



# MONTHLY LABOR REVIEW

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HUGH S. HANNA, *Editor*

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## *This Issue in Brief*

### *Governmental Labor Activity, 1913-38.*

THE United States Department of Labor on March 4, 1938, closes its first quarter century as an executive department of the United States Government. It was created at a time when the activities of governments in the interest of the workers were shifting from study of economic conditions to organizing machinery for regulation and to laying the ground work for broad social movements. In the intervening 25 years the work of the Department of Labor has expanded greatly, and numerous other agencies of the Federal Government now share with it the duty of carrying out the Federal program concerning workers. Corresponding expansion has taken place in State governments, through State departments of labor and industrial commissions administering and enforcing a greatly increased volume of legislation dealing with working conditions and industrial relations. Page 297.

### *Minimum Wages for Sugar-Beet Workers.*

WORKING and living conditions among laborers in the sugar-beet fields have long been recognized as being among the worst in industrial employment in the United States. The work is characterized by extremely low annual incomes, obtained from intermittent periods of intensive labor of whole families, by scarcity of supplementary work during off-seasons, and by widespread dependence of beet workers upon public relief during the winter months. By a Federal act of September 1937, Government benefits to growers of sugar beets and sugarcane were made contingent upon payment of minimum wage rates to be set by the Secretary of Agriculture as fair and reasonable, and on nonemployment of children. Page 322.

### *Hours Provided in Collective Agreements.*

A 40-HOUR maximum workweek is provided in a large majority of the union agreements now in effect in the United States. In several industries the maximum set by agreement is less than 40 hours, namely, the glass industry, with a 36-hour week for all but continuous processes; coal mining and fur manufacture, with a general 35-hour maximum; men's clothing, with a 36-hour week; women's clothing, with a prevailing 35-hour week; and newspaper publishing, where approximately two-thirds of the workers are on a working week of less than 40 hours. In retail-trade agreements, on the other hand, the 48-hour week predominates, and in such service industries as hotels and barbering the agreements frequently permit of a 60-hour and even longer workweek. Page 341.

### *Census of the Unemployed.*

IN THE National Unemployment Census of November 16-20, 1937, the voluntary registration of the unemployed totaled 7,822,912, of whom 2,001,877 were emergency relief workers. Among the 7,822,912 unemployed were 1,996,699 females. The enumerative test census which followed the voluntary registration indicated that this registration was only 72 percent complete. Allowing for such a variation would give a maximum total of 10,870,000 who considered themselves as unemployed. Persons who registered as partly employed and wanting more work numbered 3,209,211, including 567,551 females. The voluntary registration of the partly unemployed was only 57 percent complete, according to the subsequent test census. Page 355.

*Decline in Lead Poisoning.*

ONE of the most encouraging signs of progress in industrial sanitation and public health is the marked decline which has taken place in the occurrence of fatal lead poisoning in this and other countries. In the United States, the rate has declined from 2.5 deaths per million of population in 1900-1904 to 1.0 death per million in 1936, or 60 percent. Similar downward trends are shown for a number of other countries. The decline in industrial lead poisoning in this country is largely the result of improvement in sanitary conditions in factories, but is also due to the improved economic condition of the workmen, who receive higher wages, work shorter hours, and present a decidedly better type of physique than the workers of earlier years. Page 420.

*Cooperative Telephones, 1936.*

MORE than 460,000 subscribers were estimated to have utilized the services of cooperative telephone associations in 1936. This estimate was reached in a study by the Bureau of Labor Statistics in which it was found that this type of cooperative association was particularly numerous in the rural areas of the Middle West. The organizations varied widely in size, ranging from groups of some half dozen members, owning a single party line, upward to organizations of several thousand persons serving a whole county. Although telephone operation does not appear to be a field of business offering any great possibility of much future expansion, cooperatively, associations now in operation are rendering a necessary service at very moderate cost. Page 392.

*Limitations on Hours of Work of Men.*

IN 1937, two States—Pennsylvania and North Carolina—enacted comprehensive laws regulating the hours of labor of men in private employment. Prior to that time, there had been little legislation of general applicability except in the case of certain unhealthy or hazardous trades. The Pennsylvania law places the limitations at 44 hours per week, 8 hours a day, and 5½ days per week. It does not apply to agricultural labor, domestic servants, or persons in higher-paid executive or professional work. The North Carolina law limits the hours of labor of men to 10 per day and 55 per week. There are, however, a number of exceptions and the law does not apply to an employer of 8 or fewer employees. An article in this issue (p. 462) reviews all existing legislation in the United States on the subject of hours of labor for men.

*Paid Vacations in Latin America.*

TWELVE of the twenty Latin-American Republics now have in force legislation providing annual vacations with pay for one or more classes of employees. These are Argentina, Brazil, Chile, Colombia, Cuba, Haiti, Mexico, Panama, Peru, Salvador, Uruguay, and Venezuela. In 7 of the countries both salaried and wage-earning employees are benefited, while in the remaining 5 countries protection is more restricted. Domestic servants are specifically covered in the legislation of Chile and Peru. Ordinarily the qualifying period is 1 year. Vacations vary from a minimum of 4 to 6 days in Mexico to 30 days or a month in certain instances in Argentina, Panama, and Peru. Page 378.

# MONTHLY LABOR REVIEW

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## A QUARTER CENTURY OF GOVERNMENTAL LABOR ACTIVITY

By ESTELLE M. STEWART, *of the Bureau of Labor Statistics*

ON MARCH 4, 1913, President Taft, as his last official act as President of the United States, signed the bill creating the tenth executive department of the Government, the United States Department of Labor. The Department was to be under the administration of a member of the President's Cabinet, equal in rank and status with other executive branches of the Federal Government. On March 4, 1938, the Department of Labor thus closes its first quarter century of statutory existence, an occasion which makes peculiarly appropriate a review of the expansion and achievement in the entire field of Governmental activity, both State and National, in the interest of the American worker.

Rather more significance attaches to such a review, however, than the mere observance of the passing of a milestone that affords a convenient backward view. To a great degree President Taft's signing of the organic act creating a Federal agency devoted to the interests of American wage earners closed one era and opened another. Granting the element of arbitrariness in attaching dates to social movements, 1913 nevertheless stands out clearly in a backward view as a turning point in the movement to secure, through legislation and administrative public agencies, recognition of the rights and the needs of American workers and to take definite steps through those channels for the progressive improvement of working conditions and industrial relations.

Prior to 1913 agencies existed within the Federal Government for a limited degree of regulation and control of working conditions of specific classes of workers. In the larger industrial States regulatory labor laws, applying chiefly to women and children, were enforced by governmental bodies, but in general each type of law came under the administrative jurisdiction of an independent agency. But a great deal of the work of Federal and State Governments was in the direction

of fact-finding and exploratory trail-blazing through the ever-widening and increasingly complex social and industrial structure of a rapidly developing nation. Permanent fact-finding agencies existed in the bureaus of labor of the Federal Government and a large proportion of the States. Intensive surveys had been made by the Federal Government into the extent of employment and the working conditions of women and children, and into the social, industrial, and economic status of the immigrant population; and an exhaustive inquiry had been authorized into the underlying causes of industrial unrest and unsatisfactory industrial relations. Several States had set up commissions of inquiry into the problem of industrial accidents which had grown to proportions that demanded action, and some had enacted legislation for the compensation of injured workers and better control of work hazards.

As a social movement, however, all these efforts lacked direction and cohesiveness, and much of the legislation, particularly that dealing with workmen's compensation and minimum wages for women, was experimental. One of the important functions of the newly created Federal Department of Labor, as those who were prominent in securing its establishment saw it, was to correct this diffusion of effort and to coordinate and direct the scattered activities. Before a great deal could be accomplished, abnormal conditions produced first by the war in Europe and then by American entry into the World War had to be met, and governmental agencies to regulate and in some cases to control employment relations were created. Thus the focus of governmental activities in relation to the worker shifted from determining his status to regulating, in a measure, his conditions. The lessons that grew out of that experience were reflected in specific labor legislation and in the increase in the number and the responsibilities of administrative agencies during the years immediately following the World War. Successive developments which in their turn also tended to place upon government more and more concern for the welfare of the worker were industrial and technological expansion and change, the rapid shift from a national economy based on agriculture to one conditioned largely by industry, and, finally, depression and nation-wide unemployment and want.

During these 25 years of change the United States Department of Labor has expanded greatly. With the few antecedent governmental agencies also devoted to the interests of the worker, it has been joined by many others in the Federal Government serving the interests either of a special occupational group or of all groups in limited fields. Integrated departments of labor and other agencies in practically all States are now administering and enforcing the rapidly expanding volume of labor legislation that reflects the purpose of the American people to keep pace with change.

*Governmental Labor Activities Before 1913*

The first general demand upon governments by workers was for unbiased study and presentation of the actual conditions of hours, wages, safety, and health under which they were employed. This demand was met by creating bureaus of labor first in State governments, beginning in Massachusetts in 1869, and then in the Federal Government with the first Bureau of Labor, established in 1884, which became the Bureau of Labor Statistics of the new Department of Labor in 1913. This development was the result of an organized demand on the part of the Knights of Labor, which was successful to the point that by 1913 legislation had been enacted to create these fact-finding bodies in nearly three-fourths of the States. In the industrial States these were active agencies constantly assembling and presenting facts pertaining to working conditions upon which much of the early labor legislation was based.

*Beginnings of State labor departments.*

Enforcement of labor laws, before the movement for integrated State labor departments began about 1911, was either through existing agencies such as local school boards or police officers, or through separate agencies created to administer each type of law. Thus the laws establishing minimum wages for women and minors, for example, which were in operation in nine States in 1913, were administered by independent State bodies set up for that specific purpose.

Wisconsin launched the movement to center all State labor activities in one integrated State agency when it created its industrial commission in 1911. Massachusetts followed in 1912, with a statute establishing the State board of labor and industry which combined several functions but was still not all-inclusive. In 1913, New York reorganized its department of labor to include all activities in the interest of labor that fell within the province of the State at that time, and similar action was taken in Ohio and Kansas, and on a less comprehensive scale in Pennsylvania.

*Early safety movements.*

In certain other early activities of government in which workers' interests were involved, those interests were in fact incidental to the main purpose of the agency. In the case of railroad operation, the purpose was safety of the general public. The Interstate Commerce Commission was founded in 1887, but its regulatory authority over physical equipment and safety devices was not established until later, beginning with the law of 1893 dealing with automatic couplers. After that its control over safety hazards, hours, and working conditions was continuously and greatly extended. But it was not until 1914 that its activities in the interests of safety for the workers as

well as the traveling public were concentrated into one administrative unit, the Bureau of Safety.

*First mediation board.*

In 1898 under the terms of the Erdman Act, the Commissioner of Labor and the Chairman of the Interstate Commerce Commission were assigned the additional function of acting as a medium for the mediation, or in certain cases, the arbitration, of disputes between carriers and their employees. This *ex officio* body was the first permanent agency in the Federal Government to deal with labor relations. It continued to function in that field when called upon until the United States Board of Mediation and Conciliation was created in 1913.

*Health service for seamen.*

Government had discharged one specific function with regard to seamen practically from the beginning of the Republic, when the first step was taken which led ultimately to the establishment of the United States Public Health Service. The first marine hospital founded, maintained, and operated by the United States Government, was opened in Norfolk, Va., in 1800. Seventy years later the many marine hospitals which followed it were brought under the unified control of a special agency under the jurisdiction of the Secretary of the Treasury. This agency later was made responsible also for the medical examination of immigrants. Other governmental activities dealing with seamen were concerned in a limited way with safety, through the steamboat inspection service, established in 1838, and with employment contracts and relations through the shipping commissioners who were placed in the Bureau of Navigation by a law of 1872. However, a much wider acceptance of governmental responsibility in the welfare of American seamen came with the passage of the Seaman's Act of 1915.

*Welfare of miners.*

Another special group of workers who have traditionally been the beneficiaries of governmental intercession in their interests are miners. Mining safety has been the concern of both State and National Governments, expressed through State boards for the examination and licensing of supervisory personnel, and State departments of mines for the administration and enforcement of laws regulating hours, working conditions, and safety provisions for miners. In 1910 a Federal agency, the United States Bureau of Mines, was created for scientific research, experiment, and education and for the setting up of safety, health, and operating standards.

*Workmen's compensation movement.*

Although apparently quite fortuitously, the year 1913 also marks a definite change in the character of the movement to compensate injured victims of industrial accidents. The first phase of that movement was the appointment of commissions of inquiry. In the 4-year period 1909-12, 24 States created workmen's compensation commissions to investigate the extent of the problem and to make recommendations. Twelve of these were established in 1911. In that year workmen's compensation laws were enacted in 10 States, and in 1912 4 more States took legislative action on the problem. Thus by 1913, together with two States and the Federal Government which had passed compensation laws prior to 1911, 17 jurisdictions had studied the problem and had accepted the principle of compensation for industrial injury. However, up to that point, the movement seems to have been almost wholly analytical, and the reports of the investigative commissions dealt with the economics of the question and the desirability of the regulatory legislation rather than with the practical application and operation of measures for control. Similarly the first laws were apparently experimental. Of the 17 laws in existence in 1913, 13 were either materially changed by amendment in that year or replaced by new legislation. In 1913 also, seven new States were placed in the ranks of those dealing with industrial accidents through legislative enactment and administrative agencies.

*Governmental employment agencies.*

The task of helping workers to secure employment had been assumed as a governmental function prior to 1913 in many States, beginning with Ohio's pioneering effort in 1890. The Federal Government created placement machinery in 1907, chiefly for the purpose of diverting immigrant labor from the port of entry to points where employment opportunities were greater. While these activities constituted recognition of placement work as a legitimate governmental activity in the interest of the worker, and were a well-meaning effort, they were neither efficient nor conspicuously successful.

The first steps toward coordination and cooperation among the various State employment services were made in 1913, when the officials of the public employment offices in eight States formed an association. Labor shortage before and during the World War and marked evolution in the concept of governmental responsibility in helping workers to find work had produced, by 1938, a public employment service that differed radically from that represented by the men who organized the International Association of Public Employment Services in 1913.

*Regulation of woman and child labor.*

Except for special classes of male workers, labor legislation concerned with working hours and other conditions largely affected women and children. Hence, enforcement agencies were essentially specialized bureaus for the protection of women and children. Other functional agencies to promote the economic and industrial welfare of working women had not yet developed. The United States Children's Bureau, now a unit of the Department of Labor, was created in 1912. One of its first activities was to cooperate in an educational campaign which materially altered birth registration policies and procedures, a phase of vital statistics that has an important relation to child labor. It also set in motion the program of maternity and child welfare and the promotion of child labor standards, which have since been greatly expanded.

*Creation of the United States Department of Labor*

"We want a department in the Government of the United States that shall be distinctively a labor department, dealing with the labor questions and all that comes directly under that term," because wage earners "are the only people in all the country whose special rights and interests have no voice in the councils of the President." Thus Samuel Gompers, president of the American Federation of Labor in a Congressional hearing upon a bill to establish a department of labor<sup>1</sup> stated the position the organized labor movement had taken for nearly 50 years. "Surely," he added, "so vast a number of people" ought to have opportunity to "have the attention of the President of the United States in his councils for the purpose of determining questions" of vital concern to them. Organized labor had not been satisfied with the compromise legislation which, in 1903, created a Department of Commerce and Labor and made existing Federal labor agencies subordinate units under that department. In 1908 the Democratic platform contained a plank which pledged the Democratic Party "to the enactment of a law creating a Department of Labor represented by a Secretary in the President's Cabinet." The bill introduced in 1908 and again in 1910 by Representative Sulzer of New York was enacted into law, with modifying amendments, in 1913 (62d Cong., 3d sess.), under the leadership of Senator Borah of Idaho, Chairman of the Senate Committee on Education and Labor, and Representative William B. Wilson of Pennsylvania, chairman of the House Committee on Labor, without opposition and without a roll-call vote in either house. It was signed by President Taft on March 4, 1913, immediately before his term of office expired. A few hours later,

<sup>1</sup> U. S. House of Representatives, Committee on Labor, Subcommittee No. 2 (61st Cong.): Hearings on H. R. 3646, to establish Department of Labor. May 25, 1910, p. 10.

Representative Wilson, a former international secretary of the United Mine Workers, became the first Secretary of Labor under President Wilson. The purpose of the newly created governmental agency was declared in the organic act to be "to foster, promote, and develop the welfare of the wage earners of the United States, to improve their working conditions, and to advance their opportunities for profitable employment."

The act transferred to the new department all the units of the Department of Commerce and Labor that concerned workers, together with their statutory functions. These included the Bureau of Labor, which became the Bureau of Labor Statistics, the Bureau of Immigration and Naturalization, which was divided into two bureaus, each discharging its own statutory function, and the Children's Bureau. The enabling act specifically conferred power upon the Secretary of Labor "to act as mediator and to appoint commissioners of conciliation in labor disputes whenever in his judgment the interests of industrial peace may require it to be done."

#### *Objectives of sponsors.*

No set program of activity or endeavor was outlined in the organic act, and those who sponsored the creation of the new department made it clear that from their viewpoint the new agency should be left free to find its own range and develop its own field of greatest usefulness, subject to whatever legislative restrictions or mandates might be imposed by Congress. It is nonetheless interesting to note some of the fields of possible development that were suggested during the course of the passage of the bill, and their relation to present activities of the Department of Labor. Throughout the hearings and the brief discussions in Congress, and in the report of the House Committee on Labor the possibilities of the proposed agency as an instrument in the maintenance of industrial peace were strongly emphasized. At the hearing held on the earlier bill (H. R. 3646) on May 26, 1910, Arthur E. Holder, representing the American Federation of Labor, said that "we believe a department of labor would finally be able to evolve such a system" of peaceful adjustment of labor disputes "that we would all feel satisfied with the results." The House Committee on Labor stressed that aspect of potential usefulness of the agency it sought to create. Because "the friendly offices of some one who has the confidence of both sides to a controversy, when used intelligently and at the proper moment, can do more to bring contending parties together upon terms satisfactory to all concerned than any other policy that can be pursued," the Committee felt that authority to act in such a capacity, conferred upon a governmental agency, would be "of immense value in promoting industrial peace".<sup>2</sup>

<sup>2</sup> U. S. Senate (62d Cong., 2d sess.), Committee on Education and Labor. Report No. 973 (to accompany H. R. 22913), July 26, 1912.

The informational needs of workers and legislators specifically, and the educational value of information gathered to fill those needs, were also pointed out. Mr. Holder contended that "we should have a department that would know absolutely at all times what we were paying for commodities and what was being paid for labor." He reminded the Committee that "as legislators you are confronted with the great problem of the cost of living," and that, when "the question of wages comes along in with the cost of living" there was a dearth of up-to-date information. Moreover, "the productive value of American labor in comparison with the productive value of labor in other lands \* \* \* is one of the things we really do not know" and "is one of the facts that we want a department of this kind to ascertain so that we will know what we are talking about."

Another objective outlined at the hearing was that the Department of Labor should become "one of the influences and one of the means by which safety devices in factories could be studied and eventually standardized. \* \* \* We want to standardize factory safety devices," Mr. Holder declared. "Our States are floundering around in all kinds of ways, some making more headway than others."

Another witness saw, as "one of the great benefits of a labor department of this kind," a medium to correct a condition by which "in nearly all occupations, there is a considerable percentage of men out of employment at all times." A third discussed the improvement in the condition of workers employed on Government contracts that would follow if a Secretary of Labor, clothed with authority to investigate infractions of laws dealing with Government regulations, were made responsible for working conditions on Government work.

#### *Development of program.*

In the quarter century that has passed since the Department of Labor was founded, none of the objectives of its sponsors has been wholly lost sight of. Some of them are determining factors in its present and future program. The Conciliation Service, which grew out of an activity undertaken as soon as the Department was established in 1913, has been continuously vigilant in the effort to promote industrial peace. The Bureau of Labor Statistics pursues regular studies whose aims are identical with those mentioned 28 years ago as vital and which are today still vital. The Division of Labor Standards, an administrative unit of the Department of Labor established in 1934, is charged with stimulating and standardizing the safety and health activities of State departments of labor. A Nation-wide employment service directed and coordinated through the United States Employment Service, a statutory unit of the Department of Labor created in 1933, is of daily benefit to workers of all classes and occupations who are out of work.

Wages paid to building-trades men employed on Federal building projects were protected by the "prevailing wage rate" law enacted by Congress in 1931. In case of dispute as to what the prevailing wage rates in building construction are, the Secretary of Labor is authorized by the act to determine the rate in the locality where work is being done for the Government and to make a decision binding upon all parties. By legislative enactment in 1936 the Secretary of Labor was given wider powers in relation to employment conditions under Government contract for goods and services other than construction. This function is discharged through the latest functional unit of the Department, the Division of Public Contracts.

Working women were not represented in the hearings on the Sulzer bill, and their specific needs were not stressed. But the need and the value of specialized activities in their interest were demonstrated during the war. Accordingly, a demand arose for the continuance of the functional unit of the emergency war organization in the Department that was serving the needs of working women. Responding to that demand, Congress enacted a law in 1920 creating the Women's Bureau as the fifth statutory unit of the Department of Labor.

### *Governmental Labor Activities During the War*

#### *Department of Labor.*

The early development of the Department of Labor was materially affected first by war conditions in Europe and later by American participation in the World War. The Department had been in existence just 4 years when the United States entered the war. At the close of the fiscal year 1918 the Secretary of Labor declared in his annual report that "had the Department of Labor not existed at the beginning of the war, Congress would have been obliged to create such a department." Coordination of industrial activity on a war basis and the promulgation and maintenance of a national labor policy were imperative. Labor problems became the problems of the Government.

From a small agency consisting of four unrelated bureaus and the Office of the Secretary, through which conciliation and mediation activities were discharged, the Department evolved into a War Labor Administration composed of 13 separate bureaus and services and two functional boards. The War Labor Policies Board was created to harmonize administrative labor relations in the various branches of the Government concerned with production for war use. The War Labor Board was formed as a court of last resort to provide for the continuance of governmental intercession, after informal mediation efforts had failed, in industrial disputes involving war produc-

tion or "other fields of national activity, delays and obstructions in which might, in the opinion of the national board, affect detrimentally such production."

Other functional units of the War Labor Administration dealt with the special problems, working conditions, and employment relations of the great numbers of women recruited by industry to take the places of the men called into military service; with the determination and adoption of acceptable working conditions in the essential industries; with emergency housing and transportation facilities for Government employees and workers on Government contracts; and with the recruiting, distribution, and short-term training of labor.

#### *United States Railroad Administration.*

Outside the Department of Labor other governmental agencies were set up to deal with emergency problems affecting workers. The most important of these agencies, at least from the viewpoint of their measurable influence on postwar and present-day governmental activity in the interest of the workers, were those created as an adjunct to railroad operation under Government control. When shortly after the United States entered the war, the railroads passed into the control of the Government as represented by the United States Railroad Administration, a division of labor was created under the immediate direction of an administrator who had formerly been president of one of the railroad brotherhoods. Adjustment machinery was organized for each branch of railroad operation (train movement, shop, and maintenance and communication) which consisted of bipartisan boards representing management and labor in each branch. Procedure was largely that already in operation under collective agreements between the railroads and their organized employees, which provided for successive steps in the adjustment of controversies from local machinery at the point of origin through designated channels to the final adjustment boards. Under Federal control these boards became governmental agencies and the proviso was added that if they failed to reach a decision, final action was to lie with the Director General of the Railroad Administration whose decision was to be binding and enforceable. Special machinery was provided, through an assistant director of the division of labor, to handle disputes and grievances of unorganized railroad employees.

A board of railroad wages and working conditions was created to investigate and to hold hearings on complaints dealing with wages, working rules, and other conditions imposed by the decrees of the Railroad Administration. A women's service section in the division of labor was assigned the duty of carrying out decrees relating to the working conditions of the women who, in large numbers, were taking up wholly new lines of work in railroad operation. Among the policies

established by decree were those of equal pay for equal work and careful attention to the safety and health hazards involved in the occupations which women were entering for the first time.

*Other emergency labor agencies.*

Machinery similar to that dealing with railroad operation was set up in the United States Shipping Board for the adjustment of disputes in shipping. The Emergency Construction Commission was organized to handle labor affairs in the construction of army cantonments. The Shipbuilding Labor Adjustment Board not only dealt with grievances and controversies of various kinds, but undertook to equalize wage scales in the different shipbuilding centers, and to minimize labor turn-over and the practice of "labor stealing" which threatened production. Just before the armistice this board promulgated a wage order granting substantial increases in wages on the basis of the advance in the cost of living determined by a survey made at its request by the Bureau of Labor Statistics. Other wartime agencies which were compelled to deal with wages as part of their function to keep production moving attempted to equalize rates or maintain uniform scales, to prevent workers from shifting from job to job to secure higher wages and employers from offering extravagant wages to entice workers away from other plants. The Emergency Construction Commission ordered that union wages, hours of labor, and working conditions prevailing in each locality under its jurisdiction should be applied to all war construction jobs in that locality.

The record of achievement of all the emergency organizations hurriedly created to meet a condition which Government never had had to face before on so vast a scale was necessarily affected by the pressure and tension under which they functioned, and by the fact that the oldest of them had been in operation less than a year when the war ended. Some of them were scarcely organized before they were discontinued. Nevertheless an entirely new tenet of governmental responsibility toward the Nation's producers had become generally accepted, and much of the experience gained in dealing with the conditions produced by war was drawn on when the country again faced a national crisis in the depression.

*International Labor Conference, 1919*

One part of the treaty of peace that followed the war called for the establishment of an international agency devoted to the correction of conditions of labor in all countries that tended to produce industrial and social unrest. It provided also that the organization of this agency should take place at an initial meeting to be held in Washington, D. C., in October 1919.

This provision of the Versailles Treaty was acceded to and implemented by the Congress of the United States in a joint resolution approved August 15, 1919, authorizing the President "to convene and make arrangements for the organization of a general international labor conference to be held in Washington, D. C." The President designated the Secretary of Labor as his representative in the discharge of that obligation. The Secretary of Labor immediately sent a representative to London to work with representatives of foreign governments in making arrangements and planning the program and procedure for the first conference. Other representatives of the Department of Labor cooperated with the State Department in the administrative details involved in preparing for the international gathering.

On October 29, 1919, the Secretary of Labor opened the first international labor conference and was elected its president. In his opening address Secretary Wilson stressed the fact that "this institution," which became the International Labor Organization, "represents the first concerted effort on the part of the nations of the earth to deal with the problems of labor in a comprehensive manner."

Formal establishment of the International Labor Organization, membership in which was contingent upon ratification of the peace treaties by individual nations, did not come about until later. As a nonsignatory power, the United States did not, after the first conference, continue its relations with the International Labor Organization. By a later modification of the basis of membership, permitting nations not signatories to the treaties nor members of the League of Nations to join the International Labor Organization, the United States joined in 1934, and, as stated by the Secretary of Labor in 1936, "assumed through the Department of Labor full responsibility of active membership."

### *Government and Industrial Relations*

Outside the field of fact-finding the aspect of labor welfare that was first recognized as an obligation of government was the maintenance of industrial stability through intercession in labor disputes. Conciliation and mediation, and the promotion of voluntary arbitration have continued to be major objectives of governmental labor programs. Agencies for the purpose of bringing the weight and prestige of the State to bear on disturbed industrial relations are numerous and are steadily increasing in number and effectiveness.

As already pointed out, a conciliation service was organized within the United States Department of Labor immediately after the Department was created. At the close of the first full year of operation the Secretary of Labor stated in his second annual report (1914) that "of all the functions of the Department of Labor which it is yet possible to administer, this one may reasonably be regarded as the most im-

portant." Throughout the 25 years of the Department's existence it has continuously placed at the disposal of workers, employers, and the public, the impartial service of governmental representatives equally concerned with safeguarding the rights of all three groups. The Conciliation Service acts only upon the request of affected persons or groups. Its procedure is the simple one of bringing an unbiased viewpoint to bear upon the problem of accommodating conflicting attitudes. But the fact that its work is constantly expanding in response to calls made upon it is evidence of the value of the service it has, throughout its 25 years of endeavor, been able to perform.

Similar service is available through the medium of State labor departments in most of the industrial States. On the whole the policy of interceding only upon request is followed by the State agencies. In some instances, however, the law requires that the State, through its conciliation machinery, act at once to avert or to settle a strike. Evidence of the steadily increasing importance and prestige of governmental intercession in labor disputes is found in the fact that among recently created State labor departments the function of conciliation and mediation is written into the organic acts as being one of the important reasons for their establishment. The effectiveness of these agencies, both State and Federal, is indicated by the increasing numbers of cases, as shown by official reports, in which these representatives of government have secured amicable adjustment of differences before actual stoppage of work occurred.

The Conciliation Service of the Department of Labor and the machinery of the various State departments function wherever need arises except in fields covered by special agencies. Railroad operation is one of these fields, and was in fact the first for which permanent mediation machinery was devised. While several different forms have been tried, the purpose of the Government agency is to provide a medium to which recourse may be had after the adjustment machinery contained in collective agreements has failed to bring about an understanding between those directly involved.

Under the National Recovery Administration various mechanisms for the adjustment of disputes in specific industries were set up. The Automobile Labor Board, for example, handed down arbitral awards in disputes in which both sides agreed to refer the case for a decision which they would accept as binding.

### *Promotion of Collective Bargaining*

A different technique for stabilizing industrial relations through governmental intercession was developed under the N. R. A. That was the device of employee elections to determine representation for

collective bargaining purposes. While legislation declaring and in effect guaranteeing the right of workers to organize and to enter into negotiations with employers for the determination of their own working conditions was part of the National Recovery Program of 1933-35, the concept was not new. In 1918 the President's Mediation Commission, of which the Secretary of Labor was chairman, in its report to President Wilson declared that "since it is no longer possible to conduct industry by dealing with employees as individuals," some form of "collective relationship between management and men is indispensable. The recognition of this principle by the Government should form an accepted part of the labor policy of the Nation." Fifteen years later the principle was not only accepted as a policy, but administrative machinery was provided through the creation of the National Labor Relations Board, the function of which is to protect the rights of the workers to form and to hold membership in a labor organization, and to assist them in securing a voice in the determination of their working conditions "by encouraging the practice and procedure of collective bargaining." As in conciliation and mediation, this example thus set by the Federal Government has already been followed by five States.

### *Safety and Health*

Leadership in the movement for the control and eventual elimination of industrial accidents had been assumed by the United States Bureau of Labor before the Department of Labor was created. The same agency was among the first to direct popular attention to the health hazards in industry by studying and making public the effect of processes, practices, and substances entering into modern industry on the health of workers. The Bureau of Labor under the former Department of Commerce and Labor, with the Bureau of Mines and the Interstate Commerce Commission, represented the United States Government at the conference out of which came the National Safety Council, the organization engaged in Nation-wide accident-prevention in industry as well as in the whole field of safety practices. Two State governments, Wisconsin and Minnesota, were also represented.

Governmental responsibility for safe working conditions and the prevention of industrial accidents rests primarily upon the inspection staffs of State and Federal agencies charged with the enforcement of safety laws. In State jurisdictions that duty is discharged by departments of labor, departments of mines, and industrial boards and commissions through their factory, mine, boiler, building, and elevator inspectors. In States where accident prevention has advanced to a high standard of efficiency, specially trained safety engineers direct the work of the inspectors. Through the authority

granted the State agency they are able to make rules and regulations enforceable as law to meet changing conditions. Investigation by State inspectors of accidents as they occur enables those responsible for preventive action to determine causes and locate failures. With this information scientific methods for accident prevention are constantly being perfected and put in operation. Factory inspectors and safety experts attached to State agencies are also active mediums for spreading the gospel of safe practices and accident prevention in the work places they visit, and the educational value of their work is probably of far greater importance in reducing accidents and making work safe than is the actual inspection to insure compliance with laws and regulations.

Direct responsibility for safety and accident prevention by means of inspection and law enforcement devolves upon the Federal Government only with regard to interstate and ocean transportation. Safe operation of railroads and motor carriers in the interest of employees as well as the traveling public is a major obligation of the Interstate Commerce Commission. The inspection work of the Bureau of Marine Inspection and Navigation of the Department of Commerce is directed toward safety at sea for workers as well as travelers.

Much of the safety work of the Federal Government is, however, educational and promotional. The research work of the Bureau of Mines covers continuing studies of mine hazards and special investigation of accidents to determine immediate causes and contributing factors. Its experimental work deals with ventilation and analysis of explosives and mine equipment. Special educational activities include conducting classes in first-aid and mine-rescue work throughout mining areas. The mine-rescue section of the Bureau is also an active agent in handling and directing rescue work when mine disasters occur.

The Department of Labor, through its Division of Labor Standards, is endeavoring to coordinate safety movements and to stimulate the efforts of State labor agencies in the fields of industrial safety and health. By disseminating the most scientific information available as to technical methods of control, and by holding training classes for the inspectors who are the point of direct contact between workers and employers and the State agencies, the educational work of the division is reaching a wide field.

Probably the greatest stimulus to reducing the accident hazard in industry has come through the adoption of workmen's compensation laws, which assess industry for the social cost of accidents and provide some measure of financial assistance to the injured worker and his dependents. That movement has been so active in the past quarter

century that while in 1913 only 17 States had adopted the principle of compensation for industrial accidents, in 1938 industrial workers in all but two States are protected by workmen's compensation laws administered by specialized governmental machinery.

The theory of compensation to cover occupational disease, which was only partially accepted in the early compensation laws, is becoming more widely recognized. Material assistance to the movement directed toward analysis and control of occupational-disease hazards has come through the provision of the Social Security Act, administered by the United States Public Health Service, which makes available to States grants-in-aid for research and practical experiment. Several State labor departments have in the past few years greatly expanded their safety work to extend the same kind of organized scientific prevention with which they have, during the past 25 years, attacked the accident hazard to the more sinister hazards of occupational disease.

### *Employment and Unemployment*

One purpose for which the Department of Labor was created, as expressed in its organic act, was to advance the opportunities of American wage earners for profitable employment. Placing a literal construction upon that declared purpose, the Department has endeavored, within its capacities, to bring together the worker who needed a job and the job that needed to be filled. Throughout a large part of the Department's history that effort was made against heavy odds. Inadequate appropriations and personnel drastically reduced the extensive recruiting and placement machinery that had been set up to meet war conditions. That machinery was called upon to function during a period of great demand on one hand and labor shortage on the other. Thus, while it established placement as an accepted governmental function it provided little in the way of guidance or experience to apply when conditions were reversed.

The Secretary of Labor called a conference on employment which met in April 1919, "to define and establish the most effective form of relationship between National and State employment activities and in general bring about a definite objective toward which all may work to the end that a thorough and comprehensive public employment service may be permanently established." The plan adopted by this conference and approved by the Department of Labor outlined a system of State employment offices maintained by State governments with Federal financial aid on a matched-fund basis, to be coordinated and directed through the United States Employment Service of the Department of Labor. The plan was embodied in a bill introduced into the House of Representatives by Representative Nolan of California and into the Senate by Senator Kenyon of Iowa.

The bill, however, was never reported out of committee. The United States Employment Service continued as a functional unit of the Secretary's Office, and did effective work in helping veterans to find jobs, and in recruiting and obtaining transportation for harvest workers. At the same time State employment services were functioning in many States, with varying degrees of success. Practically always poorly financed, State placement offices as a rule did little except in the fields of unskilled, casual, and domestic employment.

In 1933 Congress passed an act, popularly known as the Wagner-Peyser Act, establishing a national system of public employment offices on essentially the same pattern as that proposed by the Kenyon-Nolan bill of 1919. Its purpose was to establish and maintain a closely knit, integrated system of employment offices operating on a Nation-wide scale, responsible and responsive to the United States Employment Service created by the act as a bureau of the Department of Labor. The United States Employment Service is charged with the duty of developing minimum standards of efficiency, promoting uniformity in administrative and statistical procedure and maintaining a system of clearance of labor. Formal acceptance of the system and of the general direction of the central agency is required of each cooperating State to become eligible to Federal grant.

At the close of the fiscal year 1937 all States had passed the legislation necessary to formal identification with the National Employment Service and the system was in operation in all but six. In addition the United States Employment Service was maintaining special placement facilities for veterans and farm laborers and was operating a public employment center for the District of Columbia. The Service is constantly searching for the best means by which to discharge its statutory obligation to develop standards of efficiency and promote uniformity in administrative and statistical procedure throughout the system. Research and experiment, using the employment offices under its direct control as a laboratory, are the mediums to that end. Personal contact between the central coordinating agency and the State services is maintained through field representatives, conferences, and a publication devoted entirely to the service.

A more direct attack on employment was made through governmental agencies as part of the national recovery program. This was the creation of employment through the Public Works Administration, The Works Program, the Civilian Conservation Corps and the National Youth Administration. These were emergency measures, adopted to enable Government to find employment for workers who for the time being had no place in industry or commerce. They not only furnished employment to millions, but they were the means of enlarging the educational, recreational, power, housing, and transportation facilities of the Nation. From the workers' viewpoint perhaps more important

still, they made it possible for vast numbers who otherwise would probably have remained idle, to retain or acquire needed occupational skills. These opportunities were not limited to industrial workers; rather they were extended to professional men and women of many groups and to young persons who had never had the opportunity to enter productive employment. The offices of the United States Employment Service and the National Reemployment Service assumed a great part of the enormous task of directing workers to the projects undertaken through the national recovery program to create employment.

Under the broad program looking toward permanent measures for establishing economic stability embodied in the Social Security Act of 1935, a system of compensation for unemployment was set up. With the development and complete functioning of that system, most American workers will be insured against having to carry the whole financial burden of unemployment, as heretofore they have had to do. This system, like the employment office system, will operate through State agencies supervised and to a great extent supported by a centralized Federal agency, the Social Security Board. The United States Employment Service cooperates with the Social Security Board in the administration of the State unemployment compensation acts, through the facilities of the State employment services.

### *Protection of Woman Workers*

The first labor legislation in the United States aimed at a measure of protection for women and children against long working hours and against the exploitation of very young children. Since then, general acceptance of the theory that guardianship of the welfare of women and children is a necessary function of government in the interest of the State has resulted in much legislative regulation of their working conditions. With great increase in the volume of labor laws to be administered and enforced, the special needs of women and children were more or less submerged. At the same time the number of women employed in industry was increasing actually and relatively. The findings of the extensive investigation of working conditions of women and children made by the Bureau of Labor, then in the Department of Commerce and Labor, in the years 1907-10, set in motion forces that produced new regulatory legislation and strengthened the enforcing machinery. Revelations of the low wages paid to working women vitalized the minimum-wage movement, and by the end of the year in which the Department of Labor was created, several States had made preliminary surveys of wage conditions, through minimum wage commissions, and nine States had enacted minimum-wage laws.

Great numbers of women became wage earners during the war, taking the places of the men formerly employed. Many of these had

never been employed before. Their sudden entrance into an economic situation unprepared in many ways to receive them brought with it serious problems. The Department of Labor created in the Woman in Industry Service of the War Labor Administration an agency whose immediate function was to prevent the employment of women on war work under deleterious conditions, and whose wider task was to develop standards and policies that would make for acceptable working conditions, and to study and advise upon the problems of women in industry. The importance and permanent value of the work the service was doing were such that a demand was voiced by organized groups of women, with the support of the labor movement and the Secretary of Labor, that it be made a permanent function of the Department of Labor. In response to that demand, Congress created the Women's Bureau of the Department of Labor in 1920. Its organic act outlines its functions as the formulation of standards and policies "which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency, and advance their opportunities for profitable employment." It was authorized to conduct investigations and surveys in connection with the standards it was charged with formulating. In consequence the Women's Bureau has made both extensive and intensive study, from the viewpoint of women, of the varying social and economic factors affecting the life, health, and welfare of working women.

Since the Federal Women's Bureau was established several similar State agencies have been formed. These in many cases operate independently of the units enforcing legislation regulating women's work, as research and standard-making agencies. Cooperation between these State agencies and the Federal Bureau is close and helpful.

The 25 years of the Department's existence coincided with the period during which the checkered history of the minimum-wage movement was written. In 1913, nine States had enacted laws providing for a basic minimum below which wages for women could not legally fall. Within the next decade eight more States passed that type of regulatory legislation. In some of these States agencies were created to administer it. Several minimum-wage commissions, in each case a component part of the State labor agency, successfully administered the minimum-wage laws. In other States the administrative agency called for in the law was either not established or it was given no money with which to work. In still others no special enforcement machinery was created. In 1923 a decision of the Supreme Court of the United States declared that legislation making mandatory the payment of a prescribed wage for adult workers was unconstitutional.

For the next 10 years the movement was moribund. Most States either carried on sharply curtailed activities of a purely advisory or

persuasive nature, or repealed their laws entirely. The movement revived in 1933 under leadership in which State labor agencies were prominent. A new type of law, devised to surmount the constitutional obstacle encountered by previous efforts to insure woman workers a living wage, was enacted by several States during 1933 and 1934, and machinery was enacted to administer it. This law, too, met an adverse decision by the Supreme Court and minimum-wage activities were again at a standstill. Then a subsequent decision of the United States Supreme Court, in 1937, reversed the decision of 1923, and upheld the constitutionality of the older type of minimum-wage law, which declared for adequate wages based on the cost of living as a necessary protection of the life and health of women.

Since this latest pronouncement of the high court, machinery for arriving at, establishing, and maintaining a wage rate below which working women may not be paid has been either created or revived in every State which has a minimum-wage law and progress in making cost-of-living surveys and convening wage boards to determine wage rates has been rapid. The Federal Women's Bureau has assumed leadership in the movement to establish comparable standards and uniform methods of administration. In the setting up of standards for determining what constitutes decent and healthful living and what living actually costs, the Women's Bureau has the cooperation of the Bureau of Home Economics of the United States Department of Agriculture and of the Bureau of Labor Statistics.

