,685	63,714	+( <sup>1</sup> )
<b>All divisions.....</b>	<b>166</b>	<b>18,649</b>	<b>18,322</b>	<b>-1.8</b>	<b>371,406</b>	<b>366,679</b>	<b>-1.3</b>

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

### 11. Employment in Dyeing and Cleaning in November, 1930

**E**MPLOYMENT in dyeing and cleaning establishments decreased 4.5 per cent in November as compared with October and pay-roll totals decreased 6.2 per cent, as shown by reports from 53 establishments, having in November 2,220 employees whose combined earnings in one week were \$52,772.

As data for November, 1929, are not available no comparison of employment over the 12-month period can be made.<sup>1</sup>

Details for each geographic division appear in the table following.

<sup>1</sup> This is the first comparison of employment and pay rolls which the bureau has published for this industry.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **DYEING AND CLEANING** ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1930

Geographic division	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1930	November, 1930		October, 1930	November, 1930	
New England.....	2	158	145	-8.2	\$5,058	\$4,336	-14.3
Middle Atlantic.....	10	728	708	-2.7	19,578	18,659	-4.7
East North Central.....	5	211	219	+3.8	4,971	4,906	-1.3
West North Central.....	11	365	327	-10.4	7,920	6,951	-12.2
South Atlantic.....	4	142	128	-9.8	2,852	2,607	-8.6
East South Central.....	4	171	171	(1)	3,118	2,966	-4.9
West South Central.....	6	156	154	-1.3	3,103	3,282	+5.8
Mountain.....	7	88	80	-9.1	2,199	2,005	-8.8
Pacific.....	4	306	288	-5.9	7,486	7,060	-5.7
<b>All divisions.....</b>	<b>53</b>	<b>2,325</b>	<b>2,220</b>	<b>-4.5</b>	<b>56,285</b>	<b>52,772</b>	<b>-6.2</b>

<sup>1</sup> No change.

### Indexes of Employment and Pay-Roll Totals—Mining, Quarrying, Public Utilities, Trade, Hotels, and Canning

**T**HE following table shows the index numbers of employment and pay-roll totals for anthracite, bituminous coal, and metalliferous mining, quarrying, telephone and telegraph, power-light-water, electric railroads, wholesale and retail trade, hotels, and canning and preserving, from January, 1929, to November, 1930, with the monthly average for 1929 as 100.

INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS, JANUARY, 1929, TO NOVEMBER, 1930—MINING, QUARRYING, PUBLIC UTILITIES, TRADE, HOTELS, AND CANNING

[Monthly average, 1929=100]

Year and month	Anthracite mining		Bituminous coal mining		Metalliferous mining		Quarrying and non-metallic mining		Telephone and telegraph		Power, light, and water		Operation and maintenance of electric railroads <sup>1</sup>		Wholesale trade		Retail trade		Hotels		Canning and preserving	
	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals	Employment	Pay-roll totals
<b>1929</b>																						
January	105.7	100.7	106.4	106.1	93.1	88.0	91.6	85.9	94.3	94.5	92.9	91.7	99.7	98.7	97.7	96.7	99.2	99.0	97.1	98.5	50.8	57.3
February	106.0	122.1	107.7	116.6	94.6	91.8	91.9	88.9	95.3	93.0	92.6	91.8	99.1	97.6	96.9	96.4	94.6	94.5	99.8	102.0	48.9	59.2
March	98.0	90.8	106.8	108.6	97.0	99.1	96.0	95.0	96.5	98.7	92.8	94.5	97.0	98.0	97.3	98.5	96.2	96.1	100.9	103.4	49.4	54.9
April	100.7	88.3	100.2	89.2	100.6	104.6	99.6	100.5	97.8	98.3	95.9	95.5	98.5	99.5	97.9	97.8	95.5	96.0	99.7	100.6	90.6	98.9
May	103.7	99.0	96.6	91.9	100.8	104.6	104.1	107.1	100.4	99.4	98.4	98.1	100.4	101.0	99.0	99.0	97.3	97.1	98.1	98.9	62.0	71.2
June	92.9	80.7	94.7	90.0	103.8	105.6	106.6	110.5	101.5	100.0	100.7	100.4	101.2	101.7	99.2	98.6	97.4	98.6	99.3	98.7	76.6	71.9
July	83.2	64.7	94.1	85.6	101.5	99.0	104.7	104.7	102.6	104.1	103.2	102.3	102.2	101.9	100.4	100.5	93.6	95.9	101.1	99.8	126.8	109.2
August	91.1	78.4	95.7	92.8	103.2	100.1	106.7	110.3	103.7	101.8	105.4	103.8	102.2	102.0	101.3	100.0	93.6	95.2	102.6	99.4	184.8	180.1
September	101.9	103.8	97.2	98.6	101.2	102.0	106.6	109.8	102.5	100.4	105.5	106.6	101.4	101.5	101.9	103.3	97.6	99.2	102.8	102.2	210.1	207.9
October	106.1	133.9	98.8	106.8	101.9	103.1	103.6	105.8	101.9	105.1	105.7	106.0	100.5	100.0	102.9	102.7	101.7	102.6	100.6	100.2	143.3	134.5
November	104.0	100.5	101.0	106.0	103.0	102.2	98.6	96.0	101.9	101.2	104.7	104.1	99.4	98.4	102.9	101.9	106.7	105.2	100.0	99.8	95.1	91.6
December	107.1	137.2	101.3	108.2	98.5	99.7	90.1	85.4	101.8	103.9	102.5	105.8	98.3	99.8	102.6	104.7	126.2	120.6	97.7	98.9	61.3	63.4
<b>Average</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>1930</b>																						
January	102.1	105.8	102.5	101.4	95.7	92.7	79.6	71.9	101.6	105.1	99.6	99.7	97.1	97.8	100.0	100.0	98.9	99.7	100.4	100.3	46.1	50.3
February	106.9	121.5	102.4	102.1	92.3	92.5	79.8	73.5	100.2	101.9	98.8	100.4	95.1	95.7	98.5	98.3	94.4	96.0	102.4	103.8	45.7	51.5
March	82.6	78.5	98.6	86.4	90.9	90.8	83.0	80.0	99.4	105.8	99.7	102.1	94.4	95.4	97.7	99.7	93.9	95.5	102.4	104.4	49.7	50.8
April	84.1	75.0	94.4	81.7	89.3	88.3	87.4	85.4	98.9	103.4	100.7	102.6	95.2	97.1	97.3	97.9	97.3	97.5	100.1	100.3	74.8	72.6
May	93.8	98.8	90.4	77.5	87.5	85.6	90.8	90.2	99.7	103.2	103.4	104.5	95.2	96.0	96.8	97.4	96.7	97.3	98.0	98.4	65.7	66.9
June	90.8	94.3	88.4	75.6	84.6	81.6	90.3	90.9	99.8	103.4	104.6	107.8	94.8	97.0	96.5	98.6	93.9	96.8	98.0	98.1	83.0	81.5
July	91.6	84.0	88.0	68.9	80.5	71.9	89.9	85.5	100.0	106.6	105.9	106.7	95.3	95.6	96.0	96.0	89.0	91.7	101.3	99.8	126.3	112.7
August	80.2	78.8	89.2	71.1	79.0	71.0	89.3	85.8	98.8	102.5	106.4	106.6	92.9	92.1	95.0	93.6	85.6	87.6	101.5	98.6	185.7	172.0
September	93.8	91.6	90.5	74.9	78.1	69.9	87.7	82.5	96.8	102.2	105.2	106.1	91.8	90.5	94.8	93.6	92.0	92.4	100.1	97.1	246.6	214.8
October	99.0	117.2	91.8	79.4	77.2	68.6	84.7	79.3	94.5	100.9	104.8	105.6	91.0	88.9	94.2	92.9	95.5	95.1	97.5	95.5	164.7	140.0
November	97.2	98.0	92.5	79.1	72.8	63.4	78.3	66.8	93.0	97.9	103.4	103.7	89.3	87.7	92.6	91.0	98.4	96.8	95.2	93.6	96.7	82.9

<sup>1</sup> Not including electric-railroad car building and repairing; see vehicles group, manufacturing industries, page 200, et seq.

### Employment on Class I Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to October, 1930, on Class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by the index numbers published in Table 1. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the monthly average for 1926 as 100.

TABLE 1.—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO OCTOBER, 1930

[Monthly average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930
January.....	98.3	96.9	95.6	95.8	95.5	89.3	88.2	86.3
February.....	93.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4
March.....	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5
April.....	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0
May.....	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6
June.....	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5
July.....	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7
August.....	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7
September.....	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2
October.....	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4
November.....	105.2	99.0	99.1	101.2	95.7	92.9	93.0	-----
December.....	99.4	96.0	97.1	98.2	91.9	89.7	88.8	-----
<b>Average.....</b>	<b>104.1</b>	<b>98.3</b>	<b>97.9</b>	<b>100.0</b>	<b>97.5</b>	<b>92.9</b>	<b>93.3</b>	<sup>1</sup> <b>85.0</b>

<sup>1</sup> Average for 10 months.

Table 2 shows the total number of employees on the 15th day each of October, 1929, and September and October, 1930, and pay-roll totals for the entire months.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES—OCTOBER, 1929, AND SEPTEMBER AND OCTOBER, 1930

[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		
	October, 1929	September, 1930	October, 1930	October, 1929	September, 1930	October, 1930
<b>Professional, clerical, and general</b>	<b>272,941</b>	<b>247,693</b>	<b>245,494</b>	<b>\$40,709,515</b>	<b>\$36,350,646</b>	<b>\$36,779,737</b>
Clerks.....	155,147	137,595	136,315	22,085,797	19,009,186	19,364,157
Stenographers and typists.....	24,818	22,892	22,676	3,292,332	2,986,240	3,018,560
<b>Maintenance of way and structures</b>	<b>452,681</b>	<b>356,484</b>	<b>337,056</b>	<b>44,182,951</b>	<b>32,581,625</b>	<b>32,438,959</b>
Laborers, extra gang and work train.....	81,638	48,409	40,172	6,707,698	3,463,891	3,085,104
Laborers, track, and roadway section.....	228,267	186,028	177,721	17,441,311	12,741,144	12,888,869
<b>Maintenance of equipment and stores</b>	<b>458,844</b>	<b>387,879</b>	<b>378,794</b>	<b>67,407,210</b>	<b>49,789,665</b>	<b>50,689,803</b>
Carmen.....	101,585	81,727	79,837	17,221,723	11,865,142	12,109,023
Machinists.....	54,836	49,175	47,960	9,851,455	7,428,103	7,568,749
Skilled trades helpers.....	102,243	85,235	83,159	13,035,641	9,178,943	9,430,801
Laborers (shops, engine houses, power plants, and stores).....	37,383	32,235	31,955	3,722,157	3,010,561	3,103,577
Common laborers (shops, engine houses, power plants, and stores).....	52,634	42,681	41,123	4,555,917	3,173,414	3,227,648
<b>Transportation, other than train, engine and yard</b>	<b>200,489</b>	<b>178,742</b>	<b>176,772</b>	<b>26,128,121</b>	<b>22,388,733</b>	<b>22,872,298</b>
Station agents.....	29,253	28,580	28,471	4,821,716	4,534,547	4,658,003
Telegraphers, telephoners, and towermen.....	23,351	21,345	21,230	3,731,051	3,291,761	3,381,008
Truckers (stations, warehouses, and platforms).....	36,849	28,236	28,266	3,766,873	2,620,781	2,721,366
Crossing and bridge flagmen and gatemen.....	20,470	19,830	19,523	1,595,565	1,539,232	1,530,320
<b>Transportation (yardmasters, switch tenders, and hostlers)</b>	<b>21,945</b>	<b>19,849</b>	<b>19,625</b>	<b>4,406,704</b>	<b>3,851,844</b>	<b>3,883,912</b>
<b>Transportation, train and engine</b>	<b>325,958</b>	<b>278,874</b>	<b>281,003</b>	<b>72,782,614</b>	<b>55,855,459</b>	<b>59,401,272</b>
Road conductors.....	36,689	31,503	31,644	9,604,812	7,581,038	7,989,179
Road brakemen and flagmen.....	72,221	61,424	61,962	14,123,331	10,699,123	11,419,115
Yard brakemen, and yard helpers.....	55,542	47,047	47,758	10,800,526	8,047,184	8,623,134
Road engineers and motormen.....	43,434	37,576	37,656	13,028,731	10,101,657	10,732,101
Road firemen and helpers.....	43,693	38,286	38,239	9,583,407	7,370,256	7,830,631
<b>All employees</b> .....	<b>1,732,858</b>	<b>1,469,521</b>	<b>1,438,744</b>	<b>255,617,115</b>	<b>200,817,972</b>	<b>206,065,981</b>

### Changes in Employment and Pay Rolls in Various States

THE following data as to changes in employment and pay rolls have been compiled from reports received from the various State labor offices:

## PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES

Monthly period

State, and industry group	Per cent of change, October to November, 1930		State, and industry group	Per cent of change, September to October, 1930	
	Employment	Pay roll		Employment	Pay roll
<b>Arkansas</b>			<b>Illinois—Continued</b>		
Auto dealers, garages.....	-5.6	-9.9	Trade, wholesale and retail Services.....	+3.4	+1.7
Auto bodies, wood parts.....	-5.6	-23.7	Public utilities.....	-2.5	-1.5
Bakeries and cafés.....	-9.5	-7.1	Coal mining.....	+5.8	+14.6
Beverages.....	-2.0	-28.0	Building and contracting..	-7.7	-17.3
Brick and tile.....	-5.4	-6.9	All nonmanufacturing.....	-0.8	-0.3
Candy and confections.....	+1.0	+12.1	All industries.....	-2.4	-2.2
Cooperage, heading.....	.0	+10.2	<b>Iowa</b>		
Cotton compresses, gins, and products.....	+3.4	-1.3	October to November, 1930		
Coal mines.....	-4	-15.4	Food and kindred products	+2.4	-----
Furniture manufactures.....	-6.1	-4.4	Textiles.....	-1.0	-----
Flour, grain, feed, fertilizer.	+1.0	+6.1	Iron and steel works.....	+2.2	-----
Glass factories.....	-43.5	-46.0	Lumber products.....	-3.6	-----
Handles, hubs, spokes.....	-1.3	-11.7	Leather products.....	+2.0	-----
Hotels.....	+3.9	+2.8	Paper products, printing and publishing.....	+1.9	-----
Laundries.....	+7	-1.8	Patent medicines, chemicals, and compounds.....	-2.2	-----
Lumber mills.....	-1.4	-4.6	Stone and clay products.....	-10.8	-----
Machinery, foundries, parts	-18.7	-17.7	Tobacco and cigars.....	+3.7	-----
Newspapers and printers.....	.0	-3.2	Railway-car shops.....	+70.0	-----
Packing houses.....	-2.1	+2.5	Various industries.....	+7	-----
Petroleum products.....	-16.4	-21.5	All industries.....	+3.0	-----
Sand, gravel, stone.....	-2.0	-21.4	<b>Maryland</b>		
Textile mills, garments.....	-2.4	-12.2	Food products.....	-6.3	-3.7
Public utilities.....	+5.7	+5	Textiles.....	-5.2	-8.8
Wholesale and retail.....	-1.0	.0	Iron and steel, and their products.....	-4.9	-8.1
Miscellaneous.....	+5.1	+3.7	Lumber and its products.....	-5.0	-9.5
All industries.....	-5.4	-10.8	Leather and its products.....	-5.5	-26.2
<b>California</b>			Rubber tires.....	-4.5	-16.8
September to October, 1930			Paper and printing.....	+6	-2.3
Stone, clay, and glass products.....	+1.7	+2.1	Chemicals and allied products.....	-11.3	-13.1
Metals, machinery, and conveyances.....	-4.0	-4.8	Stone, clay, and glass products.....	-2.5	-5.9
Wood manufactures.....	-3	-3.6	Metal products other than iron and steel.....	-3.6	-3.6
Leather and rubber goods.....	-2.1	+2	Tobacco products.....	+7.6	+3.7
Chemicals, oils, paints, etc.	-9	-4.2	Transportation equipment.....	-7.3	+1.8
Printing and paper goods.....	+1.3	+5	Car building and repairing.....	-8	-2.3
Textiles.....	+3.8	+6.8	Miscellaneous.....	+1.8	-3.2
Clothing, millinery, and laundering.....	-9	+7	All manufacturing.....	-4.5	-6.7
Foods, beverages, and tobacco.....	-32.4	-31.2	Retail establishments.....	-3.4	+3
Motion pictures.....	+4.7	+7	Wholesale establishments.....	-1.2	-3.7
Miscellaneous.....	+9.2	+7.2	Public utilities.....	-3.2	+1.8
All industries.....	-11.4	-9.9	Coal mines.....	+1.6	+4
<b>Illinois</b>			Hotels.....	+3	+1.8
Stone, clay, and glass products.....	-1.7	+0.3	Quarries.....	-18.5	-18.8
Metals, machinery, and conveyances.....	-1.5	-0			
Wood products.....	-9	+1.8			
Furs and leather goods.....	-4.8	9.4			
Chemicals, oils, paints, etc.	-3.1	+2.5			
Printing and paper goods.....	-6	-1.4			
Textiles.....	+9.0	+10.5			
Clothing and millinery.....	-10.1	-25.8			
Food, beverages, and tobacco.....	-10.0	-13.1			
Miscellaneous.....	-29.2	-30.6			
All manufacturing.....	-3.3	-3.4			

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Monthly period—Continued

State, and industry group	Employment—index numbers (1925-1927=100)		State, and industry group	Per cent of change, September to October, 1930	
	September, 1930	October, 1930		Employment	Pay roll
<b>Massachusetts</b>			<b>New Jersey—Continued</b>		
Boot and shoe cut stock and findings	701.5	97.6	Leather and its products	-4.5	-7.0
Boots and shoes	82.9	75.2	Tobacco products	+3.2	+7
Bread and other bakery products	106.4	105.6	Paper and printing	+4	+2.4
Clothing, men's	87.4	87.6	Chemicals and allied products	-1.3	-2.8
Clothing, women's	103.9	106.8	Stone, clay, and glass products	+3	-6
Confectionery	97.9	108.8	Metal products other than iron and steel	+1.7	+3.6
Cotton goods	49.1	51.2	Vehicles for land transportation	+1.5	-7.5
Dyeing and finishing textiles	86.5	86.7	Miscellaneous	+13.2	+16.1
Electrical machinery, apparatus, and supplies	68.3	70.0	All industries	+3	+5
Foundry and machine-shop products	100.1	97.5			
Furniture	80.1	82.6			
Hosiery and knit goods	72.4	73.0			
Leather, tanned, curried, and finished	94.9	92.7			
Paper and wood pulp	86.8	88.4			
Printing and publishing	103.0	103.5			
Rubber footwear	74.9	75.7			
Rubber goods, tires, and tubes	57.6	55.6			
Silk goods	55.5	56.7			
Textile machinery and parts	56.8	56.1			
Woolen and worsted goods	71.0	65.4			
All industries	73.3	72.5			
	Per cent of change, September to October, 1930				
	Employment	Pay roll			
<b>Michigan</b>			<b>New York</b>		
Paper and printing	-2.0	-1.0	Stone, clay, and glass	-1.2	+1.7
Chemicals and allied products	+7.3	+6.5	Miscellaneous stone and minerals	+1.6	+11.4
Stone, clay, and glass products	-5	-1.1	Lime, cement, and plaster	-10.2	-9.0
Metal products, not iron and steel	+2	-3.9	Brick, tile, and pottery	-9	-6
Iron, steel products	+2.9	+8.5	Glass	+3.4	+2.4
Lumber and its products	-3.6	-3.6	Metals and machinery	-2.1	-4.2
Leather and its products	-5	+1.2	Silver and jewelry	+7	+2.4
Food and kindred products	-5.7	+3	Brass, copper, and aluminum	-1.4	-2.4
Textiles and their products	+17.0	+11.6	Iron and steel	+9	-15.3
Tobacco products	-13.4	-6.2	Structural and architectural iron	-7.2	-9.1
Vehicles for land transportation	-2.4	-3.3	Sheet metal and hardware	-2.1	-3.5
Miscellaneous	-5.8	-6.3	Firearms, tools, and cutlery	-3.7	-7.8
All industries	-1.8	-1.9	Cooking, heating, and ventilating apparatus	-2.6	-12.4
<b>New Jersey</b>			Machinery, including electrical apparatus		
Food and kindred products	-30.7	-25.8	Automobiles, carriages, and airplanes	-4.3	-7.6
Textiles and their products	+1.4	+3.3	Railroad equipment and repair	-3.0	-3.9
Iron and steel and their products	-2.7	-3.9	Boat and ship building	+9.2	+23.4
Lumber and its products	+4.2	+3.2	Instruments and appliances	-8	-3.3
			Wood manufactures	-3.1	-4.2
			Saw and planing mills	-6.7	-2.0
			Furniture and cabinet-work	-3.3	-8.1
			Pianos and other musical instruments	-3.2	-4.0
			Miscellaneous wood	+4	+8
			Furs, leather, and rubber goods	-4.0	-12.9
			Leather	-9	-7.3
			Furs and fur goods	-3.8	-7
			Shoes	-4.8	-18.6
			Other leather and canvas goods	-3.2	-11.4
			Rubber and gutta-percha	-6.9	-7.0
			Pearl, horn, bone, etc.	+4.4	+4.7

October to November, 1930





PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Monthly period—Continued

State and industry group	Per cent of change, October to Novem- ber, 1930		State, and industry group	Per cent of change, September to Octo- ber, 1930	
	Employ- ment	Pay roll		Employ- ment	Pay roll
<b>Texas</b>			<b>Wisconsin—Continued</b>		
Auto and body works.....	-6.9	-----	<i>Manual—Continued</i>		
Bakeries.....	-1.5	-----	Stone crushing and quar- rying..... -3.3 -12.9		
Confectioneries.....	+5.6	-----	Manufacturing:		
Pure food products.....	-2.2	-----	Stone and allied indus- tries..... -9.4 -12.9		
Ice cream factories.....	-13.5	-----	Metal..... -5.3 -5		
Flour mills.....	-1.6	-----	Wood..... +2.3 +4.1		
Ice factories.....	-8.9	-----	Rubber..... +4.2 +4.0		
Meat packing and slaugh- tering.....	-5.2	-----	Leather..... -1.4 +2.9		
Cotton-oil mills.....	-13.0	-----	Paper..... -1.4 +1.4		
Cotton compresses.....	-15.4	-----	Textiles..... +2.5 +3.7		
Men's clothing manufac- ture.....	-31.3	-----	Foods..... -3.9 -1.5		
Women's clothing manuf- acture.....	-3.8	-----	Printing and publish- ing..... -1.1 -3.4		
Brick, tile, and terra cotta	+1.8	-----	Chemicals (including soap, glue, and ex- plosives)..... +.3 +4.3		
Foundries and machine shops.....	-3.2	-----	All manufacturing... -2.3 +.8		
Structural-iron works.....	-11.7	-----	Construction:		
Railroad car shops.....	-10.3	-----	Building..... -2.2 -7		
Electric-railway car shops	-3.4	-----	Highway..... -8.2 -6.9		
Petroleum refining.....	-7	-----	Railroad..... -1.8 -3.9		
Sawmills.....	-4.2	-----	Marine dredging, sew- er digging..... -2.9 -3.5		
Lumber mills.....	-4.2	-----	Communication:		
Furniture manufacture.....	-1.9	-----	Steam railways..... -8.1 -6.4		
Paper-box manufacture.....	+12.3	-----	Electric railways..... +.2 +1.5		
Cotton textile mills.....	+10.8	-----	Express, telephone, and telegraph..... -7.0 -3.0		
Cement plants.....	-6.6	-----	Light and power..... -4.5 -3.4		
Commercial printing.....	+3.5	-----	Wholesale trade..... +.5 +2.8		
Newspaper publishing.....	+1.3	-----	Hotels and restaurants..... +2.5 -----		
Quarrying.....	+45.3	-----	Laundering and dyeing..... -1.6 -2.8		
Public utilities.....	-1.1	-----	<i>Nonmanual</i>		
Retail stores.....	+1.4	-----	Manufacturing, mines, and quarries..... -1.6 -5		
Wholesale stores.....	-2.4	-----	Construction..... -1.9 -1.8		
Hotels.....	-3	-----	Communication..... -2.6 -2.4		
Miscellaneous.....	-6.6	-----	Wholesale trade..... -3 -2.3		
All industries.....	-2.4	-----	Retail trade, sales force only..... -2.2 +.6		
		September to Octo- ber, 1930	Miscellaneous professional services..... -3.7 +6.7		
<b>Wisconsin</b>					
<i>Manual</i>					
Logging.....	+11.3	-8.7			
Mining.....					
Lead and zinc.....	-37.1	-22.3			
Iron.....	-1.0	+2.3			

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Yearly period

State, and industry group	Per cent of change, October, 1929, to October, 1930		State, and industry group	Employment—index numbers (1925-1927 = 100)	
	Employment	Pay roll		October 1929	October, 1930
<b>California</b>			<b>Massachusetts—Con.</b>		
Stone, clay, and glass products.....	-20.8	-24.7	Electrical machinery, apparatus, and supplies.....	101.3	70.0
Metals, machinery, and conveyances.....	-21.8	-29.2	Foundry and machine-shop products.....	114.4	97.5
Wood manufactures.....	-22.7	-29.2	Furniture.....	102.8	82.6
Leather and rubber goods.....	-30.5	-27.5	Hosiery and knit goods.....	82.6	73.0
Chemicals, oils, paints, etc.....	-24.0	-26.4	Leather, tanned, curried, and finished.....	109.8	92.7
Printing and paper goods.....	-3.9	-5.0	Paper and wood pulp.....	97.0	88.4
Textiles.....	-5.3	-11.0	Printing and publishing.....	110.2	103.5
Clothing, millinery, and laundering.....	-9.5	-11.2	Rubber footwear.....	99.0	75.7
Foods, beverages, and tobacco.....	-4.2	-8.8	Rubber goods, tires, and tubes.....	79.9	55.6
Miscellaneous <sup>3</sup> .....	-48.3	-39.1	Silk goods.....	82.8	56.7
All industries.....	-18.7	-23.8	Textile machinery and parts.....	83.7	56.1
Public utilities.....	-6.4	-5.9	Woolen and worsted goods.....	81.7	65.4
Wholesale and retail.....	-3.0	-3.8	All industries.....	90.8	72.5
Employment—index numbers (1925-1927 = 100)			Per cent of change, November, 1929, to November, 1930		
October, 1929		October, 1930	Employment	Pay roll	
<b>Illinois</b>			<b>New York</b>		
Stone, clay, and glass products.....	89.3	79.3	Stone, clay, and glass.....	-14.4	-19.6
Metals, machinery, and conveyances.....	115.4	81.0	Miscellaneous stone and minerals.....	-16.4	-15.8
Wood products.....	77.6	58.3	Lime, cement, and plaster.....	-14.6	-17.3
Furs and leather goods.....	104.6	81.8	Brick, tile, and pottery.....	-5.4	-16.1
Chemicals, oils, paints, etc.....	99.9	84.6	Glass.....	-21.1	-28.3
Printing and paper goods.....	99.2	95.4	Metals and machinery.....	-24.9	-32.1
Textiles.....	101.4	88.7	Silver and jewelry.....	-19.4	-32.9
Clothing and millinery.....	78.9	68.0	Brass, copper, and aluminum.....	-19.2	-27.0
Foods, beverages, and tobacco.....	96.2	83.5	Iron and steel.....	-25.3	-29.1
All manufacturing.....	103.8	80.2	Structural and architectural iron.....	-20.7	-28.9
Trade, wholesale and retail.....	90.6	70.2	Sheet metal and hardware.....	-18.9	-22.1
Public utilities.....	106.9	97.7	Firearms, tools, and cutlery.....	-12.1	-22.1
Coal mining.....	79.1	85.0	Cooking, heating, and ventilating apparatus.....	-30.1	-41.9
Building and contracting.....	93.4	66.8	Machinery, including electrical apparatus.....	-28.3	-34.3
All industries.....	102.5	83.4	Automobiles, carriages, and airplanes.....	-31.2	-37.4
<b>Massachusetts</b>			Railroad equipment and repair.....	-25.0	-34.6
Boot and shoe cut stock and findings.....	120.8	97.6	Boat and ship building.....	-26.6	-33.7
Boots and shoes.....	92.2	75.2	Instruments and appliances.....	-18.1	-24.6
Bread and other bakery products, men's.....	111.1	105.6	Wood manufactures.....	-19.3	-29.4
Clothing, men's.....	105.5	87.6	Saw and planing mills.....	-19.1	-24.3
Clothing, women's.....	117.5	106.8	Furniture and cabinet network.....	-23.1	-36.6
Confectionery.....	108.6	108.8	Pianos and other musical instruments.....	-19.0	-29.5
Cotton goods.....	73.9	51.2	Miscellaneous wood.....	-12.4	-18.1
Dyeing and finishing textiles.....	97.4	86.7			

<sup>3</sup> Includes motion pictures.



PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—  
Continued

Yearly period—Continued

State, and industry group	Per cent of change, November, 1929, to November, 1930		State, and industry group	Per cent of change, November, 1929, to November, 1930	
	Employ- ment	Pay roll		Employ- ment	Pay roll
<b>Texas</b>			<b>Texas—Continued</b>		
Auto and body works.....	-46.4	-----	Railroad car shops.....	-34.1	-----
Bakeries.....	-21.4	-----	Electric-railway car shops.....	-6.9	-----
Confectioneries.....	-21.7	-----	Petroleum refining.....	-17.9	-----
Pure food products.....	-36.1	-----	Sawmills.....	-46.7	-----
Ice cream factories.....	-11.0	-----	Lumber mills.....	-30.1	-----
Flour mills.....	-13.1	-----	Furniture manufacture.....	-24.3	-----
Ice factories.....	-26.0	-----	Paper-box manufacture.....	-4	-----
Meat packing and slaugh- tering.....	-10.9	-----	Cotton textile mills.....	-36.0	-----
Cotton-oil mills.....	-25.7	-----	Cement plants.....	-25.4	-----
Cotton compresses.....	+2.9	-----	Commerical printing.....	+2.7	-----
Men's clothing manufac- ture.....	-31.2	-----	Newspaper publishing.....	.0	-----
Women's clothing manu- facture.....	-30.2	-----	Quarrying.....	-11.7	-----
Brick, tile, and terra cotta.....	-34.3	-----	Public utilities.....	-9.3	-----
Foundries and machine shops.....	-36.0	-----	Retail stores.....	-8.4	-----
Structural-iron works.....	-18.7	-----	Wholesale stores.....	-6.6	-----
			Hotels.....	-6.9	-----
			Miscellaneous.....	-27.5	-----
			All industries.....	-19.5	-----

# WHOLESALE AND RETAIL PRICES

## Retail Prices of Food in November, 1930

THE following tables are compiled from simple averages of the actual selling prices<sup>1</sup> received monthly by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food November 15, 1929, and October 15 and November 15, 1930, as well as the percentage changes in the year and in the month. For example, the retail price per pound of butter was 53.5 cents on November 15, 1929; 47.8 cents on October 15, 1930; and 45.4 cents on November 15, 1930. These figures show decreases of 15 per cent in the year and 5 per cent in the month.

The cost of various articles of food combined shows a decrease of 11.4 per cent November 15, 1930, as compared with November 15, 1929, and a decrease of 2.0 per cent November 15, 1930, as compared with October 15, 1930.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1930, COMPARED WITH OCTOBER 15, 1930, AND NOVEMBER 15, 1929

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

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (—) Nov. 15, 1930, compared with—	
		Nov. 15, 1929	Oct. 15, 1930	Nov. 15, 1930	Nov. 15, 1929	Oct. 15, 1930
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak.....	Pound.....	49.3	44.5	43.3	-12	-3
Round steak.....	do.....	43.8	39.3	38.1	-13	-3
Rib roast.....	do.....	36.3	32.5	31.9	-12	-2
Chuck roast.....	do.....	29.4	25.4	24.7	-16	-3
Plate beef.....	do.....	20.7	17.2	16.9	-18	-2
Pork chops.....	do.....	35.8	37.9	32.8	-8	-13
Bacon, sliced.....	do.....	43.0	42.6	42.1	-2	-1
Ham, sliced.....	do.....	53.9	53.1	52.1	-3	-2
Lamb, leg of.....	do.....	37.9	32.8	31.4	-17	-4
Hens.....	do.....	37.7	33.8	32.6	-14	-4
Salmon, red, canned.....	do.....	31.9	34.0	34.3	+8	+1
Milk, fresh.....	Quart.....	14.4	14.0	14.0	-3	0
Milk, evaporated.....	16-oz. can.....	10.5	9.9	9.9	-6	0
Butter.....	Pound.....	53.5	47.8	45.4	-15	-5
Oleomargarine (all butter substitutes).....	do.....	26.9	25.0	24.6	-9	-2
Cheese.....	do.....	37.8	34.2	33.8	-11	-1
Lard.....	do.....	18.0	17.7	17.5	-3	-1
Vegetable lard substitute.....	do.....	24.6	24.1	24.0	-2	-0.4
Eggs, strictly fresh.....	Dozen.....	63.3	44.8	48.4	-24	+8
Bread.....	Pound.....	8.9	8.6	8.5	-5	-1
Flour.....	do.....	5.2	4.3	4.2	-19	-2
Corn meal.....	do.....	5.3	5.3	5.2	-2	-2
Rolled oats.....	do.....	8.8	8.6	8.6	-2	0
Corn flakes.....	8-oz. package.....	9.5	9.3	9.3	-2	0
Wheat cereal.....	28-oz. package.....	25.5	25.4	25.3	-1	-0.4

<sup>1</sup> In addition to monthly retail prices of food and coal, the bureau publishes periodically the prices of gas and electricity for household use in each of 51 cities. At present this information is being collected in June and December of each year.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1930, COMPARED WITH OCTOBER 15, 1930, AND NOVEMBER 15, 1929—Continued.

Article	Unit	Average retail price on—			Per cent of increase (+) or decrease (–) Nov. 15, 1930, compared with—	
		Nov. 15, 1929	Oct. 15, 1930	Nov. 15, 1930	Nov. 15, 1929	Oct. 15, 1930
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Macaroni.....	Pound.....	19.7	19.1	18.9	–4	–1
Rice.....	do.....	9.7	9.5	9.3	–4	–2
Beans, navy.....	do.....	13.7	11.3	10.2	–26	–10
Potatoes.....	do.....	3.8	3.1	2.9	–24	–6
Onions.....	do.....	5.0	4.2	3.9	–22	–7
Cabbage.....	do.....	4.2	3.6	3.4	–19	–6
Pork and beans.....	No. 2 can.....	11.7	10.8	10.7	–9	–1
Corn, canned.....	do.....	15.7	15.2	15.1	–4	–1
Peas, canned.....	do.....	16.6	16.0	15.9	–4	–1
Tomatoes, canned.....	do.....	12.6	12.1	11.6	–8	–4
Sugar.....	Pound.....	6.7	5.8	5.9	–12	+2
Tea.....	do.....	77.4	77.2	76.8	–1	–1
Coffee.....	do.....	48.3	39.1	38.7	–20	–1
Prunes.....	do.....	17.9	14.5	13.6	–24	–6
Raisins.....	do.....	12.4	11.7	11.5	–7	–2
Bananas.....	Dozen.....	32.7	29.4	29.3	–10	–0.3
Oranges.....	do.....	43.0	66.8	51.1	+19	–24
Weighted food index.....	.....	.....	.....	.....	11.4	–2.0

Table 2 shows for the United States average retail prices of specified food articles on November 15, 1913, and on November 15 of each year from 1924 to 1930, together with percentage changes in November of each of these specified years compared with November, 1913. For example, the retail price per pound of lard was 15.9 cents in November, 1913; 22.4 cents in November, 1924; 23.3 cents in November, 1925; 21.1 cents in November, 1926; 19.5 cents in November, 1927; 19.1 cents in November, 1928; 18.0 cents in November, 1929; and 17.5 cents in November, 1930.

As compared with November, 1913, these figures show increases of 41 per cent in November, 1924; 47 per cent in November, 1925; 33 per cent in November, 1926; 23 per cent in November, 1927; 20 per cent in November, 1928; 13 per cent in November, 1929; and 10 per cent in November, 1930.

The cost of the various articles of food combined showed an increase of 34.9 per cent in November, 1930, as compared with November, 1913.

Table 3 shows the trend in the retail cost of three important groups of food commodities, viz, cereals, meats, and dairy products, by years, from 1913 to 1929, and by months for 1928, 1929, and 1930. The articles within these groups are as follows:

Cereals: Bread, flour, corn meal, rice, rolled oats, corn flakes, wheat cereal, and macaroni.

Meats: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, hens, and leg of lamb.

Dairy products: Butter, cheese, fresh milk, and evaporated milk.