### *Regulation of Child Labor*

During the quarter century, two efforts have been made to regulate child labor under Federal law. The first of these was the Federal Child Labor Act of 1916 administered by the Children's Bureau of the Department of Labor. That law closed to interstate and foreign commerce the product of any mine, quarry, or manufacturing establishment on which any child had been employed in violation of specific terms of employment set up by the act. The law did not become effective until one year after its passage. During that year the Children's Bureau and State labor departments were working to create a coordinated, cooperative mechanism for enforcement of a law that called for specialized administrative techniques. State inspectors enforcing State child-labor laws were deputized by the Federal agency, which however retained supervisory and directory authority.

This law was declared unconstitutional about nine months after it went into effect. The personnel used in its enforcement was retained on similar inspection work on Government orders during the war.

The second move toward Federal control of child labor was the imposition of a special tax upon all goods manufactured or produced in establishments in which children were employed in violation of standards set by the act. Standards under which a child could be employed were essentially the same as those embodied in the first Federal Child Labor Act. This provision in the tax law was administered by the child-labor tax division of the Bureau of Internal Revenue, through inspection and an age-certification system in which State labor agencies cooperated. This regulatory method lasted 4 years, 1918-22, and then met the same barrier of unconstitutionality that had ended the previous effort at Federal regulation under the first child-labor law, enforced by the Department of Labor.

Since the war, the activities of the Children's Bureau, in their specific application to working children, have been mainly of a research, consultative, and educational character, directed toward improvement of standards and administrative procedures. Many agencies are involved in the administration of State child-labor laws. Enforcement through inspection is the function of the State labor department in practically all States which make provision for central administration. The issuance of employment certificates, which are the basic mediums through which child labor is controlled is the province of State labor departments in some States, and of school authorities in others. School officers have some responsibility for enforcement in some jurisdictions and health officers in others. However, the general trend, which has been clearly marked throughout the past quarter century, is toward integrated administration of child-labor laws through State labor departments, and toward the creation of special units for research and education in the problem of control and eventual elimination of child labor.

### *Immigrant Workers*

Radical changes have occurred during the life of the Department of Labor with regard to immigration, over which Federal law gives it exclusive jurisdiction. During each of the first 2 years of the Department's existence, over 1,400,000 aliens arrived in this country. Problems of distribution and assimilation had become increasingly acute. Immigration was abruptly and decisively checked by the European War, and in 1915 fewer than a third of a million immigrants entered the United States.

Before the war ended, the United States Congress had passed one law, the Literacy Act of 1917, the effect of which was to check such mass movements as had occurred before 1914. In 1924 the quota law was passed, which imposed even greater restrictions. In consequence

of rigid laws and world-wide depression, the volume of immigration admitted in the recent past has been slight.

The carrying out of the new policy of selectivity, as opposed to the traditional policy of almost unqualified welcome, has called for strict enforcement and application of the law. Much of the routine work connected with immigration under quota is done for the Department of Labor at the point of origin by the consular offices of the State Department. On the other hand, with bars at the ports of legitimate entry, constant vigilance and greatly enlarged facilities at the borders have been necessary to guard against illegal entry. Border patrolling is now one of the most important functions of the Immigration Service.

Assimilation of our alien population has been materially simplified by this check of the constant influx. Greater interest in citizenship is evident in the demand for the Federal Textbook on Citizenship Training published by the Bureau of Immigration and Naturalization, and in the increased attendance at Americanization schools, especially in the Americanization classes conducted under the Federal Emergency Relief Administration and its successor, the Works Progress Administration.

The results of this movement are apparent in the increase in applications for citizenship. As reported by the Bureau of Immigration and Naturalization for the fiscal year 1937, the number of declarations filed and certificates of naturalization issued during that year exceeded the record of the preceding 6 years. While depression conditions and certain policies militating against aliens have perhaps also been operating to the same end, many aliens who have been in this country for years without becoming naturalized are now seeking to change their alien status to that of American citizenship.

### *Education and Training*

From Colonial days governmental authorities of this country have discharged the duty of providing for the education of its people. The universal public school system of the United States is due very largely to the organized, effective demands of American workers of a century ago. Within the past quarter century a new need has been felt and again in response to the demands of the workers, efforts have been made to meet the need for vocational education and training toward definite occupational ends. Leadership in this movement has been assumed by the United States Government under an act of Congress passed in 1917 (the Smith-Hughes law) which created a Federal Board for Vocational Education. The administrative mechanism devised to establish and maintain vocational training programs was in fact the prototype of that later adopted under the Wagner-Peyser act to establish a Nation-wide employment service. That is, it called for

the organization of an administering agency within each State, subject to State control, which would formally accept leadership and guidance from the Federal Government in carrying out a program based on minimum standards set by the central agency, for which the Federal Government accepted a degree of financial obligation.

The objective of the Federal-State cooperative program under the Smith-Hughes law and subsequent enactments is to provide opportunity, through full-time, part-time, or evening classes for practical and technical training related directly to earning a living, as contrasted to the more formal academic education available through the usual public school systems. The program is in operation in every State, the Territory of Hawaii, and the District of Columbia. In some jurisdictions highly organized and specialized agencies are carrying out plans which far exceed, in scope and method, those fixed as minimum standards by the Federal agency. At the same time, the maintenance of standards by the Government, through supervision and financial assistance, assures to all students, even in less progressive communities, opportunities within the limits set as basic.

The creation of opportunities for more specific occupational training under approved labor standards for those desiring to become skilled craftsmen by way of apprenticeship is the objective of the Federal Committee on Apprentice Training which became a statutory unit of the Department of Labor in 1937, after having been active since 1934 as an administrative agency. The work of the Committee is solely promotional, advisory, and educational. It cooperates with authoritative groups to secure the acceptance of a modernized apprentice system in training craftsmen. The most highly developed method of governmental stimulation of formal apprenticeship is that of the Industrial Commission of Wisconsin, which is a party to all legal indentures executed by apprentices and their employers. It supervises the training and regulates the working conditions of all apprentices entering into formal apprenticeship indentures throughout the State. Laws similar to that of Wisconsin have been enacted recently in other States, but in such States administrative systems have not yet been perfected.

Training, reeducation, and rehabilitation of workers injured in industrial or other accidents, or handicapped in any way, are an additional function of the Government discharged through the Vocational Rehabilitation Division of the Office of Education and the Federal Board for Vocational Education. This activity operates through the same type of Federally aided State machinery as that for vocational education. Restoration of earning capacity is the objective in the case of disabled workers. This may be accomplished by providing facilities for physical restoration, through treatment or appliances, by the retraining of former skills or the development of new ones, or by

assistance and guidance into avenues of self-employment. This service, through Federal and State agencies, is the right of all persons capable of rehabilitation. But the immensity of the undertaking and the extent of the many human factors involved impose obstacles that make the rehabilitation program one not easy of realization. Nevertheless, in the 17 years that have followed the inauguration of the work in 1920, thousands of workers have had their earning capacity restored and have regained or acquired the hold upon economic stability and personal happiness that accident, disease, or congenital defect had endangered.

A broad program of adult education was carried on as an emergency relief project through the Workers' Education Bureau of the Federal Works Progress Administration. It reached several million persons and was the instrument through which nearly three-quarters of a million adult men and women learned to write intelligibly and to read newspapers understandingly. Cultural and practical subjects have been made available to adult workers through study groups and regular class work. Occupational training and opportunities for intensive study are offered to boys and young men enrolled in the Civilian Conservation Corps. The aptitudes, needs, and interests of each enrollee are determined by vocational counsellors, and education programs are formulated to serve individual ends. The C. C. C. has been the means of overcoming illiteracy for more than 50,000 boys, and of completing interrupted school work and obtaining diplomas for another large group. The Department of Labor has been instrumental, as an officially designated cooperating agency, in supervising the selection of young men for the C. C. C.

### *New Movements*

The close of the quarter century finds under way new fields of governmental activity in the interest of American workers. A far-reaching project, affecting workers in all States, will reduce the slum areas of the country and provide new homes and new housing standards for large numbers. The most comprehensive effort yet undertaken is that provided by the Social Security Act which gives to the majority of the wage earners of the United States a measure of protection against indigent old age. By contributing to and building up benefit rights based on their work and earnings, workers eligible to old-age benefits will, upon retirement from active work after reaching the age of 65, be assured of some income for the remainder of their lives. A greater degree of care for the health of mothers and children, especially in rural areas and districts affected by economic distress, has been made possible through a cooperative plan between the States and the Federal Government, through the Children's Bureau of the Department of Labor. Federal aid is extended to States to assist in

maintaining maternal and child-health services, child welfare programs, and corrective treatment and care for crippled children.

The Department of Labor was given the opportunity, by the Walsh-Healey Act of 1936 dealing with labor conditions in plants working on Government contracts, to establish employment standards enforceable under a law which the Department itself administers. Within this limited field acceptable standards are being established and maintained and minimum rates of pay determined. This latest statutory function of the United States Department of Labor may conceivably point the way whereby through laboratory methods and the force of example, the basic obligation of the Department to "foster, promote, and develop the welfare of the wage earners of the United States" and "to improve their working conditions" may advance to a greater degree of fulfillment than was achieved during its first quarter century.

## WAGES, EMPLOYMENT CONDITIONS, AND WELFARE OF SUGAR-BEET LABORERS

By ELIZABETH S. JOHNSON, *Industrial Division, U. S. Children's Bureau*

PRESIDENT ROOSEVELT, in his message to Congress on proposed sugar legislation on March 1, 1937, said: "It is also highly desirable to continue the policy, which was inherent in the Jones-Costigan Act, of effectuating the principle that an industry which desires the protection afforded by a quota system or a tariff should be expected to guarantee that it will be a good employer. I recommend, therefore, that the prevention of child labor and the payment of wages of not less than minimum standards be included among the conditions for receiving a Federal payment."

On September 1, 1937, the President approved legislation which provided that benefits to growers of sugar beets and sugarcane are payable by the Government if the growers, in addition to meeting other conditions, do not employ any child labor in the production of the crop and if they have paid all the employed workers in full and at rates not less than those set by the Secretary of Agriculture as fair and reasonable.<sup>1</sup>

Interest in the wage rates to be established under this legislation makes timely a summary of pertinent data regarding the economic position and welfare of workers in the sugar-beet fields. This article, which assembles the findings of various Government inquiries, considers the conditions among the hired laborers who perform the hand work in the sugar-beet fields. It does not discuss the work performed by the sugar-beet growers themselves, the work performed by the farm laborers hired by the beet growers for work in the beet fields other than hand work, or any of the work of sugarcane growing.

### *Government Benefits to Growers*

Conditions among hand laborers in the beet fields are characterized by extremely low annual incomes obtained from intermittent periods of intensive work of whole families, by a scarcity of supplementary work during the off season, and by a widespread dependence of beet workers upon public relief during the winter months. These conditions prevail in an industry which has been developed under tariff protection and which has recently received assistance under the quota, tax, and benefit programs of the Jones-Costigan Act of 1934<sup>2</sup> and of the Sugar Act of 1937. The framers of both of these acts

<sup>1</sup> Public, No. 414, 75th Cong., 1st sess., ch. 898.

<sup>2</sup> Public, No. 213, 73d Cong.

recognized the desirability of making the payment of benefits to growers conditional on the observance of certain standards with respect to wages and the use of child labor. Since the immediate possibility for improving the condition of sugar-beet workers is dependent to some extent upon the administration of the benefits to growers, it seems desirable to review briefly the benefit legislation of the Jones-Costigan Act and of the Sugar Act of 1937.

The Jones-Costigan Act of 1934 provided for the establishment of sugar quotas and marketing allotments, for a processing tax on sugar, and for benefits to growers making production-adjustment contracts for sugar beets with the Government. In providing for benefit payments to growers under the production-adjustment contracts, the act specified that these contracts might contain provisions regulating child labor and fixing minimum wages. For the year 1935, before provisions of the act were invalidated by the Supreme Court, child-labor provisions were made effective for the United States as a whole and minimum-wage rates were fixed for certain areas.

In 1934 under the Jones-Costigan Act the Government benefit payment (at the rate of \$1.75 per ton of beets) was \$17.15 per acre for a crop of average yield in the United States as a whole (9.8 tons per acre).<sup>3</sup> It is of interest to note that in that year the average earnings of 664 families who were included in the Children's Bureau survey of 1935<sup>4</sup> and who reported their beet earnings per acre for 1934, were \$16.40 per acre. In 1935, the Government benefit payment (at the rate of \$1.13 per ton of beets) was \$11.75 per acre of average yield in the United States (10.4 tons per acre).<sup>5</sup>

The Sugar Act of 1937, enacted after the invalidation of provisions of the Jones-Costigan Act by the Supreme Court, provides for a sugar-quota program, for a processing tax on sugar, and for conditional benefits to growers of sugar beets. The benefits are payable to a grower under the following conditions: He shall have observed certain soil-conservation practices; he shall have produced sugar beets not in excess of the proportionate share assigned to his farm; and he shall have observed certain standards relating to child labor and to wages.

A benefit rate of 60 cents for every 100 pounds of sugar commercially recoverable from sugar beets is provided for sugar-beet growers by

<sup>3</sup> For rate of benefit see Agricultural Adjustment Administration press release of July 12, 1935.

<sup>4</sup> Report in preparation. This is a survey of conditions among families of sugar-beet laborers, based on interviews with 946 such families in 10 beet-growing areas: Central Michigan, southern Michigan; southern Minnesota; northern Colorado; Arkansas Valley, Colo.; Western Slope, Colo.; western Nebraska; northern Wyoming; southern Montana; and Sidney, Mont. Each family included had at least one child under 16 years of age and had done hand work in sugar-beet fields in 1935. The heads of most of the families (81 percent) had a contractual agreement with a beet grower for the performance of the work, some (17 percent) worked on an acreage basis as extra help with other families having a contract with a grower, and a very few (2 percent) worked at hand labor in the beet fields as day laborers hired either by contract laborers or directly by growers.

<sup>5</sup> For rate of benefit see Agricultural Adjustment Administration press release of October 1, 1936.

the act, except that a reduced rate of benefits on a graduated scale is provided for growers from whose beets more than 500 short tons of sugar is commercially recoverable (roughly equivalent to production from 300 acres of beets). This benefit payment at the 60-cent rate amounts to \$19.42 an acre for a yield of 10.9 tons of beets per acre and a recovery of 297 pounds of sugar per ton of beets—the average yield and the average recovery for the United States during the 5-year period 1931 to 1935. Additional benefits to growers are also provided by this act in the form of crop insurance in case the acreage planted in beets is abandoned or in case the yield per acre harvested is less than 80 percent of the normal yield for the farm.

The establishment of minimum wage rates in connection with conditional benefit payments to growers is provided for by the Sugar Act of 1937 in the following language:

That all persons employed on the farm in the production, cultivation, or harvesting of sugar beets or sugarcane with respect to which an application for payment is made shall have been paid \* \* \* wages therefor at rates not less than those that may be determined by the Secretary [of Agriculture] to be fair and reasonable after investigation and due notice and opportunity for public hearing; and in making such determinations the Secretary shall take into consideration the standards therefor formerly established by him under the Agricultural Adjustment Act, as amended, and the differences in conditions among various producing areas.<sup>6</sup>

The criteria for establishing minimum-wage rates that were formulated by the Secretary of Agriculture under the Jones-Costigan amendment to the Agricultural Adjustment Act are those set forth in the production-adjustment contracts for sugar beets as follows:

The Secretary [of Agriculture] shall have the authority (1) after due notice and opportunity for public hearing at a place accessible to producers and workers involved and (2) on the basis of a fair and equitable division among processors, producers, and workers of the proceeds derived from the growing and marketing of sugar beets, and the products thereof, to establish minimum wages for this factory district to be paid by producers to workers \* \* \*.<sup>7</sup>

### *The Industry*

Sugar beets are a cash crop raised for the most part by farmers under contract with sugar-manufacturing companies. The beet-raising localities extend from Ohio to California and are concentrated near the 87 beet-sugar factories in the United States. Colorado produces the largest amount of sugar beets, and California and Michigan produce the next largest amounts. About three-fourths of the sugar-beet acreage is in irrigated areas. The 87 beet-sugar factories are operated by 27 sugar-manufacturing companies. In 1936 these

<sup>6</sup> Public, No. 414, 75th Cong., 1st sess., ch. 898, sec. 301 (b).

<sup>7</sup> Sugar beet production adjustment contract (Form Sugar 3), approved October 16, 1934, p. 2.

factories were supplied with sugar beets by approximately 75,000 growers who harvested 785,000 acres of beets, an average of about 10 acres per grower.

So great are the labor requirements of beet-raising that hand labor on approximately three-fourths of the acreage is performed by contract laborers, in spite of the small average acreage per grower. The total number of beet laborers working under contracts in 1933 was estimated to be 110,354.<sup>8</sup> The hand labor on the remaining fourth of the sugar-beet acreage was done by beet growers aided by members of their families, and in some cases by laborers hired by the day.

All of the hand labor in the beet fields must be concentrated in brief periods scattered over 6 or 7 months of the year. Hand labor is used first for thinning the young plants that come up very thickly from seed planted in rows, then for hoeing and weeding the plants after thinning, and finally for pulling and topping the beets at harvest time. There are two periods of 3 to 5 weeks in which most of the hand work is concentrated, one usually in the latter part of May and the first of June for thinning, and one usually in October and the first of November for the harvesting operations.<sup>9</sup> Hoeing and weeding are done one, two, or three times during the summer. The thinning work must be done before the plants become too large and crowded. The topping work is telescoped into a few weeks in order that the beets may remain in the ground as long as possible to secure the maximum sugar content and yet be harvested before they are frozen into the ground. This need for a large amount of labor at scattered, brief periods has given rise to the practice of hiring special workers who perform only the hand-labor operations on the crop.

The sugar-beet workers in the United States are largely Spanish-speaking people of either American or Mexican birth. The second largest racial group is the Russian-German, which comprised 22 percent of all the heads of beet laborers' families included in a survey by the United States Children's Bureau in 1935. Other American-born adults rarely contract to do the hand work in the beet fields, however much they may be in need of employment, partly because the social status of beet laborers is low and partly because they are unaccustomed to the very fatiguing work, much of which is done in a stooping posture.

### *The Labor-Contract System*

The use of seasonal contracts for the hiring of the hand labor is a distinctive feature of the sugar-beet industry. This labor contract is made between the beet grower and the worker after the grower has made a contract with the processor for the raising and selling of

<sup>8</sup> Abbott, W. Lewis: Report for the Committee on Labor Conditions in the Growing of Sugar Beets, Washington, 1934, p. iii. (Mimeographed.)

<sup>9</sup> In California, these operations are performed earlier in the year.

the crop. The employment status of beet workers is thus governed by a triangular relationship between the laborer, the grower, and the sugar company. Although the labor contract itself is an agreement between the grower and the hired worker, its terms are dependent in various ways, direct and indirect, upon the grower's agreement with the sugar company.

The labor contract itself specifies the acreage on which the hand work is to be performed, the manner in which the work shall be done, whether housing is to be provided, and the rate of wages per acre which is to be paid. It also usually specifies the time of payment in relation to the completion of each process of cultivation (in most instances, three installments during the year), the conditions under which store credit may be guaranteed for the worker while waiting for the payment of his wages, and the portion of earnings for summer work to be withheld until the harvest is completed (\$1 to \$2 an acre). Usually this contract authorizes the grower to hire extra help to be paid for by the contracting worker and specifies the manner of settling disputes and the basis of settlement in case the contracted work is not carried through to completion.

Specific provisions of labor contracts for each district in any given year are usually embodied in a printed form drawn up either by the sugar company which operates in that district or by an association of the beet growers of the district. The provisions of the printed labor contract become the general pattern of labor relations in each district, even though the individual worker may be hired under an oral agreement in place of a signed contract.

The sugar-manufacturing companies, although not legally responsible for the wages, employment, or social conditions of the beet laborers, are involved in the labor conditions and labor relations of the industry in numerous ways. The company, rather than the grower, recruits beet workers to be hired by the growers and may finance the cost of their long-distance transportation. It refers beet workers resident in the locality to the growers who do not find their own workers independently. The company decides when the grower shall permit the laborer to start work at each operation and whether the grower may or should require the hiring of additional labor to speed up the work on the acreage contracted by the original laborer. In case of dispute between the contracting laborer and the grower, the sugar company's field agent may assume the role of arbiter, either by contractual arrangement or by the force of circumstances. In many localities the sugar company provides dwellings in which beet workers may live the year round.

Important in determining the terms of the labor contract is the prior contract between the processing company and the grower. The price which the company agrees to pay the grower for beets sets a

limit upon the wage which the grower can afford to pay the contract laborer. For this reason the beet laborers' union is asking that the wage rate for 1938 be agreed upon before the processors and the growers fix the price for the 1938 crop.<sup>10</sup> The desirability of establishing the proper wage rate for beet labor prior to the drawing up of contracts fixing the price to be paid by the processor for the season's beet crop, was emphasized by the Industrial Commission of Colorado which recommended in the spring of 1937:

That the price of beet-field labor should be determined or given consideration prior to the time of the establishment of the price for the sale of sugar beets. The price of beet-field labor should be one of the determining factors in the establishment of a price for the sale of beets. \* \* \*<sup>11</sup>

The principal advantage to the industry of the labor-contract system is the assurance of a sufficient supply of hand labor during the growing and harvesting period. However, by favoring the use of family labor and of a wage level based on family labor, the contract system has given rise to many of the serious problems which face the sugar-beet workers. The father of a family who contracts for beet work often counts on using the labor of his wife and children in order to earn as much as possible during the short working season. The recruiting practices of the sugar-manufacturing companies have encouraged the use of family labor. Even in 1937, one sugar company of the Mountain States pointed out in a handbill addressed to prospective workers that "work in beets is very convenient for families for the reason that they do not have to depend solely upon the wages of the father, inasmuch as all members 14 years old and over are able to take part in the work."<sup>12</sup> The practice of making contracts with the heads of families is characteristic of the sugar-beet industry in Colorado, Wyoming, and Montana and in the beet-growing States to the East. Solo or gang labor of unattached men is more usual in California and Idaho. Members of the growers' own families for the most part perform the hand work on the beet crop of Utah.

The labor-contract system, as it is applied to family labor, is typically one in which the members of one family perform all the work on one labor contract, but in many instances the group working under a contract includes relatives and friends of the contractor's family, and sometimes strangers, who share in the wages for the work. Of the 918 families of beet laborers in the Children's Bureau survey of

<sup>10</sup> In the matter of a hearing (Sugar Hearing 2) before the Secretary of Agriculture with respect to wage rates for persons employed in the production, cultivation, or harvesting of the 1937 sugar-beet crop, in the session held in Denver, Colo., October 14, 1937, pp. 60-62; in the session held in Billings, Mont., October 25, 1937, pp. 197-201.

<sup>11</sup> Recommendations by the Industrial Commission of Colorado in the matter of *Colorado Conference of Beet Field and Agricultural Workers Unions, employees, v. The Great Western Sugar Co. and the Sugar Beet Growers of the State of Colorado, employers*, May 7, 1937, p. 2.

<sup>12</sup> In the matter of a hearing (Sugar Hearing 2) before the Secretary of Agriculture with respect to wage rates for persons employed in the production, cultivation, or harvesting of the 1937 sugar-beet crop, in the session held in Scottsbluffs, Nebr., October 21, 1937, pp. 27-29.

1935 reporting on the use of extra help, 38 percent had paid persons outside the immediate family living as a household unit for doing part of the work for which the family had been paid wages under a labor contract. This extra help included all the persons working with the family throughout a process and also the extra help drawn in to speed up the work at the end. The largest number of persons outside the immediate family who were hired at any one time by one family averaged 2.9 for the families using extra help in 1935.

### *Child Labor and School Attendance*

The work of young children has long been characteristic of the contract system for sugar-beet labor where family groups are used and continues to be a factor in the problems of beet labor. In 1920 the majority even of the 8- and 9-year old children in beet workers' families worked in the beet fields, according to a survey made in that year by the United States Children's Bureau, which was based on families where children under 16 or mothers of young children worked in the beet fields.<sup>13</sup>

Another survey of beet laborers' families made by the Children's Bureau in 1935 showed that children under 14 years of age were still to be found at work in the beet fields, although the proportion was markedly smaller than in the earlier period. In this survey it was found that 9 percent of the children 6 to 11 years of age and 50 percent of those 12 and 13 years of age in sugar-beet laborers' families worked in the beet fields.<sup>14</sup>

The decrease in the use of young children is due in large part to child-labor standards which were made effective in 1935 for the first time under the Jones-Costigan Act. Under this act the production-adjustment contracts for sugar beets provided that no children under 14 years of age should be employed in beet-field labor and that no children between 14 and 16 years should be permitted to work longer than 8 hours a day, exception being made, however, in both cases for children in growers' families working on their parents' own farms.<sup>15</sup>

It is customary for the children in the beet fields to work for very long hours at strenuous labor. According to the Children's Bureau 1935 survey, about half of the child workers under 14 years of age as well as those 14 or 15 years of age were reported by their parents to be working in the beet fields usually for 9 or more hours a day. This long workday was common despite the 8-hour provision in the production-control contracts under the Jones-Costigan Act.

<sup>13</sup> U. S. Children's Bureau Publication No. 115: *Child Labor and the Work of Mothers in the Beet Fields of Colorado and Michigan*, Washington, 1923, pp. 12, 34, 94. (Included owner and tenant families doing hand labor in the beet fields as well as families of laborers.)

<sup>14</sup> U. S. Children's Bureau. Mimeographed statement, March 28, 1937, p. 1. Washington, 1937.

<sup>15</sup> U. S. Department of Agriculture. Agricultural Adjustment Administration. *Sugar-beet production adjustment contract (Form Sugar 3)*, approved October 16, 1934. Washington, 1934.

The improvement with respect to child labor that was made under the Jones-Costigan Act was achieved by warnings to growers regarding the terms of the child-labor standards in the production-adjustment contracts and by reliance on complaints of violation of these terms. No systematic provisions for obtaining evidence of age for children or inspecting beet fields for child labor during the working periods had been developed before the labor provisions of the Jones-Costigan Act were invalidated.

Reports from observers indicate that many young children worked in the beet fields in 1936 and that very probably there was an increase over 1935.<sup>16</sup> Since September 1, 1937, when the Sugar Act of 1937 became effective, growers have been informed of its child-labor provisions.

The work of young children in the beet fields is a matter of great concern not only because of the physical tax on the children at work and because of its depressing effect on wage rates, but also because of its interference with school attendance and educational progress. The Children's Bureau survey of 1935 reported enrollment and school absence during the school year 1934-35 for children in families who did beet work both in 1934 and in 1935. It was found not only that the children who topped beets were out of school during the harvest period but also that many children did not enter school for the few weeks in September before topping work began. Likewise, in some localities it was found that the same children had lost several weeks of school in the spring before the close of the term on account of work in the beet fields. During the school year 1934-35, 90 percent of the children between 6 and 16 years of age had enrolled in school and of those that were enrolled more than half were absent in the spring, or the fall, or both, on account of their own work in the beet fields or that of their families. Of the children under 16 years of age who missed school because of their own work in the beet fields or that of their families, more than one-fourth were absent for 45 or more school days, and the majority were absent for at least 25 school days, counting only absences attributed to their own work or that of their families. The longer periods of school absence were found to be more frequent, naturally, among the children in families that migrated to obtain work in the beet fields. It has been reported that in areas in New Mexico from which families are recruited for beet-field labor the number of pupils in attendance at school drops off 50 percent during the months

<sup>16</sup> The American Child, September 1936, p. 1: The Beet Fields Revisited, by Charles E. Gibbons. See also Recommendations by Industrial Commission of Colorado in the matter of *Colorado Conference of Beet Field and Agricultural Workers Unions, employees, v. The Great Western Sugar Co., and The Sugar Beet Growers of the State of Colorado, employers*, May 7, 1937, p. 1; File No. 2684. Also confirmed by a field survey in Colorado conducted in 1937 by the Works Progress Administration.

of September, October, and November and again during the latter part of May and in June.<sup>17</sup>

The children of beet laborers, handicapped by extended absence from school, frequently fail of promotion in their school grades. The Children's Bureau survey of 1935 found that more than half of the children between 10 and 16 years of age who had worked in the beet fields in 1934 were retarded one or more grades. A fifth of these children were retarded three or more grades.<sup>18</sup> A study of beet workers on relief in Weld County, which is located in northern Colorado, showed that, among the children 14 and 15 years of age in the families surveyed, half had completed no more than the fifth school grade, and that among all persons 16 years of age and over, barely half had completed more than the third grade.<sup>19</sup> The Children's Bureau 1935 survey found that many parents whose young children were working in the beet fields and missing school did not want their children to work in the beet fields, but they felt that it was necessary to have the children's help in order that the family might handle as many acres and thereby earn as much money as possible.

### *Acres and Duration of Work*

The number of acres that a family or an individual worker can handle in a season is a major factor limiting the earnings of beet workers. In 1933 the average amount handled per contract worker was estimated at 6.94 acres, on the basis of reports from sugar companies to the United States Tariff Commission.<sup>20</sup> An average of 7.9 acres per worker for the thinning process is shown by the Children's Bureau 1935 survey for 1,485 family members who worked full time while the family group had work in the beet fields.

The condition of each local labor market as well as local conditions of soil and climate appear to govern the average number of acres handled by an individual worker. The Children's Bureau figures for 1935 for family members, referred to above, show average acreages for the thinning process ranging from 5.3 per worker in the Arkansas Valley and Western Slope, Colo., to 12.6 per worker in southern

<sup>17</sup> Report of Proceedings of Regional Sugar Beet Conference, Denver, Colo., March 19 and 20, 1937, held by representatives of the Works Progress Administration, the U. S. Employment Service, the Colorado State Department of Public Welfare, with representatives of sugar companies, growers, and labor organizations, p. 16. Denver, Works Progress Administration, 1937. (Mimeographed.)

<sup>18</sup> U. S. Children's Bureau. Mimeographed statement, March 28, 1937, p. 2. Washington, 1937.

<sup>19</sup> Colorado State Agricultural Experiment Station, Fort Collins, Colo., and Rural Section, Division of Social Research, Federal Works Progress Administration. Research Bulletin No. 4; Beet Workers on Relief in Weld County, Colorado, by Olaf F. Larson. Washington, May 1937, pp. 18, 19. (Mimeographed.)

<sup>20</sup> Abbott, W. Lewis: Report for the Committee on Labor Conditions in the Growing of Sugar Beets, Washington, 1934, p. 8. (Mimeographed.)

Michigan. The area averages reported by the Children's Bureau survey in 1935 show the following variations:

	<i>Acres thinned per full-time worker <sup>1</sup></i>
All areas .....	7.9
Arkansas Valley, Colo.....	5.3
Western Slope, Colo.....	5.3
Northern Colorado.....	6.7
Southern Montana.....	6.9
Sidney, Mont.....	7.9
Northern Wyoming.....	8.3
Central Michigan.....	8.5
Southern Minnesota.....	8.8
Western Nebraska.....	8.8
Southern Michigan.....	12.6

<sup>1</sup> Based on the number of family members working full time, that is, the number working usually for at least 7 hours a day and on approximately as many days as any member of the family had work. The figures on acres handled at other processes vary slightly from these figures for the thinning process, because the total amount of work obtained by each family was often different at the different processes. Acreages for the hoeing process average, for those workers doing hoeing work, somewhat higher than acreages for thinning and for topping, because fewer persons are engaged in the hoeing process.

The long growing season in southern Michigan made possible the handling of relatively large acreages per worker in that area. However, it is also significant that southern Michigan was the only area surveyed in which the sugar-beet laborers had a collective agreement with the beet growers and some control over the number of beet workers to be hired. At the opposite extreme, the southern Colorado area, for which the lowest average acreage per worker was reported, had a very abundant supply of experienced beet laborers.

There are also great variations from area to area in the number of days that beet workers are engaged at their labor in the beet fields that closely parallel the variations in the number of acres worked. The Children's Bureau survey reports total days worked during the 1935 beet season by the fathers of 405 families in Michigan, Minnesota, Montana, and Wyoming. A fourth of the fathers of these families worked in the beet fields for fewer than 40 days in the year. The average (median) number of days worked by these 405 fathers was 56. In every area for which this information was obtained there were some families doing beet work at least 70 days in the year. Total working days of 80 to 100 for the season were reported not infrequently for Michigan and Minnesota, although such duration of work was found to occur very rarely for the beet region of the Mountain States. It should be noted that these figures from the Children's Bureau 1935 survey do not include California, where work at the hand-labor processes is reported to be done during more weeks in the year than in other regions.

The acreage of beet work handled, considered on a family basis, depends not only on the availability of work but also on the number of

workers in the family. The Children's Bureau study shows that half of the 746 families reporting the acreage of beets thinned in 1935 handled less than 18 acres per family. The percentage distribution of these families by total acreage thinned was as follows:

	<i>Percent</i>
Less than 10 acres.....	21
10, but less than 20 acres.....	35
20, but less than 30 acres.....	19
30 acres and more.....	25

The average number of persons 14 years of age and over per family who worked in the beet fields, as found by the Children's Bureau 1935 survey, was 2.7, although each person did not in every case work at all processes for which the family had beet work; the average number, including workers under 14 years of age, was 3.0 beet workers per family.

Relevant to any consideration of the length of the working season and its relation to beet earnings is the extremely long working day characteristic of beet labor. For thinning and topping work when the pressure is greatest, working hours, as reported for 1935 by families included in the Children's Bureau study, were at least 12 a day for half of the fathers of the families at thinning time and at least 11 hours a day for half of them at topping time. The working week was 6 and sometimes 7 days. The great pressure and long hours arise from a desire of the laborers to earn as much as possible in the short working periods and are accentuated by the fear that the grower may decide that it is necessary to hire extra help to finish the work on the acreage for which the laborer has the contract, and thereby reduce the laborer's net earnings.

### *Wage Rates*

Wages for contract beet labor are paid according to acreage worked. The basis is usually a fixed amount per acre for the thinning and hoeing work and a sliding scale for the topping work depending on yield, with or without a guaranteed minimum per acre for the topping. The 1937 labor-contract form issued by the Mountain States Beet Growers Marketing Association and generally used in northern Colorado, the largest concentrated beet-growing area, provided a basic wage rate of \$20.50<sup>22</sup> an acre, made up as follows:

	<i>Per acre</i>
For blocking and thinning.....	\$8. 00
For hoeing.....	1. 75
For weeding.....	1. 25
For pulling and topping.....	1 9. 50

<sup>1</sup> Up to and including 12 tons per acre harvested; and 65 cents for each additional ton harvested in excess of 12 tons per acre.

<sup>22</sup> An alternative option offered in this contract form for the year 1937 was a minimum basic rate of \$19.50 to be increased to a point equal to the total price received by the grower for 3 tons of sugar beets, including United States Government benefits other than soil-conservation payments, if this amounted to more than \$19.50 per acre. This contract form also provided that the basic rate might also be reduced by \$1 an acre if the fields were mechanically blocked.

Wages for beet labor vary from area to area. There is a definite tendency for wage rates to be higher in northern Wyoming and southern Montana than in northern Colorado and western Nebraska, and for rates in northern Colorado to be higher than in southern Colorado. In 1937 the basic rate per acre for a normal yield of 12 tons was \$23 in northern Wyoming and southern Montana, and \$20.50 in northern Colorado and western Nebraska; and for a normal yield of 10 tons it was \$18.10 for the Arkansas Valley, Colo. This tendency for wage rates to be lower toward the South parallels a difference in relative abundance of the supply of resident beet laborers, the lower wage rates being paid where the labor supply is more plentiful, and to some extent parallels a difference in average sugar production per acre of beets. Wage rates per acre tend to be lower in the unirrigated eastern beet region than in the western irrigated areas where yields tend to be higher. A wage rate often used in central Michigan in 1937 for a normal yield of 8 tons was \$17 per acre. Although no single wage-rate figure can be given for California that is representative of the State as a whole, available data for 1937 indicate that the prevailing wage in an important beet-growing district in northern California was \$21.42 an acre for a normal yield of 12 tons and that the prevailing wage in an important beet-growing district in the southern part of the State was \$17.95 for a normal yield of 11 tons. Prevailing wages, as they are indicated by the printed labor-contract forms issued by associations of growers or by sugar companies, are shown in the accompanying table for certain important producing areas for the 3 years 1935, 1936, and 1937.

Prevailing Wage Rates for Hand Labor in Sugar-Beet Fields in Selected Producing Areas in 1935, 1936, and 1937

Producing area, and year	Normal yield (in short tons) per acre, assumed for rate-making purposes	Prevailing rate of wages per acre <sup>1</sup> for—				
		All processes for assumed normal yield	Blocking, thinning, and hoeing	Pulling and topping		
				Rate for assumed normal yield	Minimum guaranteed rate	Rate per ton
				Up to assumed normal yield	Above assumed normal yield	
<b>Central Michigan:</b>						
1935.....	8	\$15.00	\$7.50	\$7.50	\$7.50	(2) \$1.00
1936.....	8	<sup>3</sup> 16.00	(4) 10.00	(4) 7.00	(4) 6.00	(4) \$1.00
1937.....	8	17.00	10.00	7.00	6.00	<sup>5</sup> \$1.00
<b>Southern Michigan and Ohio:</b>						
1935.....	(6)	19.00	10.00	9.00	9.00	(6) (6)
1936.....	8	17.20	10.00	7.20	5.00	.90
1937.....	8	18.00	10.00	8.00	8.00	1.00
<b>Southern Minnesota:</b>						
1935.....	8	<sup>7</sup> 15.00	<sup>7</sup> 10.00	5.00	5.00	(2) .60
1936.....	8	<sup>7</sup> 18.00	<sup>7</sup> 12.00	6.00	6.00	(2) .75
1937.....	8	<sup>7</sup> 18.50	<sup>7</sup> 12.50	6.00	4.00	(6) \$.75
<b>Northern Colorado and western Nebraska:</b>						
1935.....	12	19.50	10.50	9.00	(9)	.75
1936.....	12	<sup>7</sup> 19.50	<sup>7</sup> 10.50	9.00	(9)	.75
1937.....	12	<sup>7</sup> 20.50	<sup>10</sup> 11.00	<sup>11</sup> 9.50	<sup>11</sup> 9.50	(12) .65
<b>Arkansas Valley, Colorado:</b>						
1935.....	10	17.50	10.00	7.50	(9)	.75
1936.....	10	16.25	10.00	6.25	(9)	.625
1937.....	<sup>14</sup> 10	18.10	11.00	<sup>14</sup> 7.10	(9)	14, 70
<b>Northern Wyoming and southern Montana:</b>						
1935.....	12	21.50	12.50	9.00	(9)	.75
1936.....	12	<sup>7</sup> 21.50	<sup>7</sup> 12.50	9.00	(9)	.75
1937.....	12	<sup>7</sup> 23.00	<sup>7</sup> 13.40	9.00	(9)	.80
Northern California: 1937.....	<sup>15</sup> 12	<sup>15</sup> 21.42	10.50	<sup>15</sup> 10.92	6.30	<sup>15</sup> 91
Southern California: 1937.....	<sup>15</sup> 11	<sup>15</sup> 17.95	7.50	<sup>15</sup> 10.45	7.50	<sup>15</sup> 95

<sup>1</sup> The 1935 wage rates given for northern Colorado and western Nebraska, for northern Wyoming and southern Montana, and for Arkansas Valley, Colo., are the minimum rates which were established by the Secretary of Agriculture under the Jones-Costigan Act, and are specified in the labor-contract forms used in these areas in 1935. The wage rates for southern Michigan and Ohio in 1935 are those provided in the agreement between the beet laborers' union and the growers' association in that year. The other figures given are the wage rates provided in the suggested labor-contract forms prepared by the growers' association or the sugar company dominant in the area. The figures given for Michigan are the rates stated in the contract form printed by the leading company of the area; the prevailing wage rates in a number of the factory districts in central Michigan vary somewhat from the figures given. For northern and for southern California the figures given are those for 1 large factory district in the northern and 1 in the southern part of the State; available data do not indicate to what extent these figures are typical for northern or for southern California.

<sup>2</sup> No tonnage rate, because there was a guaranteed minimum rate per acre for the assumed normal yield.

<sup>3</sup> Based on informal reports.

<sup>4</sup> No information available.

<sup>5</sup> \$6 per acre for yields of 7 or fewer tons per acre, plus \$1 per additional ton up to 12 tons per acre, plus 50 cents per additional ton above 12 tons per acre.

<sup>6</sup> No assumed normal yield and no tonnage rate, because a fixed wage was paid for topping regardless of the yield.

<sup>7</sup> A reduction of \$1 per acre was provided in the rate for summer work (blocking, thinning, and hoeing) in mechanically blocked fields, except in Minnesota and in some localities in Wyoming. In Minnesota reductions of more than \$1 were provided, and in 1936 and 1937 the labor contract in certain localities in Wyoming stated that there should be no reduction from the prevailing wage rate because of mechanical blocking.

<sup>8</sup> \$4 per acre for yields of 4 or fewer tons per acre, plus 50 cents per additional ton up to 8 tons per acre, plus 75 cents per additional ton above 8 tons per acre, with a maximum rate of \$9 per acre.

<sup>9</sup> No minimum guaranteed rate.

<sup>10</sup> Figures apply only to northern Colorado. In western Nebraska for blocking, thinning, and hoeing the rate was \$11.50 per acre; for topping 75 cents per ton up to 12 tons per acre, plus 65 cents per ton above 12 tons per acre with no guaranteed minimum. See also footnote 7.

<sup>11</sup> Figures apply only to northern Colorado. In western Nebraska for blocking, thinning, and hoeing the rate was \$11.50 per acre; for topping, 75 cents per ton up to 12 tons per acre, plus 65 cents per ton above 12 tons per acre with no guaranteed minimum.

<sup>12</sup> No tonnage rate, because there was a guaranteed minimum rate per acre for the assumed normal yield. See also footnote 11.

<sup>13</sup> 62.5 cents for each ton up to 12 tons per acre, plus 50 cents per ton above 12 tons per acre.

<sup>14</sup> For a yield of 12 tons per acre the rate was \$8.50 per acre; for a yield of less than 12 tons per acre the rate was reduced by 70 cents for each ton by which the yield fell below 12 tons per acre; for a yield of more than 12 tons per acre the rate was increased by 60 cents for each ton by which the yield exceeded 12 tons per acre.

<sup>15</sup> The contract wage rates given for northern California and for southern California for topping are based on a sliding scale, the rate per ton varying in accordance with the yield per acre. There is no assumed normal yield in the contracts used. The figures given show the normal yield for the districts represented and the topping rate for the normal yield stated for each district.

The trend in wage rates for beet labor over the past 3 years has been toward a slight increase in the rate per acre. The 1937 contract in northern Colorado at a basic minimum rate of \$20.50 an acre for all processes increased the rate \$1 over the basic rate set for that area by the Secretary of Agriculture for 1935, which provided \$19.50 an acre for all processes for a yield of 12 tons per acre. The 1935 rate was made up of a flat rate of \$10.50 per acre for blocking, thinning, hoeing, and weeding and 75 cents a ton for pulling and topping for each ton harvested per acre up to and including 12 tons per acre, and 65 cents for every ton harvested in excess of 12 tons per acre. The basic rate of \$19.50 for 1935 was not, therefore, a guaranteed minimum for the season's work on an acre, as was the rate of \$20.50 for 1937. The obtaining in 1937 of a guaranteed minimum rate per acre for topping in this area was a gain for the laborer that was probably more important than the increase of \$1 in the total rate for a 12-ton yield. The workers say there is much less variation in the amount of work required to harvest an acre of beets than in the tons produced per acre, there being approximately the same number of beets to handle for a moderately small as for a normal or a large yield.

Actual earnings per acre by families of beet laborers, particularly where the prevailing rate calls for a sliding scale for topping, vary from family to family far more than a summary of wage rates will show. In 1935 earnings received per acre among 305 families in several areas reporting this information to the Children's Bureau showed a range of from \$10 to \$25 per acre for all hand-work processes. Within one area the range in earnings per acre was in some instances as much as \$10.

### *Yearly Earnings*

For beet work in 1935, earnings on a family basis have been reported in two studies. An average of \$222 earned per family from beet work in the year 1935 was reported for the sample group of beet workers on relief in Weld County, Colo.<sup>23</sup> In the Children's Bureau 1935 survey, which was not limited to families receiving relief, average (median) annual earnings from hand work in the beet fields, in northern Wyoming, Montana, Minnesota, and Michigan, were \$340 for the 377 families reporting, half of the families earning less than this amount for beet work done in the year 1935, and half earning more. However, because of great differences in the number of workers per family, in the number of acres handled, and in the earnings per acre,

<sup>23</sup> Beet Workers on Relief in Weld County, Colo. (This study is based on 192 cases, of which 12 included only 1 person and 180 included 2 or more persons. These cases are a 25-percent sample of "Spanish-American and Mexican" rural cases receiving emergency relief in Weld County (which is in northern Colorado) in the year ended February 29, 1936. Although the sample includes only relief cases, beet workers receiving relief nevertheless comprised a large part of the beet-labor population of the county. According to the Children's Bureau survey, which also included Weld County, Colo., 73 percent of all beet workers interviewed in that county had been on relief during the period of approximately a year ending October 31, 1935.)

the range in earnings per family for beet work was wide. The annual earnings of these 377 families for beet work were distributed as follows:

	<i>Percent</i>
Less than \$200.....	30
\$200, but less than \$400.....	28
\$400, but less than \$600.....	20
\$600 and more.....	22

The number of persons to a family averaged 6.4 for the families included in this survey.

The amount of beet earnings on the basis of individual workers was not more than \$130 per worker in half the families reporting yearly earnings to the Children's Bureau. A wide variation is also noticeable in annual earnings per worker as well as per family. In 33 percent of the families reporting in the Children's Bureau survey the beet earnings amounted to less than \$100 a year per worker; and a total of \$150 or more a year per worker was reported for only the 38 percent having the highest earnings.

Beet workers in the Mountain States and eastern beet regions have, for the most part, no employment during the 6 winter months and have only occasional employment during August and September, when the beet crop requires little or no attention. The concentration of sugar-beet culture about a limited number of sugar factories, and the fact that a large part of the sugar-beet industry has been developed in the sparsely settled Mountain States, accounts in part for this lack of opportunity for employment in other industries. Although the Mountain States suffer the greatest handicap in this respect, the eastern beet region, and to some extent California likewise, is involved in this lack of year-round work opportunities for beet laborers.

In northern Colorado, among beet workers' families that were on relief in 1935 the average income in a year from sources other than beet labor or public assistance was reported as \$42.<sup>24</sup>

Of the families included in the Children's Bureau 1935 survey one family in eight had no cash income whatever in addition to that from beet work and from relief. Among the families that did receive some supplementary cash income, the average (median) amount earned or otherwise received was similar to the figure reported for the Weld County families—\$51 a family in the period of approximately a year ending with the close of the 1935 beet season. This additional income was usually for agricultural labor on crops other than beets. Only one-sixth of the families in the Children's Bureau study having a supplementary cash income other than relief reported receiving as much as \$200 a year in addition to their beet earnings. Among the families in Michigan, where some industrial employment was available, only 30 percent received, in addition to beet earnings

<sup>24</sup> Beet Workers on Relief in Weld County, Colo.

and relief, an income of \$200 or more in 1935. Area variations in income supplementary to beet earnings and relief are shown by the following figures from the Children's Bureau 1935 survey:

	Percent of families reporting supplementary income	Average annual supplementary income per family (median)
Arkansas Valley, Colo.....	96	\$31
Northern Colorado.....	91	44
Southern Montana.....	71	57
Western Nebraska.....	96	72
Northern Wyoming.....	89	72
Central Michigan.....	87	93

The restricted opportunities for employment and the limited occupational background of beet workers are further indicated by the study of beet workers in Weld County, Colo., which showed that of 192 heads of these families on relief only 13 had been employed in any occupation other than agricultural work within the past 5 years.<sup>24</sup>

Although no data on supplementary work are available for California beet workers, the diversified crops and the long agricultural season of that State, together with the fact that the beet fields are comparatively near urban centers, make it probable that the employment of beet workers there is more nearly continuous than that shown in the Children's Bureau 1935 survey for beet workers in other beet-growing areas of the United States.

### Relief

With such low annual earnings from all sources, relief reciprocity has become widespread among beet workers. The end of the working season and the reckoning with the storekeeper that follows the harvest pay day find many beet workers with little or no reserve with which to begin the winter. The Children's Bureau study included information on cash on hand at the end of the 1934 working season after the bills accumulated in providing for the day-to-day needs of the family had been met. Of the families giving this information, 38 percent reported that they had no cash left on hand after paying such bills, 31 percent had less than \$60, and only 26 percent had \$60 or more on hand; for the other 4 percent some cash was on hand but the amount was not reported.

Of the beet laborers' families interviewed in the Children's Bureau 1935 study, 63 percent reported receiving either direct or work relief at some time within the period of approximately a year ending with the close of the 1935 beet season. In some areas the proportion of the beet workers' families that were on relief at some time during the year was much higher than in other areas, ranging from 37 percent to 97 percent. The highest proportion of families receiving relief (97

<sup>24</sup> Beet Workers on Relief in Weld County, Colo.

percent) was for the Arkansas Valley in southern Colorado, where average beet acreages worked were small, wage rates for other work were low, and a water shortage had restricted crops the preceding year.

The large amount of public assistance required, under prevailing wage rates and available opportunities for beet and other work, to maintain the workers over the winter months is suggested by the recent report of beet workers on relief in Weld County, Colo. The average amount of public assistance, including project work of the Works Progress Administration and other public aid, received by the 192 families included in the sample was \$172 a year, nearly as much as the total beet earnings of these families, which averaged \$222 for the year. The average amount of public assistance received was 39 percent of the total average annual income from all sources (\$436) for the year ended February 29, 1936.<sup>24</sup> These Weld County beet workers received public aid in an average of 5.7 months in this period of 1 year. Similar findings on the number of months that beet workers depended on relief are reported for the families of beet laborers interviewed by the Children's Bureau in several beet-growing areas. Among the families receiving relief in the period of approximately 12 months ended October 31, 1935, half had received such relief in at least 6 calendar months.

Many of the beet laborers' families that were not supported by public assistance or private relief during the winter months lived without cash resources by obtaining the most needed commodities on credit extended by local stores or the local sugar company against their next season's earnings. Such families may have had less to live on than those on relief. Availability of relief for beet workers varied to a marked extent from locality to locality; in rural communities particularly there was frequently reluctance to give public assistance to such persons.

### *Living Conditions*

The very low plane of living among beet workers is apparent in the overcrowding of their small houses, which are sometimes not even weatherproof, in the meagerness of their diet, in the lack of warm clothing, and in the infrequency of recreational and social activities.

As to housing, the Children's Bureau found in 1935 that 45 percent of the families lived in houses of not more than two rooms and that more than one-sixth of the families were living in houses with four or more persons to a room.

The actual impoverishment of most beet laborers' families is suggested further by figures on total cash income per person from all sources. Among the Weld County beet workers on relief the total annual cash income per person, including relief, averaged \$78, and

<sup>24</sup> Beet Workers on Relief in Weld County, Colo.

excluding relief it averaged \$47.<sup>24</sup> For the families of beet laborers surveyed in the Children's Bureau study, the amount of cash income per family member, excluding relief, was \$75 or less for a year for half of the families reporting. The meagerness of such incomes is indicated by a comparison with the amount of money needed to buy an adequate diet at minimum cost in 1935, according to the standards of the Bureau of Home Economics of the United States Department of Agriculture. Based on average prices in the United States, the cost of food for an adequate diet at minimum cost, according to this standard, is \$110 per family member.<sup>25</sup> Although some beet workers receive housing free of charge from the grower or the sugar company at least during the working season, the workers need money to pay not only for food but also for clothing, household sundries, fuel, transportation, doctors' bills, and other needs. The beet workers do not supplement their wages to any large extent through raising their own vegetables or keeping livestock.

### *Labor Organization Among Beet Workers*

A movement among beet workers to improve their conditions of living through organization into labor unions has arisen in recent years. The opportunity in 1934 and 1935 to have minimum wages set for beet labor by the Secretary of the United States Department of Agriculture was a stimulus to it. Various local groups of beet workers from the Mountain States' beet-growing localities held a convention in January 1935 and drew up a resolution calling for a wage of \$23 an acre for beet labor and urged this rate at hearings held by the Secretary of Agriculture prior to the establishment of rates for certain areas under the Jones-Costigan Act.<sup>26</sup> A number of local unions of beet workers became affiliated as Federal locals with the American Federation of Labor in 1935 and 1936, and the Colorado Conference of Beet Field and Agricultural Unions was then formed. This conference asked for a wage of at least \$23 an acre for beet labor in 1936 and for at least \$25 an acre in 1937. It has also been active in defending claims of the beet workers to relief and to employment on projects under the Works Progress Administration and in protesting against the importation of labor into the State to work at wages below those the unions have attempted to obtain. In southern Michigan and Ohio the beet workers, organized in federal local unions of the American Federation of Labor, obtained in 1935 a collective agreement providing a rate of \$19 an acre for beet labor,<sup>27</sup> which was higher than wages prevailing

<sup>24</sup> Beet Workers on Relief in Weld County, Colo.

<sup>25</sup> Computed by the Children's Bureau according to the standards of the Bureau of Home Economics, U. S. Department of Agriculture, on the basis of the composition of the beet laborers' families included in the 1935 study.

<sup>26</sup> *International Labour Review*, Geneva (January 1936), p. 80: Regulation of Labour Conditions in Sugar Cultivation under the Agricultural Adjustment Act, by William T. Ham.

<sup>27</sup> *Rural Worker*, April 1936, pp. 4, 5.

in the localities of central Michigan, of which none had collective agreements. Neither for Michigan nor for several other States had minimum wage rates for beet labor been established by the Secretary of Agriculture under the Jones-Costigan Act.

Local organizations of beet workers were included among the unions of agricultural, cannery, and packing-house workers whose representatives met in Denver in July 1937 to organize an international union. At that time the United Cannery, Agricultural, Packing, and Allied Workers of America was organized, and a charter was granted the new organization by the Committee on Industrial Organization. This new union reported that by November 1, 1937, it had granted charters to 28 local unions of beet workers in Colorado, Nebraska, Wyoming, and Montana, with a total membership of 3,000 beet workers. Besides carrying on organizational work among beet workers it is working for adequate consideration of the interests of the beet laborers under the Sugar Act of 1937. The demands of the union include a wage rate of \$25 an acre for hand work on the beet crop of 1937, \$30 an acre for the beet crop of 1938, and representation on local boards or committees which it recommends be formed to determine whether or not individual beet growers have complied with the conditions specified for eligibility to receive conditional payments under the Sugar Act of 1937.<sup>28</sup>

<sup>28</sup> In the matter of a hearing (Sugar Hearing 2) before the Secretary of Agriculture with respect to wage rates for persons employed in the production, cultivation, or harvesting of the 1937 sugar-beet crop, in the session held in Denver, Colo., October 14, 1937, pp. 51-63; in the session held in Pueblo, Colo., October 18, 1937, pp. 336-342; in the session held in Scottsbluff, Nebr., October 21, 1937, pp. 52-60; and in the session held in Billings, Mont., October 25, 1937, pp. 13-19.

## HOURS OF WORK PROVIDED IN COLLECTIVE AGREEMENTS IN 1937<sup>1</sup>

THE 40-HOUR maximum workweek is provided in a large majority of the union agreements now in effect in the United States. Weekly hours tend somewhat to be longer in the South, but exceptions to the 40-hour week occur on an industry rather than on an area basis.

The 40-hour maximum is almost invariably established in the collective agreements in the iron and steel, stone, timber, rubber, petroleum, metal mining, and aluminum industries, and is predominant in cement manufacturing. Except for stove manufacturing, the 40-hour week is the rule in metal-fabrication agreements. The same is true in the furniture and upholstery, jewelry, pulp and paper products, and pottery industries, in merchant tailoring, and in food and agricultural processing with the exception of flour and cereal products. The general weekly maximum in building construction is 40 hours. Except for the manufacture of fur and men's and women's clothing, the 40-hour week is general in agreements in the apparel industries, as well as in book and job printing, light and power, and gas and coke manufacture.

### *Workweeks Shorter Than 40 Hours*

Generally speaking, workweeks shorter than 40 hours are less common in union agreements than workweeks which are longer. In the agreements of only five industries is the shorter week the rule—in the glass industry, with a 36-hour week for all but continuous processes; in coal mining and fur manufacture, with a general 35-hour maximum; in men's clothing, with a 36-hour week; in women's clothing, with a prevailing 35-hour week and a few 37½-hour maxima; and in newspaper publishing, where approximately two-thirds of the workers in the industry are on a shorter workweek (and more than half of these work 37½ hours).

The 36-hour week is fairly general in agreements for motion-picture-machine operators and for about a third of the cement industry. The 35-hour week is common in nearly half of the agreements in hat manufacturing. In the rubber industry the workweek in two of the largest companies, as well as a few small plants, is 36 hours. Similarly, one large radio company works 35 hours and another 36. Less than 10 percent of the organized building-construction workers

<sup>1</sup> This article is based on a study of approximately 5,000 union agreements in the files of the Bureau of Labor Statistics. See pp. 347-348, for a list of the trades and industries covered.

have less than a 40-hour week, about half of these working under a 30-hour maximum and half a 35-hour maximum. Longshoremen on the Pacific coast work 30 hours a week. The other short workweeks are isolated instances, varying from 30 to 39 hours.

### *Workweeks Longer Than 40 Hours*

In petroleum refining, aluminum, textiles, fur, men's clothing, women's clothing, and hat manufacture there are no agreements providing for workweeks of more than 40 hours. In railroad yards,<sup>2</sup> in the flour and cereal products and stove industries, in retail trade, among butchers, hotel and restaurant workers, in city passenger-transportation lines, and in trucking, the prevailing weekly maximum provided in collective agreements is 48 hours. In longshore work other than on the Pacific coast and in building service agreements the maximum week is 44 hours. Maritime workers are most commonly under 44-hour weekly schedules, although some workweeks are as high as 54. Some towboat workers have weeks as high as 72 and 80 hours. In agreements in the glass industry 42 hours is the usual maximum for continuous processes. Although no single schedule predominates for barbers and taxi drivers, these two have the longest workweeks—ranging from 48 to 66 and 51 to 72 hours, respectively.

Although the 48-hour week is the most common in union agreements in retail trade, other scheduled hours cover a wide range. The exceptions from the 48-hour week, more than one-third of which are higher than 48 hours, vary from 40 to 63. For butchers the range of exceptions to the 48-hour week goes as high as 74 hours per week; nearly half of the butchers' agreements provide for workweeks longer than 48 hours. In hotels and restaurants, although 48 hours is the maximum provided in a majority of the agreements, a 54-hour week prevails in about a fourth, the others ranging from 40 to 60 hours.

A small proportion of agreements fix maximum hours as high as 48 per week in the following industries or trades: Iron and steel, glass, cement, electrical equipment, automobiles and parts, pulp, furniture, upholstery, jewelry, glassware, building construction, shipbuilding, baking, tailors, cleaning and dyeing, building service, motion-picture-machine operation, printing and publishing, and gas and coke. Maxima ranging as high as 50 are provided in a few agreements in the timber, rubber, and machinery industries and for coopers; as high as 54 in the light and power industry; 60 in stove manufacture and in laundries; and 63 on city passenger-transportation lines.

<sup>2</sup> Railway roadmen, engineers, firemen, conductors, etc., are on a mileage rather than an hourly basis, and are therefore not included in this discussion.

*Normal Hours Per Workday*

Eight hours is by far the most common workday provided in collective agreements. Workdays of 6, 7, and 9 hours—about equally prevalent—are so much less common as to be relatively unimportant except in certain industries. In coal mining, the fur industry, and the manufacture of men's and women's clothing, the 7-hour day is the rule, as is the 6-hour day for motion-picture-machine operators. Short workdays, of limits varying between 6 and 8 hours, also prevail in newspaper-publishing agreements. The 7-hour maximum is established in union agreements for a major part of the hat industry and for two of the largest companies in the radio branch of the electrical-equipment industry. Longshoremen on the Pacific coast have a 6-hour working day.

Except for barbers and taxi drivers, for whom workdays longer than 8 hours are the rule, the union agreements in no industry provide a prevailing workday of more than 8 hours. A few exceptions to the 8-hour rule are found in most industries, however; they are fairly common in retail trade, and among butchers, maritime, and hotel and restaurant workers. The range of these atypical workdays is from 5 to 14 hours, the extremes being found in a few agreements covering delivery drivers. The same maximum is generally applied to each day of the week. Longer Saturday hours, however, are the rule in retail trade and among butchers, tailors, and barbers.

*Normal Days per Workweek*

The 5-day week, though less prevalent in union agreements than the 8-hour day, is more common than the 40-hour week. The 5-day week is the rule in basic-materials industries, in fabrication (except for stoves, pottery, and glassware), in construction, in food and agricultural processing (except for flour and cereal products), and in the apparel industries. In anthracite mining, however, a 6-day week is permissible during 12 weeks of the year. The 5-day week prevails to a less extent in the agreements in printing and publishing, in the light and power, gas and coke industries, and for merchant tailors. In bituminous-coal mining, aluminum, petroleum refining, textiles, furs, men's and women's clothing, and hats, the 5-day week is the only maximum provided in agreements.

The 6-day workweek is usual in agreements for railroad yard workers, in the bakery, pottery, and flour industries, for hotel and restaurant and retail-trade employees, for butchers, motion-picture-machine operators, and for the entire transport group with the exception of longshoremen, who commonly work 5½ days a week except on the Pacific coast where the 5-day week is established.

In the building-service and maritime agreements the 5½-day week is commonly provided. In stone manufacture and glassware no single

schedule of days per week predominates, while the 5½- and 6-day work weeks are about equally common for laundry and cleaning and dyeing workers and for barbers.

Among the exceptions to the 5-day rule in those industries where it is general, the 5½-day week is found more than twice as frequently as the 6-day maximum.

### *The Workday*

Particularly concerned with defining the limits of the workday are agreements in retail stores and in the maritime, butcher, tailor, and barber trades. Starting time in these agreements varies from 6 to 10 a. m., with 8 a. m. the most common. Finishing time is usually 6 p. m., with instances of both earlier and later closing times. In these trades the Saturday finishing time is usually several hours later than that on weekdays, most often falling between 8 and 9 p. m.

A number of agreements did not specify the limits of the working day, but among those designated the most frequent workday starts at 8 a. m. and finishes at 5 p. m., with an hour for lunch. The workday rarely commences before 7 a. m. except for such workers as milk or delivery drivers, where starting hours may be as early as midnight. In such cases earlier starting times are sometimes set during the summer months and, less frequently, Saturday work may start at a later hour. The half-hour lunch period was specified in about half as many cases as the hour period.

### *Regulation of Shifts*

Provisions regulating shifts are not a common feature of union agreements. In many industries, of course, the single-shift system of operation is in effect; in others, although there is multiple-shift operation, little or no provision is made in the agreements for the regulation of working time. Maritime agreements, however, usually provide for the three-shift system for unlicensed personnel while at sea. Split shifts are common for licensed seagoing personnel and in ship stewards' departments. Hotel and restaurant workers also frequently work on a split-shift basis.

A few agreements prohibit the use of more than one shift or the addition of a third shift, and others require mutual agreement before a shift may be added. Some agreements require that shift assignments be changed every week or 2 weeks. A number of agreements authorize persons to work two shifts successively at the time of the shift change in continuous processes. When a shift partner on such work fails to appear, the worker is usually required to continue on the job until the company is able to secure a substitute.

As a substitute for the 1 day of rest in 7, shift workers on continuous processes frequently receive time off on the basis of a 2-week period—

that is, a 2-day lay-off after 12 days' work. In the glass industry such workers are on a 7-day week, with a 6-hour daily maximum, and receive time off only in the form of an annual vacation.

Some shift workers on continuous processes work more hours than day workers and some work less. Consequently a differential in hours of work for such workers is not important in union agreements. A pay differential is found more frequently, though it is not a general rule.

### *Overtime*

As a general rule overtime work is regulated in detail in union agreements rather than prohibited outright. The women's and men's clothing industries, however, are instances of an almost industry-wide prohibition of overtime work. Agreements covering portions of a few other industries prohibit overtime during designated dull seasons. In the fur industry overtime is permissible only if there are no unemployed union members. Similar provisions occur elsewhere in a few agreements, but there is no customary practice established in other industries.

The amount of overtime work is restricted primarily by requiring a penalty payment on the part of the employer for each hour of such work. The added cost thus serves as an automatic check on excessive overtime. Further restriction is placed on the amount of overtime in a number of agreements by stipulating the maximum amount permissible in a day, week, or 2-week period. Other agreements attach a higher penalty rate after a given hour, usually between 9 p. m. and 1 a. m. In a few industries, chiefly petroleum refining and newspaper printing, the equivalent of the overtime worked must be taken off later. In other cases such a practice is prohibited and payment for overtime work at the higher rate is required. The employer must frequently obtain approval from the union for overtime assignments before such work can begin.

Overtime is most often paid for at time and a half the regular rate. The double-time rate is fairly common, particularly in building construction, and there are scattered instances of overtime rates varying from slightly over the regular scale to triple time. In some cases allowances are permitted over and above the normal hours without the payment of the overtime penalty rate. This allowance varies from 2 to 2½ hours a day and from 4 to 8 hours a week.

Allowances of a somewhat different nature are those made to care for peak periods of production. Such allowances occur in agreements in the glass, machinery, leather, shoes, cleaning and dyeing, and gas and coke industries, but are common only in retail trade and the textile industry. In the former the allowance applies variously during the Christmas and Easter seasons and while taking inventory. In the

textile industry the seasonal allowance can be put into effect only after securing the consent of the employees. Seasonal allowances vary from 6 to 20 weeks a year, except in retail trade, where the seasonal period is restricted to from 2 to 5 weeks. The additional hours permitted at straight pay during this period vary from 4 to 12, with 4 the most common allowance.

Other extensions of normal hours which are found occasionally in collective agreements concern the requirements that operating engineers must get up steam in order that work may begin promptly at the starting time, that delivery-truck drivers must complete their assigned routes before stopping work, and that the handling of perishable goods must be completed by longshoremen and truck drivers regardless of the excess of working time over the usual maximum.

Most agreements provide that extensions of normal hours shall be put into effect by the employer, in conformity with the pertinent provisions of the agreement. In a considerable number of the agreements, however, a permit—either written or oral—must be secured from the union. This device is used chiefly for overtime work. In a few cases overtime or seasonal allowance can be authorized only by a joint trade committee or a permanent impartial chairman for the administration of the agreement.

### *Holidays*

Usual annual holidays are six, although the number provided in agreements varies from 3 to 14. Barbers, and to a less extent retail clerks, frequently work half days on certain holidays. The usual six are New Year's, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas. Election Day, Columbus Day, Washington's Birthday, and Lincoln's Birthday are also frequently observed. In addition there are a number of State, local, and religious holidays, the observance of which is provided for in some union agreements.

It is not possible to determine, from the provisions of the agreements, the prevalence of paid holidays, but certainly the larger proportion of workers receive such days off without pay. When emergency work is required on holidays, however, a penalty pay rate is required. This of course does not apply to those whose regularly scheduled hours fall on holidays. The penalty rate is usually higher than the overtime rate, the most common being double time. In addition, a minimum amount of pay is sometimes specified—such as a half or full day's pay—even though only a few hours are worked on a holiday.

Work on Labor Day is generally prohibited or restricted to that necessary because of an emergency. Overtime work on Saturdays outside of regularly scheduled hours, and on Sundays, is ordinarily restricted in the same way as that on holidays.

### *Vacations*

The provision for annual paid vacations is general only in collective agreements in the rubber, petroleum, and iron and steel industries, but the practice is fairly common on city passenger-transportation lines, in retail trade, and in gas and coke manufacture. Such vacations are occasionally established in agreements in the electrical-equipment, pulp and paper products, upholstery, flour and cereal products, and power and light industries and for tailors and building-service employees. Pay is usually on the basis of an average of previous earnings. In the glassware industry a general 2-week stoppage is observed each year, but this period is without pay.

As a usual rule, 1 year of service is required before vacation rights accrue, but periods varying from 2 to 5 years are also common. A limited amount of leave with pay, however, is granted in some cases after as little as 3 months' service, while other agreements require as much as 9 or 10 years' service before paid vacations are granted. These long-service requirements are especially characteristic of the rubber industry.

About equal numbers of agreements establish 1- and 2-week vacations. None of the agreements provide for vacations longer than 2 weeks, but several provide for 3-, 8-, or 10-day vacations. In several agreements the vacation is increased from 1 to 2 weeks after 2 years of service; in others after longer periods of service. Under two agreements 2 weeks' vacation is not given until after 10 years of employment. In several instances 1 day's vacation, up to a limit of 1 or 2 weeks, is given for each year of service.

### *Industries and Trade Groups Covered*

The industries and trade groups to which the above data relate are those in which collective bargaining is extensive enough to warrant consideration of union conditions as indicative of general conditions. Inclusion of a specific industry also depended upon the adequacy of the Bureau of Labor Statistics' file of union agreements for that industry. The following list gives the industries and trade groups covered.

#### Basic materials:

- Aluminum.
- Cement.
- Coal mining.
- Glass.
- Iron and steel.
- Lumber.
- Metal mining.
- Petroleum refining.
- Rubber.
- Stone.

#### Fabrication:

- Automobiles and parts.
- Coopers.
- Electrical equipment.
- Furniture.
- Glassware.
- Jewelry.
- Machinery and parts.
- Pulp and paper products.
- Pottery.
- Stoves.
- Upholstering.

## Distributive and personal service:

- Barbers.
- Butchers.
- Cleaning and dyeing.
- Hotel and restaurant.
- Laundry.
- Merchant tailors.
- Retail trade.

## Apparel:

- Furs.
- Hats.
- Hosiery.
- Leather and leather products.
- Men's clothing.
- Shoes.
- Textiles.
- Women's clothing.

## Food and agricultural processing:

- Baking and confectionery.
- Brewing.
- Flour and cereal products.

## Construction:

- Building.
- Ships.

## Transportation:

- City passenger lines.
- Longshore.
- Maritime.
- Railroads.
- Taxi.
- Trucking.

## Miscellaneous:

- Building service.
- Gas and coke.
- Light and power.
- Motion-picture machine operators.
- Printing and publishing.

## COMPOSITION OF LABOR FORCE IN THE MERCHANT MARINE<sup>1</sup>

ALIEN SEAMEN today are of relatively minor and rapidly declining importance in American ship personnel. Full citizenship has long been required of all licensed officers, and the Ocean Mail Act of 1928 required that, of the unlicensed crews of vessels employed in ocean-mail contract service, at least one-half (two-thirds after 1932) must be citizens. Later legislation extended this requirement to include the unlicensed seamen of all American ships. National legislation passed in 1936 requires that 75 percent of the unlicensed crew of all vessels flying the United States flag shall be native-born or naturalized citizens. For vessels subsidized by the Federal Government the requirements are more stringent; for them the Merchant Marine Act of 1936 specifies that the entire crew of cargo ships and a minimum of 90 percent<sup>2</sup> of the crew (including licensed officers) of passenger vessels must be citizens, and aliens may be employed on passenger vessels only in the stewards' department.

The proportion of citizens among unlicensed seamen has thus been gaining steadily since 1928. In that year, aliens comprised about 44 percent of all those shipped before shipping commissioners. The proportion declined to 25 percent in 1933, and by the close of 1935 alien seamen formed only 19.4 percent of all seamen, excluding officers. During 1936, the proportion of aliens, excluding officers, dropped further to 16.6 percent.<sup>3</sup>

Seamen of alien birth assume greater importance, however, when the number of naturalized citizens is considered. Quite naturally, the number of naturalized citizens has been increasing with the reduction in number of aliens, but to a less extent. The naturalized citizens comprised 11.0 percent of the unlicensed seamen in 1928, 17.7 percent in 1933, 19.2 percent in 1935, and 20.5 percent in 1936. Seamen of alien birth, therefore, formed 37.1 percent of all unlicensed men in 1936; this, however, was a considerable reduction from the 55.2 percent in 1928.<sup>3</sup>

<sup>1</sup> Prepared by Frances Jones, of the Bureau's Division of Wages, Hours, and Working Conditions.

The data presented in this article were obtained in a survey made by the U. S. Bureau of Labor Statistics in the winter of 1935-36, primarily for the purpose of ascertaining the wages in the industry. (See *Monthly Labor Review*, July 1937, pp. 38-55.) The information was supplemented by data from the annual reports on merchant-marine statistics published by the Bureau of Marine Inspection and Navigation, U. S. Department of Commerce.

<sup>2</sup> This is the ultimate minimum provided for. The act specified a minimum of 80 percent of the crew, excluding officers, during the first year, after which the percentage should be increased 5 percent each year, until citizens should comprise 90 percent of the entire crew, including licensed officers.

<sup>3</sup> Data in these paragraphs are from U. S. Department of Commerce, *Merchant Marine Statistics*, 1935 and 1936.

The British comprise the largest national group among the alien seamen. The other groups in order of numerical importance are the Spanish, Filipinos, Germans, Norwegians, Chinese, Portuguese, South Americans, Central Americans, Dutch, Swedish, etc. In the coastal trade, however, the British come after the Spanish and Filipinos. Chinese are found more extensively in the foreign than in the domestic trade, particularly on the Pacific coast.

A distribution, made by the United States Bureau of Labor Statistics, of employees (including licensed officers) on a single voyage of 296 vessels in 1935, according to citizenship, indicated that the largest proportion of alien seamen were in the stewards' department of passenger vessels (table 1). About 13 percent of the entire crew of passenger vessels were aliens in the stewards' department, but only 1 percent were aliens in the deck department and slightly more than 1 percent in the engine room. On cargo vessels, less than 3 percent of the entire crew were aliens in the stewards' department, and an additional 4 percent were divided about equally between the deck and engine departments. Tankers had 3.9 percent alien seamen in the stewards' department, with about 1 percent in each of the other departments. Whereas Chinese predominated among aliens in the stewards' department of passenger vessels, Filipinos were the major group in that department on cargo ships and tankers.

TABLE 1.—Percentage Distribution of Seamen Aboard 296 Vessels by Citizenship, Department, Service, and Trade, 1935

Service and trade	Total number of seamen	Percentage distribution of seamen in—								
		All departments			Deck department		Engine department		Stewards' department	
		All seamen	Citizens	Aliens	Citizens	Aliens	Citizens	Aliens	Citizens	Aliens
Total.....	20,523	100.0	88.2	11.8	31.4	1.4	27.1	1.6	29.7	8.8
Passenger service.....	11,534	100.0	84.4	15.6	22.8	1.0	19.9	1.3	41.7	13.3
Freight service.....	7,366	100.0	93.0	7.0	42.2	2.0	36.2	2.2	14.6	2.8
Tanker service.....	1,623	100.0	93.9	6.1	43.5	1.2	37.6	1.0	12.8	3.9
Foreign trade.....	11,781	100.0	87.3	12.7	29.6	1.1	26.4	1.3	31.3	10.3
Domestic trade.....	8,742	100.0	89.3	10.7	33.7	1.8	28.2	2.1	27.4	6.8

<sup>1</sup> These vessels showed a higher total percentage of citizens than was indicated by more complete figures compiled by the Department of Commerce, as shown in Merchant Marine Statistics, 1935, p. 80.

American Negroes accounted for a little more than 6 percent of all seamen (including licensed officers), according to data obtained by the Bureau from the crew lists of 352 vessels in 1935. (See table 2.) They, too, were more numerous in the stewards' department of passenger liners than in any other department or service. They, also, were confined to the unlicensed ranks, although a few were petty officers and several occupied similar positions in the stewards' department.

TABLE 2.—Percentage of American Negroes Among All Seamen Aboard 352 Vessels, by Department and Service, 1935

Department and service	All seamen	Percentage of American Negroes
Total.....	23,268	6.2
Deck department.....	7,726	2.3
Engine department.....	6,712	1.3
Stewards' department.....	8,770	13.3
Passenger service.....	12,806	8.3
Freight service.....	8,779	4.1
Tanker service.....	1,623	.0

### Age of Seamen

Older men comprised a substantial segment of the deep-water shipping personnel. Sixty-two percent of the men in the sample reporting age were 30 years old or over. Approximately one-fourth (27.5 percent) were 40 years of age or older; these men represented practically all occupational groups aboard ship. The seamen as a group, however, were relatively young, compared to all men gainfully occupied (table 3).

TABLE 3.—Age Distribution of Male Employees on Deep-Sea Vessels, 1935, Compared With All Male Workers, 1930 Census

Age	Cumulative percentage		Age	Cumulative percentage	
	All gainfully occupied males <sup>1</sup>	Male workers on American-flag deep-sea vessels		All gainfully occupied males <sup>1</sup>	Male workers on American-flag deep-sea vessels
Under 16 years.....	1.2	0.0	Under 50 years.....	76.6	92.4
Under 18 years.....	3.7	.3	Under 55 years.....	84.5	97.0
Under 20 years.....	7.9	3.9	Under 60 years.....	90.4	99.2
Under 25 years.....	20.5	20.2	Under 65 years.....	94.8	99.7
Under 30 years.....	32.9	38.4	Under 70 years.....	97.6	100.0
Under 35 years.....	44.6	56.0	Under 75 years.....	99.1	(3)
Under 40 years.....	56.6	72.5			
Under 45 years.....	67.2	84.1	Total.....	38,077,804	17,187

<sup>1</sup> Fifteenth census of the United States, 1930.

<sup>2</sup> There were  $\frac{3}{10}$  of 1 percent 75 years and older, and the age of  $\frac{1}{10}$  of 1 percent was unknown.

<sup>3</sup> Less than  $\frac{1}{10}$  of 1 percent were 70 years old and over.

The sample for which age data were compiled by the Bureau covered 17,187 male employees of all ranks who shipped aboard 274 vessels in the foreign and coastwise trade. These ships operated from the Atlantic, Gulf, and Pacific seaboard, and they included 162 freight vessels, 77 passenger liners, and 35 tankers. The Pacific coast steam schooners were not represented, as the company records did not contain age data; their inclusion would probably have raised the age

level slightly, as information indicates that they are manned by an older group of persons than is common in other deep-sea services.

The age range of shipboard employees was extremely wide. The oldest man was 80, and the youngest was 16. According to table 4, the average age of the 55 occupational groups of male workers ranged from 47 years for masters to 20 years for cadets. More than one-half of the 55 occupational groups had an average age of 35 years or more, and for only 8 groups was the average below 30 years.

TABLE 4.—Average Age of Male Employees on Deep-Sea Vessels, by Department and Occupation, 1935

Department and occupation	Number of employees	Average age	Department and occupation	Number of employees	Average age
All departments.....	17,187	33.8	<i>Unlicensed men, engine department</i>		
Masters.....	228	47.0	—Continued		
<i>Deck officers</i>			Firemen.....	1,065	32.8
Chief officers.....	42	37.9	Wipers and coal passers.....	596	30.0
First mates.....	308	40.1	<i>Stewards' department</i>		
Second mates.....	297	37.1	Chief stewards.....	221	43.7
Third mates.....	289	32.8	Second stewards.....	66	38.3
Junior mates.....	45	27.2	Third stewards.....	73	39.3
<i>Engine officers</i>			Chefs.....	101	40.4
Chief engineers.....	290	44.9	Chief bakers.....	68	40.6
First assistant engineers, executive.....	23	37.9	Chief butchers.....	64	42.1
First assistant engineers, standing watch.....	293	38.0	First cooks.....	157	39.3
Second assistant engineers.....	299	36.1	Second cooks.....	302	36.0
Third assistant engineers.....	291	34.0	Third cooks.....	79	36.1
Junior engineers.....	226	33.9	Miscellaneous other cooks, chief buffet attendants, and chief pantrymen.....	272	35.3
<i>Radio</i>			Other bakers.....	75	37.7
Radio operators.....	265	31.7	Other butchers.....	40	36.1
Radio assistants and thirds.....	132	28.5	Assistant pantrymen and buffet attendants.....	147	33.0
<i>Unlicensed men, deck department</i>			Scullions.....	507	31.1
Carpenters.....	144	44.5	Cabin stewards.....	458	37.9
Boatswains.....	251	37.3	Waiters, countermen, and salon stewards.....	1,444	35.5
Quartermasters and wheelmen.....	366	29.8	Miscellaneous stewards (deck, bar, lounge, smoking-room, and wine).....	224	32.7
Other petty officers.....	176	40.7	Messmen.....	589	31.0
Able seamen.....	1,946	33.3	Messboys.....	455	29.2
Ordinary seamen.....	682	24.5	Deck watchmen, patrol.....	130	38.9
Cadets <sup>1</sup> .....	211	20.3	Porters, laundrymen, etc.....	302	32.4
Apprentices <sup>1</sup> and deck boys.....	79	21.0	Bellboys.....	220	22.9
<i>Unlicensed men, engine department</i>			<i>Other</i>		
Chief refrigeration engineers and chief electricians.....	118	37.7	Pursers.....	72	36.4
Second and third refrigeration engineers and electricians.....	125	33.7	Pursers' assistants.....	47	30.3
Other petty officers.....	272	37.8	Surgeons and assistants.....	61	43.6
Oilers and water tenders.....	1,409	31.9	Miscellaneous clerks.....	186	31.5
			Musicians.....	118	31.6
			Other miscellaneous employees, pursers' and stewards' departments.....	241	37.4

<sup>1</sup> Includes a few employees in the engine department.

Within each department, in both licensed and unlicensed groups, the average age for the occupation generally varied directly with occupational rank. For example, among the engine officers, chief engineers averaged 45 years, first assistant engineers 38 years, second assistant engineers 36 years, and third assistant and junior engineers

34 years. Similarly, in the case of unlicensed men in the engine department, chief refrigeration engineers and chief electricians averaged 38 years, their second and third assistants 34 years, oilers, water tenders, and firemen 32 years, and wipers and coal passers 30 years. This points to the fact that experience and length of service play an important part in promotion from one rank to another within each group. It should be pointed out, however, that the chief petty officers are considerably older than the third assistant and junior licensed officers, so that persons promoted to the rank of junior licensed officers must usually come from the unlicensed grades lower than that of chief petty officers.

The ordinary seamen were considerably younger than able seamen, their respective averages being 25 and 33 years. In view of the fact that an A. B. certificate may be obtained after a year's experience as ordinary seaman, this difference in age is probably due to the high labor turn-over among ordinary seamen. On the other hand, the averages were 32 years for oilers and water tenders, 33 years for firemen, and 30 years for wipers and coal passers, thus pointing to the fact that the above condition does not exist to the same extent in the engine department. The average ages of many of the rank and file occupations in the stewards' department, such as waiters, cabin stewards, and assistant cooks, bakers, and butchers, were higher than the ages of the rank and file occupations in both the unlicensed deck and engine departments. Other occupations in the stewards' department, such as assistant pantrymen and buffet attendants, scullions, messmen and messboys, and porters and laundrymen, averaged about the same as the lower ranks among unlicensed men in the engine department. The youngest group in the stewards' department was the bellboys, with an average of 23 years, somewhat older than cadets.

The male employees 60 years old and over were scattered among the various ranks, but the largest single occupations were masters (10 percent of all men 60 years and over), chief engineers (9 percent), and surgeons (9 percent). Chief stewards comprised 7 percent of this group, and deck watchmen 6 percent. About 12 percent were petty officers on deck; 9 percent were licensed deck officers of various ranks; 7 percent were waiters, messmen, and cabin stewards; 5 percent were chief cooks, butchers, and bakers; and 5 percent were able seamen. A comparison of the occupational distribution of workers in various age groups is shown in table 5, in which the occupations are further combined into broad skill groups. Only 45 percent of the employees 60 years of age and over were in the lower skilled group, although this group comprised 77 percent of the total ship's personnel.