WHOLESALE AND RETAIL PRICES

233

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

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

Article	Average retail prices on Nov. 15—								Per cent of increase Nov. 15 of each specified year compared with Nov. 15, 1913							
	1913	1924	1925	1926	1927	1928	1929	1930	1924	1925	1926	1927	1928	1929	1930	
	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	
Sirloin steak...pound..	25.4	38.7	40.3	40.9	43.5	49.1	49.3	43.3	52	59	61	71	93	94	70	
Round steak.....do.....	22.8	32.9	34.4	35.5	37.8	43.4	43.8	38.1	44	51	56	66	90	92	67	
Rib roast.....do.....	19.8	28.2	29.5	30.2	31.9	36.3	36.3	31.9	42	49	53	61	83	83	61	
Chuck roast.....do.....	16.3	20.4	21.6	22.7	24.5	29.7	29.4	24.7	25	33	39	50	82	80	52	
Plate beef.....do.....	12.4	13.2	14.1	14.7	16.2	20.8	20.7	16.9	6	14	19	31	68	67	36	
Pork chops.....do.....	21.5	31.6	37.5	39.3	36.3	35.7	35.8	32.8	47	74	83	69	66	67	53	
Bacon, sliced.....do.....	27.2	40.1	49.2	51.0	46.3	44.5	43.0	42.1	47	81	88	70	64	58	55	
Ham, sliced.....do.....	26.9	47.0	53.5	58.4	53.0	54.6	53.9	52.1	75	99	117	97	103	100	94	
Lamb, leg of.....do.....	18.5	35.4	38.4	37.9	37.6	38.0	37.9	31.4	91	108	105	103	105	105	70	
Hens.....do.....	20.6	34.5	35.8	37.1	35.6	38.0	37.7	32.6	67	74	80	73	84	83	58	
Salmon, red, canned .....pound.....		31.7	36.4	34.7	34.8	32.3	31.9	34.3								
Milk, fresh.....quart..	9.1	13.8	14.3	14.1	14.2	14.3	14.4	14.0	52	57	55	56	57	58	54	
Milk, evaporated .....16-ounce can.....		11.0	11.6	11.4	11.5	11.4	10.5	9.9								
Butter.....pound.....	38.7	48.9	59.7	55.7	56.4	58.3	53.5	45.4	26	54	44	46	51	38	17	
Oleomargarine (all butter substitutes) .....pound.....		30.2	31.2	30.1	27.9	27.6	26.9	24.6								
Cheese.....do.....	22.5	34.7	37.4	36.9	38.6	38.5	37.8	33.8	54	66	64	72	71	68	50	
Lard.....do.....	15.9	22.4	23.3	21.1	19.5	19.1	18.0	17.5	41	47	33	23	20	13	10	
Vegetable lard substi- tute.....pound.....		25.5	25.8	25.6	25.1	24.8	24.6	24.0								
Eggs, strictly fresh .....dozen.....	49.7	68.1	69.4	66.0	61.7	59.3	63.3	48.4	37	40	33	24	19	27	23	
Bread.....pound.....	5.6	8.9	9.4	9.4	9.3	9.1	8.9	8.5	59	68	68	66	63	59	52	
Flour.....do.....	3.3	5.4	6.0	5.7	5.4	5.1	5.2	4.2	64	82	73	64	55	58	27	
Corn meal.....do.....	3.1	5.1	5.3	5.1	5.2	5.3	5.3	5.2	65	71	65	68	71	71	68	
Rolled oats.....do.....		9.1	9.2	9.1	9.0	8.9	8.8	8.6								
Corn flakes .....8-ounce package.....		10.7	11.0	10.9	9.7	9.5	9.5	9.3								
Wheat cereal .....28-ounce package.....		24.4	25.2	25.4	25.5	25.5	25.3									
Macaroni.....pound.....		19.6	20.5	20.1	20.0	19.7	19.7	18.9								
Rice.....do.....	8.7	10.5	11.4	11.3	10.4	9.8	9.7	9.3	21	31	30	20	13	11	7	
Beans, navy.....do.....		10.1	9.9	9.3	9.5	12.5	13.7	10.2								
Potatoes.....do.....	1.8	2.2	5.2	4.0	3.0	2.2	3.8	2.9	22	189	122	67	22	111	61	
Onions.....do.....		5.1	5.7	5.0	4.8	6.5	5.0	3.9								
Cabbage.....do.....		3.7	4.2	4.0	3.7	4.3	4.2	3.4								
Pork and beans .....No. 2 can.....		12.6	12.3	11.7	11.5	11.7	11.7	10.7								
Corn, canned.....do.....		16.6	17.1	16.3	15.7	15.9	15.7	15.1								
Peas, canned.....do.....		18.3	18.1	17.3	16.6	16.7	16.6	15.9								
Tomatoes, canned .....No. 2 can.....		13.6	12.9	12.1	11.8	11.9	12.6	11.6								
Sugar, granulated .....pound.....	5.4	8.8	6.6	7.1	7.2	6.8	6.7	5.9	63	22	31	33	26	24	9	
Tea.....do.....	54.5	73.5	75.7	77.1	77.5	77.4	77.4	76.8	35	39	41	42	42	42	41	
Coffee.....do.....	29.8	49.0	51.2	50.8	47.8	49.7	48.3	38.7	64	72	70	60	67	62	30	
Prunes.....do.....		17.2	17.2	16.5	14.1	14.0	17.9	13.6								
Raisins.....do.....		14.8	14.2	14.6	13.8	12.0	12.4	11.5								
Bananas.....dozen.....		37.3	34.7	34.9	34.4	33.7	32.7	29.3								
Oranges.....do.....		48.9	65.5	55.1	53.2	56.5	43.0									
All articles combined <sup>1</sup>									43.1	59.3	54.2	49.1	50.0	52.3	34.9	

<sup>1</sup> Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

<sup>2</sup> Decrease.

TABLE 3.—INDEX NUMBERS OF RETAIL COST OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES, 1913 TO NOVEMBER, 1930

[Average cost in 1913=100.0]

Year and month	Cereals	Meats	Dairy products	Year and month	Cereals	Meats	Dairy products
1913: Average for year	100.0	100.0	100.0	1929: Average for year	164.1	188.4	148.6
1914: Average for year	106.7	103.4	97.1	January	164.1	180.9	151.9
1915: Average for year	121.6	99.6	96.1	February	164.1	180.3	152.6
1916: Average for year	126.8	108.2	103.2	March	164.1	182.8	152.4
1917: Average for year	186.5	137.0	127.6	April	164.1	187.5	148.9
1918: Average for year	194.3	172.8	153.4	May	163.5	191.2	147.5
1919: Average for year	198.0	184.2	176.6	June	163.0	192.4	146.8
1920: Average for year	232.1	185.7	185.1	July	163.5	195.9	146.8
1921: Average for year	179.8	158.1	149.5	August	164.7	196.0	147.1
1922: Average for year	159.3	150.3	135.9	September	165.2	194.2	148.1
1923: Average for year	156.9	149.0	147.6	October	163.5	189.2	149.3
1924: Average for year	160.4	150.2	142.8	November	163.6	184.1	147.0
1925: Average for year	176.2	163.0	147.1	December	162.9	181.8	144.9
1926: Average for year	175.5	171.3	145.5	1930:			
1927: Average for year	170.7	169.9	148.7	January	162.9	183.6	138.9
1928: Average for year	167.2	179.2	150.0	February	161.6	183.1	138.5
January	168.0	168.3	152.2	March	160.9	183.0	137.6
February	168.0	167.8	150.7	April	160.3	183.3	138.9
March	166.8	167.1	150.7	May	159.8	181.5	137.0
April	167.2	170.3	147.8	June	160.1	179.9	133.7
May	168.3	175.4	147.3	July	158.6	175.2	133.9
June	169.8	177.7	146.1	August	156.9	169.9	137.4
July	169.3	184.4	147.1	September	156.4	173.3	138.8
August	168.2	189.5	148.3	October	154.4	171.1	137.8
September	166.7	195.8	151.2	November	152.4	164.1	137.4
October	165.9	188.9	151.1				
November	165.3	184.9	152.5				
December	164.2	179.1	153.5				

## Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years, for 1913 and 1920 to 1929,<sup>2</sup> by months for 1929 and for January through November, 1930. 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 1929 was 196.9, which means that the average money price for the year 1929 was 96.9 per cent higher than the average money price for the year 1913. As compared with the relative price, 188.2 in 1928, the figures for 1929 show an increase of 8.7 points, but an increase of 4.6 per cent in the year.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles 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 144.4 for October, 1930, and 141.4 for November, 1930.

The curve shown in the chart on next page pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

<sup>2</sup> For index numbers of each month, January, 1913 to December, 1928, see Bulletin No. 396, pp. 44 to 61; and Bulletin No. 495, pp. 32 to 45.



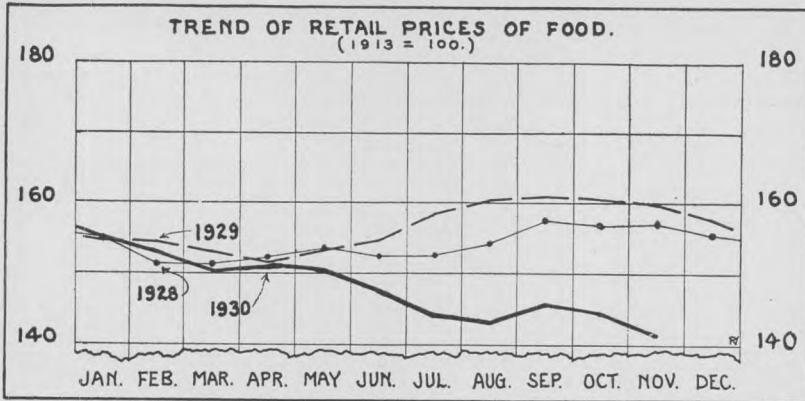


TABLE 4—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920 TO 1929, AND BY MONTHS FOR 1929 AND 1930

[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	114.1	174.3	173.0	195.5	171.8	157.3	159.7
1925.....	159.8	155.6	149.5	135.0	114.1	146.7	139.6	168.4	165.7	155.1	135.0	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	165.9
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
1928.....	188.2	188.3	176.8	174.4	157.0	165.7	163.0	196.7	175.6	159.6	147.5	174.2
1929.....	196.9	199.1	185.4	186.9	172.7	175.7	161.1	204.1	186.4	160.7	150.7	173.8
1929: January.....	190.6	191.0	180.8	181.3	170.2	153.8	159.3	200.0	184.0	160.7	152.5	172.9
February.....	188.2	188.8	178.8	179.4	167.8	157.1	158.2	199.6	186.4	160.7	150.7	173.8
March.....	188.6	189.2	179.3	180.0	167.8	167.6	158.9	201.9	190.1	160.7	152.5	172.9
April.....	192.9	194.6	183.8	184.4	170.2	176.7	160.4	203.3	196.2	159.6	145.7	172.4
May.....	198.4	201.3	187.9	190.0	174.4	179.5	160.7	204.8	198.1	159.6	142.3	171.9
June.....	201.6	205.4	189.9	191.9	176.0	179.0	162.2	205.6	193.9	159.6	140.5	171.9
July.....	206.7	210.8	192.9	195.6	177.7	188.1	164.1	209.7	187.3	160.7	139.4	171.5
August.....	206.3	210.8	191.9	194.0	176.0	192.4	165.6	211.2	185.0	160.7	140.5	171.0
September.....	202.8	206.7	189.4	191.9	175.2	193.8	164.4	209.7	184.0	160.7	143.1	171.9
October.....	198.0	199.6	186.9	187.5	173.6	185.2	161.9	204.8	180.3	161.8	145.4	171.5
November.....	194.1	196.4	183.3	183.8	171.1	170.5	159.3	200.4	177.0	161.8	139.7	171.0
December.....	192.5	194.6	181.8	183.1	170.2	163.3	157.4	198.5	174.2	161.8	134.7	170.6
1930: January.....	192.9	195.5	183.3	184.4	172.7	168.1	157.0	199.3	178.4	159.6	121.9	169.2
February.....	191.3	194.2	181.8	184.4	171.9	167.6	157.8	200.7	179.3	158.4	122.7	167.0
March.....	190.6	192.8	181.3	182.5	170.2	171.9	157.8	201.1	179.8	157.3	121.9	164.7
April.....	190.2	193.3	181.3	182.5	168.6	176.7	157.4	200.4	179.3	157.3	125.6	162.9
May.....	190.2	192.8	179.8	179.4	164.5	171.9	156.7	200.7	175.6	157.3	120.9	162.0
June.....	188.6	191.5	177.3	175.6	160.3	174.3	156.7	200.7	167.6	157.3	113.1	157.9
July.....	182.3	184.3	171.7	166.3	149.6	173.8	156.7	200.0	161.5	157.3	114.1	155.2
August.....	175.6	176.7	163.1	155.6	138.8	174.8	155.6	198.1	158.7	157.3	123.8	153.4
September.....	177.2	178.0	166.7	160.0	142.1	186.2	158.1	198.9	159.6	157.3	127.2	154.8
October.....	175.2	176.2	164.1	158.7	142.1	180.5	157.8	197.4	158.7	157.3	124.8	154.8
November.....	170.5	170.9	161.1	154.4	139.7	156.2	155.9	193.7	153.1	157.3	118.5	152.9

29334°—31—16

TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920 TO 1929, AND BY MONTHS FOR 1929 AND 1930—Continued

Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Pota-toes	Sugar	Tea	Coffee	All arti-cles <sup>1</sup>
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
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
1928	117.7	134.5	162.5	163.6	176.7	114.9	158.8	129.1	142.3	165.1	154.3
1929	115.8	142.0	160.7	154.5	176.7	111.5	188.2	120.0	142.6	164.8	156.7
1929: January	117.1	146.7	160.7	154.5	176.7	112.6	135.3	121.8	142.5	164.1	154.6
February	116.5	142.3	160.7	154.5	176.7	112.6	135.3	120.0	142.6	166.1	154.4
March	116.5	122.0	160.7	154.5	176.7	112.6	135.3	118.2	142.6	166.4	153.0
April	117.1	106.4	160.7	154.5	176.7	112.6	135.3	116.4	142.6	166.4	151.6
May	116.5	112.2	160.7	151.5	176.7	111.5	158.8	116.4	142.6	166.1	153.3
June	115.8	120.0	160.7	148.5	176.7	111.5	182.4	116.4	142.5	165.8	154.8
July	115.8	127.8	160.7	151.5	176.7	111.5	229.4	116.4	142.3	165.8	158.5
August	116.5	140.0	160.7	157.6	176.7	112.6	235.3	120.0	142.5	165.4	160.2
September	117.1	153.6	160.7	160.6	176.7	111.5	229.4	121.8	142.6	165.1	160.8
October	115.8	168.1	158.9	157.6	176.7	111.5	223.5	121.8	142.6	164.8	160.5
November	113.9	183.5	158.9	157.6	176.7	111.5	223.5	121.8	142.3	162.1	159.7
December	111.4	182.0	158.9	154.5	180.0	110.3	223.5	120.0	142.8	155.4	158.0
1930: January	108.9	160.6	158.9	154.5	180.0	110.3	229.4	120.0	143.4	147.0	155.4
February	108.2	136.8	157.1	154.5	176.7	110.3	229.4	118.2	143.2	143.3	153.0
March	107.0	102.3	157.1	151.5	176.7	109.2	229.4	116.4	142.8	140.6	150.1
April	106.3	100.0	157.1	148.5	176.7	110.3	241.2	114.5	142.5	138.9	151.2
May	105.7	97.7	157.1	145.5	176.7	109.2	252.9	114.5	142.5	137.2	150.1
June	105.1	97.4	157.1	145.5	176.7	109.2	247.1	110.9	143.0	136.2	144.0
July	103.2	101.7	157.1	139.4	176.7	109.2	194.1	110.9	142.6	135.6	147.9
August	104.4	112.5	155.4	136.4	176.7	109.2	182.4	110.9	142.3	134.6	143.7
September	110.8	124.9	155.4	133.3	176.7	110.3	188.2	107.3	142.1	132.6	145.6
October	112.0	129.9	153.6	130.3	176.7	109.2	182.4	105.5	141.9	131.2	144.4
November	110.8	140.3	151.8	127.3	173.3	106.9	170.6	107.3	141.2	129.9	141.4

<sup>1</sup> 22 articles in 1913-1920; 42 articles in 1921-1930.