TABLE 5.—Percentage Distribution of Male Employees on Deep-Sea Vessels According to Age, by Occupational Groups, 1935

Occupational group	Percentage distribution of workers				
	All ages	Under 30 years	30 and under 45 years	45 and under 60 years	60 years and over
Officers and comparable personnel.....	23.0	13.3	27.2	33.8	54.7
Masters.....	1.3	( <sup>1</sup> )	1.0	5.1	10.2
Licensed men, deck department.....	5.7	4.0	6.7	7.1	9.5
Licensed men, engine department.....	8.2	4.1	10.9	10.6	11.7
Supervisory personnel, stewards' department <sup>2</sup> .....	4.4	1.3	5.2	9.4	13.1
Radio operators and assistants.....	2.3	3.0	2.4	.5	.7
Pursers and assistants.....	.7	.7	.7	.5	.7
Surgeons.....	.4	.2	.3	.6	8.8
Subordinate personnel.....	77.0	86.7	72.8	66.2	45.3
Unlicensed men, deck department.....	22.2	28.8	18.6	16.6	17.5
Unlicensed men, engine department.....	21.1	23.8	20.9	15.3	5.1
Subordinate personnel, stewards' and pursers' departments.....	33.7	34.1	33.3	34.3	22.7
All ranks.....	100.0	100.0	100.0	100.0	100.0
Total number of employees.....	17,187	6,604	7,853	2,593	137

<sup>1</sup> Less than  $\frac{1}{10}$  of 1 percent.<sup>2</sup> Includes chief, second and third stewards, chefs, and chief cooks, butchers, and bakers.

Of 17,187 male employees, 1,078 or 6.3 percent were under 21 years of age. Of these young employees, 3 were 16 years old, 41 were 17, 250 were 18, 374 were 19, and 410 were 20 years old. Only 125 were cadets and 45 were apprentices and deck boys. Of the remaining 908 minors, 190 were ordinary seamen (or 27.9 percent of all ordinary seamen and 17.6 percent of all minors), of whom 6 were 17 years of age, 51 were 18, 75 were 19, and 58 were 20 years old. There were 49 able seamen among the employees of less than 21 years. In the engine department, 223 minors (19.8 percent of the total) were occupied as oilers and water tenders, firemen, and wipers and coal passers, of whom 3 were 17 years of age, 38 were 18, 75 were 19, and 97 were 20 years of age. The stewards' department, including miscellaneous workers, showed 413 employees (38.3 percent of all minors) under 21 years of age, of whom 2 were 16 years, 19 were 17, 115 were 18, 129 were 19, and 148 were 20 years of age. These employees were occupied as bellboys, messboys, messmen, scullions, waiters, counter-men, porters, and laundrymen. There were also 33 employees under 21 years of age scattered among a number of miscellaneous occupations.

The 316 female workers included were, as a group, older than the male employees, the former averaging 35.7 as compared with 33.8 years for the latter (who included the older executive officers not represented among the female workers). The principal group of woman employees, namely stewardesses, cooks, maids, etc., had an average of 36 years, as compared with 34 years for the comparable class of male workers.

No woman employees were younger than 21 years; 70 percent were 30 years old or over; 33 percent were 40 years old or more, and 7 percent were 50 years old or over.

# *Employment Conditions*

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## NATIONAL UNEMPLOYMENT CENSUS, 1937<sup>1</sup>

ACCORDING to the voluntary registration in the National Unemployment Census of November 16-20, 1937, the number of totally unemployed, including persons on emergency relief work, was 7,822,912.

The enumerative test census which followed this voluntary registration, and which actually covered 1,950,000 persons by house-to-house canvass, indicated that the voluntary census had been 72 percent complete, so that allowance for this variation would give a projected maximum total of 10,870,000 who regarded themselves as unemployed, at the time of the unemployment census. The number of emergency relief workers included in the voluntary record as unemployed was 2,001,877. The number of females who reported themselves as totally unemployed or on emergency relief work in the voluntary registration and who are included in the above totals was 1,996,699.

The number in the 48 States and the District of Columbia registered as totally unemployed and wanting work (not including persons on emergency work) was 5,821,035. The registration was as low as 3,091 in Nevada and as high as 763,322 in New York. Slightly over one-half of the 5,821,035 unemployed wanting work (2,925,415) were in 8 States—New York (763,322), Pennsylvania (566,437), Illinois (338,055), Ohio (304,682), California (258,005), Massachusetts (248,484), Texas (229,254), and New Jersey (217,176).

Persons who registered as partly employed and wanting more work numbered 3,209,211, of whom 2,641,660 were males and 567,551, females. That the voluntary registration of these partly unemployed was only 57 percent complete was indicated by the subsequent test census. The Middle Atlantic States, including New York, New Jersey, and Pennsylvania, had the largest number partly unemployed, totalling 715,158, of which number 580,934 were males and 134,224 were females. New York had the highest State total of partly employed who wanted more work, 319,566, including 250,264 males and 69,304 females. Pennsylvania was second with a total of 300,809, of which 257,945 were males, and 42,864 females.

The above information was conveyed to President Roosevelt by John D. Biggers, as Administrator of the National Unemployment

<sup>1</sup> Data are from National Unemployment Census, Washington, press releases of January 2, 3, and 8, 1938.

Census which was taken according to an act of Congress passed at the last regular session.

The Post Office Department was designated to distribute unemployment report cards to every known address in the United States, Alaska, and Hawaii.

The text of Mr. Biggers' reports to the President is given below:

### *Text of Reports*

#### PERSONS TOTALLY UNEMPLOYED

As Administrator of the census of partial employment, unemployment, and occupations, I respectfully submit this preliminary report on unemployment as revealed by the voluntary unemployment registration, November 16 to 20, 1937, and our subsequent enumerative test census.

Unemployment is difficult to measure. We approached this task with an appreciation of the difficulties but with a conviction that a knowledge of basic facts was a prerequisite to a sound solution of the unemployment problem.

A voluntary registration of the unemployed was undertaken because it offered the possibility of getting the essential information more promptly and at less cost than a Nation-wide enumerative census. However, as you know, we recognized from the outset that sole reliance could not be placed upon this or any other voluntary registration. Therefore, we conducted an enumerative test census of 1,950,000 people, representing a cross section of the United States, in order to appraise the completeness and accuracy of our voluntary registration. This combination of voluntary and enumerative methods seemed to be the best procedure available within the limits of time and cost.

The painstaking care with which the unemployment report cards were filled out surpassed all expectations. Careful checks in the field and in the process of tabulation resulted in rejection of less than 6 percent of all the cards sent in, although rejections of 10 to 20 percent had been anticipated. The principal reasons for rejection were inability to work, duplicate registrations, unknown at address given, and under or over the age limit (15 to 74). Your faith in the willingness of the people to cooperate in any undertaking for their own good and that of the Nation was fully justified.

The voluntary registration of those working for W. P. A., N. Y. A., C. C. C., and on other emergency work, who, for the purposes of this census, were asked to register as unemployed was—

Males.....	1, 662, 444
Females.....	339, 433
Total emergency workers.....	2, 001, 877

All others classified as totally unemployed, able to work, and wanting work numbered—

Males.....	4, 163, 769
Females.....	1, 657, 266
Totally unemployed workers.....	5, 821, 035

Thus the voluntary registration of totally unemployed, including the emergency workers, was 7,822,912 of whom 5,826,213 were males and 1,996,699 females.

The enumerative test census heretofore mentioned was taken in 1,864 areas, selected at random and distributed throughout the United States approximately in proportion to population. This house-to-house canvass covered more than 1½ percent of the population of the United States and was made by the trained personnel of the Post Office Department during the week of November 29. The questions, however, applied to the employment status of those individuals at the time of the voluntary registration.

The voluntary registrations from the identical areas have been compared with the results of this test census. According to a preliminary analysis for 1,455 areas, the voluntary registration was 72 percent of the number reported in the test census as totally unemployed, including emergency workers. The largest variation was among females. The percentage for males was 79 percent. These percentages of apparent completeness are regarded by the experts as exceptionally high for any type of voluntary registration, and are attributable to the efficiency with which the Post Office Department did its part of the job and to the exceptional support received from the press, the radio, the motion-picture industry, and the mayors' committees and other cooperating agencies in more than 4,000 cities and towns.

In determining the true measure of unemployment it is important to consider certain factors brought to light by the variation between the results of the voluntary census and of the enumerative census.

The unemployed may be divided into two classes. One class represents those regular workers for wages who always work when work is available, regardless of their immediate economic status. Work to them is not only a means of livelihood but a habit of life. These unemployed are clearly a part of the regular labor market.

There is also a second group consisting of those who are not regular workers for wages, such as housewives who seek wage jobs only when the family breadwinner is idle; daughters or sons who take jobs through choice rather than necessity; unpaid family workers on farms and in family stores who seek wage jobs only when family income needs augmenting; retired people who, because savings have been depleted, decide to enter the labor market again. To this class unemployment

is a status depending on their current inclinations and temporary economic conditions.

This second group, made up of the occasional workers for wages, might not take the trouble to respond to a voluntary registration but might readily be reminded to relate to a census enumerator their current inclination to work. For example, the proportion of women who reported themselves as unemployed was greater in the enumerative census than in the registration, though both exceed the percentage of women reporting as unemployed in the 1930 census. It is expected that our detailed analysis will throw further light on this and similar questions.

Considering all of those factors, we do not claim provable accuracy for any one figure. The true number of those who considered themselves totally unemployed, able to work and wanting work, in our opinion, lies between 7,822,912, the number who responded to the registration, and 10,870,000, the number indicated by the enumerative census.

In formulating any program for reemployment of workers in industry, based upon the results of this census, a number of considerations must be borne in mind. For example, it is not to be assumed that because a certain number of people are jobless, the same number of jobs must be created to bring a return to normal conditions. When the usual family breadwinner is idle, two or perhaps more members of his family may enter the labor market. Conversely, when the breadwinner is satisfactorily reemployed, other members of the family may withdraw from the labor market.

Then, too, you recognize—but it should perhaps be emphasized—that the number of people who reported themselves as unemployed should not be confused with the number of people who need financial assistance or relief. Many people consider themselves unemployed who are not financially compelled to work. Irrespective of their need when they seek employment, they enter the labor market and compete with others who have jobs or vitally need jobs. They are, therefore, a factor in the unemployment problem though they may never seek relief.

Our figures reflect the decline in employment during the earlier stages of the current business recession but not the subsequent trend. If you desire additional information beyond that obtainable from the usual statistical sources, it would be possible, with the cooperation of the Post Office Department, to make at any future date a cross-sectional enumeration of our test areas which should be of value to you and the Congress. This, in addition to all the other work contemplated by us, could be carried through well within the \$5,000,000 budgeted for the purposes of this census.

We will submit to you tomorrow another report showing the distribution, by States, of total unemployment as revealed by the voluntary census, following which there will be made available a break-down of this information by counties and by cities of 10,000 and more population, all according to sex. Subsequently, we will give you a report on the extent of partial unemployment, National, State, county, and city, likewise according to sex.

As the tabulation progresses we will report additional facts such as the age groups of the unemployed; their occupational classification; the kinds of business or industry in which they have worked; and other related factors.

Fully appreciating the vital importance of a reemployment program and the contributing value of this information, the Bureau of the Census has cooperated with us by working three shifts a day, in order to expedite this work and permit the completion of our report to you at the earliest possible date, which will be by or before the end of March 1938.

In concluding this initial and partial report, may I express my appreciation of the personal consideration which you have given to this undertaking and of the inestimable value of your counsel and support? I believe this undertaking will prove worth while not only because it provides new facts and figures about unemployment but because the wide popular consideration of this subject has focused the attention of the Nation upon the immediate necessity of formulating a long-range program of reemployment.

TABLE 1.—Persons Who Registered in Unemployment Census as Totally Unemployed or Working on Emergency Work, by States

State	Persons who, between Nov. 16 and Nov. 20, were—					
	Totally unemployed and wanted work			Working at W. P. A., N. Y. A., C. C. C., or other emergency work		
	Total	Male	Female	Total	Male	Female
United States.....	5,821,035	4,163,769	1,657,266	2,001,877	1,662,444	339,433
Alabama.....	150,145	98,942	51,203	38,739	30,782	7,957
Arizona.....	12,948	10,220	2,728	8,476	7,176	1,300
Arkansas.....	92,149	67,832	24,317	34,254	29,037	5,217
California.....	258,005	182,466	75,539	91,055	68,674	22,381
Colorado.....	44,272	33,967	10,305	20,829	15,621	5,208
Connecticut.....	69,576	48,183	21,393	18,206	15,776	2,430
Delaware.....	8,907	6,493	2,414	2,429	1,883	546
District of Columbia.....	37,600	19,073	18,527	9,765	6,960	2,805
Florida.....	73,479	42,924	30,555	33,151	25,491	7,660
Georgia.....	130,803	78,715	52,088	36,587	27,573	9,014
Idaho.....	18,641	15,819	2,822	7,239	6,171	1,068
Illinois.....	338,055	246,732	91,323	121,688	106,270	15,418
Indiana.....	133,136	97,724	35,412	53,267	47,865	5,402
Iowa.....	61,531	46,760	14,771	23,765	20,324	3,441
Kansas.....	64,575	49,361	15,214	35,038	27,926	7,112
Kentucky.....	143,031	98,240	44,791	54,352	44,838	9,514
Louisiana.....	97,317	69,410	27,907	33,160	27,026	6,134
Maine.....	37,814	27,534	10,280	6,050	5,226	824
Maryland.....	58,288	41,518	16,770	12,947	11,237	1,710
Massachusetts.....	248,484	162,052	86,432	79,135	62,428	16,707
Michigan.....	195,016	147,445	47,571	54,172	47,914	6,258
Minnesota.....	98,495	75,568	22,927	45,684	38,937	6,747
Mississippi.....	89,584	60,654	28,930	29,377	22,455	6,922
Missouri.....	191,873	133,573	58,300	65,109	55,333	9,776
Montana.....	28,390	22,867	5,523	20,203	17,515	2,688
Nebraska.....	44,872	33,446	11,426	25,850	22,044	3,806
Nevada.....	3,091	2,571	520	1,757	1,385	372
New Hampshire.....	25,311	16,219	9,092	6,628	5,305	1,323
New Jersey.....	217,176	156,371	60,805	70,354	60,155	10,199
New Mexico.....	21,162	18,232	2,930	9,428	8,313	1,115
New York.....	763,322	537,007	226,315	206,518	178,074	27,544
North Carolina.....	94,711	55,270	39,441	31,030	22,471	8,559
North Dakota.....	26,962	22,340	4,622	18,707	15,531	3,176
Ohio.....	304,682	223,254	81,428	105,185	92,375	12,810
Oklahoma.....	114,114	85,596	28,518	58,725	48,212	10,513
Oregon.....	58,557	46,673	11,884	14,634	12,414	2,220
Pennsylvania.....	566,437	440,692	125,745	184,014	157,882	26,132
Rhode Island.....	43,654	27,453	16,201	14,889	12,487	2,402
South Carolina.....	73,227	44,268	28,959	29,401	20,694	8,707
South Dakota.....	26,002	20,533	5,469	23,680	19,323	4,357
Tennessee.....	116,142	76,266	39,876	31,956	27,609	4,347
Texas.....	229,254	163,223	66,031	76,355	55,643	20,712
Utah.....	18,848	14,959	3,889	10,945	9,223	1,722
Vermont.....	10,197	7,619	2,578	4,128	3,362	766
Virginia.....	84,487	53,372	31,115	28,112	20,329	7,783
Washington.....	89,871	71,196	18,675	31,078	26,574	4,504
West Virginia.....	86,449	69,315	17,134	34,061	29,194	4,867
Wisconsin.....	112,728	87,467	25,261	46,574	40,172	6,402
Wyoming.....	7,665	6,355	1,310	3,191	2,335	856

## PERSONS PARTLY UNEMPLOYED

The voluntary registration of those partly employed and wanting more work was—

Males..... 2,641,660  
 Females..... 567,551

Total, partly unemployed..... 3,209,211

Just as soon as final tabulation of the answers to all of the 14 questions can be completed, we will make available to you and to the

Nation a wealth of data which should be helpful in formulating plans for reemployment. In fact we place much greater value upon such information than upon the enumeration approximation achieved in the fields of total and partial unemployment.

This information will include statistics as to age, color, farm or urban residence, occupational classification, industry, the number of weeks worked during the past year, the hours of employment during the week preceding registration, the number of workers in the family of each registrant and the number of persons dependent upon the registrant.

Questions regarding partial unemployment were included on the voluntary registration card, as provided by law, but with full realization of the impracticability of accurately measuring such a variable quantity. The enumerative test census, conducted over 1,455 postal routes immediately after the voluntary registration to check its completeness and accuracy, demonstrated that it is more difficult to measure partial unemployment than total unemployment. The voluntary registration of the partially unemployed was only 57 percent of the number reported in our test census, as compared with the 72-percent registration of the number reported to the enumerators as totally unemployed.

In our report on total unemployment we pointed out the difficulties of measuring the marginal group consisting of those who are not regular workers for wages. In the field of partial unemployment other factors make the appraisal even more complex. For example, it is difficult to get people to understand the important distinction between partial employment and partial unemployment. Many persons regularly work only part time and do not need or want more work. They are partially employed. Others are reduced to part-time work by force of circumstances, not by personal limitations or choice. They are partly unemployed.

Preliminary analysis indicates that a very considerable number have registered or reported themselves as partially unemployed when they clearly belong to the group of partly employed workers and should not have included themselves in either the voluntary or the test census.

Attention should also be called to the fact that the volume of partial unemployment reflects the prevalent share-the-work policy. Employers, oftentimes at the request of the workers, distribute the burden of unemployment among all of their workers to avoid imposing the extreme hardships of idleness on those who would otherwise have to be laid off. This is usually done with the hope that improved conditions will make it possible to bring all back to full-time employment, but during the interim the part-time workers may properly consider themselves partly unemployed.

TABLE 2.—Persons Who Registered in the Unemployment Census as Partly Employed and Wanting More Work, by Sex, and by States

Division and State	Estimated population July 1, 1937	Persons who (between Nov. 16 and Nov. 20) registered as partly employed and wanting more work		
		Total	Male	Female
United States.....	129,257,000	3,209,211	2,641,660	567,551
New England.....	8,597,000	264,397	194,180	70,217
Maine.....	856,000	29,048	23,695	5,353
New Hampshire.....	510,000	21,462	15,545	5,917
Vermont.....	383,000	7,798	6,484	1,314
Massachusetts.....	4,426,000	135,359	97,626	37,733
Rhode Island.....	681,000	28,225	18,217	10,008
Connecticut.....	1,741,000	42,505	32,613	9,892
Middle Atlantic.....	27,478,000	715,158	580,934	134,224
New York.....	12,959,000	319,566	250,264	69,302
New Jersey.....	4,343,000	94,783	72,725	22,058
Pennsylvania.....	10,176,000	300,809	257,945	42,864
East North Central.....	25,841,000	578,835	498,359	80,476
Ohio.....	6,733,000	178,538	154,183	24,355
Indiana.....	3,474,000	86,281	75,352	10,929
Illinois.....	7,878,000	162,606	137,970	24,636
Michigan.....	4,830,000	88,778	77,044	11,734
Wisconsin.....	2,926,000	62,632	53,810	8,822
West North Central.....	13,819,000	306,865	262,802	44,064
Minnesota.....	2,652,000	56,197	48,355	7,842
Iowa.....	2,552,000	50,337	43,936	6,401
Missouri.....	3,989,000	104,360	86,995	17,365
North Dakota.....	706,000	12,546	11,257	1,289
South Dakota.....	692,000	15,005	13,212	1,793
Nebraska.....	1,364,000	29,526	25,484	4,042
Kansas.....	1,864,000	38,894	33,563	5,331
South Atlantic.....	17,260,000	405,232	314,315	90,918
Delaware.....	261,000	4,317	3,501	816
Maryland.....	1,769,000	28,202	22,866	5,336
District of Columbia.....	627,000	12,164	7,252	4,912
Virginia.....	2,706,000	53,108	43,437	9,671
West Virginia.....	1,865,000	37,522	33,873	3,649
North Carolina.....	3,492,000	79,369	58,224	21,145
South Carolina.....	1,875,000	51,625	39,461	12,164
Georgia.....	3,085,000	88,408	66,493	21,915
Florida.....	1,670,000	50,517	39,207	11,310
East South Central.....	10,731,000	300,134	247,789	52,345
Kentucky.....	2,920,000	63,528	53,816	9,712
Tennessee.....	2,893,000	68,811	57,215	11,596
Alabama.....	2,895,000	102,501	82,369	20,132
Mississippi.....	2,023,000	65,294	54,389	10,905
West South Central.....	12,900,000	335,679	285,156	50,523
Arkansas.....	2,048,000	67,235	58,396	8,839
Louisiana.....	2,132,000	60,797	50,719	10,078
Oklahoma.....	2,548,000	61,487	53,335	8,152
Texas.....	6,172,000	146,160	122,706	23,454
Mountain.....	3,792,000	86,616	75,319	11,297
Montana.....	539,000	13,642	12,260	1,382
Idaho.....	493,000	12,698	11,676	1,022
Wyoming.....	235,000	4,830	4,361	469
Colorado.....	1,071,000	25,874	20,739	5,135
New Mexico.....	422,000	8,100	7,178	922
Arizona.....	412,000	6,609	5,730	879
Utah.....	519,000	13,485	12,147	1,338
Nevada.....	101,000	1,378	1,228	150
Pacific.....	8,839,000	216,295	182,806	33,489
Washington.....	1,658,000	49,476	43,615	5,861
Oregon.....	1,027,000	31,243	27,284	3,959
California.....	6,154,000	135,576	111,907	23,669

## PLACEMENT OF AMERICAN INDIANS, 1936-37

THROUGH the employment offices of the Indian Service some 6,570 Indians were placed in employment (2,654 within the Service and 3,916 in private employment) in the year ending June 30, 1937. Two-thirds of those placed in private employment obtained permanent positions, according to the annual report of the Secretary of the Interior. The types of jobs obtained ranged from household work to highly technical positions. The follow-up work for Indian placements outside the Indian Service indicates that most of these job holders were able to adjust themselves to city industrial life.

As a general practice, Indian workers are strongly encouraged to remain on their homelands, and to use their training to solve their individual economic difficulties and to promote the economic rehabilitation of their tribes. However, when an Indian manifests a wish to get employment away from the reservation, all possible assistance is given to secure work for which he is equipped by training and experience.

*Indian Emergency Employment*

Over 50,000 Indians were given work by the Indian Emergency Conservation Work, from its beginning in June 1933 to June 30, 1937.<sup>1</sup> The daily number of men on the pay rolls for the 4 years was about 8,500, and the number of calendar days worked exceeded 11,500,000. At certain agencies employment had to be staggered.

Indians when qualified, have been given preference in supervisory positions. A large number of machine operators, mechanics, group foremen, assistant foremen, and camp assistants are Indians. For skilled and supervisory positions the record for the 4-year period is 540 Indians as against 436 whites.

The monthly wages for Indian enrollees have been, as in the camps for whites, \$30 plus board, lodging, and clothing, or a monthly commutation of \$15 when the enrollee lives at home and provides his own meals. The popularity of the family camps continued. Reservation staffs aided these groups in sanitation, health, and social problems.

<sup>1</sup> The Indian Emergency Conservation Work ended its fourth year June 30, 1937. Henceforth this activity will be designated the Civilian Conservation Corps, Indian Division.

# Social Security

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## SICKNESS INSURANCE IN DENMARK <sup>1</sup>

THE SOCIAL reform law of May 20, 1933, which codified the numerous social laws passed in Denmark during more than half a century, included four laws, one of which—the law governing public insurance (*Lov om Folkeforsikring*)—dealt with sickness insurance, invalidity insurance, and old-age pensions. This law, as amended May 7, 1937, covers practically the entire population but benefits specifically the workers, and persons of either no means or very limited resources. The historical background of the national insurance system was the voluntary sickness insurance for the poor, which was carried on with public support. The first law relating to sick funds was passed April 12, 1892. At that time the country already possessed an extensive network of mutual-benefit societies. This law was replaced by a new act in 1915 which was amended in 1921, the amendment being necessitated by the Invalidity Insurance Act of May 6, 1921, which provided that every member of a sickness fund without means should be compulsorily insured against invalidity until his sixty-second year. The three principles embodied in all these acts were the voluntary insurance of persons without means, subsidy from the public authorities, and supervision of the insurance institutions by State departments. The voluntary health insurance prior to the enactment of the social reform law in 1933 covered about two-thirds of the population.

### *Type of System*

The national sickness-insurance system is based on the principle of voluntary insurance, but insurance against invalidity and the right to an old-age pension are dependent upon membership in a recognized sick fund. Under the definitions used, a sick fund is an association of persons without resources who have combined to provide mutual assistance in case of sickness by means of a specified contribution, whereas a sick-benefit society is an association of persons who cannot be considered to be without means but who have combined to provide mutual assistance in case of sickness. The latter class of

<sup>1</sup> Based on report by E. Gjessing, American vice consul, Copenhagen; additional data from International Labor Office (Geneva), Legislative Series 1933, and Industrial and Labor Information, October 3, 1937.

societies may, with the consent of the Minister of Social Affairs, become subject to the supervision of the Director of Sick Funds, in which case the association is called a State-inspected sick-benefit society (continuation sick fund). In order to secure recognition a sick fund must operate either for a particular trade (commerce, industry, or handicraft) or for a locality (as a rule, the area of the commune).

### *Coverage*

All citizens of Denmark enjoying civic rights are entitled to become members of either a recognized sick fund or a State-inspected sick-benefit society. Under the laws of May 20, 1933, and May 7, 1937, the members of the sick fund, in order to receive benefits, must be "unpropertied," and an order is issued every 3 years by the Minister of Social Affairs fixing the income and property limits for the beneficiary members. The maximum income ranges, at present, from 4,200 kroner in Copenhagen to 2,800 kroner in the rural districts, and the property limitation from 14,000 kroner for heads of families to 9,000 kroner for single persons. Only persons of the working classes without means and men or women in similar economic circumstances, such as small farmers, handicraft workers, and other persons engaged in industry, public employees, etc., may become full members of a sick fund. Orphaned children up to the age of 15 years for whom no other facilities are provided for obtaining sick benefit under any legislative provisions may (subject to fulfillment of the usual economic conditions) become independent full members of a sick fund irrespective of the lower age limit, but they are entitled only to sick benefit and may not receive cash benefits. If a member's economic situation improves to such an extent that he cannot remain in the sick fund as a full member without means, he may become a contributing member of the sick fund with means if the fund has a section for such members, or he may become a member of one of the State-inspected sick-benefit societies. Admission to the sick funds is between the ages of 14 and 60, and a member's children under the age of 15 are also covered by the insurance. No person may be admitted to a sick fund as a full member while suffering from a temporary illness, nor can persons be admitted who, because of a chronic or incurable disease or a serious bodily infirmity, cannot be deemed to be capable of work. No person may be a member of more than one recognized sick fund and no member of such a fund, who also joins a nonrecognized sick fund, may secure daily cash benefit exceeding his average earnings.

Irrespective of income and property qualification, all persons between 21 and 60 years of age who are Danish citizens and are residents in Denmark or employed on a Danish vessel, and who are not full members of a sick fund or full or contributing members of a sick-

benefit society, must be contributing members of a recognized sick fund if they fulfill the required conditions as to health. Application for membership must be made not more than 3 months after attaining the age of 21, and other persons were required to apply for admission within a year after the act became operative (October 1, 1933). Every person who fails to fulfill the conditions as to health before reaching the age of 27 years is required to reapply for admission to a sick fund as a contributing member not less than 3 months before reaching the age of 30 years. Contributing members are entitled to be transferred to full membership in a sick fund, irrespective of their health and age at the time of transference, when their economic circumstances change so that they fulfill the financial requirements for beneficiary members. However, such members are not entitled to benefits until the expiration of 6 months (formerly 6 weeks) after their transference. This extension of waiting period, which was effected by the 1937 law, was intended to restrain the tendency of insured persons to remain passive members of the system (because of the smaller contribution) as long as they are young and in good health and only to move into the class of active members when older and more exposed to sickness. Not more than one State-inspected sick-benefit society may be approved for the same area. The operations of such societies are restricted to the granting of sick benefits, based on the mutual liability of members. Such societies pay an annual fee to the State treasury for inspection. Admission to membership in the sick-benefit societies for persons with means is between the ages of 14 and 40 and every such society must provide for the admission of persons who fulfill the conditions as to age and health. A contributing member who on account of his age is no longer entitled to obtain full membership rights in the sick-benefit society must be transferred to a recognized sick fund as a contributing member.

A sick fund for persons without means must as a rule have at least 200 members in order to receive and retain State recognition. The number of full members of the sick funds was about 2,100,000 at the end of 1935.

Nationals of other States residing in Denmark may be admitted to membership in the funds in cases where reciprocal agreements have been concluded with the State in question.

### *Contributions*

The contributions of full members of a sick fund are fixed at such an amount as may be anticipated from the previous experience to be sufficient when combined with other ordinary receipts of the fund and the grants from public sources to meet the claims and to form a reserve which will be equal to the average expenses of the sick fund over the

3 preceding financial years. The fee paid by contributing members is 2 kroner per year if 25 years of age and under, and 2.50 kroner per year thereafter. An annual grant is made to the recognized sick funds by the Treasury, the amount of which is fixed in the annual finance act. The grant allocated to the individual sick funds is 2 kroner per year for each person who at the end of the year is a full member without means, plus one-fourth of the expenditures of the funds for medical treatment of members, hospitalization, daily cash benefits, dental care, maternity benefits, home nursing, and treatment in convalescent homes, etc. An additional State grant is made for persons who, though suffering from frequently recurring or incurable disease or bodily infirmity, are nevertheless considered capable of work. The communes repay to the sick funds expenditures in certain types of cases. If a full member without means or a contributing member of a sick fund is wholly or partially unable to pay the membership or invalidity premiums, because of sickness, reduction in working capacity, unemployment, etc., the commune of residence will pay the premium as long as circumstances require. The communes are assessed an amount (which is apportioned among them on the basis of the number of inhabitants, the total income of the commune, and the total taxable land value of the commune) to be applied toward payment of the cost for persons suffering from a chronic or incurable disease and of cash benefits in maternity cases.

### *Benefits*

In case of sickness, the law specifies that the sick fund shall provide free medical attendance, free hospital treatment, a daily cash benefit, maternity care, and three-fourths of the cost of insulin and liver preparations for patients suffering from diabetes and pernicious anemia. Sick benefit may not be granted until 6 weeks after admission to membership in a fund, except in case of accident, when it is paid immediately; maternity benefit is payable after 10 months. No cash benefit may be granted for sickness which does not last more than 3 days. The 6-week qualifying period does not apply to a child who is registered before he reaches the age of 15. The daily cash benefit may not be less than 40 øre nor more than 6 kroner, nor exceed four-fifths of the beneficiary's average daily earnings prior to sickness. The benefit period may not exceed 26 weeks in each 12 consecutive months. A member, whose sickness becomes chronic or incurable, may not receive more than 3 kroner per day. A member who is in receipt of an invalidity or old-age pension may receive not more than 1 krone per day, and his benefit is limited to 13 weeks in any 12 consecutive months. Children of members may not receive cash benefits. In maternity cases the daily cash benefit is paid for a fortnight at the

same rate which the person would receive in case of sickness, and after that the daily benefit is 3 kroner, 2.40 kroner, or 1.80 kroner, according to the place of residence. The total period for which the benefit may be granted is 6 weeks. If a member has received sick benefit for 60 weeks during 3 consecutive financial years his right to receive further benefit lapses and he is transferred to the class of contributing members. He may regain full membership rights at the expiration of 12 months but must then produce a medical certificate showing that he is physically fit. A member who receives his full income during sickness is not entitled to pecuniary benefit, and if part of the income ceases the cash benefit granted must be such that the total amount will not exceed his usual income. This rule does not apply if a member's income consists solely of an invalidity or old-age pension.

Free conveyance is provided by the communal authority for persons living in the country or more than 1 kilometer outside a market town for the purpose of taking a member to a medical practitioner or midwife or to a hospital, or for bringing the doctor or midwife to the patient. In general, the distance for which conveyance is provided may not be more than 10 kilometers.

The optional benefits which a sick fund may provide include medicines (three-fourths of the cost), dental care, treatment by specialists, hospitalization in special clinics, and home nursing.

The sick-benefit funds pay the physicians employed on the basis of collective agreements between the management of the societies and medical practitioners, dentists, and midwives. The agreements must be approved by the Minister of Social Affairs. The payments may be in the form of a fixed amount annually per member, with additional payments in difficult cases and for visits at night and on holidays, or payment for each visit. Payment on an annual basis is the preferred method, as it is considered less expensive. Members are free to choose a physician within the district of the society to which they belong. The hospital charges are fixed by agreement between the sick-benefit funds and the hospitals in the districts in which the funds are located, and the rates may not exceed those charged to persons who are not beneficiary members. Such agreements are subject to the approval of the Minister of Social Affairs.

### *Disputes and Penalties*

Loss of membership rights as a full member may be incurred for fraud and dishonesty, and repayment to the sick fund of benefits received as a result of fraudulent statements may be required. An appeal against the decision of the director in such cases may be lodged, by the member or the sick-fund committee, with the Minister of Social Affairs within 1 month.

Disputes between sick funds and medical practitioners or midwives are referred to an arbitration council consisting of a chairman and six members representing the Federation of Central Associations of Sick Funds and the Danish Medical Association.

### *Administration*

A State sick-benefit insurance department was established in 1933 under the Ministry of Social Affairs. The Director of Sick Funds who is in charge of the department has general supervision of the funds but takes no part in their management. He presents an annual report to the Minister on the operations of the sick funds and arranges for annual meetings (for the whole country or for each Province) for the instruction of representatives of the recognized funds. Each fund may send to the annual meeting one or more representatives, elected by the governing body of the fund. A sick-fund committee, consisting of 12 members with the Director as chairman, is elected by the governing bodies of all the sick funds for a term of 4 years. This committee is required to meet at least once a year to deal with questions affecting the system of sick funds, and has power to demand audits of the accounts of the funds, to regulate the transference of members from one fund to another, and to recommend withdrawal of State recognition in cases where it is considered that the management of a fund is acting toward its members or toward other funds in such a way as to affect the whole system adversely. Annual reports covering the financial condition of the funds must be made on forms approved by the Director of Sick Funds by funds whose membership does not exceed 5,000; funds with a larger membership must meet the requirements of the Director as to their system of accounts. The reports for the year, together with the accounts duly audited and approved, must be forwarded to the Director by the funds within a time limit fixed by the Minister of Social Affairs. A thorough local audit of the accounts of all recognized sick funds must be made every 5 years by accountants belonging to the civil service.

### *Statistics of Operation*

Most of the 1,640 sick-benefit societies are quite small, and about 75 percent have fewer than 1,000 members. Under the circumstances, the financial standing of the individual societies varies greatly. The total expenditures, according to officials of the State Sick Benefit Committee, now average 67,000,000 kroner per annum, and the total reserve funds in 1937 amounted to 44,000,000 kroner. The demands made on the funds are increasing and some difficulty is experienced in increasing the membership contribution. As a result, the reserve funds have decreased in proportion to expenditures in the past few years.

The public contributions to the sick-benefit societies have been as follows (according to officials of the Ministry of Social Affairs):

	<i>State</i> ( <i>kroner</i> )	<i>Communes</i> ( <i>kroner</i> )	<i>Total</i> ( <i>kroner</i> )
1933-34-----	12, 815, 000	1, 750, 000	14, 565, 000
1934-35-----	15, 000, 000	6, 916, 000	21, 915, 000
1935-36-----	17, 742, 000	7, 249, 000	24, 991, 000

The Sick Benefit Societies Committee publishes statements of income and expenditure of the societies for each calendar year. The cost of administration of the sick funds amounted to slightly more than 11 percent of the total expenditures in 1934. These costs are higher in the urban than in the rural districts. The figures for 1934, the latest year available, are given in the following table:

*Receipts and Expenditures of Sick-Benefit Funds in Denmark in 1934*

Item	Amount
	<i>Kroner</i>
Receipts-----	61, 804, 539
Membership fees-----	41, 151, 035
Contributions by passive members-----	191, 030
Voluntary contributions by the communes-----	916, 933
Interest on assets-----	931, 217
Interest on invalid premiums and other assets-----	488, 009
Other-----	1, 859, 938
Contributions by the State and communes-----	16, 266, 377
Expenditures-----	62, 282, 569
Cash benefits-----	8, 795, 166
Treatment at local hospitals-----	8, 404, 246
Treatment of tubercular patients-----	766, 792
Medical treatment-----	16, 150, 602
Treatments by specialists-----	2, 308, 229
Dental treatment-----	2, 604, 382
Medicine-----	5, 669, 587
Maternity help and treatment-----	2, 371, 512
Treatment at private clinics-----	878, 408
Home nursing-----	892, 039
Bandages, disinfectants and spectacles-----	734, 621
Treatment at insane asylums-----	474, 441
Payments to homes for convalescents-----	663, 514
Insulin and liver medicines-----	308, 577
Massage and medicinal baths-----	464, 747
Administration expenditures-----	7, 000, 077
Miscellaneous-----	1, 034, 008
Sick benefits to older members <sup>1</sup> -----	1, 041, 347
Benefits to chronically sick members-----	1, 720, 274

<sup>1</sup> Persons who had reached the pensionable age at the time the act became operative.



## UNEMPLOYMENT-BENEFIT ACT OF UNION OF SOUTH AFRICA <sup>1</sup>

THE UNEMPLOYMENT benefit plan lately introduced in the Union of South Africa establishes separate insurance funds for a selected group of industries. In this respect it differs from the majority

<sup>1</sup> Report of Russell M. Brooks, American consul, Johannesburg, October 13, 1937; Union of South Africa, Act No. 25 of 1937 (Unemployment Benefit Act); International Labor Office, Industrial and Labor Information, August 23, 1937, p. 259; and Great Britain, Ministry of Labor Gazette, July 1937, p. 259.

of governmental systems of compulsory unemployment insurance whereby pooled funds are provided. The law of South Africa was enacted in April 1937 to become effective on a future date to be fixed by the Governor-General. Adoption of this legislation followed two unsuccessful attempts on the part of members of Parliament to establish unemployment insurance in 1934 and 1935. The new law places the supervision of the system under a central authority appointed by the Minister of Labor and Social Welfare. Employee contributions in the lower wage brackets are one-third those of employers, increasing until, in the highest of three wage classes, they equal those of the employers. The Government is committed to contribute in an amount equaling one-fourth of the total of employer and employee payments, but reserves the right to allocate such funds in grants and loans under its own terms, requiring compliance with the standards it may fix. Benefits of 10s. to 30s. per week are payable depending upon the wage class in which the contributor falls. To be eligible for benefit an employee must have made at least 26 contributions within the 2 years immediately preceding the period of unemployment. The waiting period is 1 week and benefits are receivable for 26 weeks in any 52.

### *Coverage*

Although employees of only eight industries—building, mechanical and electrical engineering, motor engineering, furniture making, gold mining (within certain areas), leather and footwear manufacture, printing and newspaper, and clothing—are covered by the terms of the act, the Governor-General is empowered to abolish funds or add to them as the need arises. Participation is compulsory for employees under a contract of service or apprenticeship with an employer to perform work in one of the industries listed or in the areas for which a fund has been established. Regardless of whether the contract to work is expressed or implied, oral or written, whether the remuneration is on a time- or piece-rate basis, or whether the contract was entered into before or after setting up of the fund, the members of the industry affected are obliged to contribute.

The chief categories of labor excluded from the system are laborers; persons whose earnings exceed £450 per year (with exceptions); persons performing contract work in a place not under the control of the employer; those performing work for an employer at irregular intervals for less than one day in a calendar week; or employed by more than one employer in a calendar week unless all are operating in the same scheduled industry; husband or wife of an employer, when working for such employer; employees of the Government (including the Railway Administration) or a provincial administration, unless employed in an undertaking within the limits of a sched-

uled industry; persons whose contract of service is regulated under the Native Labor Regulation Act, 1911; and those employed in agriculture including horticulture, forestry, and any employment in or connected with farming.

### *Contributions*

The funds are supported by employers, employees, and the Government. Rates of contribution depend upon the annual earnings of the employee in question. For the purposes of the law workers are divided into three classes. For those with annual earnings of up to £78 the employer contributes 6d. per week and the employee 2d; in the earnings class £79 to £130 the respective weekly payments amount to 10d. and 6d; from £131 to £450 employers and employees make equal contributions of 1s. each.

A person falling in the highest wage class (£131 to £450) is not disqualified from participation by reason of earnings in any week or month of more than the maximum if he contributed to the fund immediately before the week or month when his earnings rose. Such an employee is permitted to continue under the system until his earnings in any week or month are at the rate of more than £500 per year.

To compute annual earnings for the purpose of establishing the contribution rate, the weekly earnings are multiplied by 52, or for those paid by the month the monthly rate is multiplied by 12, or the calculation may be made in such a way as to give the true value of the earnings of the contributor. In establishing earnings on an annual basis the law provides that account shall be taken of the value of any food and quarters supplied by the employer and overtime or other special remuneration of frequent occurrence for work habitually performed. Disputes over the calculation may be referred to the Central Authority, whose decisions are final.

The contribution of the Government is one-fourth of that of the aggregate employer and employee payments. Its contributions are payable to the respective funds, from governmental revenue, at such times and in such manner as the Minister of Labor may determine in consultation with the Central Authority and upon receipt of proof that contributions have been made by employers and workers. Government contributions are placed in a central fund together with certain other assets. The Central Authority is given authority to dispose of Government contributions by aiding a given fund with a monetary grant or advance. It is further provided that "any such grant or advance shall be conditional upon the committee effecting such alteration in the rates of the contributions or benefit or such variation of the conditions relating to the payment of benefit as may be deemed necessary by the Central Authority, and in the case of an

advance upon such terms as to the repayment thereof as the Central Authority may determine."

If in the judgment of the Central Authority the assets of any fund are larger than necessary or are insufficient to meet demands, the Authority may agree to a change in the rate of contributions, or to a variation in the benefits, or any combination of these provisions. Such action must be published by the Central Authority in the Government Gazette and will apply from a date fixed in the notice of change.