### Comparison of Retail Food Costs in 51 Cities

TABLE 5 shows for 39 cities the percentage of increase or decrease in the retail cost of food<sup>3</sup> November, 1930, compared with the average cost in the year 1913, in November, 1929, and October, 1930. For 12 other cities comparisons are given for the 1-year and the 1-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average consumption of these articles in each city.<sup>4</sup>

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of November, 99.4 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 44 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, Boston, Bridgeport, Buffalo, Butte, Chicago, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Houston, Indianapolis, Jacksonville, Kansas City, Little Rock, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Newark, New Haven, New Orleans, New York, Norfolk, Omaha, Peoria, Pittsburgh,

<sup>3</sup> For list of articles see note 1, p. 233.

<sup>4</sup> The consumption figures used for January, 1913, to December, 1920, for each article in each city are given in the Labor Review for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the Labor Review for March, 1921, p. 26.

Portland (Me.), Portland (Oreg.), Providence, Richmond, Rochester, St. Louis, St. Paul, Salt Lake City, San Francisco, Savannah, Scranton, Seattle, Springfield (Ill.), and Washington.

TABLE 5.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN NOVEMBER, 1930, COMPARED WITH THE COST IN OCTOBER, 1930, NOVEMBER, 1929, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase November, 1930, compared with 1913	Percentage decrease November, 1930, compared with—		City	Percentage increase November, 1930, compared with 1913	Percentage decrease November, 1930, compared with—	
		November, 1929	October, 1930			November, 1929	October, 1930
Atlanta	41.4	11.8	2.8	Minneapolis	43.3	10.5	1.7
Baltimore	46.0	10.8	2.3	Mobile		7.9	2.1
Birmingham	43.7	11.5	2.5	Newark	39.7	9.8	2.5
Boston	47.3	9.4	1.1	New Haven	48.0	9.7	0.7
Bridgeport		10.2	1.8	New Orleans	39.4	12.2	2.5
Buffalo	46.4	11.1	2.1	New York	47.1	10.1	1.4
Butte		14.6	2.1	Norfolk		11.3	0.9
Charleston, S. C.	45.5	10.4	2.5	Omaha	34.6	11.3	1.5
Chicago	52.5	10.6	2.6	Peoria		11.5	2.3
Cincinnati	49.9	10.0	2.0	Philadelphia	45.5	11.2	1.1
Cleveland	37.1	11.2	1.6	Pittsburgh	41.5	11.9	3.4
Columbus		10.4	1.9	Portland, Me.		10.3	1.2
Dallas	42.4	9.7	0.2	Portland, Oreg.	24.2	16.3	3.2
Denver	26.3	11.4	1.8	Providence	45.3	10.7	1.1
Detroit	39.4	15.3	4.5	Richmond	46.5	11.0	2.5
Fall River	41.6	10.5	1.2	Rochester		12.0	3.0
Houston		11.9	2.9	St. Louis	42.2	12.7	3.0
Indianapolis	39.0	11.8	1.9	St. Paul		11.5	2.8
Jacksonville	34.7	8.5	2.1	Salt Lake City	21.3	13.1	2.9
Kansas City	37.1	12.7	1.9	San Francisco	43.1	9.9	0.9
Little Rock	36.0	11.8	2.6	Savannah		12.4	3.1
Los Angeles	28.2	14.4	2.8	Scranton	48.3	12.2	1.8
Louisville	36.1	13.2	2.0	Seattle	33.9	12.7	1.7
Manchester	40.6	10.7	1.8	Springfield, Ill.		9.7	1.3
Memphis	33.9	12.1	2.7	Washington	49.9	9.2	3.6
Milwaukee	43.1	11.9	2.4				

### Retail Prices of Coal in November, 1930<sup>1</sup>

THE following table shows the average retail prices of coal on November 15, 1929, and October 15 and November 15, 1930, 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.

<sup>1</sup> Prices of coal were formerly secured semiannually and published in the March and September issues of the Labor Review. Since June, 1920, these prices have been secured and published monthly.

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 NOVEMBER 15, 1929, AND OCTOBER 15 AND NOVEMBER 15, 1930

City, and kind of coal	1929			1930		
	Nov. 15	Oct. 15	Nov. 15	Nov. 15	Oct. 15	Nov. 15
United States:						
Pennsylvania anthracite—						
Stove—						
Average price.....	\$15.31	\$15.13	\$15.14			
Index (1913=100).....	198.2	195.8	196.0			
Chestnut—						
Average price.....	\$14.98	\$14.87	\$14.90			
Index (1913=100).....	189.3	187.9	188.2			
Bituminous—						
Average price.....	\$9.00	\$8.88	\$8.94			
Index (1913=100).....	165.6	163.3	164.6			
Atlanta, Ga.:						
Bituminous, prepared sizes.....	\$7.80	\$7.47	\$7.60			
Baltimore, Md.:						
Pennsylvania anthracite—						
Stove.....	14.25	14.25	14.25			
Chestnut.....	13.75	13.75	13.75			
Bituminous, run of mine—						
High volatile.....	7.82	7.89	7.96			
Birmingham, Ala.:						
Bituminous, prepared sizes.....	7.62	7.51	7.45			
Boston, Mass.:						
Pennsylvania anthracite—						
Stove.....	16.00	16.25	16.25			
Chestnut.....	15.50	15.75	15.75			
Bridgeport, Conn.:						
Pennsylvania anthracite—						
Stove.....	15.50	14.75	14.75			
Chestnut.....	15.50	14.75	14.75			
Buffalo, N. Y.:						
Pennsylvania anthracite—						
Stove.....	13.77	13.79	13.81			
Chestnut.....	13.32	13.29	13.31			
Butte, Mont.:						
Bituminous, prepared sizes.....	11.17	10.70	10.71			
Charleston, S. C.:						
Bituminous, prepared sizes.....	9.67	9.67	9.67			
Chicago, Ill.:						
Pennsylvania anthracite—						
Stove.....	16.85	16.38	16.38			
Chestnut.....	16.40	16.28	16.28			
Bituminous—						
Prepared sizes—						
High volatile.....	8.45	8.09	8.09			
Low volatile.....	12.35	11.96	11.96			
Run of mine—						
Low volatile.....	8.25	8.00	8.00			
Cincinnati, Ohio:						
Bituminous—						
Prepared sizes—						
High volatile.....	6.20	6.30	6.30			
Low volatile.....	8.63	8.53	8.53			
Cleveland, Ohio:						
Pennsylvania anthracite—						
Stove.....	15.22	14.50	14.56			
Chestnut.....	14.80	14.25	14.31			
Bituminous—						
Prepared sizes—						
High volatile.....	7.05	6.86	6.61			
Low volatile.....	9.97	9.80	9.86			
Columbus, Ohio:						
Bituminous—						
Prepared sizes—						
High volatile.....	5.95	6.02	6.13			
Low volatile.....	8.31	7.75	8.13			
Dallas, Tex.:						
Arkansas anthracite—Egg—	\$15.75	\$15.00	\$15.00			
Bituminous, prepared sizes.....	12.83	12.58	12.58			
Denver, Colo.:						
Colorado anthracite—						
Furnace, 1 and 2 mixed....	14.75	15.25	15.25			
Stove, 3 and 5 mixed.....	14.75	15.25	15.25			
Bituminous, prepared sizes.....	10.34	10.29	10.27			
Detroit, Mich.:						
Pennsylvania anthracite—						
Stove.....	16.00	15.00	15.00			
Chestnut.....	15.50	15.00	15.00			
Bituminous—						
Prepared sizes—						
High volatile.....	8.39	8.00	7.96			
Low volatile.....	10.36	9.77	9.96			
Run of mine—						
Low volatile.....	8.00	7.83	7.92			
Fall River, Mass.:						
Pennsylvania anthracite—						
Stove.....	16.50	16.50	16.50			
Chestnut.....	16.25	16.25	16.25			
Houston, Tex.:						
Bituminous, prepared sizes.....	12.20	12.20	12.00			
Indianapolis, Ind.:						
Bituminous—						
Prepared sizes—						
High volatile.....	6.20	5.90	5.98			
Low volatile.....	9.04	8.75	9.13			
Run of mine—						
Low volatile.....	7.25	7.05	7.05			
Jacksonville, Fla.:						
Bituminous, prepared sizes.....	14.00	10.00	10.75			
Kansas City, Mo.:						
Arkansas anthracite—						
Furnace.....	12.45	12.44	12.44			
Stove No. 4.....	13.58	13.58	13.50			
Bituminous, prepared sizes.....	7.23	6.93	6.86			
Little Rock, Ark.:						
Arkansas anthracite—Egg—	13.50	13.00	13.00			
Bituminous, prepared sizes.....	10.00	9.70	10.05			
Los Angeles, Calif.:						
Bituminous, prepared sizes.....	16.50	16.50	16.50			
Louisville, Ky.:						
Bituminous—						
Prepared sizes—						
High volatile.....	6.66	6.37	6.27			
Low volatile.....	9.00	8.75	8.75			
Manchester, N. H.:						
Pennsylvania anthracite—						
Stove.....	17.00	16.83	16.83			
Chestnut.....	17.00	16.83	16.83			
Memphis, Tenn.:						
Bituminous, prepared sizes.....	7.39	7.87	7.85			
Milwaukee, Wis.:						
Pennsylvania anthracite—						
Stove.....	16.30	15.75	15.75			
Chestnut.....	15.85	15.41	15.50			
Bituminous—						
Prepared sizes—						
High volatile.....	7.68	7.68	7.68			
Low volatile.....	10.99	10.63	10.68			
Minneapolis, Minn.:						
Pennsylvania anthracite—						
Stove.....	18.30	16.92	17.05			
Chestnut.....	17.85	16.83	17.05			

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON NOVEMBER 15, 1929, AND OCTOBER 15 AND NOVEMBER 15, 1930—Continued

City, and kind of coal	1929			1930			City, and kind of coal	1929			1930		
	Nov. 15	Oct. 15	Nov. 15	Nov. 15	Oct. 15	Nov. 15		Nov. 15	Oct. 15	Nov. 15	Nov. 15	Oct. 15	Nov. 15
Minneapolis, Minn.—Contd.							Richmond, Va.—Contd.						
Bituminous—							Bituminous—						
Prepared sizes—							Prepared sizes—						
High volatile.....	\$10.52	\$9.81	\$10.01				High volatile.....	\$8.38	\$8.75	\$8.75			
Low volatile.....	13.65	12.63	12.63				Low volatile.....	9.11	9.37	9.87			
Mobile, Ala.:							Run of mine—						
Bituminous, prepared sizes.	9.50	9.23	9.60				Low volatile.....	7.25	7.25	7.50			
Newark, N. J.:							Rochester, N. Y.:						
Pennsylvania anthracite—							Pennsylvania anthracite—						
Stove.....	13.96	13.90	13.90				Stove.....	14.75	14.75	14.75			
Chestnut.....	13.46	13.40	13.40				Chestnut.....	14.25	14.25	14.25			
New Haven, Conn.:							St. Louis, Mo.:						
Pennsylvania anthracite—							Pennsylvania anthracite—						
Stove.....	14.96	14.90	14.90				Stove.....	16.70	16.23	16.20			
Chestnut.....	14.96	14.90	14.90				Chestnut.....	16.45	15.98	15.95			
New Orleans, La.:							Bituminous, prepared sizes.	6.75	6.29	6.36			
Bituminous, prepared sizes.	10.96	10.43	10.93				St. Paul, Minn.:						
New York, N. Y.:							Pennsylvania anthracite—						
Pennsylvania anthracite—							Stove.....	18.30	16.90	16.90			
Stove.....	14.54	14.08	14.17				Chestnut.....	17.85	16.90	16.90			
Chestnut.....	14.08	13.58	13.67				Bituminous—						
Norfolk, Va.:							Prepared sizes—						
Pennsylvania anthracite—							High volatile.....	10.26	9.75	9.58			
Stove.....	14.00	15.00	15.00				Low volatile.....	13.65	12.80	12.65			
Chestnut.....	14.00	15.00	15.00				Salt Lake City, Utah:						
Bituminous—							Bituminous, prepared sizes.	7.93	8.41	8.49			
Prepared sizes—							San Francisco, Calif.:						
High volatile.....	7.25	7.38	7.38				New Mexico anthracite—						
Low volatile.....	9.00	10.00	10.00				Cerrillos egg.....	26.00	26.00	26.00			
Run of mine—							Colorado anthracite—						
Low volatile.....	6.83	7.00	7.00				Egg.....	25.50	25.50	25.50			
Omaha, Nebr.:							Bituminous, prepared sizes.	17.13	16.88	17.00			
Bituminous, prepared sizes.	9.61	9.79	9.68				Savannah, Ga.:						
Peoria, Ill.:							Bituminous, prepared sizes.	4 10.44	4 9.87	4 10.53			
Bituminous, prepared sizes.	6.72	6.44	6.39				Scranton, Pa.:						
Philadelphia, Pa.:							Pennsylvania anthracite—						
Pennsylvania anthracite—							Stove.....	10.28	10.18	10.18			
Stove.....	2 15.00	13.96	14.00				Chestnut.....	9.92	9.88	9.88			
Chestnut.....	2 14.50	13.46	13.50				Seattle, Wash.:						
Pittsburgh, Pa.:							Bituminous, prepared sizes.	10.68	10.68	10.68			
Pennsylvania anthracite—							Springfield, Ill.:						
Chestnut.....	15.00	14.50	14.50				Bituminous, prepared sizes.	4.34	4.34	4.34			
Bituminous, prepared sizes.	5.29	4.91	5.00				Washington, D. C.:						
Portland, Me.:							Pennsylvania anthracite—						
Pennsylvania anthracite—							Stove.....	2 15.73	2 15.73	2 15.73			
Stove.....	16.80	16.80	16.80				Chestnut.....	2 15.23	2 15.23	2 15.23			
Chestnut.....	16.80	16.80	16.80				Bituminous—						
Portland, Oreg.:							Prepared sizes—						
Bituminous, prepared sizes.	13.46	13.27	13.18				High volatile.....	2 8.63	2 8.63	2 8.63			
Providence, R. I.:							Low volatile.....	2 11.42	2 11.43	2 11.43			
Pennsylvania anthracite—							Run of mine—						
Stove.....	3 16.00	3 16.00	3 16.00				Mixed.....	2 7.75	2 7.81	2 7.81			
Chestnut.....	3 16.00	3 16.00	3 16.00										
Richmond, Va.:													
Pennsylvania anthracite—													
Stove.....	15.00	15.00	15.00										
Chestnut.....	15.00	15.00	15.00										

<sup>2</sup> Per ton of 2,240 pounds.

<sup>3</sup> The average price of coal delivered in bin is 50 cents higher than here shown. Practically all coal is delivered in bin.

<sup>4</sup> 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.

### 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.....	42 foods	29 foods	56 (foods, etc.)	29 foods	53 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
1924									
January.....	146	145	480	836	194	1089	<sup>1</sup> 401	376	127
April.....	138	137	498	829	-----	1035	<sup>1</sup> 395	380	123
July.....	140	134	493	837	200	1052	<sup>1</sup> 401	360	126
October.....	145	139	513	877	-----	1156	<sup>1</sup> 428	383	134
1925									
January.....	151	145	521	899	215	1130	<sup>1</sup> 442	408	137
April.....	148	142	506	901	-----	1137	<sup>1</sup> 435	409	144
July.....	156	141	509	916	210	1145	<sup>1</sup> 451	421	154
October.....	158	147	533	875	-----	1165	<sup>1</sup> 471	433	151
1926									
January.....	161	157	527	854	177	1090	<sup>1</sup> 503	480	143
April.....	159	153	529	832	-----	1085	<sup>1</sup> 523	503	142
July.....	154	149	637	876	159	1105	<sup>1</sup> 610	574	145
October.....	157	147	705	888	-----	1126	<sup>1</sup> 647	624	145
1927									
January.....	156	153	755	914	156	1092	<sup>1</sup> 586	592	151
April.....	150	146	774	923	152	1069	<sup>1</sup> 572	580	150
July.....	150	147	790	962	153	1102	<sup>1</sup> 553	557	157
October.....	153	148	804	907	152	1156	<sup>1</sup> 526	520	152
1928									
January.....	152	151	813	913	152	1126	<sup>1</sup> 522	530	152
April.....	149	146	807	905	152	1119	<sup>1</sup> 530	532	151
July.....	150	146	811	943	153	1155	<sup>1</sup> 536	<sup>2</sup> 111	154
October.....	153	152	834	907	146	1183	<sup>1</sup> 562	<sup>2</sup> 115	152
1929									
January.....	151	152	856	900	147	1156	-----	<sup>2</sup> 122	153
February.....	151	150	859	911	-----	1141	<sup>2</sup> 117	<sup>2</sup> 122	156
March.....	150	151	862	913	-----	1135	-----	<sup>2</sup> 123	159
April.....	148	148	860	901	150	1118	-----	<sup>2</sup> 125	154
May.....	150	147	864	906	-----	1104	<sup>2</sup> 118	<sup>2</sup> 127	154
June.....	151	147	867	907	-----	1103	-----	<sup>2</sup> 127	154
July.....	155	148	874	925	149	1116	-----	<sup>2</sup> 123	156
August.....	157	157	879	900	-----	1131	<sup>2</sup> 118	<sup>2</sup> 123	155
September.....	157	157	889	886	-----	1128	-----	<sup>2</sup> 122	154
October.....	157	157	894	879	146	1137	-----	<sup>2</sup> 124	154
November.....	156	158	897	880	-----	1123	<sup>2</sup> 120	<sup>2</sup> 125	153
December.....	155	159	897	880	-----	1090	-----	<sup>2</sup> 125	152
1930									
January.....	152	160	895	872	145	1048	-----	<sup>2</sup> 124	150
February.....	150	159	890	865	-----	1022	<sup>2</sup> 118	<sup>2</sup> 121	148
March.....	147	157	879	853	-----	1006	-----	<sup>2</sup> 120	145
April.....	148	151	870	851	140	975	-----	<sup>2</sup> 119	143
May.....	147	151	867	852	-----	945	<sup>2</sup> 116	<sup>2</sup> 120	142
June.....	145	150	866	865	-----	937	-----	<sup>2</sup> 120	143
July.....	141	147	869	886	137	969	-----	<sup>2</sup> 122	146
August.....	141	144	872	857	-----	995	-----	<sup>2</sup> 127	145
September.....	142	140	-----	839	-----	976	<sup>2</sup> 127	<sup>2</sup> 129	142

<sup>1</sup> For succeeding month.

<sup>2</sup> In gold.

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

Country...	Italy	Netherlands (The Hague)	Norway	Sweden	Switzerland	United Kingdom	South Africa	India (Bombay)	Australia	New Zealand
Number of localities...	47	1	31	49	33	630	9	1	30	25
Commodities included...	20 foods and charcoal	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	1921	July, 1914	July, 1914	July, 1914	July, 1919	1914	July, 1914	July, 1914	July, 1914
1924										
January.....	527	<sup>3</sup> 82.5	230	163	173	175	120	154	155	150
April.....	527	<sup>3</sup> 81.7	240	159	169	167	122	143	150	150
July.....	538	<sup>3</sup> 80.8	248	159	170	162	117	151	148	148
October.....	556	<sup>3</sup> 82.3	264	172	174	172	120	156	146	145
1925										
January.....	609	<sup>3</sup> 80.2	277	170	172	178	120	152	148	147
April.....	606	<sup>3</sup> 86.7	276	170	169	170	124	153	152	149
July.....	605	<sup>3</sup> 81.3	260	169	169	167	120	152	156	151
October.....	645	<sup>3</sup> 79.3	228	166	168	172	119	148	157	155
1926										
January.....	658	<sup>3</sup> 76.6	216	162	165	171	116	151	155	154
April.....	633	<sup>3</sup> 80.1	198	158	161	159	119	150	163	151
July.....	645	<sup>3</sup> 73.5	198	156	159	161	117	155	159	149
October.....	662	<sup>3</sup> 75.7	191	157	160	163	120	153	153	147
1927										
January.....	629	<sup>3</sup> 76.3	180	156	158	167	116	155	158	148
April.....	606	<sup>3</sup> 77.0	169	151	156	155	119	151	151	145
July.....	540	<sup>3</sup> 76.5	175	151	157	159	119	154	152	144
October.....	530	<sup>3</sup> 79.5	173	155	159	161	119	148	159	143
1928										
January.....	531	<sup>3</sup> 81.6	170	153	159	162	119	151	154	147
April.....	522	<sup>3</sup> 79.4	171	154	156	155	119	140	154	144
July.....	516	<sup>3</sup> 76.2	173	157	157	157	116	143	152	147
October.....	536	<sup>3</sup> 75.5	163	153	158	157	115	142	150	149
1929										
January.....	565	-----	158	150	157	159	115	146	161	149
February.....	565	-----	157	151	157	156	115	146	161	148
March.....	571	76.0	158	152	156	157	117	146	160	146
April.....	566	-----	156	150	154	150	119	145	162	147
May.....	563	-----	156	149	154	149	119	143	160	148
June.....	564	73.2	156	149	155	147	118	144	161	147
July.....	558	-----	157	151	155	149	116	145	160	146
August.....	553	-----	161	151	156	153	115	146	161	146
September.....	547	74.5	160	151	158	154	114	146	162	147
October.....	546	-----	160	150	158	156	113	147	165	147
November.....	551	-----	159	148	157	159	112	147	164	147
December.....	554	73.1	157	147	157	159	112	148	155	147
1930										
January.....	548	-----	156	145	155	157	112	145	153	146
February.....	536	-----	154	144	154	154	111	143	151	145
March.....	525	69.7	152	142	153	150	111	139	151	144
April.....	522	-----	152	140	152	143	113	138	151	144
May.....	510	-----	151	140	150	140	113	137	150	144
June.....	509	68.8	151	140	151	138	112	137	149	143
July.....	507	-----	151	140	152	141	109	136	147	143
August.....	506	-----	151	139	152	144	108	133	146	141
September.....	508	-----	151	139	152	144	107	134	-----	140

<sup>3</sup> Second month following.

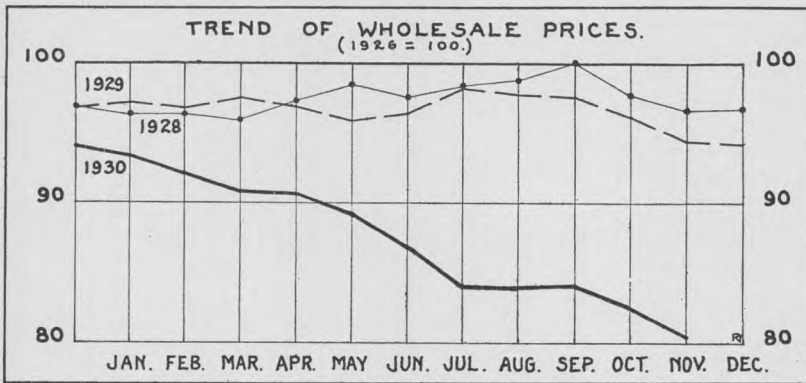


### Index Numbers of Wholesale Prices in November, 1930

THE course of wholesale prices was downward in November, according to the index number computed by the Bureau of Labor Statistics of the United States Department of Labor. This index number, which includes 550 price quotations weighted according to the importance of each article and based on prices in 1926 as 100.0, declined from 82.6 in October to 80.4 in November, a decrease of over 2½ per cent. The purchasing power of the 1926 dollar was \$1.244.

Farm products as a group decreased 4 per cent from the October level, due to lower prices for all grains, beef cows, calves, hogs, poultry, beans, flaxseed, oranges, and potatoes. Beef steers, sheep and lambs, cotton, eggs, alfalfa hay, and onions, on the other hand, averaged higher.

Foods were ¾ per cent lower than in October, with declines in butter, fresh pork, dressed poultry, veal, coffee, flour, corn meal, and most canned vegetables. Raw and granulated sugar were somewhat higher than in the month before. Practically no change in price was reported for fresh beef, cured pork, cured fish, canned and dried fruits, and bakery products.



Hides and skins showed a further pronounced price drop, while leather also declined. No change was reported for boots and shoes and other leather products.

In the group of textile products there was a slight increase among cotton goods. Silk and rayon, woolen and worsted goods, and other textile products, on the contrary, were downward.

Anthracite and bituminous coal and coke showed no change in the general price level while petroleum products moved sharply downward, resulting in a decrease for fuel and lighting materials as a whole.

Among metals and metal products there was a slight decrease in iron and steel, also automobiles, while nonferrous metals advanced.

Building materials showed little change, as lumber, brick, cement, and certain paint materials declined slightly and other materials advanced.

Chemicals and drugs, including fertilizer materials and mixed fertilizers, were somewhat cheaper than in October.

House-furnishing goods were practically unchanged in price, but with a downward tendency.

In the group of miscellaneous commodities cattle feed moved sharply downward and crude rubber reacted upward from its recent low prices. Automobile tires were lower than in the preceding month, while paper and pulp were unchanged in price.

Raw materials as a whole averaged lower in November than in October, as did also finished products. Semimanufactured commodities, on the other hand, showed advancing tendency.