Contributions are not required for any employee who, although employed, has not worked in a given week; however, if he has worked for one or more days in a calendar week, contributions are payable for the whole week. If employment in any calendar week is furnished by more than one employer in a scheduled industry, the full amount of the employer contribution is charged to the employer for whom the employee first worked in that week. The full employee contribution for that week is also deducted by the first employer.

### *Benefits*

*Amount.*—The rate of benefits paid to the worker depends upon the wage classification under which contributions are made toward the unemployment-benefit fund. Persons in the wage class £78 and under, are entitled to 10s. per calendar week, those earning £79 to £130 receive 20s., and persons paid from £131 to £450 per annum receive 30s. per calendar week. The amount of the benefit payments is subject to change in the discretion of the Central Authority, just as are contributions. For any period of less than 1 calendar week the amount of the benefit is calculated at one-sixth for each of the 6 working days.

Benefits to a person in any earnings class are limited to 1 week's payment for each 6 weekly contributions made to a fund, or the amount of benefit standing to his credit in that class, whichever is less. If contributions have been made under more than one earnings classification the payments shall amount to 1 week's benefit for each 6 weekly contributions or the total of the benefits credited to him in each such group, whichever is less. For purposes of this provision the amount of benefit standing to the employee's credit is the amount obtained when the number of weeks of benefit to which he is entitled is multiplied by the rate of benefit applicable for the period in question.

An employee who ceases to contribute to one fund and becomes a contributor to another is entitled to unemployment benefit when earned, under the second fund, subject to the same conditions as if he had not been a contributor to the first fund. Payments to both funds are taken into account in computing the benefits due the

contributor and are to be considered as having been paid into one fund. If the contributor becomes unemployed within 3 years of the time he belonged to the first fund he is entitled to benefit from the second fund until his rights are exhausted and then from the first fund to the extent his previous payments will cover. In case a worker ceases to contribute to one fund and for any reason deemed sufficient by the Central Authority does not contribute to another in his new employment, he is entitled within 2 years of the time he leaves his previous employment to such unemployment benefit as he has earned in that employment.

*Waiting period.*—No period of unemployment is deemed to have commenced under the act until the contributor has applied for benefit. No benefit is payable for the first week of unemployment, and for this purpose periods of unemployment separated by less than 9 weeks of employment are regarded as a continuous period of unemployment.

*Conditions of benefit.*—In case of a contributor who receives compensation for any loss of employment, the committee may consider him as employed during a part of the period and thus not entitled to benefits during that interval. Benefits are further limited to those employees who have made contributions for at least 26 weeks in the 2 years immediately preceding the beginning of unemployment. Payments may not be made unless the contributor is capable of and available for work, with the exception that if he becomes ill while unemployed and the committee is satisfied that such illness is unlikely to have prejudiced his chance of securing work, benefit may be allowed. He must make application for benefit in the prescribed manner. If he is unemployed by reason of a labor dispute he is not entitled to benefit unless the unemployment follows bona fide employment in other suitable work after the stoppage occurs. Persons whose unemployment is attributable to misconduct or due to voluntary separation are not entitled to benefit for 6 weeks from the date when unemployment commenced, unless the committee determines that special circumstances would make this inequitable, in which case the period may be reduced. Other causes for withholding benefits include detention in any prison or other institution maintained wholly or partly with public funds, absence from South Africa, receipt of a pension or other allowance if the amount is sufficient to make benefits unnecessary, and refusal to accept or apply for "suitable" work. Suitable work is defined as employment of a similar class and in the same wage group for the first 13 weeks of unemployment and thereafter any work deemed suitable by the committee (but not including work available because of a labor dispute).

*Duration of benefit.*—Benefits may be paid for not to exceed 26 weeks in any 52 weeks, commencing with the first day of any period of unemployment for which benefits are allowed.

*Administration*

*Personnel and duties.*—The Minister of Labor<sup>3</sup> has jurisdiction over the several unemployment funds established by the Unemployment Benefit Act, 1937, and has the power to reduce or extend the industrial coverage under the law, either on application from interested groups or on his own initiative. In establishing a fund the Minister must give notice in the Government Gazette and define the limits of the scheduled industry. He may, from time to time, vary the areas included.

The Minister is further empowered to appoint a body, known as the Central Authority, consisting of three members one of whom is entrusted with registration of employers' organizations and trade-unions under any law relating to such registration; the second must be a person with sound knowledge of financial matters; and the third must possess sound knowledge of administration. The Minister may designate which of these shall act as chairman of the Authority.

Members may in the discretion of the Minister be paid sums not to exceed £100 per annum for their services, this amount not to form part of their pensionable salary but to be in addition to other salary as officers of the public service.

General supervision of the system is vested in the Central Authority by the terms of the enabling legislation. This body is required to inform itself on the condition of the several funds and the work of the special committees established for each fund; to inquire into any matter relating to a scheduled industry which is likely to affect unemployment; to order necessary investigations; and to determine the financial condition of funds. It is further empowered to report to the Minister of Labor upon objections, determine appeals, control the central fund, collect and collate statistics, approve rules, agree to committee recommendations on the alteration of rates of contributions and benefits or order such changes, alter rules of a committee, control a fund on order of the Minister, and perform any other functions assigned by the Minister. Final determination of questions as to coverage for any employer or contributor is also a power of the Central Authority; such decisions are not subject to appeal in any court of law. A decision by two of the three members of the Authority is deemed a decision of the Central Authority.

The Central Authority may, in its discretion or on motion of a defendant if he makes request within 90 days of notification of a decision, refer a case to the Supreme Court. In such cases no appeal from the Court's decision is permitted unless the Court is of the

<sup>3</sup> When the law was enacted the Union of South Africa had a single department of labor and social welfare. Effective October 1, 1937, these functions were separated and placed under two departments, and administration of the unemployment-benefit system was then placed in the Department of Labor.

opinion that the case involves an important question of law or is of importance to a large body of persons.

For each fund established, a committee of six persons, consisting of an equal number of employer and contributor members, is directly responsible for administration. If a fund is set up on request of members of an industry the committee representatives are chosen by the employers' organizations and the trade-unions concerned, and it is further provided that if there is more than one organization or union the selection shall be by a method determined by the Minister of Labor. If the Minister establishes a fund on his own initiative he is accorded the right to appoint representatives to the committee. A seventh impartial member appointed by the Central Authority may be added in the discretion of the Minister of Labor. As each fund is a corporate body, capable of suing and being sued under the law, and is exempt from income taxes and stamp duties, the responsibility of the management committee is considerable. Alternate members and persons to fill vacancies for unexpired terms are chosen in the same manner as members of committees. Terms of office vary from 1 to 3 years.

Committee members may receive salaries out of the funds as determined by the Central Authority with the approval of the Minister of Labor.

The functions of the committees are to receive applications for benefit; decide whether benefit is due and in what amount; make payments in accordance with their own decision or with the decision of the Central Authority in cases of appeal; recommend changes in contributions and the conditions of benefit payment; collect the contributions payable; make required reports; keep accounts; maintain records and minutes of proceedings; and perform such other duties as may be required for carrying out the terms of the act. Persons may appeal decisions of committees to the Central Authority, provided action is taken in writing within 14 days of the notification of the decision.

For cause, the Minister of Labor may disestablish a committee and place administration of the fund affected under the Central Authority for a specified period.

*Funds.*—The law provides that each fund shall maintain its own bank account, made up from contributions, and in addition there shall be a central fund wherein are deposited the Government's contributions toward maintenance of the unemployment system plus deposits from the individual funds and interest on investments. Each industry fund is permitted to keep in its individual account only such sums as the Central Authority may approve as necessary to cover current expenses. Amounts in excess of such requirements are placed in the central fund and together with sums contributed by the Government and earned by investment must be deposited with the Public Debt

Commissioners in one account to be known as the "unemployment-benefit funds account."

The Central Authority is responsible for keeping accounts of the moneys of each industry fund and the central fund and must at the end of each calendar year allocate to each fund the proportionate share of interest earned from deposits with the Public Debt Commissioners. In addition the Authority makes money available to the separate funds as needed, drawing upon Government funds allocated to the several industry funds as well as upon employer and employee contributions. Annual reports on operations are required.

Officials handling money of the fund must give such security as the committee deems sufficient. Expenditures in connection with administration are a charge against the fund affected and the amounts may not exceed a sum determined by the Central Authority.

*Contributions and benefit procedure.*—Employers are required to pay into the appropriate fund the amount of their own and their employees' contributions, within 7 days after the calendar month for which they are due. The committee may, however, agree to another date of payment. In this connection the employer is obliged to keep comprehensive records of wages and time worked by employees.

The applicant for benefit must conform with the rules established by the committee for such payments and is entitled to receive benefits only if on investigation it appears that he has met the requirements. If benefits are paid in error, the recipient is liable for the repayment of the amount to the proper fund in full. This requirement may be waived if the committee deems it inequitable to require repayment of the whole amount or any portion of it.

Any person who is guilty of an offense under the terms of the unemployment-benefit law is liable to a fine or imprisonment or both.

Employers whose establishments are covered by the system under any scheduled industry must, within 10 days of establishment of the fund or of establishment of their respective businesses, notify the management committee of the fund, giving the address and nature of operations of their business. Failure to do so constitutes an offense and is punishable as already stated.

## *Vacations with Pay*

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### PAID VACATIONS IN LATIN AMERICA

TWELVE of the Latin American Republics (Argentina, Brazil, Chile, Colombia, Cuba, Haiti, Mexico, Panama, Peru, Salvador, Uruguay, and Venezuela) have now (January 1938) legislation in force providing annual vacations with pay for one or more classes of employees. Both salaried and wage-earning employees in certain types of employment are so benefited in Argentina, Brazil, Chile, Cuba, Mexico, Peru, and Venezuela, but only salaried employees in Colombia, Haiti, Panama, Salvador, and Uruguay. In Mexico only persons working under labor contracts are legally entitled to vacations with pay. Domestic servants are specifically covered in Chile and Peru. Though several of the Republics had earlier legislation which has been replaced, the earliest legislation now in effect governing vacations with pay in the various countries dates from the following years: Salvador, 1927; Chile, Colombia, Mexico, and Panama, 1931; Peru, 1932; Brazil and Uruguay, 1933; Argentina and Haiti, 1934; Cuba, 1935; and Venezuela, 1936.

#### *Coverage*

Salaried and wage-earning employees in commercial enterprises in Argentina are legally entitled to earn annual vacations at their work. In Brazil salaried and wage-earning employees in commercial and banking enterprises, private relief institutions, and the commercial departments of industrial establishments, and salaried and wage-earning employees who are members of workers' associations approved by the Ministry of Labor, Industry, and Commerce and who are employed in any kind of industrial establishments, newspapers, land or air communication or transportation, the industrial departments of commercial enterprises, and small-scale workshops, laboratories, etc., and crews of national vessels of all kinds, are covered by various legislation authorizing vacations. Chilean legislation embraces salaried and wage-earning employees, including marine wage-earning employees engaged in coastwise, river, or lake navigation, persons engaged in aviation, or in submarine or underground work, and domestic servants. Salaried employees of private firms in Colombia are entitled to paid vacations. The Cuban vacation legislation applies to salaried and wage-earning employees and apprentices

in commercial and industrial establishments which employ more than five salaried and wage-earning employees. In Haiti, clerks in commercial establishments, shops, and banks are entitled to paid vacations. Mexican legislation accords vacations to persons who render manual or intellectual services, or both, to another by virtue of a labor contract. In Panama, salaried employees in commercial or industrial establishments earn annual vacations with pay. Vacation legislation in Peru covers salaried and wage-earning employees in both commercial and industrial establishments, and includes also domestic servants. The legislation of Salvador includes only commercial employees. In Uruguay, salaried employees in commercial establishments and in private offices and salaried employees and clerical staffs in the offices of industrial establishments, and workers in commercial establishments who prepare or arrange merchandise for the needs of the establishment itself, cleaners, watchmen and repairers of merchandise, are provided for in the vacation legislation, but hair-dressing establishments are not included among those which must grant vacations. The Venezuelan labor law accords annual vacations to both salaried and wage-earning employees.

### *Length of Service Required*

In most instances, the legislation stipulates that the service which qualifies for vacation must be in one enterprise, and in some instances service must be continuous or uninterrupted. In Cuba, 6 months of service qualifies for a vacation, or in enterprises working irregular days or hours, the equivalent of 6 months of continuous service. The legislation of Argentina, Chile (salaried employees and domestic servants), Colombia, Haiti, Peru (salaried employees), and Salvador, authorizes a vacation each year. The employee begins to earn his vacation after a year of service in Mexico, Uruguay, and Venezuela, and after 2 years in Panama. Service for 12 months qualifies for a vacation in Brazil, but in industrial establishments the employee must have worked at least 150 days. Wage-earning employees in Chile must have worked at least 220 days in a year in order to be entitled to a vacation. In Peru wage-earning employees and domestic servants must have been employed by the same employer for at least a year and have worked at least 260 days during that year.

### *Date of Vacation and Manner of Fixing It*

The date of vacation is fixed by the employer in Argentina, Brazil, Chile (for salaried employees, upon their written request), Colombia, Cuba, Peru (salaried employees), and Uruguay, but in Uruguay the schedule of the year's vacations prepared by the establishments in January of each year may be changed twice in the year for reasons

approved by the National Labor Institute. The time is to be suited to the interests of the establishment, according to the legislation of Brazil, Colombia, Cuba, and Peru (wage-earning employees and domestic servants); but taking into consideration the interests of the establishment, in Peru, wage-earning employees and domestic servants may take their vacations at any time they wish. If there are more than five employees in an establishment in Chile, at least four-fifths of the personnel must be on the job at all times; if there are fewer than five employees, not more than one person is to be on vacation at a time. In Cuba, the wishes of the employee are to be taken into consideration when possible. The time is to be set 1 month in advance in Salvador, by agreement between employer and employee. In Panama the time is to be set by agreement between employer and employee. In Brazil the employee must be notified in writing at least a week in advance of his vacation. In Chile the employee is to make written request for his vacation at least 1 month in advance and his notification must also be in writing. In Uruguay the schedule of vacations for the year, when approved by the National Labor Institute, is to be posted in a visible place in the establishment.

The vacation in Chile is to be taken preferably in spring or summer. In Brazil the vacation must be taken within 12 months following the qualifying period. Vacations in Cuba are not to be deferred more than 6 months beyond the qualifying period without the authorization of the Department of Labor. Under specified circumstances vacations are cumulative, but for not more than 2 years in Chile, Colombia, and Panama, and for 3 years in Salvador. In Panama the vacation may be taken at the end of the qualifying period or in any subsequent month; if allowed to accumulate, both months may be taken at one time. Vacation time in Salvador which has accumulated may be taken at any time, provided the time taken does not exceed that for the 3 years.

### *Length of Vacation*

Length of vacation varies with years of service in Argentina and Mexico, with days of service during the qualifying period in Brazil and Chile, and with type of employment in Peru and Venezuela. Legislation which provides no variation in length of vacation allows the following periods each year: Colombia, 15 working days; Cuba, 14 days—7 days for 6 months; Haiti, at least 15 days; Panama, 1 month; Salvador, not less than 15 days; and Uruguay, 2 weeks. Wage-earning employees and domestic servants in Peru are allowed 15 days of vacation each year, and salaried employees, 30 days. In Venezuela, wage-earning employees receive 7 working days and salaried employees 15 days per year. Persons in Argentina who are

entitled to vacations who have not to exceed 5 years of service to their credit are allowed 10 days; from 5 to 10 years, 15 days; from 10 to 20 years, 20 days; and over 20 years, 30 days. Employees in Mexico with more than a year's service are entitled to not less than 4 working days of vacation; after 2 years of service, at least 6 working days. In Brazil, employees in commercial and banking and similar enterprises are entitled to 15 days of vacation each year; employees in industrial establishments who have worked more than 250 days in the qualifying period are to have 15 days' vacation; those who have worked from 200 to 250 days, 11 days' vacation; persons who have worked from 150 to 200 days, 7 days' vacation; persons who have worked less than 150 days are not entitled to vacations. Annual vacations for salaried employees and domestic servants in Chile amount to 15 days; for wage-earning employees who have been employed for 288 days in a year, the vacation is 15 days in length, but if they have worked from 220 to 288 days, they are allowed only 7 days.

### *Continuity of Vacations*

Vacations are to be taken in one period in Argentina, Haiti, and Peru. In Brazil, employees in commercial and banking and similar establishments under 18 or over 50 years of age must take their vacations in one period; other persons may take them in two periods, one of which must be not less than 7 days in length. In industrial establishments in Brazil, employees have the option of taking their vacation in one period or in installments of at least 5 days each, but members of a family working in the same establishment may take their vacation at the same time if they so desire.

### *Remuneration*

All vacations discussed in this report are remunerated, and unless otherwise stated, at regular rate. In Brazil, Cuba, and Salvador, employees are paid in advance for their vacation time. Pay for employees in commercial and banking and similar establishments in Brazil is at the regular rate or the average for the last 12 months; for those in industrial establishments, the average for the last 6 months of the qualifying period is to be taken. In Brazil workdays missed without legitimate reason are deducted from the vacation and the pay for these days from the pay for vacation, but when an employer fails to provide vacations, he must pay double for the vacation not allowed. Vacations in Chile are not compensable in cash, unless an employee is leaving an establishment. In Cuba cash pay for vacations is supplemented by the cash equivalent of pay ordinarily received in kind, and vacation time not taken in the usual manner through no fault of the employee is carried over to the following year, but for this deferring

of time, the employee receives at least a third of regular pay. From vacation time in Mexico may be deducted workdays missed without legitimate reason. Technical workers in Peru who, because of conditions in the business are not able to take their vacations, are paid three times their usual pay for the time not taken. Overtime worked in Peru also entitles the worker to additional vacation time.

### *Loss of Right to Vacation*

Acceptance of paid work during vacation period in Brazil and Cuba causes the forfeiture of the next vacation to which the employee would otherwise be entitled. Other reasons for forfeiture of vacation are: In Cuba, dismissal for cause and absence from work for more than 6 months; in Uruguay, serious offense by the employee in connection with his work, but in this instance the employee has the right to appeal to the Superior Labor Council, which has final authority.

SOURCES.—This article is based on data from the following sources:

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## *Profit Sharing*

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### PROFIT SHARING FOR INDUSTRIAL EMPLOYEES

THE practice by industrial undertakings of sharing profits with employees has been advocated on various social and economic grounds and, although failing to meet with general success, has been the subject of periodic interest, particularly during periods of rising business activity. A recent study<sup>1</sup> by the National Industrial Conference Board is based on the experience with 161 formal plans, of which 50 were active, 15 inactive, and 96 discontinued. In addition, 32 plans for giving extra compensation which could not be classified as true profit sharing were included. Of the 50 active plans 5 were in the electrical-appliance industry; 2 in the food-products industry; 10 in the machinery and machine-tools industry; 9 in other metal-products industries; 5 in the paper and printing industry; 4 in the textile industry; 4 in mercantile establishments; 1 in a financial institution; and 10 in miscellaneous manufacturing establishments. The extra-compensation plans were distributed among the same industries, with the exception of electrical appliances. The 82 companies having the two types of plans employed approximately 200,000 persons, of whom all but 29,724 were covered by the formal profit-sharing plans. The study did not include plans which were restricted to executives or special groups, and covered, therefore, plans in which most or all of the employees were included in the distribution.

In order to be included in the study as true profit sharing, a plan had to provide that payments to employees shall bear a definite relation to the profits of the company. The most important problem to be settled in establishing a plan, the report states, is the decision by management as to what constitutes an equitable division of profits between the employees and the stockholders. There are various determining factors in the method of apportioning the profits to be paid to the employees, such as the basic purpose of the plan, the financial position of the company, the outstanding obligations to stockholders, and the relative liberality of the management. As a result of these varying factors, there was no uniformity in the provisions of the plans as regards the percentage of profits allocated to employees or in the manner of their distribution to the individual

<sup>1</sup> National Industrial Conference Board, Inc. Profit Sharing and Other Supplementary-Compensation Plans Covering Wage Earners, by F. Beatrice Brower. New York, 247 Park Ave., 1937.

workers. However, it was possible to classify the 50 plans broadly in three groups, i. e., 14 plans in which no deductions were made for capital earnings before computing the employees' share of the profits, 19 plans in which a deduction for dividends was made before the division of profits to the employees, and 9 plans in which profit sharing was dependent on dividends to stockholders. In eight cases the percentage of profits paid to employees and the method of computation was not reported.

In the first group, in which the employees' share of the profits was taken from the net earnings of the companies before deduction of any earnings on capital investment, the percentage divided among eligible employees ranged from 5 to 33%. In the second group of plans, in which the stockholders' interest was protected before providing for the distribution to employees, 5 to 10 percent was deducted from net profits for payment of dividends on preferred or common stock by 17 companies, while 2 companies deducted fixed amounts, varying proportions of the balance being distributed to the employees. The proportion paid to employees ranged from 12% percent of the balance to 75 percent in 14 companies, while two companies divided among the employees the entire amount left after the stock dividend, two made the division on the basis of the proportion of capital invested to the total pay roll, and in one case the proportion paid to employees was not reported. In the third group of companies the employees' share of the profits was based on the amount of dividends declared on company stock. In three of these companies an imaginary block of stock is set up on which the same dividends are paid as on common stock, in two companies an amount equal to that paid in dividends on common stock is paid into the employees' fund (one of these pays this only on extra dividends), one company pays the same percentage in wages as stockholders receive in dividends, and in the remaining companies the employees receive a proportion of the amount of dividends above a fixed value.

In regard to the amounts distributed, it is stated in the report that "the percentage of profits cannot be regarded as an unflinching index of the relative liberality of the plan, however, as the rate of earnings of companies differs so widely that what apparently is a small percentage may in reality represent a liberal contribution from management."

The profits distributed among employees are frequently in exact ratio to their earnings, but in a majority of the plans other factors are included. Twenty-two of the plans provided for distribution in exact ratio of each worker's wages to the total pay roll, while various combinations of earnings, length of service, and rank were the basis of the allotment in 18 plans; in 2 cases the employees' share was dependent on thrift; and varied provisions were featured in the plans of 8 other

companies. Only one of the 50 companies paid a flat sum to the employees, regardless of position, wages, and service.

The managerial group as well as the rank and file employees participated under the same plan in more than two-thirds of the companies. In 25 of the companies the two groups shared alike, although the managerial group received a larger sum in view of their larger salaries. In 11 cases this group received a higher percentage of profits than the employees, while in 6 cases the managerial group did not participate, and in 6 cases there were different plans for the 2 groups. In two cases only salaried employees were eligible; in one of these companies this policy was based upon the belief that the principle of profit sharing would not be understood by the unskilled group, the experience under the plan having been such as to decide the company to restrict participation to the managerial group and the skilled workers.

Service requirements for participation varied greatly, the extremes ranging from participation by all persons in the employ of the company at the time the dividend is declared to a service requirement, in one instance, of 10 years. The usual requirements, however, range from 3 months to 1 year. In one case only did the profit-sharing plan provide for the sharing of losses by the employees. In this plan salaried employees receiving more than \$118.75 per month are subject to a 1 percent reduction in their base rates for every unit of \$60,000 by which the company's monthly net income is below \$600,000. No further deduction is made, however, when the consolidated statement shows a loss, and wage earners and salaried employees in the lower brackets are not subject to the loss-sharing provisions.

Profit-sharing plans providing for distribution of earnings on a monthly or quarterly basis make adjustment for losses more difficult than when it is on an annual basis. However, in companies which distribute earnings more frequently than once a year there is usually some provision for averaging the losses in unprofitable periods against gains in more prosperous periods.

Profits were distributed in the form of cash in 42 of the 50 plans studied. In the remaining eight companies, the distribution was in the form of stock, interest-bearing certificates, or other forms, or part cash and part securities, largely for the purpose of inducing the employees to save the extra compensation.

The distribution of the employees' share of profits, it was found, was most frequently made at the end of the fiscal year, but although in some ways it is simpler than more frequent distributions, it is stated in the report, it has not been entirely successful. One of the most important objections to the annual distribution is that the interval between payments is too long to maintain the interest of the employees, with the result that they lose sight of the primary

purpose of the profit sharing. Twenty-one of the companies followed the plan of annual distribution of profits and 6 each paid them semi-annually, quarterly, and monthly. In four cases the payments depended upon stock dividends, four paid wage earners more frequently than the supervisory group, and in three cases the distribution period was not reported. It is stated in the report that apparently there is a trend toward increasing the frequency of the distribution of profits, for while a study made by the Conference Board in 1920 showed that 32 out of 41 plans, or 78 percent, made distributions annually, the present study showed that the proportion on an annual basis had dropped to 21 out of 50 plans, or 42 percent.

### *Other Extra-Compensation Plans*

Information was obtained in the course of the study regarding 32 additional compensation plans, some of which could have been classed as true profit sharing except for the fact that the proportion of profits divided among employees was either revised periodically by the management or distributions were not entirely dependent on the earnings of the company.

Thirteen companies had plans providing for the payment of bonuses based on length of service; 15 had informal profit-sharing plans, the amount of the share in 8 of the plans being determined by individual merit and worth, and in 7 cases the share consisting of a uniform percentage of earnings determined by the management; 3 had stock credit or distribution plans; and 1 company had a merit-rating plan.

In addition to the companies which have adopted such plans, many companies distribute year-end bonuses in times of prosperity.

### *Results of Profit-Sharing Plans*

The reasons for the adoption of profit-sharing plans, it is said, are both practical and altruistic. A frequent reason given for the establishment of such plans is the belief that the employees should share in the profits they have helped to create, while profit sharing has also been regarded as "a stabilizer of the wage scale by providing a flexible, supplementary payment that will fluctuate with business conditions and yet also permit the company to control the wage cost so that it will bear a definite relation to company income." Another reason for the adoption of profit sharing has been to encourage employees to save and to build up a reserve for old age or emergencies. Underlying these reasons is said to be the hope that it will result in better cooperation and interest in the company's welfare on the part of the worker.

Some of the results of the operation of the plans, as reported by different companies, were improvement of employee morale and of

the relations between management and the workers, greater efficiency, and reduced labor turn-over. The active plans reported on in this study are in general those which have been successful over a period of years, as more than half of them were in operation before the depression. Approximately 43 percent of the discontinued plans of 96 companies (which were 60 percent of the true profit-sharing plans surveyed, however) were given up because of dissatisfaction on the part of management or the unfavorable response of the workers. An additional 12 percent of the companies did not give the reason for discontinuance, but it was assumed the experience had been unsatisfactory. The remaining 45 percent of the plans were apparently discontinued "not because of any fault in the plan itself but because of extraneous influences."

The conclusion drawn from this study of both active and discontinued plans is that the future of profit sharing is problematical. "Each rise in the business cycle brings with it plans designed to reward the workers in some measure for the hardships suffered during the depression and to give them an opportunity to share in the returning prosperity, but how large a proportion of all such plans will survive recurrent depression is an open question."

## *Education and Training*

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### PROVISION FOR EDUCATION IN C. C. C. CAMPS IN 1938

EDUCATIONAL and vocational training of at least 10 hours per week for the unemployed young men who have enrolled in C. C. C. camps was specifically provided for in the recent act of Congress prolonging the life of the Corps. Authority was also given to the Director of the Corps to allow enrollees to interrupt the period of enrollment for attendance at school or college, returning to camp at the termination of the school term. The objectives and general features of the educational program for 1938 are discussed in an article in *School Life* for October 1937 (p. 51), published by the United States Department of the Interior.

Instruction for the 10 hours per week is to be provided on week nights and Saturday mornings, and additional opportunities will be furnished for enrollees who wish further instruction. An increased expenditure of \$4,500,000, which has been approved by the Director, will allow 2,600 square feet of space for classrooms and shops in every camp, an educational adviser for each company, and additional funds for educational supplies and equipment.

An individualized type of education has been found to be peculiarly adapted to C. C. C. camps, and will be continued. A recent conference in Washington, D. C., of the Corps area educational advisers, considered plans to make the educational program more effective. Individual needs and interests as the basis of camp education were emphasized, and it was felt that for that reason job training and leisure-time education should be more closely connected. Enrollees should be placed on work projects for which they have a vocational aptitude or interest.

Literacy and elementary and higher education are to be continued as objectives of the educational program. Utilization of nearby school facilities for instruction of enrollees has been facilitated by provision by the Director for the expense connected therewith. Cooperation of schools and colleges in the C. C. C. educational program has been assured, as over three-fourths of the 120 colleges requested to give scholarship aid have responded favorably.

## EMPLOYMENT STATUS OF PHILADELPHIA PUBLIC-SCHOOL GRADUATES OF 1935

AN OCCUPATIONAL follow-up study of 5,898 of the graduates of 1935 of the Philadelphia high schools and vocational schools showed an encouraging percentage of employment stability and a marked correlation between the jobs held and the training received.<sup>1</sup>

As table 1 indicates, on April 1, 1937, 59 percent of the 1935 high-school graduates had jobs, over 24 percent were attending school, 14 percent were seeking employment, and 2 percent were not seeking gainful work.<sup>2</sup> The corresponding percentages for the graduates of vocational schools were 71, 2, 22, and 5.

TABLE 1.—*Employment Status of Philadelphia Public-School Graduates of 1935, as of April 1, 1937*

Type of school and curriculum	Grand total			Attending day school		
	Both sexes	Male	Female	Both sexes	Male	Female
Grand total.....	5,898	2,876	3,022	1,356	725	631
High-school graduates.....	5,560	2,726	2,834	1,350	719	631
Academic curriculum.....	2,423	1,376	1,047	1,096	582	514
Business curriculum.....	2,076	465	1,611	96	33	63
Industrial curriculum:						
Auto mechanics.....	153	153	0	5	5	0
Building construction.....	53	53	0	1	1	0
Electrical construction.....	116	116	0	5	5	0
Machine construction.....	143	143	0	1	1	0
Mechanic arts.....	400	400	0	81	81	0
Home economics.....	116	0	116	30	0	30
Vocational art.....	73	18	55	3	9	23
Vocational music.....	7	2	5	3	2	1
Vocational school graduates.....	338	150	188	6	6	0
Dressmaking.....	53	0	53	0	0	0
Millinery.....	26	0	26	0	0	0
Power operating.....	1	0	1	0	0	0
Auto mechanics.....	35	35	0	1	1	0
Electrical construction.....	33	33	0	3	3	0
Machine construction.....	12	12	0	0	0	0
Mechanical drafting.....	16	16	0	0	0	0
Textiles.....	14	14	0	0	0	0
Woodwork.....	15	15	0	0	0	0
Home economics.....	22	0	22	0	0	0
Business curriculum.....	88	4	84	0	0	0
Vocational art.....	16	15	1	0	0	0
Vocational music.....	7	6	1	2	2	0

<sup>1</sup> Occupations—The Vocational Guidance Magazine, New York, December 1937: A follow-up study of Philadelphia public-school graduates, by Ann Pavan.

<sup>2</sup> The members of this group were married, keeping house for their families, waiting to return to jobs or 8 cases) deceased.

TABLE 1.—*Employment Status of Philadelphia Public-School Graduates of 1935, as of April 1, 1937—Continued*

Type of school and curriculum	Employed			Seeking employment			Not seeking employment
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
Grand total.....	3,535	1,769	1,766	863	369	494	1,144
High-school graduates.....	3,295	1,656	1,639	787	340	447	128
Academic curriculum.....	1,015	647	368	267	141	126	45
Business curriculum.....	1,538	339	1,199	376	91	285	66
Industrial curriculum:							
Auto mechanics.....	126	126	0	21	21	0	1
Building construction.....	47	47	0	5	5	0	0
Electrical construction.....	91	91	0	20	20	0	0
Machine construction.....	115	115	0	26	26	0	1
Mechanic arts.....	285	285	0	33	33	0	1
Home economics.....	49	0	49	26	0	26	11
Vocational art.....	25	6	19	13	3	10	3
Vocational music.....	4	0	4	0	0	0	0
Vocational school graduates.....	240	113	127	76	29	47	16
Dressmaking.....	44	0	44	6	0	6	3
Millinery.....	18	0	18	5	0	5	3
Power operating.....	0	0	0	1	0	1	0
Auto mechanics.....	27	27	0	7	7	0	0
Electrical construction.....	24	24	0	5	5	0	1
Machine construction.....	11	11	0	0	0	0	0
Mechanical grafting.....	13	13	0	3	3	0	0
Textiles.....	9	9	0	5	5	0	0
Woodwork.....	12	12	0	3	3	0	0
Home economics.....	14	0	14	7	0	7	1
Business curriculum.....	54	3	51	28	1	27	6
Vocational art.....	11	11	0	5	4	1	1
Vocational music.....	3	3	0	1	1	0	0

<sup>1</sup> Of these, only 13 were males.

Of the 1,350 high-school graduates reported as continuing their education, 67 percent were registered for work in universities and colleges, 10 percent in normal schools, and 8 percent in business schools. Table 1, however, reports only those attending school at the time of the survey. As a matter of fact, 65 percent of the graduates of high schools and 37 percent of the graduates of vocational schools continued their education after they had graduated.

*Stability of employment.*—Forty-two percent of the high-school graduates with jobs had held one position since graduation; 28 percent, 2 positions; and 17 percent, 3 positions. The corresponding percentages for the graduates of vocational schools were respectively 45, 30, and 13.

*Unemployment.*—Of the 787 high-school graduates and 76 vocational-school graduates who were seeking employment at the time of the survey, 19 percent of the former and 27 percent of the latter had had no employment. However, 33 percent of the high-school graduates and 23 percent of the vocational-school graduates had had 12 months or more of employment experience since their graduation. Unemployment among graduates varied from 7 to 27 percent, according to the location of the school, the higher percentages being for schools in the poorer and predominantly foreign sections of Philadelphia. In the judgment of the investigator, this seems "to be

evidence that environmental background acts as a contributing factor in the successful occupational adjustment of young people after graduation."

*Relation of jobs held to training received.*—Of the 1,538 high-school graduates of the business curriculum who were employed, 80 percent had office or sales work jobs for which that curriculum prepares; and 63 percent of the high-school graduates of the industrial curriculum had employment in which they could utilize their training.

The distribution of graduates of these two curricula, by jobs held, is given in the following table:

TABLE 2.—Percentage Distribution of Graduates Having Positions Related to Curricula Followed

Position	Percent of graduates	Position	Percent of graduates
<i>Business curriculum</i>		<i>Industrial curriculum</i>	
General office workers.....	51	Factory workers (handwork).....	23
Stenographers.....	20	Apprentices in metal trades.....	19
Salesmen (store).....	9	Factory workers (machine work).....	16
Typists.....	7	Machinists (helper).....	14
Book keepers.....	4	Draftsmen or tracers.....	9
Office machine operators.....	4	Technical assistants.....	7
Stock or shipping clerks.....	3	Building trades workers.....	5
Office boys or inside messengers.....	1	Supervisory assistants.....	4
Salesmen (outside).....	1	Chauffeurs or truck drivers.....	3

*Earnings of employed group.*—The weekly rates of pay of the 3,295 high-school and 240 vocational-school graduates who were employed at the time of the survey are recorded in table 3:

TABLE 3.—Percentage Distribution of Employed Graduates, by Weekly Earnings, April 1, 1937

Class and sex	Percent in each classified weekly earnings group						
	Under \$10	\$10-\$12	\$13-\$15	\$16-\$18	\$19-\$21	\$22-\$24	\$25 and over
High-school graduates.....	8	19	33	22	10	3	5
Males.....	7	14	27	24	14	5	9
Females.....	9	24	39	20	6	1	1
Vocational-school graduates.....	11	25	29	19	9	5	2
Males.....	3	24	22	25	13	9	4
Females.....	18	26	37	13	5	1	0

*Conclusion.*—After giving credit to wise guidance and improved economic conditions as factors in the gratifying situation shown by this survey, the author emphasizes the fact that these young persons were withheld from the wage-earning world until they had reached the age of 18 and suggests that "future educational programs should provide means for keeping adolescents under 18 in school and off the job market." The study, it is further stated, has also disclosed "the need for post-graduate training in the public schools for the purpose of maintaining or increasing the skills of those graduates who cannot pay for further schooling."

# Cooperation

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## COOPERATIVE TELEPHONE ASSOCIATIONS, 1936<sup>1</sup>

By FLORENCE E. PARKER, *Bureau of Labor Statistics*

COOPERATIVE telephone associations represent one of the older forms of cooperative enterprise. In the survey just completed by the Bureau of Labor Statistics it was found that for the group as a whole the average age was more than a quarter of a century. The oldest association reporting dated from 1893. The period from 1900 to 1919 was the most fruitful; nearly 88 percent of those making returns were formed in this 20-year interval.

To judge by the returns in the present study, however, almost no new associations are being formed in this field. This is probably due to conditions in this branch of business. Today the entire country is fairly well covered by the telephone network and there appears to be comparatively little territory into which to expand.

At the time the early associations were formed, there were few telephones in the rural districts. The telephone had been known only for about two decades and had not yet spread much beyond the cities and towns. In the country the sparse, widely scattered population made the installation of service by private companies unprofitable, and the farmers in many localities were entirely isolated and cut off from communication not only with each other but with the outside world. It was to remedy this situation that the telephone associations began to be started.

These early associations were generally the product of mutual effort. The poles were cut from nearby timberland or purchased collectively, and were erected by the members all working together. Sometimes the wires were even strung along the fences. Wire, insulators, batteries, and instruments were bought collectively and the cost was apportioned among the members. If there was a switchboard in a nearby village, the association would bargain for connection and service there; if not, a small switchboard of their own would be installed, perhaps in some conveniently located farmhouse. The costs of operation were very small, as any repairs necessary were generally made by the cooperators themselves.

<sup>1</sup> Part of a general survey of cooperative associations being carried on by the Bureau of Labor Statistics. Data on cooperative housing associations were given in the Monthly Labor Review for November 1937 (p. 1146), and on cooperative electricity associations, for January 1938 (p. 110).

The service in these early organizations usually afforded communication either within the cooperative group only or within the immediate locality. The next step would be to obtain connection with nearby towns and villages and then with long distance. As this extension took place and as new lines came into existence, some overlapping of territory and service became inevitable. This led to mutual agreements between lines and eventually to consolidation of several lines within given territories, to form larger associations. This process of consolidation was undoubtedly hastened by the gradual spread of State regulation of telephone companies of all types.

Whereas the original organizations were largely informal, unincorporated associations, as they grew larger and extended their field of operations, more and more of them took corporate form. Some of the local associations which had no switchboard of their own formed federated associations for the purchase and operation of a switchboard which would handle the calls of all of them.

All of these stages of development are represented in the associations which reported to the Bureau of Labor Statistics. With some minor variation they fall into three main classes, as follows:

(1) The so-called "service line"—the local association, formed among the subscribers on one or more party lines, which has no switchboard of its own but connects with other local lines and the outside world through the switchboard of another company, either cooperative or private. In these associations the cooperative enterprise is one of common ownership and maintenance of the telephone facilities and of bargaining for switchboard service.

(2) The local association, also composed of individual telephone users, having its own switchboard.

(3) The switchboard association of the federated type, whose membership is composed of local service-line associations.

Extreme variation was found in size of societies. Those reporting varied from the associations which consisted of only one party line and some half dozen members to a large organization with a membership of 4,025, serving 6,606 families throughout a whole county. Most of them, however, were small organizations operating in small towns or rural districts. Nearly 68 percent of those reporting had fewer than 50 members each, and of the whole number only 19 associations had 500 members or more.

On the basis of the findings in the Bureau's study it may be said that the typical telephone association is a small organization of 60 to 70 members, serving on an average about 90 subscribers (including members). The association is more likely than not to be incorporated, and quite likely to be operating its own switchboard. Generally the association owns the poles and wire along the right-of-way,

but the wire and poles necessary to carry the service to the member's home must usually be furnished by the member. It is also common to find that the member must furnish his telephone instrument in the smaller associations, though in the larger organizations these are generally owned by the company.

The construction may be either of the single-wire (grounded) type or double-wire (metallic) type; in the former the ground completes the circuit, whereas in the latter the entire circuit is carried by wire. The grounded type is less expensive to maintain but is also said to be less satisfactory as to clearness of reception and general service. The existing associations appear to be about evenly divided between the grounded and metallic types.

Local service for 24 hours a day is quite general and toll connection is also usually available.

The typical association operates on an assessment basis; about twice as many associations make assessments as charge flat rates. The cost of service to the member is very moderate, averaging \$7.77 a year in the assessment associations, and in those charging flat rates 87 cents a month for rural service and 92 cents a month for service within the village or town limits.

The financial data obtained in the survey were not entirely satisfactory, owing to lost records, inadequate records, and lack of knowledge of business methods on the part of a considerable number of the reporting associations. On the basis of the returns, however, it appears that the average gross revenue per association in 1936 was only \$968. This average probably understates the actual amount. Many of the service-line associations handle almost no cash in the course of the year. Even the fee paid per telephone to the switchboard company for making switchboard connections may not pass through the local association but may be paid by the individual members directly to that company; in such cases, however, where the amount of the switching fee could be obtained the total amount paid in such fees was credited as income to the service-line association. Many of the associations have no employees and make little or no cash expenditures. If repairs are needed, the members as a whole either make them themselves (purchasing only the necessary materials) or hire from a local company the services of a lineman at a fixed hourly rate.

Taking into consideration the fact that many of the associations were formed before the passage of cooperative laws, that they are operating under corporation acts whose requirements are in many cases in direct contravention of cooperative practice, and that as public utilities they are in a number of States subject to public regulation by State utility commissions, a surprisingly high degree of

conformity with cooperative principle was found among them. It may be said, however, that few of them have any conception of themselves as a part of a general cooperative movement. They have been content with their avowed purpose of furnishing telephone service in territories which would ordinarily be without such service if they did not exist. This service they are furnishing through democratic channels and at extremely low cost.

### *Scope and Method of Study*

From various sources the Bureau assembled a list including not only associations operating as cooperatives but also those operating as mutuals. One or more associations of these types were found in 44 States. All of these were circularized one or more times.