In the large group of nonagricultural commodities, including all articles other than farm products, and among all commodities other than farm products and foods November prices averaged lower than those of the month before.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES (1926=100.0)

Groups and subgroups	November, 1929	October, 1930	November, 1930	Purchasing power of the dollar November, 1930
All commodities.....	94.4	82.6	80.4	\$1.224
Farm products.....	101.1	82.6	79.3	1.261
Grains.....	94.9	72.1	64.0	1.563
Livestock and poultry.....	93.7	82.4	77.7	1.287
Other farm products.....	108.1	86.3	85.4	1.171
Foods.....	98.8	88.6	85.7	1.167
Butter, cheese, and milk.....	103.7	98.7	95.8	1.044
Meats.....	102.5	96.7	91.4	1.094
Other foods.....	94.5	79.8	78.4	1.276
Hides and leather products.....	108.4	96.5	94.0	1.064
Hides and skins.....	109.3	83.6	75.1	1.332
Leather.....	113.3	96.7	93.3	1.072
Boots and shoes.....	106.1	100.3	100.3	.997
Other leather products.....	106.1	104.2	104.2	.960
Textile products.....	91.5	73.8	73.3	1.364
Cotton goods.....	98.1	81.6	81.9	1.221
Silk and rayon.....	77.0	52.1	50.7	1.972
Woolen and worsted goods.....	95.7	83.6	83.2	1.202
Other textile products.....	76.1	59.0	57.9	1.727
Fuel and lighting materials.....	81.7	75.1	71.8	1.393
Anthracite coal.....	91.2	89.6	89.6	1.116
Bituminous coal.....	92.0	85.2	89.1	1.122
Coke.....	84.4	83.9	83.9	1.192
Gas.....	92.4	59.7	(1)	-----
Petroleum products.....	70.9	59.4	53.3	1.876
Metals and metal products.....	102.3	90.4	90.2	1.109
Iron and steel.....	96.5	88.6	88.3	1.133
Nonferrous metals.....	102.4	67.8	68.4	1.462
Agricultural implements.....	96.1	94.9	94.9	1.054
Automobiles.....	108.0	100.2	99.8	1.002
Other metal products.....	98.6	98.4	98.0	1.020
Building materials.....	96.0	85.8	85.6	1.168
Lumber.....	92.4	80.2	80.1	1.248
Brick.....	90.5	82.5	81.8	1.222
Cement.....	86.6	91.7	91.1	1.098
Structural steel.....	97.0	81.7	81.7	1.224
Paint materials.....	97.8	75.9	74.4	1.344
Other building materials.....	105.4	97.3	97.8	1.022
Chemicals and drugs.....	94.0	86.0	85.2	1.174
Chemicals.....	100.0	89.6	89.2	1.121
Drugs and pharmaceuticals.....	70.6	66.8	66.3	1.508
Fertilizer materials.....	89.9	83.6	82.1	1.218
Mixed fertilizers.....	97.4	92.9	91.1	1.098
House furnishing goods.....	97.1	95.3	95.2	1.050
Furniture.....	96.7	96.5	96.5	1.036
Furnishings.....	97.4	94.2	94.0	1.064
Miscellaneous.....	80.1	68.8	67.8	1.475
Cattle feed.....	124.1	89.6	83.0	1.205
Paper and pulp.....	87.9	83.5	83.5	1.198
Rubber.....	34.5	16.9	18.6	5.376
Automobile tires.....	55.0	52.0	51.3	1.949
Other miscellaneous.....	108.6	91.5	88.9	1.125
Raw materials.....	94.8	80.0	76.8	1.302
Semimanufactured articles.....	95.6	75.5	75.6	1.323
Finished products.....	94.2	85.6	83.7	1.195
Nonagricultural commodities.....	92.6	82.8	80.9	1.236
All commodities less farm products and foods.....	91.7	81.5	80.1	1.248

<sup>1</sup> Data not yet available.

# IMMIGRATION AND EMIGRATION

## Statistics of Immigration for October, 1930

By J. J. KUNNA, CHIEF STATISTICIAN UNITED STATES BUREAU OF IMMIGRATION

**D**URING October, 1930, 13,942 immigrant aliens were admitted to the United States, a decrease of 3,850, or 21.6 per cent, as compared with the preceding month, and 12,798, or 47.9 per cent, less than the number for October, 1929. The number of emigrant aliens leaving the country during October last to make their homes abroad again was 5,352, an increase of 252 over the previous month.

Immigration during the first four months of the current fiscal year shows a decline of 37,733, or 38.7 per cent, from that for the corresponding period of last year, the number of immigrants dropping from 97,606 admitted from July 1 to October 31, 1929, to 59,873 entering from July 1 to October 31, 1930. The drop for Europe was 16,447, or 30.8 per cent, while that from Canada was 14,725, or nearly 50 per cent, with a still larger proportionate decrease of 73 per cent in the case of Mexico. Immigration from the latter country has been reduced so drastically since the fiscal year 1929 that it is no longer a problem, the number of immigrant aliens admitted from Mexico dropping from an average of 3,346 a month during that year to 346 for the month of October, 1930. Canadian immigration is also rapidly declining, the monthly average number of immigrants coming from Canada dropping from 5,370 for the fiscal year 1929 and 5,292 for 1930 to 3,768 for the first four months of the present fiscal year. In October last, only 2,731 immigrant aliens were admitted who gave Canada as their last permanent residence. Over two-thirds of the immigrants now admitted from Canada and Mexico, as well as from Europe, are women and children under 16 years of age, and only 1 out of every 4 immigrants is a laborer or skilled worker.

About 87 per cent of the arrivals by water came in at New York, 37,830 immigrants having been admitted at that port during the four months from July to October last and 5,849 entered via the other seaports, while 14,558 entered over the international land border from Canada, and 1,636 from Mexico. Nearly two-thirds of these immigrants settled in the North Atlantic States, New York receiving the largest number by far, 22,307 immigrant aliens, or over one-third of the total for the said four months, giving that State as their intended future permanent residence.

As to the sex of the 59,873 immigrants admitted during the four months from July to October, 1930, about 5 females arrived for every 4 males, the numbers being 26,115 and 33,758, respectively, while 9,811 were under 16 years of age, 14,545 ranged in age from 16 to 21 years, 16,762 from 22 to 29 years, 8,454 from 30 to 37 years, 3,483 from

38 to 44 years, and 6,818 from 45 to 55 years and over. The single immigrants numbered 38,032, while 19,308 were married at the time of arrival, 2,365 were widowed, and 168 were divorced.

## INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1 TO OCTOBER 31, 1930

Period	Inward					Aliens de- barred from enter- ing <sup>1</sup>	Outward					Aliens de- ported after land- ing <sup>2</sup>
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens de- parted	Total	
	Immig- rant	Non- immig- rant	Total				Emi- grant	Non- emi- grant	Total			
1930												
July.....	13,323	16,466	29,789	38,822	68,611	881	4,818	22,588	27,406	55,366	82,772	1,440
August.....	14,816	19,724	34,540	69,957	104,497	837	5,245	29,166	34,411	88,372	122,783	1,208
September.....	17,792	29,359	47,151	80,900	128,051	929	5,100	24,604	29,704	56,526	86,230	1,552
October.....	13,942	23,304	37,246	40,702	77,948	854	5,352	22,938	28,290	32,988	61,278	1,526
Total ..	59,873	88,853	148,726	230,381	379,107	3,501	20,515	99,296	119,811	233,252	353,063	5,726

<sup>1</sup> These aliens are not included among arrivals, as they were not permitted to enter the United States.

<sup>2</sup> These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

# PUBLICATIONS RELATING TO LABOR

## Official—United States

CALIFORNIA.—Mexican Fact-Finding Committee. *Report: Mexicans in California.* San Francisco, October, 1930. 214 pp.; maps, charts.

Reviewed in this issue.

IOWA.—Workmen's Compensation Service. *Ninth biennial report, for the period ending June 30, 1930, and report of decisions by the department and State courts.* Des Moines, 1930. 175 pp.

Reviewed in this issue.

NEW YORK CITY.—Department of Health. Noise Abatement Commission. *City noise. Report of the commission appointed to study noise in New York City and to develop means of abating it.* New York, 1930. 308 pp.; diagrams, illus.

The report includes a general discussion of the noise problem and of the effects of noise on human beings and a report of the measurement of various kinds of noises in the streets and indoors in New York City, and suggests practical remedies. The appendix contains articles by several authorities on the subject.

NORTH CAROLINA.—Industrial Commission. *First annual report, 1929-30.* Raleigh, 1930. 43 pp.

Reviewed in this issue.

OHIO.—Department of Industrial Relations. Division of Labor Statistics. *Report No. 23: Statistics of mines and quarries in Ohio, 1929.* Columbus, 1930. 57 pp.; chart.

The report includes data for coal, fire-clay, and gypsum mines, and for limestone and sandstone quarries, on production, number of employees, and wages, and for coal mines, on fatal accidents.

— — — Division of Safety and Hygiene. *Accident prevention and first-aid suggestions.* Columbus, 1930. 67 pp.; diagrams, illus.

TEXAS.—Bureau of Labor Statistics. *Eleventh biennial report, 1929-1930.* Austin, 1930. 60 pp.

Certain data on wages and hours, taken from this report, are given in this issue of the Labor Review.

UNITED STATES.—Board of Mediation. *Annual report, for the fiscal year ended June 30, 1930.* Washington, 1930. 26 pp.

Reviewed in this issue.

— Congress. House of Representatives. *Report No. 1971: To provide for the advance planning and regulated construction of certain public works, for the stabilization of industry, and for aiding in the prevention of unemployment during periods of business depression.* Washington, 1930. In two parts, 5 and 4 pp. (71st Cong., 2d sess.)

— — — *Report No. 1594: Restriction of immigration from Republic of Mexico.* Washington, 1930. 12 pp. (71st Cong., 2d sess.)

— — — Committee on Immigration and Naturalization. *Immigration from Mexico. Hearing No. 71.2.13 (71st Cong., 2d sess.), May 15, 1930, on H. R. 12382.* Washington, 1930. 13 pp.

— — — *Quota preferences for certain immigrants. Hearing No. 71.2.3 (71st Cong., 2d sess.), January 21, 1930, on H. R. 7258.* Washington, 1930. 60 pp.; Supplement, 8 pp.

UNITED STATES.—Department of Commerce. *Eighteenth annual report of the Secretary of Commerce, for the fiscal year ended June 30, 1930.* Washington, 1930., *xliv*, 351 pp.; map, charts.

— Bureau of Foreign and Domestic Commerce. *Statistical abstract of the United States, 1930.* Washington, 1930. 876 pp.

— Department of Labor. *Eighteenth annual report of the Secretary of Labor for the fiscal year ended June 30, 1930.* Washington, 1930. 134 pp.

Reviewed in this issue.

— Bureau of Immigration. *Annual report, fiscal year ended June 30, 1930.* Washington, 1930. 267 pp.

— Bureau of Labor Statistics. *Annual report, fiscal year ended June 30, 1930.* 29 pp.

— — — *Bulletin No. 522: Wages and hours of labor in foundries and machine shops, 1929.* Washington, 1930. 153 pp.

Summary figures from this study were published in the Labor Review for February, 1930 (pp. 146-154).

— — — *Bulletin No. 524: Building permits in the principal cities of the United States in 1929.* Washington, 1930. 109 pp.

— — — *Bulletin No. 530: Proceedings of the seventeenth annual convention of the Association of Governmental Officials in Industry of the United States and Canada, Louisville, Ky., May 20-23, 1930.* Washington, 1930. 129 pp.

— Bureau of Naturalization. *Annual report, fiscal year ended June 30, 1930.* Washington, 1930. 40 pp.

— Children's Bureau. *Eighteenth annual report, fiscal year ended June 30, 1930.* Washington, 1930. 38 pp.

— Women's Bureau. *Bulletin No. 78: A survey of laundries and their women workers in 23 cities, by Ethel L. Best and Ethel Erickson.* Washington, 1930. 164 pp.; charts, illus.

Reviewed in this issue.

— — — *Bulletin No. 81: Industrial accidents to men and women, by Emily C. Brown.* Washington, 1930. 46 pp

Reviewed in this issue.

— — — *Twelfth annual report, fiscal year ended June 30, 1930.* Washington, 1930. 37 pp.

The reports of the several bureaus of the Department of Labor for the year ended June 30, 1930, are covered in the review of the Secretary's report in this issue. In addition, data on trends in the employment of children, 1927 to 1929, taken from the report of the Children's Bureau, are given in a separate article.

— Federal Farm Board. *Bulletin No. 1: Fruits and vegetables—guide for setting up local cooperative marketing associations, by Harry C. Hensley.* Washington, 1930. 28 pp.

Contains models for marketing agreements, articles of incorporation, and by-laws, as well as instructions as to how to go about organizing an association in this field.

— Treasury Department. Public Health Service. *Public health bulletin No. 185: Physiological response attending exposure to vapors of methyl bromide, methyl chloride, ethyl bromide, and ethyl chloride.* Washington, 1929. 56 pp.; charts, illus.

### Official—Foreign Countries

AMSTERDAM (NETHERLANDS).—Bureau van Statistiek. *Statistisch jaarboek der gemeente Amsterdam, 1929.* Amsterdam, 1930. 358 pp. (In Dutch and French.)

Contains statistical information in regard to the city of Amsterdam for 1929, including housing, sanitary conditions, employment service, unemployment, public works, hours of labor, industrial accidents, social insurance, etc.

AUSTRALIA.—Bureau of Census and Statistics. *Labor report, 1929 (No. 20). Canberra, 1930. 180 pp.*

Some data on wages and wage trends, taken from this report, are given in this issue of the Labor Review.

—Commissioner of Maternity Allowances. *Maternity allowances. Statement showing number of claims granted and rejected, expenditure, and cost of administration during the 12 months ended June 30, 1930. Canberra, 1930. 3 pp.*

During the year 128,598 claims were granted and 821 refused. More than half of the refusals were due to the fact that the mothers, being aliens, were not eligible for the benefit. The total amount paid in allowances during the year was £642,990 (\$3,129,111), and the cost of administration was £15,157 (\$73,762), or £2 7s. 2d. (\$11.45) to each £100 (\$487) paid in allowances.

—Commissioner of Pensions. *Invalid and old-age pensions. Statement for the 12 months ended June 30, 1930. Canberra, 1930. 10 pp.*

During the year covered, 22,575 old-age pensions were granted, and the number current rose from 145,393 on June 30, 1929, to 155,196 on June 30, 1930, an increase of 9,803 for the year. Of the pensions granted during the year, 11,215 were to men and 11,360 to women. On June 30, to each 10,000 of the population, as estimated at the close of 1929, there were 239.54 old-age and 97.70 invalid pensioners. The maximum pension in both cases is £52 (\$253) a year, or 40s. (\$9.73) a fortnight; the average pension received was, for old-age pensioners, 38s. 2.03d. (\$9.29) and for invalids, 39s. 0.07d. (\$9.49) per fortnight. The total expenditure during the year in pensions was £10,791,325 (\$52,515,983), and the cost of administration was £89,201 (\$434,097), or 16s. 6d. (\$4.01) for each £100 (\$487) paid in pensions. There has been a continuous fall in the proportionate cost of administration since 1922, the above figure being the lowest yet reached.

BRITISH GUIANA.—Economic Investigation Committee. *Report. Georgetown, 1930. 35 pp.*

Report of a committee appointed in March, 1930, "to investigate and report upon the extent of unemployment in the Colony [British Guiana], the causes of such unemployment, and to advise as to any measure by which it might be possible to find employment for those seeking it."

CHINA.—Ministry of Industry, Commerce, and Labor. *Three of the recent labor laws promulgated by the National Government. Nanking, 1930. 24 pp.*

Two of these acts have already been published in the Labor Review, the one on labor unions in the February, 1930, issue, and the factory law in the June, 1930, issue. The third act, on labor disputes, is an amendment to the conciliation and arbitration act which was published in the September, 1929, Review. In that number of the Review the date of the promulgation of the original act was erroneously given as June 9, 1929, the correct date being June 9, 1928.

GERMANY.—Statistisches Reichsamtsamt. *Jahrbuch der Berufsverbände im Deutschen Reiche, 1930. Berlin, 1930. 64\*, 288 pp.; charts. (52. Sonderheft zum Reichsarbeitsblatt.)*

The yearbook contains information in regard to the industrial organizations in Germany, including both employers' associations and labor unions. The first part contains histories of these organizations, and summary, charts, and statistical tables; and the second part reviews the organizations in detail.

GREAT BRITAIN.—Industrial Health Research Board. *Report No. 59: Sickness amongst operatives in Lancashire cotton spinning mills (with special reference to the card room), by A. Bradford Hill. London, 1930. 81 pp.*

This study was undertaken because of the complaint that card-room operatives in the cotton-spinning mills suffered excessively from respiratory diseases, but

no definite conclusion was reached as to whether present or earlier conditions were to blame. While the study showed that among the older workers there was an excessive number of cases of respiratory disease, it could not be shown that present working conditions were detrimental to health. Working conditions were materially altered in 1912 when localized exhaust ventilation for stripping was introduced and it was thought that the excess of respiratory disease found at the older ages might be due to the very dusty conditions in which these older operatives once worked.

GREATER SHANGHAI (CHINA).—Bureau of Social Affairs. *Strikes and lockouts in Greater Shanghai, 1929. Shanghai, 1930. 183 pp. (in Chinese) and 71 pp. (in English).*

HUNGARY.—Office Central Royal Hongrois de Statistique. *Annuaire statistique Hongrois, 1928. Budapest, 1930. 374 pp.*

Contains statistical information in regard to Hungary for 1928, the topics covered including education, unemployment, etc.

INTERNATIONAL LABOR OFFICE.—*Hours of work in coal mines (questionnaire). (Item II on agenda of International Labor Conference, 15th session, Geneva, May, 1931.) Geneva, 1930. 91 pp.*

— *Studies and reports, Series N (statistics), No. 16: Statistical methods for measuring occupational morbidity and mortality. Geneva, 1930. 208 pp.; charts.*

This report deals with the problems presented in developing adequate statistics of occupational diseases, and suggests possible methods to be followed. A variety of statistical tables on different diseases are used in illustration.

NETHERLANDS.—Rijksverzekeringsbank. *Ongevallenstatistiek, 1925, 1926. Amsterdam, 1930. 138 pp.*

A report on accident experience in the Netherlands in 1925 and 1926, under the compulsory and voluntary accident insurance laws of 1921 and 1922, covering, respectively, industrial workers and agricultural workers.

— *Ongevallenstatistiek. Betreffende het kalenderjaar 1928. I. Statistiek der Ondernemingen. Amsterdam [1930?]. 55\*, 103 pp.*

Contains statistics of accidents and insurance against accidents in the Netherlands in 1928.

QUEENSLAND (AUSTRALIA).—Insurance Office. *Fourteenth annual report, for the year ended June 30, 1930. Brisbane, 1930. 41 pp.*

Covers the year's work in the field of workmen's compensation, and in life, fire, marine, and miscellaneous accident insurance.

SOUTH AUSTRALIA (AUSTRALIA).—Statistical Office. *Statistical register, 1928-29. Adelaide, 1930. [Various paging.]*

Includes data relating to accidents, prices, production, and wages.

SPAIN.—Ministerio de Trabajo y Prevision. Servicio General de Estadística. *Anuario estadístico de España, 1928. Madrid, 1930. 711 pp.*

Certain wage data, taken from this annual, are given in this issue of the Labor Review.

STOCKHOLM (SWEDEN).—Statistiska Kontor. *Stockholms Stads Statistiska Kontor, 1905-1930. Några Minnesord av J. Guinchard. Stockholm, 1930. 85 pp., illus.*

Contains a review of the history and activities of the statistical office of the city of Stockholm, Sweden, from 1905 to 1930.

UKRAINE (SOVIET UNION (U. S. S. R.)).—Statistical Office. *Budgets of wage earners and salaried employees in 1928-29. Kharkof, 1930. 41 pp. (In Ukrainian).*

Contains a statistical review of the budgets (earnings and living expenses) of 258 families.



VICTORIA (AUSTRALIA).—Department of Labor. *Report of the chief inspector of factories and shops for the year ended December 31, 1929.* Melbourne, 1930. 47 pp.

Tables are included showing accidents, wages, etc.

### Unofficial

ALLGEMEINER DEUTSCHER GEWERKSCHAFTSBUND. *Die Tarifverträge in Deutschland, Ende 1929.* Berlin, 1930. 67 pp. (1. Sonderheft der Gewerkschafts-Zeitung.)

Contains information in regard to the trade agreements in force at the end of 1929 in Germany, classified by trades and occupations and by districts.

ANDREWS, JOHN B. *Major issues in labor law administration.* New York, American Association for Labor Legislation, 131 East 23d Street, 1930. 7 pp.

CARROLL, MOLLIE RAY. *Unemployment insurance in Germany.* Washington, The Brookings Institution, 1930. 140 pp.

This is a second edition of the study of the German unemployment insurance system which has been revised to include amendments and executive orders which have been enacted or issued during the year following the publication of the original study.

CASOLANI, HENRY. *Awake Malta, or The hard lesson of emigration.* Malta, Government Printing Office, 1930. 84 pp.

The author, who was formerly superintendent of emigration in Malta, is convinced that the only solution for the many complex problems confronting that island is a sound system of national organized emigration.

CIVIL-SERVICE ASSEMBLY OF THE UNITED STATES AND CANADA. *Report of technical committee on rules for the installation and administration of classification and compensation plans.* [Chicago, Fred Telford, secretary, 923 East 60th Street, 1930.] 40 pp. (Mimeographed.)

COMMITTEE ON THE COSTS OF MEDICAL CARE. *Miscellaneous contributions on the costs of medical care, No. 1: Institutional convalescence, by E. H. Lewinski Corwin.* Washington, 910 Seventeenth Street NW., 1930. 8 pp.

Reviewed in this issue.

— *Miscellaneous contributions on the costs of medical care, No. 2: The costs of medical care; Preliminary report, by Nathan Sinai and Margaret C. Klem.* Washington, 910 Seventeenth Street NW., 1930. 8 pp.

Reviewed in this issue.

COMMONS, JOHN R. *Representative advisory committees in labor law administration.* New York, American Association for Labor Legislation, 131 East 23d Street, 1930. 7 pp.

DEUTSCHE GESELLSCHAFT FÜR GEWERBEHYGIENE. *Schriften aus dem Gesamtgebiet der Gewerbehygiene, Neue Folge, Heft 18: Die Beseitigung der beim Tauch- und Spritzlackieren entstehenden Dämpfe, von Wenzel, Alvensleben, und Witt.* Berlin, 1930. 47 pp.; diagrams, illus.

Contains results of an investigation of and experiments in elimination of vapors and fumes in painting.

GRANT, MADISON, AND DAVISON, CHARLES STEWART, EDITORS. *The alien in our midst.* New York, Galton Publishing Co. (Inc.), 1930. 238 pp.

A compilation of extracts from the writings of a number of Americans on immigration and its results.

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HAMMOND, J. L. AND BARBARA. *The age of the Chartists, 1832-1854: A study of discontent.* New York, Longmans, Green & Co., 1930. 386 pp.

In two earlier works, dealing with the town laborer and the skilled laborer, the writers made a study of the social life, from 1760 to 1832, in the parts of England most affected by the first industrial revolution. The present volume carries on this study from the passage of the reform bill to the outbreak of the Crimean War. The authors emphasize that this is by no means intended as a history of the Chartist movement, but is an attempt "to describe the society that was brought to life by the great changes of the time; the spirit of that society; the first efforts to regulate its life, and the discontent that distinguished this phase of English history."

HEWES, AMY. *The contribution of economics to social work.* Published for New York School of Social Work by Columbia University Press, New York, 1930. 135 pp.

HOBSON, J. A. *Rationalization and unemployment—an economic dilemma.* London, George Allen & Unwin (Ltd.), 1930. 126 pp.

Recent improvements in technique and organization have made it possible, the author holds, to produce most kinds of goods and devices required for human consumption at a rate which is far outrunning the present power to purchase and consume them. The failure of the markets to expand in proportion to productive capacity is the crux of the situation, and the remedy must be sought through such an expansion.

"Living, as we do, in intimate contact with world industry and world markets, the only satisfactory escape from our present plight can be achieved by such improvements in the general distribution of income here and throughout the economic system as will place an increased proportion of the purchasing power in the hands of those who will use them in a general raising of the standard of life of the community. A better distribution and utilization of income is the only remedy for this failure of markets, or underconsumption, which shows itself as the direct cause of underproduction and unemployment."

IOWA, UNIVERSITY OF. Bureau of Business Research. *Iowa studies in business, No. VII: Industrial migration in the United States, 1914-1927*, by H. H. McCarty. Iowa City, 1930. 79 pp.; map, charts.

KIDDIER, WILLIAM. *The old trade-unions, from unprinted records of the brush-makers.* London, George Allen & Unwin (Ltd.), 1930. 245 pp.

An informal discussion of the doings of the brushmakers' associations in the days when trade-unions were illegal associations, their funds were outside the protection of the law, and their members had need to walk circumspectly or incur serious penalties.

KIRSCHBAUM, LOUIS. *Justice for organized workers.* Brooklyn, N. Y., P. O. Box 200, Station A, [1930?]. 96 pp.

MARSH, CHARLES FRANKLIN. *Trade-unionism in the electric light and power industry.* Urbana, Ill., University of Illinois Press, [1928?]. 204 pp. (Reprinted from University of Illinois studies in the social sciences, Vol. XVI, No. 2, pp. 115-318.)

MITCHELL, BROADUS, AND MITCHELL, GEORGE SINCLAIR. *The industrial revolution in the South.* Baltimore, Johns Hopkins Press, 1930. 298 pp.

Various papers, published at intervals from 1919 to 1930, dealing with different aspects of the problems presented by the change of the South to a new industrial and manufacturing economy.

PHILADELPHIA HOUSING ASSOCIATION. *Annual report: Housing in Philadelphia*, by Bernard J. Newman. Philadelphia, 311 S. Juniper Street, [1930?]. 48 pp.

Reviewed in this issue.

PRINCETON UNIVERSITY. Industrial Relations Section. *Memorandum: Employee rating scales.* Princeton, November, 1930. 23 pp. (Mimeographed.)

— Selected book list for the office library of an industrial relations executive. Princeton, 1930. 24 pp.

SOCIAL WORK YEAR BOOK, 1929. New York, Russell Sage Foundation, 1930. 600 pp.

This first issue of the Social Work Year Book, which the Russell Sage Foundation plans to publish biennially, is a record of organized efforts in the United States to deal with social problems, the problems themselves, in the words of the preface, being "discussed only to the extent that is necessary for an understanding of the forms of social work related to them. No problem or social condition is described unless some agency exists for its control, prevention, or study." The volume includes a directory of national social work agencies.

SPAHR, WALTER EARL, AND SWENSON, RINEHART JOHN. *Methods and status of scientific research, with particular application to the social sciences.* New York, Harper & Bros., 1930. 533 pp.

UNION SUISSE DES PAYSANS. *Rapport du secrétariat des paysans suisses. Recherches relatives à la rentabilité de l'agriculture pendant l'exercice 1928-29. Part I.* Brugg, 1929. 77 pp.

The annual report of the Swiss Agricultural Union for the year March 1, 1928, to February 28, 1929. It covers the various conditions affecting Swiss agriculture and contains statistics of production, costs, and income from different agricultural projects.