Examination of the replies showed that a substantial number of the so-called "cooperative associations," while they may have been cooperative in their early years, were no longer so. A very large proportion of the "mutuals," however, although making no pretensions to being cooperative, nevertheless were conforming to all of the cooperative principles except possibly that of return of patronage dividends; and in most instances the same purpose—service without profit—was being achieved through the medium of rates only high enough to cover expenses.

In order to be included in the Bureau's tabulation an association had to be at least semicooperative. For purposes of this study an association was regarded as entirely cooperative which conformed to the principles of open membership, a single vote per member, no proxy voting, limited return on share capital, and service at cost (either through the patronage refund or through service rates so low as to yield no profit). An association was regarded as semicooperative which allowed voting by shares but limited to a small number the shares held by any one person, or which allowed proxy voting but only one vote per member; no association was included in the tabulations in which both voting by proxy and voting by shares was allowed or in which the nonmember subscribers outnumbered the members, unless the organization was clearly a nonprofit association. In evaluating the cooperative features, consideration was given to requirements of State cooperative and other laws and to public-utility regulations.

Altogether there were 1,614 associations which furnished usable reports and which were cooperative on a sufficient number of points to warrant their inclusion.

The geographic distribution of the known and reporting associations is given in table 1. As is there shown, more than 80 percent of all the known associations are in the North Central States.

TABLE 1.—Number of Known and Reporting Cooperative Telephone Associations, by Geographic Division and State

Geographic division and State	Total known associations		Number furnishing usable reports	Geographic division and State	Total known associations		Number furnishing usable reports
	Number <sup>1</sup>	Per cent			Number <sup>1</sup>	Per cent	
United States.....	3,728	100.00	1,614	South Atlantic—Con.			
New England.....	34	.91	15	North Carolina.....	18	0.48	7
Maine.....	19	.51	7	South Carolina.....	13	.35	-----
New Hampshire.....	5	.13	2	Georgia.....	19	.51	2
Vermont.....	9	.24	6	Florida.....	3	.10	-----
Massachusetts.....	1	.03	-----	East South Central.....	44	1.18	8
Middle Atlantic.....	70	1.88	36	Kentucky.....	17	.46	4
New York.....	22	.59	18	Tennessee.....	16	.43	3
New Jersey.....	1	.03	-----	Alabama.....	9	.24	1
Pennsylvania.....	47	1.26	18	Mississippi.....	2	.05	-----
East North Central.....	493	13.23	223	West South Central.....	149	4.00	28
Ohio.....	70	1.88	46	Arkansas.....	21	.56	2
Indiana.....	135	3.62	52	Louisiana.....	4	.11	-----
Illinois.....	170	4.56	69	Oklahoma.....	56	1.50	8
Michigan.....	53	1.42	24	Texas.....	68	1.82	10
Wisconsin.....	65	1.74	32	Mountain.....	96	2.58	32
West North Central.....	2,535	68.00	1,178	Montana.....	39	1.05	14
Minnesota.....	1,653	44.34	765	Idaho.....	11	.30	4
Iowa.....	272	7.30	137	Wyoming.....	16	.43	6
Missouri.....	90	2.41	30	Colorado.....	20	.54	7
North Dakota.....	162	4.35	81	New Mexico.....	4	.11	-----
South Dakota.....	143	3.83	65	Utah.....	4	.11	-----
Nebraska.....	38	1.02	15	Nevada.....	2	.05	1
Kansas.....	177	4.75	85	Pacific.....	155	4.16	61
South Atlantic.....	152	4.08	41	Washington.....	31	.83	20
Maryland.....	8	.22	3	Oregon.....	114	3.06	40
Virginia.....	64	1.72	24	California.....	10	.27	1
West Virginia.....	27	.70	5				

<sup>1</sup> Subject to revision.

### Extent of Cooperative Telephone Movement

The Bureau of the Census every 5 years makes a count of the number of telephone companies and telephones in use in the United States. Its reports classify the companies into two groups—those with annual gross incomes of \$10,000 and over and those whose income is less than that amount.

Its latest report covered the year 1932. In that year it found that there were 44,828 telephone systems in the United States, of which 918 (or less than 2½ percent) had incomes of \$10,000 or over. But the network of that 2½ percent was serving about 93½ percent of the nearly 17½ million telephones in use that year. This was an average of slightly more than 17,700 telephones for each of the larger systems, whereas the small companies were averaging only about 26 telephones each.

TABLE 2.—Development of Large and Small Telephone Companies Since 1922<sup>1</sup>

Year	Companies with annual gross incomes of—				Number of tele- phones per 10,000 popu- lation
	\$10,000 or over		Under \$10,000		
	Number of telephones in use	Average number per company	Number of telephones in use	Average number per com- pany	
1922.....	12, 295, 234	9, 293	2, 052, 161	37	130
1927.....	16, 712, 495	12, 217	1, 810, 272	31	155
1932.....	16, 284, 231	17, 739	1, 140, 175	26	139

<sup>1</sup> Source: U. S. Bureau of the Census. Census of Electrical Industries, 1932—Telephones and Telegraphs. Washington, 1934.

The returns in the Bureau of Labor Statistics study indicate that most of the mutual and cooperative companies would fall within the small-company classification,<sup>2</sup> but it cannot be assumed that all of the small systems are either mutual or cooperative. The reports to the Bureau show that a substantial proportion of these smaller systems are owned either by single individuals or by stock companies operating for profit. A further percentage, although calling themselves mutual or cooperative, are actually not now operating along mutual or cooperative lines, whatever they may have done in the beginning.

It is not known how many telephone systems there are in the United States which are functioning cooperatively. A Federal law makes the individual returns and the mailing lists of the Bureau of the Census confidential even as regards other Federal offices, and it is therefore not possible to examine the census files in order to obtain a complete list of companies which might be cooperative.

In the absence of these data the Bureau of Labor Statistics was able to build up a list of some 4,400 associations, but nearly 400 of these proved to have gone out of business and over 300 had to be discarded because they could not qualify under the Bureau's definition of cooperative or semicooperative. That left some 3,700, of which nearly 45 percent were in Minnesota alone.

It is known that, with two exceptions, this is not a complete list of associations. The exceptions are Minnesota and North Dakota, where State-wide cooperative censuses, made as "white-collar" projects under the W. P. A., resulted in finding almost all if not quite all of the associations. It is believed, however, that the list does cover at least 70 percent of the total number of the really cooperative or mutual-cooperative associations in telephone operation in the United States. The list is weak mainly in its coverage of the unincorporated service lines, but many of these are included in the returns from the federated switchboard associations.

<sup>2</sup> Only 5 of the associations included in the present study had gross incomes of \$10,000 or over in 1936.

Assuming a total of 5,000 associations functioning either entirely cooperatively or semicooperatively, then on the basis of returns to the Bureau of Labor Statistics it may be estimated that their total membership in 1936 was in the neighborhood of 330,000 and that some 460,000 persons were served by them in that year.

### Types of Associations

Of 1,614 reporting associations, almost two-thirds were of the service-line type, about a third were local associations with their own switchboard service, and less than 4 percent were federations of local associations. In the States from which 25 or more associations reported, service lines were in the majority in Minnesota, North Dakota, Oregon, South Dakota, and Wisconsin, whereas in Illinois, Indiana, Iowa, Kansas, Missouri, and Ohio it was more common for the telephone associations to own their own switchboards.

The distribution of the associations by type and by State is shown in table 3.

TABLE 3.—*Geographic Distribution of Reporting Cooperative Telephone Associations, by Type, 1936*

Geographic division and State	Number				Percent			
	Total	Locals		Federation with switch- board	Total	Locals		Federation with switch- board
		With switch- board	With- out switch- board			With switch- board	With- out switch- board	
United States.....	1,614	554	999	61	100.0	34.3	61.9	3.8
New England.....	15	4	11		100.0	26.7	73.7	
Maine.....	7	3	4		100.0	42.9	57.1	
New Hampshire.....	2		2		100.0		100.0	
Vermont.....	6	1	5		100.0	16.7	83.3	
Middle Atlantic.....	36	10	26		100.0	27.8	72.2	
New York.....	18	5	13		100.0	27.8	72.2	
Pennsylvania.....	18	5	13		100.0	27.8	72.2	
East North Central.....	223	154	55	14	100.0	69.0	24.7	6.3
Ohio.....	46	42	4		100.0	91.3	8.7	
Indiana.....	52	42	7	3	100.0	80.8	13.5	5.7
Illinois.....	69	45	15	9	100.0	65.2	21.7	13.0
Michigan.....	24	13	9	2	100.0	54.2	37.5	8.3
Wisconsin.....	32	12	20		100.0	37.5	62.5	
West North Central.....	1,178	307	831	40	100.0	26.1	70.5	3.4
Minnesota.....	765	78	681	6	100.0	10.2	89.0	.8
Iowa.....	137	91	27	19	100.0	66.4	19.7	13.9
Missouri.....	30	25	2	3	100.0	83.3	6.7	10.0
North Dakota.....	81	26	55		100.0	32.1	67.9	
South Dakota.....	65	11	52	2	100.0	16.9	80.0	3.1
Nebraska.....	15	9	5	1	100.0	60.0	33.3	6.7
Kansas.....	85	67	9	9	100.0	78.8	10.6	10.6
South Atlantic.....	41	22	18	1	100.0	53.7	43.9	2.4
Maryland.....	3	1	2		100.0	33.3	66.7	
Virginia.....	24	17	6	1	100.0	70.8	25.0	4.2
West Virginia.....	5	3	2		100.0	60.0	40.0	
North Carolina.....	7		7		100.0		100.0	
Georgia.....	2	1	1		100.0	50.0	50.0	

TABLE 3.—*Geographic Distribution of Reporting Cooperative Telephone Associations, by Type, 1936—Continued*

Geographic division and State	Number				Percent			
	Total	Locals		Federation with switch-board	Total	Locals		Federation with switch-board
		With switch-board	Without switch-board			With switch-board	Without switch-board	
East South Central.....	8	7	1	-----	100.0	87.5	12.5	-----
Kentucky.....	4	3	1	-----	100.0	75.0	25.0	-----
Tennessee.....	3	3	-----	-----	100.0	100.0	-----	-----
Alabama.....	1	1	-----	-----	100.0	100.0	-----	-----
West South Central.....	20	15	2	-----	100.0	75.0	10.0	15.0
Arkansas.....	2	1	1	-----	100.0	50.0	50.0	-----
Oklahoma.....	8	5	1	-----	100.0	62.5	12.5	25.0
Texas.....	10	9	-----	-----	100.0	90.0	-----	10.0
Mountain.....	32	12	20	-----	100.0	37.5	62.5	-----
Montana.....	14	5	9	-----	100.0	35.7	64.3	-----
Idaho.....	4	3	1	-----	100.0	75.0	25.0	-----
Wyoming.....	6	-----	6	-----	100.0	-----	100.0	-----
Colorado.....	7	4	3	-----	100.0	57.1	42.9	-----
Nevada.....	1	-----	1	-----	100.0	-----	100.0	-----
Pacific.....	61	23	35	-----	100.0	37.7	57.4	4.9
California.....	1	1	-----	-----	100.0	100.0	-----	-----
Washington.....	20	10	9	-----	100.0	50.0	45.0	5.0
Oregon.....	40	12	26	-----	100.0	30.0	65.0	-----

*Age of Associations*

The reports received from the telephone associations show that these associations are one of the oldest forms of cooperative effort in the United States. The average age for all associations reporting on this point was 26 years. The following statement shows the distribution of associations, by length of time in operation:

	<i>Number of associations</i>
Less than 1 year.....	2
1 year and under 3 years.....	10
3 and under 5 years.....	9
5 and under 10 years.....	48
10 and under 15 years.....	45
15 and under 20 years.....	147
20 and under 25 years.....	321
25 and under 30 years.....	400
30 years and over.....	492
Total.....	1,474

The largest groups had been formed in the periods 1900 to 1909 (49.5 percent) and 1910 to 1919 (38.0 percent), but 1.3 percent had been in operation since before 1900. The oldest association reporting was started in 1893. Table 4 shows, by States, the distribution of the associations according to the year in which they were formed.

TABLE 4.—Distribution of Cooperative Telephone Associations, by Period in Which Established

State	Total number of associations reporting	Number of associations organized in specified period											
		1890 to 1899	1900 to 1909	1910 to 1919	1920 to 1924	1925 to 1929	1930	1931	1932	1933	1934	1935	1936
All associations....	1,474	19	730	560	78	50	10	6	7	2	7	3	2
Alabama.....	1			1									
Arkansas.....	1				1								
California.....	1			1									
Colorado.....	7		2	5									
Georgia.....	2			1	1								
Idaho.....	4		2	2									
Illinois.....	61	3	44	9	3	1		1					
Indiana.....	46	1	37	7	1								
Iowa.....	122		76	22	7	8	3	1	2		1 <sup>2</sup>		1
Kansas.....	81		59	15	3		1			1	2		
Kentucky.....	4			1	2	1							
Maine.....	7		5	2									
Maryland.....	2	1	1										
Michigan.....	18		14	3									
Minnesota.....	700	11	309	<sup>2</sup> 326	32	14	1	2	1	1	1	2	
Missouri.....	25	1	18	5		1							
Montana.....	14		2	9	2	1							
Nebraska.....	14		9	4	1								
Nevada.....	1												
New Hampshire.....	2		1	1									
New York.....	18		12	3	3								
North Carolina.....	6		1	3		1					1		
North Dakota.....	78		16	50	4	6	1		1				
Ohio.....	44		34	6			2					1	1
Oklahoma.....	7		4	3									
Oregon.....	37	1	9	11	3	7	2	1	2		1		
Pennsylvania.....	17		12	4	1								
South Dakota.....	58		22	31	3	1			1				
Tennessee.....	3			2		1							
Texas.....	9		3	3	2	1							
Vermont.....	4		4										
Virginia.....	22	1	9	10	2								
Washington.....	18		6	8		4							
West Virginia.....	5		1	2	2								
Wisconsin.....	30		17	6	4	2		1					
Wyoming.....	5		1	3	1								

<sup>1</sup> 1 reorganized; no information on date first established.

<sup>2</sup> 1 established in 1911; reorganized in 1936.

### Membership and Subscribers Served

The telephone associations ranged in size from 2 to 4,025 but were generally small. Of the whole group, 48.5 percent had fewer than 25 members each and 67.8 percent had fewer than 50 members each. Less than one-fifth had more than 100 members and only 1.2 percent had 500 members or more. (Table 5.)

TABLE 5.—*Distribution of Cooperative Telephone Associations by Number of Members, 1936*

Classified membership	Operating switchboards		Not operating switchboards		Both types of associations	
	Number	Percent	Number	Percent	Number	Percent
Fewer than 10 members.....	7	1.5	166	16.8	173	11.4
10 and under 25 members.....	35	6.6	530	53.5	565	37.1
25 and under 50 members.....	92	17.3	201	20.3	293	19.3
50 and under 100 members.....	123	23.2	64	6.5	187	12.3
100 and under 250 members.....	201	37.9	26	2.6	227	14.9
250 and under 500 members.....	55	10.4	3	.3	58	3.8
500 and under 1,000 members.....	10	1.9	1	.1	11	.7
1,000 members and over.....	8	1.5	-----	-----	8	.5
Total.....	531	100.0	991	100.0	1,522	100.0

As would be expected, the service-line associations were the smaller of the two types of associations shown in table 5. Seventy percent of these had fewer than 25 members and 90 percent fewer than 50 members. As table 6 indicates, they averaged only 27 members each, as compared with 161 members in the associations having their own switchboards. The central, or federated associations, had in membership an average of 24 local associations each.

The 1,522 local associations reporting as to membership had a combined total of 110,981 members at the end of 1936, or an average of 66 persons each. More than three-fourths of these were members of local associations operating their own switchboards.

Not all of these members were also subscribers at the end of the year. In some cases shareholders had moved out of the territory served by the association, and though retaining their stock in the organization were no longer using its facilities. Reports from other associations indicated that, low as the rates or assessments were, there nevertheless were members whose financial condition was such that they could no longer afford the service. The number of inactive members was more than counterbalanced by the nonmember patrons, however, so that the number of active subscribers of the local associations at the end of 1936 exceeded the number of shareholders by 25,185.

TABLE 6.—*Membership and Subscribers of Cooperative Telephone Associations, 1936, by Type of Association*

Type of association	Membership			Subscribers		
	Number of associations reporting	Members	Average	Number of associations reporting	Members	Average
Local associations.....	1,522	110,981	66	1,542	136,166	88
Operating switchboards.....	529	85,041	161	549	109,274	199
Not operating switchboards.....	993	25,940	27	993	26,892	27
Federated or central associations operating switchboards.....	50	1,198	24	56	11,641	208

<sup>1</sup> Number of member associations.

Fifty-six associations, composed of 1,198 member associations of the service-line type, reported a total of 11,641 subscribers. Although there is a small amount of duplication, in number of subscribers reported, as between the local service-line associations and the federated central associations, it is safe to say that the reporting associations were serving over 147,000 families at the end of 1936.

The total and average membership and subscribers are shown, by geographic divisions and States, in table 7. It is evident from this table that 87 percent of the local associations reporting and 81 percent of the membership were in the North Central States. The largest associations were in the State of Washington where the average membership was 339, followed by Idaho with 296. In Minnesota, which had the largest number of associations, the average membership was only 37 but this was because of the unusually large proportion of the small service lines.

A considerable margin between average membership and average number of subscribers was shown in some States, notably Iowa, Nebraska, Oklahoma, and Washington. Undoubtedly this was due to some extent to requirements by State commissions making it compulsory upon the associations to serve all applicants (whether members or not) in the area in which they have license to operate.

TABLE 7.—Membership and Subscribers, 1936, by Division and State

Geographic division and State	Type of association	Membership			Subscribers			
		Associations reporting	Members	Average per association	Associations reporting	Members	Average per association	
United States.....	Local.....	1,522	110,981	66	1,542	136,166	88	
	Central..	50	1,198	24	56	11,641	208	
New England.....	Local.....	14	1,774	127	14	1,534	110	
	Maine.....do.....	7	1,654	222	7	1,316	188	
	New Hampshire.....do.....	2	58	29	2	56	28	
	Vermont.....do.....	5	162	32	5	162	32	
Middle Atlantic.....	do.....	36	1,298	36	36	1,683	47	
	New York.....do.....	18	747	42	18	1,062	59	
	Pennsylvania.....do.....	18	551	31	18	621	35	
East North Central.....	do.....	204	22,011	108	207	26,365	127	
	Central..	13	1,282	122	13	2,803	216	
	Ohio.....Local..	45	5,542	123	46	6,482	141	
	Indiana.....do.....	49	5,151	105	49	6,251	128	
	Central..	2	137	119	3	364	121	
	Illinois.....Local..	59	7,152	121	59	9,050	153	
	Central..	9	1,208	123	8	1,889	236	
	Michigan.....Local..	19	1,976	104	21	2,040	97	
	Central..	2	137	119	2	550	275	
	Wisconsin.....Local..	32	2,190	68	32	2,542	79	
West North Central.....	do.....	1,115	67,416	60	1,131	82,399	75	
	Central..	32	1,801	125	36	7,845	218	
	Minnesota.....Local..	743	27,744	37	766	32,753	43	
	Central..	5	1,120	124	5	594	119	
	Iowa.....Local..	114	16,674	146	115	21,803	190	
	Central..	14	1,438	131	18	4,358	242	
	Missouri.....Local..	26	3,608	139	27	4,376	162	
	Central..	3	171	124	3	760	253	
	North Dakota.....Local..	80	3,839	48	81	3,854	48	
	South Dakota.....do.....	63	1,938	31	63	2,386	38	
Nebraska.....	Central..	2	116	18	1	70	70	
	Local..	14	2,530	181	14	3,734	267	
	Central..	1	16	16	1	275	275	
	Kansas.....Local..	75	11,083	148	75	13,493	180	
Central..	7	1,150	121	8	1,788	224		
South Atlantic.....	Local..	40	5,725	143	40	5,934	148	
	Central..	1	130	130	1	210	210	
	Maryland.....Local..	3	277	92	3	352	117	
	Virginia.....do.....	23	4,952	215	23	5,003	218	
	Central..	1	130	130	1	210	210	
	West Virginia.....Local..	5	312	62	5	385	77	
	North Carolina.....do.....	7	149	21	7	154	22	
	Georgia.....do.....	2	35	18	2	40	20	
	East South Central.....	do.....	8	689	86	8	726	91
		Kentucky.....do.....	4	185	46	4	209	52
Tennessee.....do.....		3	490	163	3	498	166	
Alabama.....do.....		1	14	14	1	19	19	
West South Central.....	do.....	16	1,605	100	16	2,448	153	
	Central..	3	181	127	3	195	65	
	Arkansas.....Local..	2	43	22	2	43	22	
	Oklahoma.....do.....	6	722	120	6	1,592	265	
	Central..	2	174	137	2	155	78	
	Texas.....Local..	8	840	105	8	813	102	
Central..	1	17	17	1	40	40		
Mountain.....	Local..	32	2,215	69	32	2,136	67	
	Montana.....do.....	14	635	45	14	464	33	
	Idaho.....do.....	4	1,182	296	4	1,195	299	
	Wyoming.....do.....	6	100	17	6	84	14	
	Colorado.....do.....	7	288	41	7	383	55	
	Nevada.....do.....	1	10	10	1	10	10	
Pacific.....	do.....	57	8,248	145	58	12,941	223	
	Central..	1	14	14	3	588	196	
	California.....Local..	1	33	33	1	33	33	
	Washington.....do.....	18	6,110	339	19	10,643	560	
	Central..	1	14	14	1	20	20	
	Oregon.....Local..	38	2,105	55	38	2,265	60	
Central..	-----	-----	-----	2	568	284		

<sup>1</sup> Number of member associations.

The associations appear to have been losing ground as regards membership. Of 1,305 societies which reported number of members for both 1935 and 1936, the membership in the latter year showed an increase in 184, a decrease in 218, and remained unchanged in 903.

Some relation between period of operation and membership was indicated, in the reporting associations. Thus, of 62 associations which had been in existence for less than 10 years, all but 17 had fewer than 50 members. On the other hand no associations less than 15 years of age had attained a membership of 500 or more and the only associations with 1,000 or more members were 5 which had all been operating for 20 years or longer (3 of these, for 30 years or longer).

### *Legal Status and Cooperative Practice*

#### LEGAL STATUS

The so-called "Rochdale principles" practiced among the distributive and service associations are somewhat modified in the telephone associations by conditions in their field of business, by the wish of the members, or by the terms of the acts under which they operate. Although unincorporated associations may operate on any basis they choose, the business procedure of any incorporated organization is determined to a certain extent by the statute under which it has been incorporated. Thus, the general corporation acts usually specify that the stockholder shall have one vote for every share of stock he owns, that any dividends paid shall be paid on the stock, and that proxy voting must be permitted—all of which requirements are in direct contravention of the cooperative principles. Sometimes also the State constitution contains sections covering such business procedure as voting by shares or by proxy.

The cooperative statutes vary considerably in their requirements from State to State. The best ones enumerate the cooperative principles, in defining what constitutes a cooperative, and specify adherence to these standards as a requirement for operation under the act. But by no means can all of these cooperative statutes be said to be adequate in the sense of defining and compelling compliance with the Rochdale principles. Wide variations from the accepted practice, and equally unfortunate omissions, are found in the provisions of the State acts.

Of the 1,292 telephone associations which reported their legal status, 787 were incorporated and 505 were unincorporated. The small service lines appeared to be more likely to remain informal associations, while the larger organizations giving switchboard service were generally incorporated. That this distinction was by no means always true, however, is indicated by the fact that some service-line

associations with as few as half a dozen members were found to be incorporated. There were, nevertheless, some service-line groups that not only had not incorporated but had never even had what could be called an association. One such association reported that there had never been even a signed agreement among the members. A few neighbors had assembled, strung their poles and wire, and negotiated for switching service from the telephone company in the nearest town; one member acted as secretary in collecting "switching fees" to be paid to the company and in carrying on any necessary correspondence. That was all there was to it.

A great many of the telephone associations were formed before there was any State cooperative law under which they could be established and they therefore incorporated as stock companies under the general corporation act; a good many of these, in practice, however, have operated as mutuals. Comparatively few appear to have been established under the cooperative statutes. In 1933 the Wisconsin Public Service Commission had a check made of the incorporation records in that State. This revealed that, although the State cooperative statute is broad enough to cover telephone operation, only four associations had elected to incorporate under it; most of the others had been formed as mutuals.

Again, telephone companies are in many States regarded as public utilities or common carriers and, as such, are subject to regulation by State commissions. A number of States exempt from such regulation associations operating as pure mutuals (i. e., serving members only and having no predetermined rates but assessing all members their pro rata share of the cost of operation); service extended to even one nonmember subjects the association to regulation by the State commission. Some of the regulations imposed by these State commissions also place obstacles in the way of completely cooperative practice. Thus, in States where operating territory is apportioned, company by company, and exclusive rights are given therein, State commissions generally require the companies to serve all applicants for service whether they are stockholders or not. And in some cases the companies are specifically prohibited from making any distinction in the rates charged to members and to nonmembers. The result is that where nonmembers can get the same service as members and at the same rate, there is little inducement to take out membership in the cooperative association. Such has been the effect of this that, in States where this regulation is in force, many associations have a greater number of nonmember than member subscribers.

As is evident, therefore, the rate of observance of the cooperative principles among the telephone associations is dependent to a considerable extent upon these legal and regulatory requirements.

## COOPERATIVE PRACTICE

In general the practice of open membership is followed by the telephone associations. Limitation, where found, was generally that imposed by the capacity of the facilities owned. Thus several associations reported that membership was limited to 15, 18, or 20—the load limit of the party line owned by the association. A few associations required that the prospective member must live in the territory served by the association and thus be in a position to utilize the telephone facilities. Only four associations were found which imposed any other restriction. In two of these, membership was open only to farmers, and in one farmers were specifically excluded. The fourth association (located in Texas) barred Negroes from membership.

*Voting.*—Roughly, 80 percent of the reporting associations allowed only one vote per member, and about 75 percent prohibited voting by proxy. In the federations, member associations had one vote each. In one case, however, a number of party lines, all in rural districts, had federated and bought their own switchboard which was set up in a village centrally located. At the same time, service was extended to the villagers. The rural service was still operated on the assessment basis, and the members continued to provide and maintain their own telephones and lines, but the village subscribers were renters and were charged a flat rate. In this association each of the local member associations (i. e., the party lines) had one vote in the affairs of the association and the villagers were given one vote for every 10 subscribers.

*Share capital.*—In the associations with capital stock one of the conditions of membership was the purchase of at least one share. The pure mutuals and some of the cooperative associations were membership organizations without capital stock. In the pure mutuals the usual practice, at the time the lines were built, had been for the members to divide the total cost equally among themselves, the pro rata share being regarded as the cost of "membership." In at least one case, the association later issued shares, the par value of which was based upon the amount of contribution of the original members.

Generally when a member wishes to withdraw from the organization, he must find a purchaser for his share, but some associations purchase his share at par value or net worth, whichever is lower.

Analysis of the policies of the associations indicates that less than 5 percent make a practice of paying interest on share capital. In these associations therefore, although they are organized as capital-stock associations, the share may be regarded as only a membership certificate. Of 33 associations which make a practice of paying interest on share capital, 14 limit the rate of return—one to 4 percent, five to 5 percent, three to 6 percent, one to 7 percent, three to 8 percent, and

one to 10 percent. Only 23 made any return on shares in 1936, the rates ranging from 2 to 8 percent.

*Patronage refunds.*—The return of surpluses earned on the year's operations, in proportion to patronage, is not common among the telephone associations. The main reason for this is that there is generally no surplus to return. About three-fourths of the associations operate on the assessment basis. The assessment may be levied upon all members alike, or may be in proportion either to the amount of shares held or to the telephones in use. Whatever the basis, the total amount is set only high enough to cover operating expenses. Those associations which do operate on a predetermined monthly rate usually aim to fix that rate only high enough to cover the actual cost of service. In the grocery trade and retail gasoline business there is a "current price" which is easily known, and which provides for a margin sufficient to cover operating expenses plus a profit to the dealer. In other words, the member of a grocery cooperative voluntarily advances to his association this difference between actual cost and the current price. It is from this "overcharge" that he receives his patronage refund at the end of the operating period. Most of the telephone associations, however, are operating in a business field and in districts where there has been no current rate, and their low rates afford little or no surplus.

Among the associations covered by the present study only 29 reported that they had returned a patronage refund for 1936. They had rebated the sum of \$7,168, which was an average of \$3.23 for each of their members. The practice of one additional association was to divide any surplus equally among the members—a purely mutual procedure—and it was the custom of another to give free service until the surplus was exhausted.

### *Operative and Administrative Procedure*

The larger switchboard associations operate like any other telephone company, with directors, officers, manager, linemen, and operators. The directors, however, are generally either unpaid or receive only a small fee for attendance at meetings. Full-time officers and all employees are on a salary status.

There is little formal procedure in the operation of the service lines. Generally most of the actual work is carried on by a secretary, elected from the membership, who may contribute his services or may receive a small annual amount for his work. In some of the very small associations the secretary is the only officer and there are no paid employees.

The associations which have no switchboard of their own naturally need no operators. In the smaller associations which give switchboard service, it was found that service may be provided for in one of several

different ways: (1) One or more operators may be hired at a flat monthly or yearly rate, the association being responsible for the payment of the salary; (2) the operator may be guaranteed a certain sum per year, each member being directly responsible to the operator for his share; (3) the operator may be hired on a contingent or commission basis, receiving either a specified commission on the total business (calls made) or a flat rate per call; (4) the switchboard may be placed in the home of one of the members and operated by the family, either gratuitously or for a small yearly amount. A fifth method had been resorted to in a few instances, mainly in territories where the economic situation of the association and its members was desperate; there the procedure was to turn over the switchboard (though still retaining ownership) to some person or family willing to take over its operation for the small amounts receivable in annual switchboard fees or for a small amount per call; generally such arrangements were undertaken by a local family simply to obtain some small supplementary income.

#### PROPERTIES AND EQUIPMENT

Data as to miles of lines owned by the associations were available for only 239 organizations. These had a total of 7,139.8 miles, an average of 29.9 miles each. If this average can be regarded as representative of the whole group, then the associations covered in this report own and operate about 45,000 miles of line.

As already indicated, the associations usually own the poles and wire along the main right of way. The wire and poles necessary to carry the service from the highway to the members' homes, however, must be furnished by the member in over three-fifths of the service lines, and in nearly two-fifths of the local associations operating their own switchboards. In over three-fourths of the service lines, and three-fifths of the local switchboard associations, the member must also supply his own telephone instrument. Many of the associations furnish service only to members; if nonmember subscribers are served, instruments are furnished by the association, either (1) at a specified monthly rental for the instrument but with switching service at the same rate as for members, or (2) at a higher flat service rate than for members, the difference being in consideration of furnishing instrument and maintenance of line.

The larger companies, particularly those which charge a stipulated monthly rate, utilize part of their revenues for the maintenance and repair of lines and equipment. In the smaller companies it is the general practice that a considerable amount of the repair and maintenance work on the association's lines is done by the members themselves. Of the 1,224 companies reporting on this point, in 692 (57 percent) the members are responsible for the repair of their instru-

ments, the replacement of batteries, and the upkeep of their wire as far as the main line.

In some associations when repairs on the main lines are needed, either the members all contribute the necessary services or a lineman (who may be a professional from one of the private companies or simply one of the cooperative members) is hired. Some associations permit certain members to pay all or part of their assessment in services. In at least one association one member is elected as lineman each year and receives a small sum for his services.

Sometimes the association holds a "bee." Thus one society reports: "Every fall the members go out 1 day, in a body, all over the line, reset poles and insulators and do everything possible to keep expenses down to a minimum."

### *Finances*

The associations were asked to supply data on gross and net income, paid-in share capital, net worth, bills and accounts payable, and total assets.

The financial data thus obtained were far from complete and not altogether satisfactory. Most of the switchboard associations (especially the larger ones) had good accounting and bookkeeping. A large proportion of the service-line associations, however, operate on an informal basis, and many of them keep few accounts. It was found that the determination of the associations' net worth, for instance, was impossible in many cases. It will be noted, in table 11, that the number of organizations reporting varies widely from point to point. Sometimes early records had been lost. Often no record had been kept of the value of original installations, equipment or replacements. Some reported "no net worth," even though sizeable sums had been invested, the plant was still in good operating condition, and there were few or no debts outstanding against the organization. It is more than likely therefore that the aggregate net worth, even of associations reporting, is considerably greater than that shown in table 8.

### RESOURCES

Of 505 associations which reported as to amount of assets, 42 percent had total resources of less than \$1,000, about 36 percent had resources of from \$1,000 to \$5,000, and only a little over 11 percent had assets of \$10,000 or over (table 8). The assets of the service-line associations were small; in about 42 percent they were less than \$500 and in 65 percent were under \$1,000.

TABLE 8.—Distribution of Cooperative Associations by Amount of Assets at End of 1936

State	Total number reporting	Number of associations with assets of—							
		Under \$500	\$500 and under \$1,000	\$1,000 and under \$2,000	\$2,000 and under \$5,000	\$5,000 and under \$10,000	\$10,000 and under \$25,000	\$25,000 and under \$50,000	\$50,000 and over
All associations.....	505	125	87	81	99	56	38	14	5
Locals operating switchboard.....	261	29	29	37	67	45	36	13	5
Locals not operating switchboard.....	227	95	53	40	30	7	1	1	-----
Federations operating switchboard.....	17	1	5	4	2	4	1	-----	-----
Alabama.....	1	-----	-----	1	-----	-----	-----	-----	-----
California.....	1	1	-----	-----	-----	-----	-----	-----	-----
Colorado.....	3	2	-----	-----	1	-----	-----	-----	-----
Idaho.....	2	-----	-----	-----	-----	-----	1	1	-----
Illinois.....	24	3	7	2	5	4	1	2	-----
Indiana.....	24	1	2	2	16	8	1	-----	-----
Iowa.....	32	3	4	8	6	5	4	2	-----
Kansas.....	42	8	4	12	9	5	3	1	-----
Kentucky.....	1	1	-----	-----	-----	-----	-----	-----	-----
Maine.....	2	1	-----	-----	-----	-----	1	-----	-----
Maryland.....	1	-----	-----	-----	-----	-----	1	-----	-----
Michigan.....	11	3	2	3	3	-----	-----	-----	-----
Minnesota.....	202	65	43	25	28	16	16	7	2
Missouri.....	7	-----	1	3	2	1	-----	-----	-----
Montana.....	10	4	-----	1	3	1	-----	1	-----
Nebraska.....	11	1	-----	1	5	1	2	-----	1
New Hampshire.....	1	1	-----	-----	-----	-----	-----	-----	-----
New York.....	2	-----	-----	-----	1	-----	1	-----	-----
North Carolina.....	2	2	-----	-----	-----	-----	-----	-----	-----
North Dakota.....	25	3	7	6	3	4	2	-----	-----
Ohio.....	12	-----	-----	2	7	2	1	-----	-----
Oklahoma.....	5	2	-----	1	1	-----	1	-----	-----
Oregon.....	14	6	2	4	1	1	-----	-----	-----
Pennsylvania.....	7	1	2	2	1	1	-----	-----	-----
South Dakota.....	20	10	3	2	3	2	-----	-----	-----
Tennessee.....	2	2	-----	-----	-----	-----	-----	-----	-----
Texas.....	4	-----	4	-----	-----	-----	-----	-----	-----
Virginia.....	7	1	2	3	-----	1	-----	-----	-----
Washington.....	15	2	2	1	4	3	1	-----	2
West Virginia.....	3	1	1	1	-----	-----	-----	-----	-----
Wisconsin.....	11	1	1	-----	6	1	2	-----	-----
Wyoming.....	1	-----	-----	1	-----	-----	-----	-----	-----

For the 505 associations reporting, total assets amounted to \$2,719,-155. A combined net worth of \$2,446,111 was reported by 422 associations and a paid-in share capital of \$2,413,895 by 750 associations (table 9).

TABLE 9.—Resources, and Bills Payable, of Cooperative Telephone Associations, at end of 1936

Type of society	Total assets		Net worth		Paid-in share capital			Bills and accounts payable	
	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number of non-stock associations	Number reporting	Amount
All associations.....	505	\$2,719,155	1,422	\$2,446,111	750	\$2,413,895	230	228	\$191,770
Locals operating switchboard.....	261	2,379,385	1,227	1,970,912	343	1,781,641	87	130	170,689
Locals not operating switchboard.....	227	288,252	176	240,960	396	545,780	119	91	17,567
Federations operating switchboard.....	17	51,518	19	234,239	11	86,474	24	7	3,514
New England.....	3	17,448	4	15,852	6	20,307	2	2	460
Maine.....	2	17,198	2	15,177	3	16,333	1	2	460
New Hampshire.....	1	250	1	275	—	—	1	—	—
Vermont.....	—	—	1	400	3	3,974	—	—	—
Middle Atlantic.....	9	23,585	6	13,448	12	14,725	4	7	3,233
New York.....	2	15,617	3	11,008	4	6,625	—	2	2,300
Pennsylvania.....	7	7,968	3	2,440	8	8,100	4	5	933
East North Central.....	82	346,011	73	310,994	118	377,353	46	48	23,264
Ohio.....	12	50,037	9	32,172	21	91,378	15	12	5,240
Indiana.....	24	98,609	19	79,067	25	68,041	10	8	2,645
Illinois.....	24	120,683	22	101,300	37	112,877	15	12	6,123
Michigan.....	11	18,087	8	29,164	11	23,827	3	7	3,706
Wisconsin.....	11	58,595	15	69,291	24	81,230	3	9	5,550
West North Central.....	339	1,724,120	288	1,621,915	519	1,691,617	159	137	88,305
Minnesota.....	202	1,023,381	143	1,697,623	304	730,599	85	68	22,610
Iowa.....	32	194,770	46	426,125	70	360,330	28	16	25,435
Missouri.....	7	14,200	7	10,500	7	16,503	9	2	695
North Dakota.....	25	84,992	26	100,487	46	212,145	9	22	14,598
South Dakota.....	20	30,109	18	33,887	34	78,287	9	12	4,220
Nebraska.....	11	221,826	10	214,692	13	86,104	—	5	5,634
Kansas.....	42	154,842	38	138,601	45	207,649	19	12	15,113
South Atlantic.....	13	24,101	9	22,633	20	44,513	2	7	3,113
Maryland.....	1	10,306	1	7,173	1	4,300	—	1	2,482
Virginia.....	7	10,910	5	13,235	14	34,853	2	4	561
West Virginia.....	3	2,650	2	2,050	3	4,710	—	2	70
North Carolina.....	2	235	1	175	2	650	—	—	—
East South Central.....	4	1,949	1	400	5	7,244	—	3	1,112
Kentucky.....	1	400	—	—	2	1,409	—	2	1,037
Tennessee.....	2	517	1	400	2	4,540	—	1	75
Alabama.....	1	1,032	—	—	1	1,295	—	—	—
West South Central.....	9	22,270	7	10,707	6	17,380	6	—	—
Arkansas.....	—	—	1	50	—	—	—	—	—
Oklahoma.....	5	19,720	3	8,369	3	11,800	2	—	—
Texas.....	4	2,550	3	2,288	3	5,580	4	—	—
Mountain.....	16	118,348	13	87,806	18	114,928	4	9	738
Montana.....	10	46,479	8	31,029	10	28,777	1	2	84
Idaho.....	2	65,284	2	49,414	4	63,399	—	3	261
Wyoming.....	1	1,527	1	1,577	2	12,755	—	1	168
Colorado.....	3	5,058	2	5,786	2	9,997	2	3	225
Nevada.....	—	—	—	—	—	—	1	—	—
Pacific.....	30	441,323	21	362,356	46	125,828	7	15	71,545
California.....	1	50	—	—	—	—	1	—	—
Washington.....	15	424,139	9	329,733	17	88,154	1	9	70,232
Oregon.....	14	17,134	12	32,623	29	37,674	5	6	1,313

<sup>1</sup> Not including 1 society which reported a deficit of \$6,438.

For the associations reporting both amount of share capital and membership, the average member's investment (in share capital) was \$36.33.

Bills and accounts payable at the end of 1936 were reported by 228 associations, in an aggregate amount of \$191,770. An additional 642 associations stated that they had no debts.

#### INCOME AND EARNINGS

The figures for revenues, given in table 10, can be regarded as only approximate. In many cases no exact records of income and expenses are kept. Often the only expense in the service-line associations is the monthly switching charge and even this may be paid by each subscriber directly to the company which provides switchboard service, so that this money may not pass through the hands of the local treasurer. If repairs are needed for which labor must be hired or materials bought, each member is assessed his pro rata share. In the figures of revenues here given, however, the association has been credited with the total amount of switching fees paid, where this was known; no estimate could be made of value of repairs.

The 1,536 associations reporting gross revenue in 1936 had an aggregate of \$1,486,761, of which over three-fourths was reported by the local associations giving switchboard service, about one-seventh by the service lines, and the remainder by the federations. There were 495 associations which made a net gain during the year; for the 494 which reported the amount the combined total was \$90,030. On the other hand 163 associations had a loss; in the 153 which reported the amount this totaled \$20,649. Altogether the whole number of associations furnishing returns on this point had combined net earnings of \$69,381. This small net can be attributed mainly to the preponderance of associations operating on the assessment basis. These collect only enough revenue to cover expenses. In the words of one association: "Our profit is service at cost."

TABLE 10.—Income and Earnings of Cooperative Telephone Associations, 1936, by States

State	Gross revenue		Net gain		Net loss		Net earnings, all societies <sup>1</sup>	
	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount	Number reporting	Amount
All associations.....	1, 536	\$1, 486, 761	<sup>2</sup> 495	\$90, 030	<sup>3</sup> 163	\$20, 649	<sup>4</sup> 658	\$69, 381
Locals operating switchboard.....	539	1, 164, 263	<sup>2</sup> 222	71, 929	<sup>5</sup> 84	17, 016	<sup>6</sup> 306	54, 913
Locals not operating switchboard.....	941	211, 971	252	9, 945	<sup>7</sup> 68	2, 720	<sup>7</sup> 320	7, 225
Federations operating switchboards.....	56	110, 527	21	8, 156	<sup>8</sup> 11	913	<sup>8</sup> 32	7, 243
Alabama.....	1	890	-----	-----	1	114	1	<sup>9</sup> 114
Colorado.....	6	3, 709	1	137	-----	-----	1	137
Georgia.....	1	96	-----	-----	-----	-----	-----	-----
Idaho.....	4	26, 507	3	762	-----	-----	3	762
Illinois.....	61	108, 435	20	6, 332	4	95	24	6, 237
Indiana.....	51	70, 573	<sup>2</sup> 22	3, 635	<sup>8</sup> 6	529	<sup>10</sup> 28	3, 106
Iowa.....	127	289, 551	49	17, 185	<sup>11</sup> 17	1, 911	<sup>11</sup> 66	15, 274
Kansas.....	84	142, 937	36	5, 691	<sup>8</sup> 20	3, 108	<sup>8</sup> 56	2, 583
Kentucky.....	3	1, 400	-----	-----	-----	-----	-----	-----
Maine.....	7	17, 857	3	766	-----	-----	3	766
Maryland.....	2	3, 998	1	367	-----	-----	1	367
Michigan.....	24	38, 304	16	8, 625	1	50	17	8, 575
Minnesota.....	741	276, 146	232	20, 879	<sup>12</sup> 68	5, 201	<sup>12</sup> 300	15, 678
Missouri.....	30	35, 341	6	2, 581	3	250	9	2, 331
Montana.....	14	4, 430	4	100	1	54	5	46
Nebraska.....	15	56, 826	-----	-----	9	5, 265	9	<sup>9</sup> 5, 265
Nevada.....	1	84	-----	-----	-----	-----	-----	-----
New Hampshire.....	2	582	-----	-----	-----	-----	-----	-----
New York.....	6	6, 858	2	94	1	377	3	<sup>9</sup> 283
North Carolina.....	7	885	-----	-----	-----	-----	-----	-----
North Dakota.....	78	45, 237	18	3, 838	<sup>8</sup> 6	776	<sup>8</sup> 24	3, 062
Ohio.....	44	69, 770	19	3, 912	6	1, 159	25	2, 753
Oklahoma.....	7	15, 520	3	129	-----	-----	3	129
Oregon.....	40	26, 604	10	2, 823	2	91	12	2, 732
Pennsylvania.....	18	6, 252	7	436	3	219	10	217
South Dakota.....	62	26, 463	19	955	4	355	23	600
Tennessee.....	3	5, 010	-----	-----	-----	-----	-----	-----
Texas.....	9	5, 743	3	10	2	191	5	<sup>9</sup> 181
Vermont.....	5	3, 055	-----	-----	1	127	1	<sup>9</sup> 127
Virginia.....	23	27, 428	4	442	-----	-----	4	442
Washington.....	20	133, 013	6	8, 166	<sup>11</sup> 4	33	<sup>11</sup> 10	8, 133
West Virginia.....	4	2, 210	2	190	-----	-----	2	190
Wisconsin.....	30	34, 435	9	1, 975	4	744	13	1, 231
Wyoming.....	6	612	-----	-----	-----	-----	-----	-----

<sup>1</sup> Not including 320 associations which reported "no net earnings" for the year.

<sup>2</sup> Includes 1 association reporting small gain, amount not stated.

<sup>3</sup> Includes 10 associations which did not report amount of loss.

<sup>4</sup> Includes 10 associations reporting loss and 1 reporting gain, amount not stated.

<sup>5</sup> Includes 5 associations which did not report amount of loss.

<sup>6</sup> Includes 1 association reporting gain, and 5 reporting loss, amount not stated.

<sup>7</sup> Includes 4 associations which did not report amount of loss.

<sup>8</sup> Includes 1 association which did not report amount of loss.

<sup>9</sup> Loss.

<sup>10</sup> Includes 1 association reporting gain and 1 reporting loss, amount not stated.

<sup>11</sup> Includes 2 associations which did not report amount of loss.

<sup>12</sup> Includes 3 associations which did not report amount of loss.

Only five of the associations included in the present study had gross revenues in 1936 amounting to \$10,000 or over. The revenues of these ranged from \$11,205 to \$67,000.

# *Housing Conditions*

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## HOUSING AND HOUSING FINANCE IN AMERICAN CITIES

BY COMBINING the results of the Real Property Inventory and the Financial Survey of Urban Housing, both conducted by the U. S. Bureau of Foreign and Domestic Commerce, those interested in the betterment of living conditions in the United States are furnished with valuable data for planning purposes.<sup>1</sup> Primarily covering accommodations as they existed in 1933, these reports deal with the predominant types of housing, including substandard units, and also show the ratio of owner-occupied to rented dwellings, the proportion of income spent on rent, the importance of mortgaged buildings in housing finance and contract, as well as effective rates of interest on both owner-occupied and rental properties. Statistics are presented for 64 individual cities included in the inventory of property and for 61 cities under the financial survey, in addition to country-wide summaries. The date of inauguration of this survey coincided with the time of the broadening of Federal policy in housing questions, and the results supply essential economic and financial information on residential properties which heretofore has been lacking.

### *Condition of Housing*<sup>2</sup>

In investigating 2,633,135 dwelling units in 64 American cities the Bureau of Foreign and Domestic Commerce found that nearly 80 percent of the structures were of the single-family type, 2-family houses made up 13 percent of the total, and the remaining 8 percent were of other kinds including apartment houses. The relatively low proportion of apartment houses is doubtless accounted for by the omission of the largest cities from the survey.

On the average, owner-occupied dwellings were larger than rented units. Over 83 percent of the single-family houses occupied by owners had 5 or more rooms, as compared with 63 percent of the rented houses. One- and 2-room units represented only 1.7 percent of the total owner-occupied dwellings and 5.2 percent of those rented.

<sup>1</sup> U. S. Bureau of Foreign and Domestic Commerce. Real Property Inventory, 1934. Summary and 64 Cities Combined, Washington, 1935, mimeographed; Financial Survey of Urban Housing, Statistics on Financial Aspects of Urban Housing, Washington, 1937.

<sup>2</sup> For a fuller description of the findings from the Real Property Inventory see Monthly Labor Review, March 1935 (pp. 723-729).

It was also found that owner-occupied houses had relatively more conveniences of specified types. For example 90.6 percent of all the homes investigated had electricity for lighting, but in rented houses the percentage was 87.5 as compared with 95.4 in the owner-occupied dwellings. Gas for cooking was available in 69 percent of all the houses, mechanical refrigeration in 17.0 percent, indoor water-closets in 82.9 percent, and baths in 76.7 percent. The report reviewed commented on the large extent to which sanitary plumbing was absent in residential buildings in the cities surveyed.

On the basis of a standard of occupancy of one person to a room, 17.1 percent of the dwellings were overcrowded. In 379,434 units, making up 15.6 percent of the total, the number of persons to a room was 1 to 2; in 29,283 (1.2 percent of the total) it was 2 to 3; and in 6,120 (0.3 percent) it was over 3.

Owner-occupied single-family homes valued at \$3,000 to \$4,999 represented 29.1 percent of the total on which valuation was reported; 41.6 percent were valued at less than \$3,000, and the remaining group at \$5,000 and over. Eight percent fell in the lowest valuation class, under \$1,000, and 1.5 percent were valued at \$20,000 and over. The modal rental for all tenant-occupied units was \$20 to \$29.99 per month (25.9 percent of the total). Of single-family tenant dwellings, the classes at rental under \$10, \$10 to \$14.99, and \$20 to \$29.99, each accounted for over 20 percent of the total and together made up 63.2 percent. Multiple-family tenant dwellings brought a modal monthly rental of \$20 to \$29.99 (28.5 percent of the total).

Rating the occupied dwellings by their condition, the Department of Commerce concluded that 39.0 percent were in good condition, 44.5 percent were in need of minor repairs, 14.7 were in need of major repairs, and 1.7 were unfit for use. No information was obtained on 0.1 percent. Of the occupied units, 83.5 percent were either in good condition or in need of minor repairs, as compared with 67.7 percent of those that were vacant.

### *Financial Status*

In choosing cities to be covered in the Financial Survey of Urban Housing, consideration was given to variety in size and location in order to make the sample "sufficiently representative to give national significance to the results." In the 61 cities covered by the financial survey, 163,059 families made up the tenant sample. This represented 11.9 percent of the 1,366,443 families scheduled in the real-property inventory. The number of owner occupants in the sample was 133,478, or 14.9 percent of the 897,903 families included in the real-property inventory. Material was tabulated for 52 cities, and the findings here discussed relate to that sample. A considerable

part of the financial study was devoted to family income, this being the controlling factor in limiting expenditures for housing. Tenants tended to spend 25 percent of their income on rent. Those with higher than average incomes required smaller proportions for rent and those in the lower brackets spent a substantially higher proportion for rent. Values of owner-occupied homes averaged 2 to 3 times the annual family income; and total incomes of owner occupants averaged nearly one-third above those of tenants in the same city. The difference in total income was roughly proportionate to the difference in values of dwellings occupied in the two groups.

In cities located in the same general vicinity, conditions as to values and rents tended to be similar, with certain exceptions. Differences between areas are, of course, largely due to differences in climate between the North and the South. It is more common to find large dwellings in older, more settled areas of the Northeastern States than elsewhere. Age of dwellings, also, affects valuations and rents.

Owing to the importance of credit in ownership of real estate and in the revival of the real-estate market, special attention was given to the financing of residential buildings. An average of 58.3 percent of the owner-occupied dwellings covered were mortgaged, the ratio varying from 24 to 84 percent in the 52 cities. For rented properties the proportion mortgaged was 42.8 percent. The outstanding debt on mortgaged properties averaged more than half the value in most of the cities. The average ratio of mortgage debt to value was 55.6 percent for owner-occupied units and 60.4 for rented dwellings. These figures indicate the importance of credit in housing and show further that, where used, credit forms a more substantial part of value than the owner's equity.

Contract interest rates on first mortgages averaged nearly 6.5 percent on owner-occupied houses; rates were lowest in the Northeast and highest in the South and West. Effective rates of interest—that is, the total cost of credit after adding financing charges incident to loans—averaged about one-third of 1 percent above the contract rate. In general the interest rates on owner-occupied houses were lower than on those rented. Considerable differences in rates charged were noted between financing agencies and between geographical areas. Of the agencies lending money on real estate, individuals made up 19.7 percent, followed by savings banks (17.2 percent), commercial banks (16.5 percent), life insurance companies (15 percent), and building and loan associations (13.6 percent). Mortgage companies, the Home Owners' Loan Corporation, title and trust companies, construction companies, and other sources accounted for the remaining 18 percent of the volume of mortgage loans reported for owner-occupied dwellings.

A separate inquiry was made to determine the value of various furnishings and facilities included in rents. Information was collected on items such as electricity, gas, water, heating, garage, and mechanical refrigeration, in 11 cities. The figures disclosed that approximately one-fourth of the gross apartment rental was due to inclusion of such items in the rent. In 1- and 2-family dwellings this item made up about one-tenth of the rent, notwithstanding that multifamily dwellings are of smaller average size.

In the accompanying table summary and individual-city data are given on the principal findings of the financial survey.

Value, Income, Ratio of Rent to Income, Mortgages, and Interest Rates on Dwellings, by Cities

City and geographic area	Average value of 1-family dwellings, Jan. 1, 1934 <sup>1</sup>		Average annual family income, 1933		Average ratio rent to income, 1933 <sup>2</sup> (percent)	Percent of properties mortgaged <sup>4</sup>		Average ratio of mortgage debt to value of property <sup>5</sup> (percent)		Interest rates <sup>6</sup> (percent)			
	Owner-occupied	Rented	Owner-occupied <sup>2</sup>	Tenants <sup>3</sup>		Owner-occupied	Rented	Owner-occupied	Rented	Contract rate (weighted)		Effective rate (weighted)	
					Owner-occupied					Rented	Owner-occupied	Rented	
Total, 52 cities.....	\$4,447	\$3,142	\$1,465	\$1,082	24.2	58.3	42.8	55.6	60.4	6.18	6.25	6.54	6.76
New England.....	6,214	4,832	1,710	1,171	25.2	68.6	53.8	54.6	60.6	5.93	5.88	6.17	6.20
Portland, Maine.....	6,051	4,445	1,842	1,290	25.4	46.7	41.3	50.5	53.4	6.00	6.04	6.10	6.11
Worcester, Mass.....	6,642	6,133	1,907	1,221	24.9	83.6	69.3	67.1	69.3	5.64	5.47	5.71	5.76
Providence, R. I.....	5,903	4,706	1,606	1,124	25.5	63.2	50.2	49.4	58.7	6.06	6.00	6.45	6.40
Waterbury, Conn.....	8,001	.....	2,073	1,223	24.0	81.1	.....	60.0	.....	5.90	5.93	5.84	6.06
Middle Atlantic.....	5,223	4,457	1,394	1,071	27.5	66.9	55.9	55.9	62.8	5.65	5.72	5.91	6.03
Binghamton, N. Y.....	6,163	.....	2,019	1,408	23.4	45.3	.....	45.9	.....	5.80	6.35	6.18	6.18
Syracuse, N. Y.....	5,901	5,436	1,507	1,082	27.3	76.9	67.1	57.0	62.7	5.46	5.54	5.69	5.83
Trenton, N. J.....	4,200	3,135	1,174	902	30.3	68.8	39.8	58.4	59.7	5.92	5.77	6.03	6.29
Erie, Pa.....	4,576	3,786	1,080	924	28.6	49.7	36.5	57.7	64.5	5.94	5.95	6.36	6.48
East North Central.....	5,669	4,306	1,430	1,149	25.9	65.3	51.2	56.8	64.2	6.18	6.15	6.45	6.46
Cleveland, Ohio.....	6,249	5,464	1,391	1,138	27.2	67.0	53.2	57.2	67.7	6.14	6.09	6.42	6.35
Indianapolis, Ind.....	4,890	3,126	1,821	1,289	23.1	63.8	51.2	56.2	57.0	6.34	6.34	6.52	6.76
Peoria, Ill.....	4,405	3,087	1,454	1,131	24.9	54.0	40.3	50.4	52.5	6.56	6.39	6.88	6.76
Lansing, Mich.....	3,813	2,970	1,204	966	21.0	57.4	36.5	59.5	57.0	6.20	6.35	6.41	6.75
Kenosha, Wis.....	5,069	4,969	959	803	28.1	65.3	48.2	53.8	58.4	6.09	6.24	6.38	6.69
Racine, Wis.....	4,961	4,342	918	837	26.3	67.1	53.5	58.9	59.8	5.95	5.96	6.34	6.47
West North Central.....	3,662	2,713	1,449	1,141	24.5	51.5	39.4	52.0	55.3	6.09	6.08	6.54	6.72
Minneapolis, Minn.....	4,204	3,375	1,530	1,220	26.0	55.9	46.3	52.4	56.7	5.92	5.91	6.31	6.68
St. Paul, Minn.....	3,766	3,285	1,469	1,056	27.6	48.0	41.4	50.0	53.7	5.93	5.94	6.46	6.50
Des Moines, Iowa.....	3,157	2,486	1,455	1,174	24.2	49.5	35.4	53.2	52.2	5.91	6.18	6.48	6.64
St. Joseph, Mo.....	3,276	2,483	1,473	1,176	19.9	42.9	24.7	52.5	54.5	6.21	6.12	6.80	6.69
Springfield, Mo.....	2,651	1,940	1,162	899	20.2	50.1	25.4	52.9	48.2	7.04	7.00	7.51	7.58
Fargo, N. Dak.....	4,811	.....	1,682	1,304	25.8	58.5	.....	50.4	.....	6.38	6.64	6.40	6.92
Sioux Falls, S. Dak.....	4,101	3,291	1,545	1,229	24.3	53.4	40.8	46.5	48.8	6.12	6.01	6.57	6.71
Lincoln, Nebr.....	3,548	2,524	1,404	1,153	23.2	48.2	36.5	53.6	63.3	6.22	6.14	6.52	6.66
Topeka, Kans.....	3,186	2,258	1,373	1,070	22.6	44.0	26.2	50.4	52.0	7.03	6.86	7.51	6.99
Wichita, Kans.....	2,722	2,066	1,271	1,035	19.3	53.5	38.8	56.8	57.4	6.48	6.34	7.11	7.23

South Atlantic.....	4,323	3,128	1,620	958	23.3	50.5	34.5	56.6	65.5	6.25	6.32	6.91	7.25
Hagerstown, Md.....	4,601	2,535	1,315	920	25.2	49.6	26.2	60.9	67.4	5.87	5.75	6.12	5.64
Richmond, Va.....	5,218	3,640	1,999	1,285	22.2	40.7	34.2	59.4	62.6	5.97	6.00	6.72	6.83
Wheeling, W. Va.....	3,768	3,519	1,073	925	24.4	35.3	21.9	49.4	51.1	5.93	6.05	6.39	6.15
Asheville, N. C.....	3,807	3,234	1,393	821	20.6	46.9	14.5	66.3	79.7	5.95	5.83	6.39	6.35
Greensboro, N. C.....	5,226	3,382	2,000	1,217	16.3	56.8	29.3	61.9	61.2	5.97	5.98	6.35	7.75
Charleston, S. C.....	5,023	2,723	1,927	784	24.0	32.9	23.6	50.3	51.9	6.71	6.42	7.12	6.87
Columbia, S. C.....	4,779	2,907	1,737	812	22.8	58.4	33.7	57.4	62.6	6.87	6.94	7.39	6.72
Atlanta, Ga.....	4,339	2,793	1,906	979	22.7	58.3	40.7	57.3	70.0	6.40	6.35	7.25	7.60
Jacksonville, Fla.....	3,499	-----	1,224	626	27.5	47.6	-----	52.2	-----	6.78	6.80	7.35	7.14
East South Central.....	3,213	2,566	1,275	778	20.3	52.4	22.5	59.4	51.1	6.59	6.39	7.09	7.17
Paducah, Ky.....	2,106	1,188	1,134	680	21.5	30.7	7.1	58.7	48.2	5.93	6.16	7.29	6.70
Birmingham, Ala.....	3,198	2,708	1,211	769	19.6	52.4	22.9	61.1	52.0	6.63	6.37	7.10	7.19
Jackson, Miss.....	4,462	-----	1,707	899	25.4	61.5	-----	50.4	-----	6.52	6.60	6.93	7.11
West South Central.....	3,643	2,488	1,647	1,128	21.8	53.4	37.4	55.4	56.7	6.99	7.07	7.45	7.50
Little Rock, Ark.....	3,230	1,794	1,502	940	20.3	43.8	23.9	62.9	62.2	6.26	6.32	6.88	7.34
Baton Rouge, La.....	3,806	-----	1,532	1,009	22.5	53.3	-----	45.0	-----	7.17	6.78	7.55	7.61
Oklahoma City, Okla.....	3,833	2,580	1,617	1,096	22.9	61.7	43.1	58.2	55.5	6.82	7.02	7.38	6.98
Austin, Tex.....	3,732	2,529	1,534	1,168	22.0	39.2	30.6	46.4	50.9	7.41	7.59	7.52	9.16
Dallas, Tex.....	3,695	2,796	1,712	1,233	22.4	53.3	39.6	53.5	56.7	7.22	7.21	7.63	7.76
Wichita Falls, Tex.....	2,933	1,970	1,650	1,048	14.7	41.4	21.2	66.3	72.4	7.22	7.12	7.48	8.02
Mountain.....	2,956	2,465	1,341	1,027	23.3	49.3	39.1	55.7	57.5	7.02	7.06	6.60	7.36
Butte, Mont.....	2,355	1,719	1,155	986	25.1	24.2	15.1	41.3	52.2	7.82	7.45	8.32	8.71
Boise, Idaho.....	3,147	-----	1,266	1,194	24.0	45.1	-----	43.2	-----	6.95	6.64	7.91	8.17
Casper, Wyo.....	2,594	-----	1,441	1,099	20.0	44.1	-----	56.9	-----	6.93	6.85	7.31	7.05
Pueblo, Colo.....	1,830	1,503	933	783	23.8	40.9	22.5	59.2	58.9	6.62	7.04	7.08	7.16
Phoenix, Ariz.....	4,143	3,368	1,590	1,114	21.8	55.6	43.6	56.3	53.3	7.31	7.39	7.60	7.94
Salt Lake City, Utah.....	3,224	2,677	1,417	1,094	23.7	54.0	42.9	58.0	59.8	6.97	6.80	5.83	6.97
Pacific.....	3,231	2,727	1,307	1,092	22.8	50.5	37.1	55.9	57.4	6.34	6.42	6.92	7.06
Seattle, Wash.....	3,043	2,587	1,278	1,125	22.7	49.2	36.4	54.7	57.2	6.25	6.26	6.95	6.79
Portland, Ore.....	3,104	2,655	1,218	905	22.5	51.0	33.8	56.6	54.9	6.09	6.20	6.45	7.10
Sacramento, Calif.....	3,995	3,255	1,712	1,344	23.7	54.5	45.0	61.8	64.2	6.58	6.82	7.14	7.23
San Diego, Calif.....	3,568	2,872	1,371	1,192	23.1	50.6	38.3	54.4	57.6	6.79	6.88	7.48	7.66

<sup>1</sup> Totals for 52 cities and geographic areas weighted by total number of 1-family dwellings in each city by tenure.  
<sup>2</sup> Totals for 52 cities and geographic areas weighted by total number owner-occupant families in each city.  
<sup>3</sup> Totals for 52 cities and geographic areas weighted by total number of tenant families in each city.  
<sup>4</sup> Totals for 52 cities and geographic areas weighted by total number of mortgaged properties in each city by tenure.  
<sup>5</sup> Totals for 52 cities and geographic areas weighted by total value of mortgaged properties in each city by tenure.  
<sup>6</sup> Totals for 52 cities and geographic areas weighted by total amount of first mortgage debt in each city by tenure.

# *Safety and Health*

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## LEAD POISONING IN 1936 AND EARLIER YEARS

By FREDERICK L. HOFFMAN, LL. D.<sup>1</sup>

STATISTICS for this and other countries are consistently indicative of a marked decline in the occurrence of fatal lead poisoning. This decline is one of the most encouraging signs of progress in the sanitary administration of modern industry and in public health generally. For foreign countries the returns are not always precise, because of their varying practices of including or excluding deaths from nonindustrial sources. It would be highly desirable to have uniformity of procedure in recording occupational deaths from lead poisoning separately, as is the practice in Great Britain. For the United States the returns include both occupational and nonoccupational deaths from lead poisoning; in other words, they include deaths from nonindustrial causes, such as contaminated water supplies, the poisoning of children by lead-painted toys, and other sources.

The incidence of the fatal form of lead poisoning in this country declined from 2.5 deaths per million of population in 1900-1904 to 1.0 death per million in 1936, or 60 percent. In England and Wales the occupational death rate from lead poisoning declined from 2.5 per million in 1911-15 to 0.6 in 1936, or 76.0 percent. In Scotland the rate declined from 0.6 in 1911-15 to 0.2 in 1936, or 66.7 percent. Similar downward trends are shown for most of the other countries included in the present review.

During 1935 there were 130 deaths from lead poisoning in the United States, 36 of which were of painters, the remainder being scattered among a wide range of occupations, as well as among women and among boys and girls under 18 years of age. The decline in industrial lead poisoning is largely the result of sanitary improvements in factory conditions, which during the last 20 years have continued on a progressive scale from year to year. Another factor is the improved economic condition of the workmen, who receive higher wages, work shorter hours, and represent a decidedly better type of physique than during earlier years. Chronic intoxication, which was once common

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among lead workers, has disappeared. Another factor of importance is the introduction of workmen's compensation, which places the financial responsibility for the occurrence of lead poisoning on the employers in the lead-using industries. Unfortunately, no uniform statistics of workmen's compensation for lead poisoning are available.

The physical and clinical statistics of lead workers are indicative of thoroughly healthy and physically sound bodies of the workers, whose condition has been materially improved by more widespread practices of personal hygiene and bodily cleanliness, and the use of improved respirators in dust-exposing occupations. The increasing practice of medical supervision of employees and their periodical examination is proving its value in other directions, as the early recognition of lead absorption prevents the development of toxic conditions and avoids the risk of death or permanent disability.

It is regrettable that there are no statistics of lead absorption on a large scale showing the number of nonfatal cases of lead poisoning in industry, corresponding to the returns of the factory inspector of Great Britain. In that country, during the 5 years 1931-35 there were 884 cases reported under the Factory Acts, of which 105, or 11.9 per cent, terminated fatally. It would be mere blind conjecture to apply this ratio to our American deaths from lead poisoning, in the absence of any useful data on the probable number of cases in American industry at the present time.

Finally, it may be pointed out that there has been considerable progress in the diagnosis of lead poisoning in both industrial and non-industrial cases, and that treatment is making considerable progress, with the result that the incidence of fatal forms of lead poisoning is now decidedly less common than in former years.

Fatal lead poisoning occurs not only in the lead-using industries but also in the general population, though only to a negligible degree in the latter case. The situation is somewhat confused by the varying practices of local authorities in reporting the occurrence of fatal lead poisoning in conformity to the international classification of causes of death, which, if strictly complied with, records only deaths from occupational lead poisoning while disregarding deaths occurring in the population at large from nonoccupational sources. The practice varies for different countries, although general statistics, as a rule, include both types of the disease, and in most of the discussion following it is assumed that the term includes all cases of lead poisoning, whether of industrial or nonindustrial origin. In a special and extended inquiry for different countries and localities no other procedure is feasible at the present time.

The following discussion is divided into four separate sections: (1) Statistics of occupational and nonoccupational lead poisoning in the United States, as derived from the general mortality returns;

(2) statistics of cases of lead poisoning and deaths resulting from the disease, according to workmen's compensation practices and other sources of information utilized for the present purpose; (3) statistics for foreign countries, limited to those countries for which the returns are conveniently available; and (4) physical and clinical statistics of lead workers.

### Lead Poisoning in the United States

#### CASES AMONG GENERAL POPULATION

Statistics for the United States registration area are available since 1900, when the area comprehended 40.5 percent of the total population. Since 1933 the registration area has included the entire population. During the 37 years 1900 to 1936, the rate per million for lead-poisoning deaths has varied from a maximum of 3.1 in 1903 to a minimum of 0.6 in 1932. By quinquennial periods the fluctuation in the rate has been as follows:

TABLE 1.—Deaths From Lead Poisoning in United States Registration Area, 1900 to 1936, by 5-Year Periods

Period	Registration area				Estimated number of lead-poisoning deaths in United States
	Aggregate population included		Total lead-poisoning deaths		
	Number	Percent of total population	Number	Rate per million	
1900-1904	160,212,631	40.4	407	2.5	992
1905-9	216,713,041	50.2	457	2.1	918
1910-14	302,388,727	64.2	740	2.4	1,141
1915-19	379,929,059	74.8	763	2.0	1,022
1920-24	468,499,432	86.0	682	1.5	824
1925-29	546,643,899	93.2	688	1.3	768
1930-34	610,422,900	97.8	525	.9	562
1935	127,521,000	100.0	130	1.0	130
1936 <sup>1</sup>	128,429,000	100.0	131	1.0	131

<sup>1</sup> According to preliminary statistics received from the Bureau of Census, the number of deaths from lead poisoning in Continental United States in 1936 was 131. For certain States the deaths were as follows: California, 9; Florida, 4; Illinois, 9; Indiana, 4; Maryland, 1; Massachusetts, 7; Michigan, 6; Missouri, 4; New Jersey, 8; New York, 19; Ohio, 6; and Pennsylvania, 11. There were no deaths reported in Arizona, Arkansas, Colorado, Delaware, District of Columbia, Idaho, Louisiana, Montana, Nevada, New Mexico, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Vermont, and Wyoming. In the remainder of the States the number of lead-poisoning deaths was from 1 to 3 in each State.

The preceding table shows that the death rate from lead poisoning in the United States has declined from 2.5 per million in 1900-1904 to 0.9 in 1930-34 and 1.0 in 1936. Statistics of lead poisoning for the United States include both occupational and nonoccupational deaths from the disease.

There were 130 deaths from lead poisoning in the United States in 1935; these included 36 painters, 6 paint workers, 10 laborers, 7 persons in lead-using industries, 8 farmers, 5 miners, 3 metal workers, 4 printers, 2 electric-storage-battery workers, 1 rubber worker, 1 worker in the automobile industry, and 13 whose occupations were unknown or miscellaneous. Among the nonoccupational deaths there were 6 women, and 14 girls and 14 boys under 18 years of age, a total

of 34, leaving 96 deaths from lead poisoning strictly chargeable to industry.

The average age at death in the lead-poisoning cases in 1935 was 42.5 years, the ages ranging from 1 to 90. The average age for painters was 58.9 years and for lead workers, 61.8 years. During the 11 years 1925-35, there were 1,343 deaths from lead poisoning in the United States registration area, at an average age of 48.5 years. The average age of 584 painters who died from this cause during this period was 53.9 years, and for 51 lead workers, 51.8 years. The number of deaths clearly nonoccupational during this period was 195, leaving 1,148 in the strictly occupational group, or 85.5 percent of the total. During this period there were 47 deaths of women from lead poisoning, at an average age of 49.7 years. These deaths in most cases were due to contaminated water supplies and in a few other cases, in all probability, to painting at home. There were 36 deaths of farmers, at an average age of 55.5 years, most of which were probably caused by painting at home, but some also by contaminated water supplies. There were 56 deaths of boys under 18 years of age, 22 of whom were 1 year of age, 24 were 2 years, 6 were 3 years, 1 was 5 years, 1 was 6 years, and 2 were 17 years of age; the average age for the group was 2.4 years. There were also 56 deaths of girls under 18, 17 of whom were 1 year of age, 22 were 2 years, 7 were 3 years, 3 were 4 years, 1 was 5 years, 4 were 6 years, 1 was 10 years, and 1 was 16 years; the average age for the group was 2.7 years. Most of the deaths of the little children were due to sucking paint on lead-painted toys, furniture, walls, or banisters.

The number and rate of deaths from lead poisoning in four leading industrial States, by 5-year periods, are shown in table 2.

TABLE 2.—Fatal Cases of Lead Poisoning in Specified States, by 5-Year Periods

Period	Aggregate population	Total deaths		Period	Aggregate population	Total deaths	
		Number	Rate per million			Number	Rate per million
<b>New York State:</b>				<b>Pennsylvania:</b>			
1921-25	54, 153, 217	71	1.3	1925-29	46, 934, 224	61	1.3
1926-30	58, 766, 394	72	1.2	1930-34	49, 179, 000	42	.9
1931-35	65, 894, 610	55	.8	1935-36	20, 187, 000	22	1.1
1936	13, 345, 226	15	1.1	<b>Massachusetts:</b>			
<b>New Jersey:</b>				1901-5	14, 654, 094	30	2.0
1915-20	18, 007, 290	48	2.7	1906-10	16, 175, 209	30	1.9
1921-25	17, 107, 645	36	2.1	1911-15	17, 873, 184	38	2.1
1926-30	19, 321, 224	31	1.6	1916-20	19, 212, 914	43	2.2
1931-35	20, 968, 485	28	1.3	1921-25	19, 938, 649	46	2.3
1936	4, 328, 000	7	1.6	1926-30	21, 437, 990	44	2.1
				1931-35	21, 581, 290	29	1.3
				1936	4, 425, 000	7	1.6

A tabulation of deaths from lead poisoning in 18 American cities in which the lead-using industries are more or less concentrated gives the following results: In the aggregate there were 179 deaths during

the period 1929–36, of which 30 occurred in New York City, 29 in Baltimore, 28 in Philadelphia, 22 in Boston, 16 in Chicago, 15 in Cleveland, and 10 in Providence. By single years the number of lead poisoning deaths in these cities has been as follows: 1929, 18; 1930, 20; 1931, 24; 1932, 17; 1933, 17; 1934, 24; 1935, 26; 1936, 33.

The Metropolitan Life Insurance Co. has furnished returns of deaths from lead poisoning in the experience of the industrial department of that company for the period 1914–36. According to these returns the death rate from lead poisoning of these policy holders declined from 3.0 per million in 1914–18 to 2.3 in 1919–23, 1.6 in 1924–28, and 1.1 in 1929–33. It was 1.0 in 1934, 1.4 in 1935, and 1.7 in 1936. For the entire period the rate was 1.8 per million exposed to risk, ages 1 year and over, the highest rate, or 4.2, having been reached in 1914, and the lowest, or 0.7, in 1930. In the aggregate there were 605 deaths in the experience of the company during the period under review.

Of interest in connection with the foregoing are the statistics of the Massachusetts General Hospital for the period 1918–36, differentiating acute and chronic cases. By 5-year periods the figures are as follows:

TABLE 3.—*Lead Poisoning at Massachusetts General Hospital, 1918 to 1936, by 5-Year Periods*

Period	Total cases	Acute cases	Chronic cases
1918–22.....	65	11	54
1923–27.....	116	14	102
1928–32.....	37	10	27
1933–36.....	19	5	14

The statistics for the United States Navy, for the period 1913–35, differentiating acute and chronic cases, show a remarkable decline for both types of lead poisoning—from 300 cases in 1913–17 to 56 cases in 1928–32 and 35 cases in 1933–35. The details by 5-year periods are given in table 4.

TABLE 4.—*Lead Poisoning in the United States Navy, 1913 to 1935, by 5-Year Periods*

Period	Average strength of Navy	Acute cases		Chronic cases	
		Total number	Number of deaths	Total number	Number of deaths
1913–17.....	516, 016	169	-----	131	-----
1918–22.....	1, 214, 326	45	-----	33	-----
1923–27.....	580, 308	85	1	33	-----
1928–32.....	574, 372	42	-----	14	-----
1933–35.....	328, 283	28	-----	7	-----

#### WORKMEN'S COMPENSATION EXPERIENCE

Workmen's compensation statistics for lead poisoning are especially interesting, in that they afford a view into the financial aspects of the problem. As a result of new laws passed in 1937, there are now 21 States which compensate for occupational diseases, as compared with 16 a year ago. These States are California, Connecticut, Delaware, Illinois, Indiana, Kentucky, Massachusetts, Michigan, Minnesota,

Missouri, Nebraska, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, Washington, West Virginia, and Wisconsin. Coverage for occupational diseases is also extended to employees under the workmen's compensation laws of the District of Columbia, Hawaii, Puerto Rico, and the Philippine Islands, and to employees covered by the Federal Employees' Compensation Act and the Longshoremen's and Harbor Workers' Act. Of the 21 States enumerated above, all but Kentucky and West Virginia compensate for lead poisoning. Unfortunately, for only a few of these States are statistics available which are useful for the present purpose. The most important of these are for the State of New York, 1935-36, yielding the results shown in the following table:

TABLE 5.—*Workmen's Compensation for Lead Poisoning in New York State, 1935 and 1936*

Type of disability	1935			1936		
	Total cases	Weeks of compensation	Amount of compensation	Total cases	Weeks of compensation	Amount of compensation
All types of disability.....	99	8,414	\$141,379	69	6,390	\$78,239
Death or permanent total disability.....	1 <sup>3</sup>	3,000	237,517	3	3,000	20,817
Permanent partial disability.....	3	2,321	53,272	3	1,411	21,471
Temporary disability.....	93	3,093	50,590	63	1,979	35,951

<sup>1</sup> Includes 1 case of permanent total disability.

<sup>2</sup> Present value of compensation awarded.

In the State of Ohio the number of cases reported under the workmen's compensation act since 1928 and amount paid as compensation were as follows:

	Cases		Cases		Cases
1928.....	180	1931.....	114	1934.....	162
1929.....	183	1932.....	148	1935.....	102
1930.....	134	1933.....	134	1936.....	112

As the above statement shows, the total number of cases of lead poisoning in Ohio during the 9 years, 1928-36, was 1,269. Of these, 77 terminated fatally, equivalent to a rate of 1.3 per million of population. The statement below lists the lead-poisoning cases in Ohio in 1935 and 1936, classified according to the principal occupation of the worker:

	1935	1936
Painters.....	16	30
Foundry workers.....	9	23
Storage-battery factory workers.....	23	18
Sanitary-ware enamellers.....	13	12
Lead workers.....	7	8
Printers, electrotypers, and lithographers.....	5	5
Potters (clay workers).....	6	2
Miscellaneous occupations.....	23	14
<b>Total.....</b>	<b>102</b>	<b>112</b>

In the State of New Jersey, 1929-35, the number of cases of lead poisoning and amount paid as compensation were as follows:

TABLE 6.—Cases of Lead Poisoning and Compensation Paid in New Jersey, 1929 to 1935

Year	Cases of lead poisoning					Compensation paid			
	Total	Deaths	Perma- nent total dis- ability	Perma- nent partial dis- ability	Tempo- rary dis- ability	Total	Death or perma- nent total dis- ability	Perma- nent partial dis- ability	Tempo- rary dis- ability
Total.....	962	14	6	502	440	\$677,468	\$53,790	\$477,449	\$54,739
1929.....	124	4	2	40	78	91,490			
1930.....	169	2	1	61	105	105,593	11,829	74,963	18,801
1931.....	227	3	1	152	71	217,814	16,946	188,900	11,968
1932.....	180	1	2	121	56	126,838	17,223	99,790	9,825
1933.....	128	1		67	60	60,121	1,500	51,124	7,497
1934.....	70	1		40	29	49,358	1,600	44,933	2,825
1935.....	64	2		21	41	26,264	4,692	17,739	3,823

In addition to compensation awarded, there were 242 cases in New Jersey in the period covered by the above table in which medical costs, to the amount of \$35,295, were incurred. The maximum amount paid in any of these years on account of medical costs—\$15,981—was reached in 1930. The proportion of compensation to medical costs indicates a decided decline in lead poisoning during recent years.

The total number of days lost (weighted) during this period was 429,435, of which 84,000 were for permanent total disability, 250,044 for permanent partial disability, and 23,109 for temporary disability.

According to information furnished by the Connecticut Bureau of Occupational Diseases, there were in that State 96 cases of lead poisoning during the 5-year period, 1931-36, as shown in table 7:

TABLE 7.—Lead Poisoning in Connecticut, 1931-32 to 1935-36

Year	Total cases	Cases re- ported by physicians	Compen- sated cases
Total.....	96	42	54
1931-32.....	1	1	
1932-33.....	26	18	8
1933-34.....	28	12	16
1934-35.....	27	8	19
1935-36.....	14	3	11

In Wisconsin the number of lead-poisoning cases for which compensation is paid is comparatively small. In 1934, the sum of \$8,380 was paid in compensation for 13 cases of temporary disability and 1 case of permanent partial disability resulting from this cause. In 1935, \$1,259 was paid in compensation for 13 cases of temporary disability. There were no compensated cases of death or permanent total disa-

bility in either year. The total number of days lost on account of lead poisoning during these 2 years was 2,287—1,837 in 1934 and only 450 in 1935.

No satisfactory compensation data are available for the State of Massachusetts. The number of cases of lead poisoning reported to the State Department of Labor during the 5 years 1931-35 was 175, with 3 deaths, equivalent to a rate of 0.1 per million of population.

### International Statistics of Lead Poisoning

The data for Canada for the period 1931-35 are suggestive of a stationary condition in the frequency of lead poisoning. During 1936 there was a marked increase in the rate, or from an average of 0.8 per million to 1.6, based on 18 deaths for the year. The rates per million of population for the 5-year periods are shown in the following table:

TABLE 8.—Fatalities From Lead Poisoning in Canada, 1921 to 1936, by 5-Year Periods

Period	Aggregate population	Total deaths	
		Number	Rate per million
1921-25.....	32,833,654	25	0.8
1926-30.....	49,096,000	37	.8
1931-35.....	53,277,000	44	.8
1936.....	11,014,000	18	1.6

By Provinces the deaths from lead poisoning in Canada for 1936 were distributed as follows: Ontario, 11; Quebec, 5; Nova Scotia, 1; British Columbia, 1; and no deaths in Prince Edward Island, New Brunswick, Manitoba, Saskatchewan, and Alberta.

For England and Wales data are available since 1911, obtained from the reports of the Registrar General. These data, amplified by statistics on lead poisoning under the Factory Acts, derived from the annual reports of the chief inspector of factories, are shown in table 9.

TABLE 9.—Cases of Lead Poisoning in England and Wales, by 5-Year Periods

Period	Aggregate population	Fatalities among general population				Cases under Factory Acts	
		Occupational		Nonoccupational		Total	Fatalities
		Number	Rate per million	Number	Rate per million		
1911-15.....	181,287,000	444	2.5	46	0.25	2,617	157
1916-20.....	175,537,000	251	1.4	14	.08	1,259	102
1921-25.....	192,084,000	241	1.3	13	.07	1,626	119
1926-30.....	197,252,000	231	1.2	11	.06	1,424	169
1931-35.....	201,506,000	148	.7	13	.06	884	105
1936.....	40,600,000	23	.6	4	.10	163	13

The above statistics do not include cases of lead poisoning in house painters and plumbers not employed under the acts. These have been included in the total number of cases given as 1,990 during the first

5-year period, 1,595 during the second, and 914 during the third. The number of deaths in this group was 201 in 1921-25, 206 in 1926-30, and 115 in 1931-35, while the respective fatality percentages were 10.1, 12.9, and 12.6. Of interest in connection with the foregoing is the following tabulation of cases of lead poisoning reported in the United Kingdom, by industrial groups. These statistics have been derived from the annual report of the chief inspector of factories for 1935, amplified by a communication from Dr. Bridges, chief medical inspector of factories, dated February 1, 1937.

TABLE 10.—Lead Poisoning in the United Kingdom, 1934 to 1936

Industrial group]	All reported cases			Deaths		
	1934	1935	1936	1934	1935	1936
All groups.....	198	168	163	25	17	13
Smelting of metals.....	20	17	19	1	—	1
Plumbing and soldering.....	6	3	3	1	1	—
Shipbreaking.....	24	10	11	—	—	—
Printing.....	3	4	3	—	1	—
Tinning of metals.....	1	—	—	—	—	—
Other contact with molten lead.....	10	11	5	—	—	—
White and red lead works.....	7	7	5	—	—	1
Pottery.....	26	18	18	8	7	1
Vitreous enameling.....	8	1	5	—	—	—
Electric-accumulator works.....	12	10	15	—	—	—
Paint and color works.....	19	21	19	1	—	—
Coach and car painting.....	8	5	7	1	1	—
Shipbuilding.....	1	3	3	1	—	—
Paint used in other industries.....	1	2	4	1	—	1
Other industries.....	11	24	19	1	—	2
Painting of buildings.....	41	32	27	10	7	7

The annual report of the chief inspector of factories and workshops of the United Kingdom is an invaluable source of information regarding lead poisoning in industry, disclosing a wealth of useful information not otherwise obtainable. It is a model of its kind, and the method adopted should be followed by other countries.

The fatalities from lead poisoning, by 5-year periods, are shown for specified countries in table 11. Considerable variation in the mortality rate is evident here, but, as already indicated, the data are not entirely comparable because of the varying practice in the different countries with regard to the inclusion or exclusion of nonoccupational fatalities. All of the countries, however, exhibit a marked decline in the relative frequency of lead poisoning.

As the table indicates, lead poisoning is comparatively rare in the Irish Free State and the Netherlands. The statistics are not entirely satisfactory for certain years, since they include all forms of mineral poison under No. 77 of the international classification of the causes of death, but deaths from mineral poisoning other than lead are very infrequent. On the whole, the statistics can be relied upon as fairly representative of the whole problem. In Denmark the deaths from lead poisoning are also rare, the rate having been 0.3 per million for

the period 1931-35, based on 5 deaths. However, during the single year 1936 there were also 5 deaths from this cause, equivalent to a rate of 1.3 per million.

TABLE 11.—Deaths and Death Rate From Lead Poisoning in Specified Countries, by 5-Year Periods

Country and period	Aggregate population	Total deaths		Country and period	Aggregate population	Total deaths	
		Number	Rate per million			Number	Rate per million
Scotland:				Netherlands:			
1911-15.....	23,738,306	15	0.6	1921-25.....	35,732,943	16	0.2
1916-20.....	24,101,793	16	.7	1926-30.....	38,427,737	13	.1
1921-25.....	24,462,722	13	.5	1931-34.....	32,762,152	13	.1
1926-30.....	24,411,691	5	.2	Australia:			
1931-35.....	24,524,490	8	.3	1926-30.....	31,408,493	100	3.2
1936.....	4,966,300	1	.2	1931-35.....	33,138,325	82	2.5
Irish Free State:				1936.....	6,777,744	10	1.5
1923-25.....	9,004,000	19	1.0	Victoria.....	1,847,841		
1926-30.....	14,767,000	111	.7	New South Wales.....	2,667,839	2	.8
1931-35.....	14,908,000	18	.5	Queensland.....	987,589	7	7.2
Switzerland:				South Australia.....	587,549	1	1.7
1926-30.....	19,948,900	23	1.2	Western Australia.....	450,036	0	0
1931-35.....	20,610,900	19	.9				
Italy:							
1928-31.....	163,345,671	125	.8				
1932-35.....	169,279,873	123	.7				

<sup>1</sup> Included under No. 77 (mineral poisoning) of the international classification of the causes of death.

The death rate from lead poisoning in Australia is relatively high compared with other countries, but there was a gratifying decline during the last 5 years shown in table 11. Of the 100 deaths during the first 5 years, 85 were males and 15 were females, while during the second 5 years, of the 82 deaths, 58 were males and 24 were females. The Australian situation is interesting, and many of the deaths are probably of nonindustrial origin, but no definite information is available. Of the 82 deaths during the period 1931-35, 10 were of persons under 15 years of age and 29 were persons 15 to 29 years. Because of the high concentration of deaths in Queensland, data, by sex, are shown for that State for the 2 latest 5-year periods and for 1936, in table 12.

TABLE 12.—Lead Poisoning in Queensland, Australia, 1926 to 1936, by 5-Year Periods

Period	Aggregate population	Total deaths		Males			Females		
		Number	Rate per million	Aggregate population	Deaths		Aggregate population	Deaths	
					Number	Rate per million		Number	Rate per million
1926-30.....	4,420,417	40	9.0	2,323,413	27	11.6	2,097,004	13	6.2
1931-35.....	4,727,636	47	9.9	2,479,421	25	10.1	2,248,215	22	9.8
1936.....	978,689	7	7.2	512,652	3	5.9	465,937	4	8.6

The situation in Queensland has attracted much attention because of the alleged exceptional frequency of the disease in young children contracted by sucking painted surfaces, toys, etc. It is also alleged that contaminated water supplies play an important part at the present time.

For the Dominion of New Zealand lead-poisoning returns are reported under No. 77 of the international classification, for the 7 years, 1929-35. According to these returns there were 9 deaths during this period, all males, equivalent to a rate of 0.9 per million of population.

For Germany the only data available are the workmen's compensation statistics of lead poisoning for the period 1926-34, based on information derived from the German Statistical Year Book and from correspondence with the German Statistical Office. Table 13 gives the total number of cases reported and the total cases compensated, as well as the number of deaths.

TABLE 13.—Lead Poisoning in Germany, 1926 to 1934, by Specified Periods

Period	Total cases reported	Total cases compensated		Deaths	
		Number	Percent	Number	Percent of compensated cases
1926-30.....	16,170	1,717	10.6	62	3.6
1931-34.....	5,630	787	14.0	39	5.0

### *Physical and Clinical Statistics of Lead Workers*

To the foregoing discussion of the vital statistics of lead poisoning, some clinical and physical statistics of employees in lead-using industries are added, based on examinations made during the last 2 years. The statistics represent examinations in 9 different plants in Brooklyn, Philadelphia, Chicago, Atlanta, Staten Island, and Oakland, Calif. In the aggregate there were 1,623 employees, of whom 62.9 percent were born in the United States, 8.1 percent in Poland, 4.6 percent in Italy, 3.0 percent in Spain, and the remainder, or 21.4 percent, in 27 different countries.

The average age of 1,621 employees was 38.6 years, the ages ranging from 16 to 71. The largest group of employees were 24 years of age. Of the total, 74.6 percent were married, widowed, or divorced, while 25.4 percent were single. For 1,594 employees the average duration of employment was 88.2 months, or 7.5 years. The range in duration of employment was from 1 day to 509 months (42.4 years).

Table 14 shows the occupational distribution and certain data regarding the workers' previous disease history. The number of workers for whom data were obtained on each point is shown in parentheses.

TABLE 14.—Occupational Distribution and Disease and Injury Experience of Workers in the Lead Industry

Department, occupation, and number reporting	Em- ployees reporting	Department, occupation, and number reporting	Em- ployees reporting
Occupational distribution (1,439):	<i>Number</i>	Occupational distribution—Continued.	<i>Number</i>
White-lead mill.....	345	Power house.....	57
Laborers.....	54	Firemen.....	29
Packers.....	47	Engineers.....	23
Sprinklers.....	31	Laborers.....	5
Mixers.....	19	Oil and color department.....	26
Pulp-machine operators.....	18	Laborers.....	8
Roll operators.....	18	Fillers.....	4
Millwrights.....	12	Grinders.....	4
Operators, not specified.....	12	Mixers.....	3
Foremen.....	12	Miscellaneous occupations.....	7
Cylinder cleaners.....	11	Metal department.....	23
Washroom workers.....	11	Laborers.....	14
Dryer operators.....	10	Type pressmen.....	3
Miscellaneous occupations.....	90	Sheet-lead operators.....	2
Oxide department.....	233	Sheet-metal operators.....	2
Furnacemen.....	60	Foreman.....	1
Oxide handlers.....	24	Metal mixers.....	1
Packers.....	21	Exposure to lead dust or fumes (1,608):	<i>Percent</i>
Dumping fumes.....	19	Exposed.....	57.8
Pig-lead handlers.....	17	Not exposed.....	42.2
Operators, not specified.....	17	Former employment (1,612):	
Laborers.....	16	In lead-using industries.....	11.4
Foremen.....	11	Not in lead-using industries.....	88.6
Miscellaneous occupations.....	48	Previous history of lead poisoning	
Oil mill.....	217	(1,617):	
Pressmen.....	108	None.....	96.5
Laborers.....	38	Lead poisoning.....	3.5
Floormen.....	16	Previous other diseases (1,606):	<i>Number</i>
Coopers.....	10	Pneumonia.....	23
Miscellaneous occupations.....	45	Rheumatism.....	23
Mechanical department.....	198	Appendicitis.....	19
Mechanics.....	60	Scarlet fever.....	12
Machinists.....	27	Diabetes.....	2
Repairmen.....	25	Tuberculosis.....	2
Carpenters.....	17	Nephritis.....	3
Electricians.....	17	Typhoid fever.....	9
Miscellaneous occupations.....	52	Other.....	83
Yard.....	178	None.....	1,430
Drawing-lead workers.....	48	Previous injuries or defects (1,602):	
Setting-lead workers.....	41	Scars.....	113
Laborers.....	40	Fractures.....	49
Pig-lead handlers.....	15	Fingers injured.....	35
Crane operators.....	13	Fingers missing.....	18
Miscellaneous occupations.....	21	Abnormal tonsils.....	8
Shipping and warehouse depart- ments.....	162	Leg injuries.....	8
Laborers.....	44	Toes missing.....	7
Drivers and chauffeurs.....	37	Miscellaneous defects.....	69
Dock laborers.....	36	None.....	1,295
Shipping laborers.....	28		
Miscellaneous occupations.....	17		

Certain other clinical data are given in table 15.

TABLE 15.—Clinical Data on Lead Workers

Item and number reporting	Range	Average	Largest group	
Height (1,614).....	inches..	52.5- 78.0	67.9	68.0
Pulse rate (1,424).....		40.0- 140.0	78.6	72.0
Systolic blood pressure (1,462).....		86.0- 234.0	129.6	120.0
Diastolic blood pressure (1,462).....		30.0- 145.0	82.2	
Body temperatures (832).....	degrees..	94.0- 101.0	98.4	
Specific gravity (1,027).....		1,002.0-1,040.0	1,021.0	
Hemoglobin (868).....	percent..	50.0- 140.0	83.7	
Chest inspiration (596).....	inches..	31.0- 55.0	38.0	
Chest expiration (596).....	do.....	29.5- 53.3	36.0	

Of 1,494 employees, 221 or 14.8 percent had shown a gain in weight, 143 or 9.6 percent a loss, while in 1,130 or 75.6 percent the weight had remained stationary. The average weight of 1,613 employees was 158 pounds, the weight ranging from 100 pounds in 1 case to 284 pounds in another. The maximum group, 43, had a weight of 149 pounds, while the number of persons weighing 200 pounds or more was 46.

The condition of the mouth for 1,607 employees was reported clean in 1,054, or 65.6 percent, while for 300 pyorrhea was reported. In 76 the condition of the mouth was poor, 67 fair, 31 septic, 25 abnormal tonsils, 24 bad, 23 shrunken, and 3 cleft palate. Of 1,273 employees, 74 or 5.8 percent showed a lead line on the gums. The condition of the tongue in 1,596 employees was clean in 1,349 or 84.5 percent, and coated, fissured, or beefy in the remaining 247. The condition of the teeth in 1,603 employees was clean in 327 or 20.4 percent, satisfactory in 324 or 20.2 percent, fair in 372 or 23.2 percent, poor in 90 or 5.6 percent, and bad in 249 or 15.5 percent. Artificial teeth were used by 148 or 9.3 percent.

The condition of the veins in 1,604 employees was indicated as normal in 1,308 or 81.6 percent and fair in 169 or 10.5 percent. Varicose veins were reported for 99, enlarged veins for 19, arteriosclerosis for 8, and relaxed veins for 1, a total of 7.9 percent.

The condition of the heart in 1,615 employees was reported as normal in 1,457 or 90.2 percent. In the remainder, or 9.8 percent, the condition was reported irregular in 45, murmurs in 90, both irregular and murmurs in 8, cardiodegeneration in 5, cardiovascular disease in 2, flabby muscle in 2, poor in 2, and enlarged in 5.

The nervous system in 1,619 employees was reported as normal in 1,558 or 96.2 percent. Neuritis was observed in 24, tremors in 11, poor reflex in 11, a fair condition in 9, paresthesia in 2, nervousness in 2, and headache in 2.

The condition of the digestive system was normal in 1,564 cases, or 96.5 percent of the 1,620 for whom information on this point was obtained. Constipation was observed in 2.2 percent, hemorrhoids in 0.5 percent, a fair condition in 0.4 percent, gall-bladder trouble in 0.1 percent, and miscellaneous conditions in 0.3 percent.

Of 1,617 employees, no indication of hernia was observed in 1,384 or 85.6 percent. Right inguinal hernia was observed in 15 cases, left inguinal in 13, double inguinal in 5, not specified inguinal in 5, bilateral in 1, and others not specified in 15, a total of 3.3 percent. Varicocele was observed in 30 cases and hydrocele in 5, impulse in 124, large rings in 11, enlarged testes in 2, and miscellaneous conditions in 7.

The urinary condition of 877 employees was found to be satisfactory in 781 or 89.0 percent. Nycturia was observed in 92 cases or

10.5 percent, nephritis in 2 cases, and miscellaneous conditions in 3 cases. Chemical analysis of the urine of 1,209 employees revealed that sugar was present in 167 or 13.8 percent, while of 1,215 employees albumen was present in 76 or 6.3 percent.

Anemia was observed in 75, or 9.6 percent of 779 employees, and was not present in 704, or 90.4 percent.

The condition of the skin in 1,556 employees was reported negative in 1,345 or 86.4 percent. The complexion was ruddy in 118 or 7.6 percent, while miscellaneous conditions of minor importance were observed in the remainder.

Of 1,563 employees, 889 or 56.9 percent used respirators and 674 or 43.1 did not use them. The types of respirators used were Pulmosan 30.4 percent, Cover's 30.2 percent, Dustite 20.3 percent, Willson 15.7 percent, Diamond Disk 3.2 percent, and Approved 0.2 percent. Of 1,538 employees, 888 or 57.7 used gloves and 650 or 42.3 percent did not.

The height, weight, and circulatory conditions of the majority of those examined are shown in table 16, by age groups.

TABLE 16.—*Height, Weight, and Circulatory Conditions of Lead Workers, by Age Groups*

Age	Average height		Average weight		Relative weight		Average pulse		Systolic blood pressure		Diastolic blood pressure	
	Number reporting	Inches	Number reporting	Pounds	Number reporting	Average pounds per inch	Number reporting	Beats	Number reporting	Average mm.	Number reporting	Average mm.
Total.....	1,614	67.90	1,613	158.0	1,612	2.33	1,424	78.6	1,462	129.6	1,462	82.2
Under 30 years.....	445	69.02	444	157.2	444	2.27	406	80.7	414	124.6	414	78.3
30-39 years.....	442	67.85	440	157.8	441	2.32	385	79.2	409	125.3	409	81.1
40-49 years.....	397	67.39	398	161.1	397	2.39	342	76.8	341	130.5	341	83.5
50 years and over.....	328	67.05	329	156.1	328	2.32	289	77.1	296	141.4	296	87.8
Not specified.....	2	66.13	2	136.0	2	2.06	2	80.0	2	124.0	2	86.0



## INTERNATIONAL COMPARISONS OF INDUSTRIAL ACCIDENT STATISTICS <sup>1</sup>

STATISTICS of workmen's accidents necessarily are based upon the provisions of the workmen's compensation laws, no matter whether the aim of the statistics is to prepare data on the frequency of accidents, on the indemnity of insured accidents, or on the prevention of accidents. And because these laws differ extensively there is a wide variation in the nature and quality of industrial accident statistics, ranging from the very best to the most elementary. Even in countries where there are similar laws, many variations are found therein; for example, they may not include identical professions, or the same categories of workers.

<sup>1</sup> Extracts from a paper by Dr. Alfred Manes, professor of insurance, School of Business Administration, Indiana University, at a meeting of Federal accident statisticians in October 1937.

It is difficult to define a workman's accident exactly, for this term may have many different meanings, depending entirely upon the definitions as stated in the laws of the different countries. Further influence upon its definition is exercised by the courts through their decisions and by physicians in their diagnoses.

Various international and world-wide congresses have considered the problem of a standard international basis for industrial accident statistics. Among the members of these bodies were statisticians and actuaries, hygienists, demographers, technicians, and officials of the International Labor Office. All of the congresses have promoted some phase of the question and this has been more or less valuable to the expert. The Eleventh International Congress of Actuaries, which met in Paris in the summer of 1937, probably brought about the best understanding of actual facts as they are today. In view of the great variations in legal provisions already mentioned, it is not surprising that the Paris congress was also unsuccessful in reaching the much-desired goal of statistical uniformity. In fact, it may be stated that it is the opinion of all specialists who have given their attention to the question that it is generally impossible to make use of international material. However, in spite of the negative result of all these efforts from an international point of view, there has come a better understanding regarding the very narrow and short-lived usefulness of statistical accident data within a nation, and it is better to know the limitations of such data than to proceed, ignorant of them, to make mistakes by using figures which are not actuarially sound and which may result in miscalculations in premiums and reserves.

Proof of the limitations in existing statistics may be found in the material of the Swiss Accident Insurance Institution. One is the fact that the accident risk is affected by the time factor. Years of depression show much higher figures than normal years. Furthermore, the transference to other localities of statistical data relating to specific localities can lead to immense errors. There is perhaps no better proof of the existence of regional differences in the accident risk than the fact that in one and the same country, with the same law, the same interpretation of law, and the same insurance practice, the various regions of the country may produce entirely different accident statistics. Thus, an increase in the building industry in Switzerland during the years 1929, 1930, and 1931 resulted in the following significant picture: Expenses for cures, including payment until complete convalescence and payment for working ability lost, amounted to the following percentage of wages—Entire Switzerland, 21.3; Canton A, 15.3; Canton B, 31.5.

The Swiss representative to the Paris conference made another very instructive comparison between two countries which seem completely comparable—the Netherlands and Switzerland. The legal require-

ments of the insurance system covering industrial accidents are very similar in the two countries and the few deviations which do exist are negligible. A comparison of the insurance costs of both countries for the years 1932 to 1934, however, shows the following differences:

*Net Cost of Insurance for Industrial Accidents in Netherlands and Switzerland, 1932-34*

Industry	Net costs (in percentage of wages)	
	Netherlands	Switzerland
Shoe manufacture.....	3.9	6.1
Paper manufacture.....	5.1	10.3
Mills.....	9.3	23.3
Breweries.....	9.7	18.7
Building.....	19.7	35.6
Generation and distribution of electricity..	7.0	23.6

In discussing the reasons for such an astounding contrast of statistical data, the representative from the Netherlands pointed out that the importance of medical science cannot be overestimated. The Netherlands seems to have a most efficient medical service and this may be the reason that the time of treatment in case of an accident is comparatively short. Ninety-five percent of all workmen's accidents there require less than 6 weeks of medical attention before the worker is able to return to work. Such a favorable result is probably due to the fact that in the Netherlands all accidents, even the least serious, are inspected by official experts, and, if necessary, the injured persons are attended by specialists.

From the inevitable conclusion that there exists no possibility of any general application of the accident statistics of one country to another country, one is forced to depend upon one's own experience. And yet even the application of personal material is not possible without restrictions, since the accident risk is subjected to considerable changes during the course of time. As a consequence, it is apparent that only the most recent data may be used and conclusions drawn from a limited experience are not sound.

In spite of the many reasons which make impossible an international comparison of statistics on industrial accidents, on the whole, detailed explanation of the various data available may be useful. One conclusion has been reached, after employing all possible precautions in regard to the variations in the basic material in making an analysis of fatality rates in several occupations; namely, that the United States has not reached the desired objective of its motto of "Safety First." Without any doubt preventive measures have improved the situation but the same improvement has occurred in many other countries, and the fact remains that the loss of life and money in America through avoidable accidents is proportionally much larger than in many other countries.

# Industrial Disputes

## TREND OF STRIKES

THE DOWNWARD trend in number of strikes, which has been evident since June 1937, took a further and more pronounced drop in December. This decrease reflects the combined influences of the usual winter decline in number of strikes as well as the recession in business which started a few weeks before. Preliminary estimates indicate 155 new strikes in December in which 30,000 workers were involved. There were about 650,000 man-days of idleness in December as a result of 320 strikes in progress during the month. These figures for December are lower than corresponding figures for any other month in 1937. As compared with November, they indicate reductions of 38 percent in number of strikes, 57 percent in number of workers involved, and 28 percent in man-days idle.

*Trend of Strikes, 1933 to December 1937* <sup>1</sup>

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1933.....		1,695				1,168,272		16,872,128
1934.....		1,856				1,466,695		19,591,949
1935.....		2,014				1,117,213		15,456,337
1936.....		2,172				788,648		13,901,956
<i>1936</i>								
January.....	84	167	251	149	102	32,406	59,153	635,519
February.....	102	148	250	131	119	63,056	89,735	748,491
March.....	119	185	304	174	130	75,191	122,162	1,331,162
April.....	130	183	313	179	134	65,379	95,526	699,900
May.....	134	206	340	219	121	72,824	123,030	1,019,171
June.....	121	188	309	158	151	63,429	133,531	1,327,678
July.....	151	173	324	197	127	38,017	125,281	1,105,480
August.....	127	228	355	210	145	68,752	118,268	911,216
September.....	145	234	379	236	143	65,994	130,875	1,063,100
October.....	143	192	335	219	116	100,845	148,570	1,053,878
November.....	116	136	252	126	126	70,116	157,007	1,940,628
December.....	126	132	258	158	100	72,639	184,859	2,065,733
<i>1937</i>								
January.....	100	172	272	133	139	108,697	214,344	2,720,553
February.....	139	209	348	203	145	112,095	239,109	1,519,850
March.....	145	607	752	506	246	288,083	355,814	3,281,806
April.....	246	523	769	497	272	220,524	390,048	3,351,721
May.....	272	584	856	540	316	320,095	437,601	2,943,226
June.....	316	585	901	559	342	281,511	473,650	4,963,441
July.....	342	436	778	502	276	141,992	352,248	3,024,241
August.....	276	412	688	422	266	137,805	234,105	2,236,079
September.....	266	322	588	354	234	85,867	153,734	1,400,855
October.....	234	278	512	342	170	61,395	116,106	1,125,515
November <sup>1</sup> .....	170	250	420	255	165	70,000	110,000	900,000
December <sup>1</sup> .....	165	155	320	195	125	30,000	60,000	650,000

<sup>1</sup> Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from more than 650 daily papers, labor papers, and trade journals, as well as from all Government labor boards. Letters are written to representatives of parties in the disputes asking for detailed and authentic information. Since answers to some of these letters have not yet been received, the figures given for the late months are not final. This is particularly true with regard to figures for the last 2 months, and these should be considered as preliminary estimates.

Although strike activity in December represented a significant decline as compared with other months of 1937, there were more strikes last December than in any December since 1918. The number of workers involved was exceeded, however, in December 1933 and 1936. Comparisons with December a year ago show an increase of 17 percent in number of strikes, but reductions of 59 percent in number of workers involved and 69 percent in man-days of idleness.

The figures given for November and December are merely preliminary estimates and are subject to change as later information is received. An analysis of strikes in each of these months, based on detailed and verified information will appear in subsequent issues of the Monthly Labor Review.



### ANALYSIS OF STRIKES IN OCTOBER 1937<sup>1</sup>

AS COMPARED with the preceding spring and summer months, there was a substantial reduction in number of strikes, number of workers involved, and amount of idleness due to labor disputes during October 1937. The following analysis is based on information for 278 strikes which began in October, plus 234 which began prior to but continued into October, making a total of 512 strikes in progress during the month. These strikes resulted in 1,125,000 man-days of idleness for 116,000 workers during October—an average of about 9½ working days for each worker involved.

The greatest concentration of new strikes in October was in the following industry groups: Trade (42), transportation and communication (39), domestic and personal service (36), textiles, including clothing (31), and lumber and allied products (21). The strikes in these five groups accounted for 60 percent of the total. The largest numbers of man-days of idleness because of strikes were in (1) the domestic and personal-service industries (183,000), principally a result of the strike of laundry workers in Cincinnati, Ohio, and northern Kentucky; (2) the lumber industries (172,000), chiefly because of the disputes involving logging and sawmill workers in northern Minnesota and around Portland, Oreg.; (3) textiles (142,000) caused by a number of medium-sized strikes both in the fabric and clothing industries; and (4) transportation and communication (105,000) resulting from a strike of longshoremen on the South Atlantic coast in progress from October 16 to November 5.

<sup>1</sup> Detailed information on a few strikes has not yet been received. (See footnote to preceding table.) Data on missing strikes will be included in the annual report.

TABLE 1.—Strikes in October 1937, by Industry

Industry	Beginning in October		In progress during October		Man-days idle during October
	Number	Workers involved	Number	Workers involved	
All industries.....	278	61,395	512	116,106	1,125,515
Iron and steel and their products, not including machinery.	6	1,058	13	2,351	33,619
Blast furnaces, steel works, and rolling mills.....	1	311	1	311	622
Cast-iron pipe and fittings.....	1	408	1	408	7,750
Hardware.....			1	38	798
Steam and hot-water heating apparatus and steam fittings.....			1	250	6,250
Stoves.....	1	169	3	393	5,445
Structural and ornamental metal work.....	1	50	1	50	250
Tin cans and other tinware.....			1	650	10,400
Wirework.....	1	80	2	126	344
Other.....	1	40	2	125	1,760
Machinery, not including transportation equipment.....	13	1,467	26	3,407	42,225
Agricultural implements.....	1	98	1	98	294
Electrical machinery, apparatus, and supplies.....	6	448	6	448	6,872
Foundry and machine-shop products.....	3	587	8	992	7,434
Radios and phonographs.....			1	540	13,500
Other.....	3	334	10	1,329	14,125
Transportation equipment.....	9	8,266	12	10,814	73,125
Aircraft.....			1	1,388	20,820
Automobiles, bodies and parts.....	9	8,266	9	8,266	46,202
Cars, electric and steam railroad.....			1	1,059	5,295
Shipbuilding.....			1	101	808
Railroad repair shops.....	1	110	1	110	2,310
Electric railroad.....	1	110	1	110	2,310
Nonferrous metals and their products.....	3	272	9	3,623	51,947
Brass, bronze, and copper products.....	2	167	4	3,311	48,634
Clocks and watches and time-recording devices.....			1	25	525
Lighting equipment.....			1	74	1,554
Silverware and plated ware.....	1	105	1	105	1,050
Other.....			2	108	184
Lumber and allied products.....	21	5,848	54	16,376	172,137
Furniture.....	9	1,405	23	5,829	50,810
Millwork and planing.....	3	426	8	1,285	8,580
Sawmills and logging camps.....	5	3,874	9	7,285	85,119
Other.....	4	143	14	1,977	27,628
Stone, clay, and glass products.....	4	513	17	2,316	18,532
Brick, tile, and terra cotta.....	1	40	2	129	907
Cement.....	1	279	5	1,186	8,516
Glass.....	1	31	3	518	3,216
Marble, granite, slate, and other products.....			2	147	2,766
Pottery.....			2	45	540
Other.....	1	163	3	291	2,587
Textiles and their products.....	31	4,516	70	13,691	141,868
Fabrics:					
Cotton goods.....	4	1,221	6	2,264	23,448
Dyeing and finishing textiles.....	2	159	2	159	1,341
Silk and rayon goods.....	1	250	4	475	3,400
Woolen and worsted goods.....			3	490	5,580
Other.....	2	74	5	216	3,033
Wearing apparel:					
Clothing, men's.....	1	50	1	50	200
Clothing, women's.....	9	1,965	22	3,021	27,928
Corsets and allied garments.....	1	8	1	8	16
Men's furnishings.....	4	159	4	159	625
Hats, caps, and millinery.....	1	16	4	2,261	22,892
Shirts and collars.....			1	190	2,280
Hosiery.....	2	469	7	1,610	15,196
Knit goods.....	3	98	5	928	17,855
Other.....	1	47	5	1,860	18,074
Leather and its manufactures.....	5	656	10	1,125	12,479
Boots and shoes.....	3	64	5	234	4,102
Leather.....	1	300	3	545	6,145
Other leather goods.....	1	292	2	346	2,232

TABLE 1.—*Strikes in October 1937, by Industry—Continued*

Industry	Beginning in October		In progress during October		Mandays idle during October
	Number	Workers involved	Number	Workers involved	
<b>Food and kindred products</b> .....	15	885	26	1 754	24, 870
Baking.....	8	519	15	1, 185	16, 298
Beverages.....			1	64	1, 408
Canning and preserving.....	1	75	2	112	1, 412
Confectionery.....	3	145	3	145	1, 102
Flour and grain mills.....	1	80	2	170	4, 180
Slaughtering and meat packing.....	1	24	1	24	48
Other.....	1	42	2	54	222
<b>Tobacco manufactures</b> .....	1	640	2	770	7, 840
Cigars.....	1	640	2	770	7, 840
<b>Paper and printing</b> .....	7	187	18	1, 564	31, 228
Boxes, paper.....			2	298	2, 334
Paper and pulp.....			1	35	70
Printing and publishing:					
Book and job.....	2	66	4	680	10, 904
Newspapers and periodicals.....	2	29	5	310	5, 831
Other.....	3	92	6	241	2, 089
<b>Chemicals and allied products</b> .....	1	9	5	561	5, 147
Druggists' preparations.....			1	125	750
Paint and varnishes.....	1	9	2	136	2, 467
Other.....			2	300	1, 930
<b>Rubber products</b> .....	2	268	3	369	5, 831
Other rubber goods.....	2	268	3	369	5, 831
<b>Miscellaneous manufacturing</b> .....	11	813	20	3, 409	30, 492
Electric light, power, and manufactured gas.....	1	58	1	58	290
Furriers and fur factories.....			1	750	750
Other.....	10	755	18	2, 601	29, 452
<b>Extraction of minerals</b> .....	7	9, 622	10	10, 239	64, 379
Coal mining, anthracite.....	1	5, 650	1	5, 650	39, 550
Coal mining, bituminous.....	4	3, 923	6	4, 504	23, 695
Quarrying and nonmetallic mining.....	1	21	1	21	210
Crude petroleum producing.....	1	28	2	64	924
<b>Transportation and communication</b> .....	39	14, 290	50	16, 704	104, 597
Water transportation.....	14	10, 317	19	10, 771	59, 063
Motortruck transportation.....	20	2, 614	22	4, 245	34, 204
Motorbus transportation.....	2	82	3	94	1, 312
Taxicabs and miscellaneous.....	3	1, 277	6	1, 594	10, 018
<b>Trade</b> .....	42	4, 677	62	6, 130	58, 917
Wholesale.....	13	1, 470	18	1, 659	14, 894
Retail.....	29	3, 207	44	4, 471	44, 023
<b>Domestic and personal service</b> .....	36	4, 845	54	11, 142	183, 485
Hotels, restaurants, and boarding houses.....	16	736	20	1, 275	18, 877
Personal service, barbers, beauty parlors.....	2	803	3	1, 303	6, 412
Laundries.....	10	1, 050	19	4, 830	92, 433
Dyeing, cleaning, and pressing.....	4	156	6	1, 489	33, 087
Elevator and maintenance workers (when not attached to specific industry).....	4	2, 100	6	2, 245	32, 676
<b>Professional service</b> .....	1	36	4	395	4, 032
Recreation and amusement.....	1	36	2	126	780
Semiprofessional, attendants, and helpers.....			2	269	3, 252
<b>Building and construction</b> .....	15	1, 967	25	4, 813	23, 268
Buildings, exclusive of P. W. A.....	9	975	17	3, 708	18, 203
All other construction (bridges, docks, etc., and P. W. A. buildings).....	6	992	8	1, 110	5, 065
<b>W. P. A., relief, and resettlement projects</b> .....	1	158	1	158	158
<b>Other nonmanufacturing industries</b> .....	7	292	20	4, 280	43, 229

The October strikes in New York (71) and Pennsylvania (37) amounted to about 39 percent of the total for the entire country. Another 33 percent of the strikes were in the following seven States: California (19), Michigan (16), Ohio and Indiana (13 each), Massachusetts (12), and Illinois and New Jersey (10 each).

Of the 12 strikes in progress during October which extended across State lines, as indicated at the end of table 2, the largest was the strike of East coast longshoremen, referred to above. This strike extended into North Carolina, South Carolina, Georgia, and Florida. The next largest was the strike of laundry workers in Cincinnati, Ohio, and northern Kentucky, which began September 28 and was still in progress at the end of October.

TABLE 2.—*Strikes in October 1937, by States*

State	Beginning in October		In progress during October		Man-days idle during October
	Number	Workers involved	Number	Workers involved	
All States.....	278	61,395	512	116,106	1,125,515
Alabama.....	5	1,729	11	2,370	15,555
California.....	19	1,416	33	5,746	56,608
Connecticut.....	2	48	7	1,953	8,317
District of Columbia.....	3	590	5	638	8,428
Florida.....	5	237	6	245	3,372
Georgia.....	1	23	4	447	6,944
Illinois.....	10	3,093	17	4,761	47,177
Indiana.....	13	3,166	18	6,376	72,205
Iowa.....	1	29	7	681	1,192
Kansas.....	1	---	1	101	808
Kentucky.....	3	419	5	570	7,331
Louisiana.....	2	412	2	412	3,260
Maryland.....	2	147	3	293	1,791
Massachusetts.....	12	1,456	20	2,870	26,979
Michigan.....	16	5,860	28	8,227	42,889
Minnesota.....	4	4,163	8	5,716	80,759
Mississippi.....	---	---	1	211	4,431
Missouri.....	6	2,214	19	3,865	42,125
Montana.....	1	10	2	26	334
Nebraska.....	2	37	2	37	81
New Hampshire.....	1	24	1	24	48
New Jersey.....	10	642	19	1,347	16,156
New York.....	71	8,797	127	16,999	152,421
North Carolina.....	3	683	5	1,605	18,109
North Dakota.....	1	194	3	247	4,599
Ohio.....	13	1,064	24	3,388	33,291
Oklahoma.....	2	648	3	684	4,644
Oregon.....	2	93	7	3,632	51,898
Pennsylvania.....	37	11,450	57	16,254	136,409
Rhode Island.....	3	845	4	873	3,491
Tennessee.....	4	739	5	855	11,681
Texas.....	1	32	5	284	4,183
Utah.....	2	36	2	36	126
Virginia.....	4	910	5	1,210	10,749
Washington.....	1	400	4	1,165	16,115
West Virginia.....	2	168	5	674	6,110
Wisconsin.....	9	966	25	6,104	78,337
Interstate.....	5	8,625	12	15,530	146,562

The average number of workers involved in the strikes beginning in October was 221. About 23 percent of the strikes involved fewer than 20 workers each and an additional 41 percent involved from 20 to 100 workers each. Only two strikes, as shown in table 3, involved

as many as 5,000 workers. These were the strike of longshoremen on the South Atlantic coast, referred to above, and a short strike of anthracite miners in Pennsylvania from October 5 to 13.

TABLE 3.—*Strikes Beginning in October 1937, Classified by Number of Workers Involved*

Industry group	Total	Number of strikes in which the number of workers involved was—						
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10,000 and over
All industries.....	278	63	114	77	12	10	2	
<i>Manufacturing</i>								
Iron and steel and their products, not including machinery.....	6		3	3				
Machinery, not including transportation equipment.....	13	3	4	6				
Transportation equipment.....	9	2	1	1		5		
Railroad repair shops.....	1			1				
Nonferrous metals and their products.....	3		1	2				
Lumber and allied products.....	21	5	8	6	1	1		
Stone, clay, and glass products.....	4		2	2				
Textiles and their products.....	31	4	18	6	2	1		
Leather and its manufactures.....	5	1	2	2				
Food and kindred products.....	15	4	8	3				
Tobacco manufactures.....	1				1			
Paper and printing.....	7	2	5					
Chemicals and allied products.....	1	1						
Rubber products.....	2		1	1				
Miscellaneous manufactures.....	11	1	8	2				
<i>Nonmanufacturing</i>								
Extraction of minerals.....	7		2	1	2	1	1	
Transportation and communication.....	39	11	14	9	3	1	1	
Trade.....	42	12	14	15	1			
Domestic and personal service.....	36	11	13	10	1	1		
Professional service.....	1		1					
Building and construction.....	15	3	6	5	1			
W. F. A., relief, and resettlement projects.....	1			1				
Other nonmanufacturing industries.....	7	3	3	1				

Nearly 60 percent of the strikes in October were principally over union organization matters, 25 percent chiefly over wages and hours, and 15 percent over miscellaneous issues. These are approximately the same proportions as have been found in the preceding summer and fall months of 1937. Of the workers involved in the October strikes, 42 percent were concerned principally with union organization issues, 36 percent with wages and hours, and 21 percent with questions of union rivalry, lay-off policies, or other issues.

TABLE 4.—Major Issues Involved in Strikes Beginning in October 1937

Major issues	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues.....	278	100.0	61,395	100.0
Wages and hours.....	69	24.8	22,800	36.3
Wage increase.....	37	13.3	11,880	19.3
Wage decrease.....	4	1.4	556	.9
Wage increase, hour decrease.....	25	9.0	9,687	15.8
Wage decrease, hour increase.....	1	.4	20	(1)
Hour decrease.....	2	.7	157	.3
Union organization.....	165	59.4	25,928	42.3
Recognition.....	33	11.9	6,909	11.3
Recognition and wages.....	32	11.5	6,020	9.8
Recognition and hours.....	1	.4	175	.3
Recognition, wages, and hours.....	56	20.1	7,332	12.0
Closed shop.....	23	8.3	2,607	4.2
Discrimination.....	14	5.0	2,773	4.5
Other.....	6	2.2	112	.2
Miscellaneous.....	44	15.8	13,167	21.4
Sympathy.....	5	1.8	274	.4
Rival unions or factions.....	8	2.9	3,302	5.4
Jurisdiction.....	7	2.5	955	1.6
Other.....	24	8.6	8,636	14.0

<sup>1</sup> Less than 1/10 of 1 percent.

The 342 strikes which were terminated in October are classified in table 5 according to industry group and duration. About 30 percent of them lasted less than a week and 50 percent were terminated less than one-half month after they began. The average duration of the 342 strikes was nearly 27 calendar days. Less than 5 percent (16 strikes) had been in progress three months or more. Practically all of these strikes were against individual firms and most of them involved only a small number of workers.

TABLE 5.—Duration of Strikes Ending in October 1937

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than 1 month	1/2 and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries.....	342	105	66	66	67	22	16
<i>Manufacturing</i>							
Iron and steel and their products, not including machinery.....	7	1	2	1	3		
Machinery, not including transportation equipment.....	17	4	2	6	3	2	
Transportation equipment.....	10	4	2	2	2		
Nonferrous metals and their products.....	5	2		1	2		
Lumber and allied products.....	38	8	2	8	14	4	2
Stone, clay, and glass products.....	13		3	4	2	2	2
Textiles and their products.....	40	9	6	7	10	2	6
Leather and its manufactures.....	6	1	3	1		1	
Food and kindred products.....	18	7	5	2	3	1	
Tobacco manufactures.....	1						1
Paper and printing.....	14	3	5	2	4		
Chemicals and allied products.....	4		1	1	1	1	
Rubber products.....	2			1	1		
Miscellaneous manufactures.....	11	2	1	1	5	1	1
<i>Nonmanufacturing</i>							
Extraction of minerals.....	6	2	4		1		
Transportation and communication.....	35	18	8	6	1	2	
Trade.....	42	17	8	10	2	3	2
Domestic and personal service.....	35	16	7	5	5	2	
Professional service.....	4		1	1	1		1
Building and construction.....	20		7	4	4		1
W. P. A., relief, and resettlement projects.....	1	1					
Other nonmanufacturing industries.....	13	3	2	3	4	1	

Government conciliators and labor boards assisted in settling approximately the same proportion of the strikes ending in October as were settled directly between the employers and representatives of organized workers—about 42 percent in each case. About 52 percent of the total workers involved were in the strikes which the Government agencies helped to settle and 34 percent were in the strikes settled directly between the employers and union representatives. About 15 percent of the strikes, including 13 percent of the workers, were terminated without formal settlements. In most of these cases the strikers simply went back to work without settlements or they lost their jobs entirely through replacement or discontinuation of the employers' business.

TABLE 6.—*Methods of Negotiating Settlements of Strikes Ending in October 1937*

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	342	100.0	72,279	100.0
Employers and representatives of organized workers directly.....	142	41.5	24,407	33.8
Government conciliators or labor boards.....	144	42.1	37,839	52.3
Private conciliators or arbitrators.....	6	1.8	489	.7
Terminated without formal settlement.....	50	14.6	9,544	13.2

The workers were successful in obtaining substantially all of their demands in 42 percent of the strikes ending in October. They obtained partial gains or compromises in 31 percent and gained little or nothing in 20 percent. The proportions of workers in these three groups were approximately 26 percent, 50 percent, and 19 percent, respectively. (See table 7.)

The data in table 8, which shows the results of strikes ending in October in relation to the major issues involved, indicate that about the same proportion of strikes over wages and hours were successful, from the workers' viewpoint, as the strikes over union organization matters. A larger proportion of the wage-and-hour strikes were compromised and a smaller proportion lost. Three-fourths of the workers in the wage-and-hour strikes obtained compromises while 19 percent won their strikes and 6 percent lost. In the strikes over union organization matters, 41 percent of the workers obtained compromises while 31 percent won and 27 percent lost.

TABLE 7.—Results of Strikes Ending in October 1937

Results	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total.....	342	100.0	72,279	100.0
Substantial gains to workers.....	145	42.3	18,706	25.9
Partial gains or compromises.....	107	31.3	35,830	49.6
Little or no gains to workers.....	68	19.9	13,550	18.7
Jurisdiction, rival union or faction settlements.....	18	5.3	3,972	5.5
Indeterminate.....	3	.9	116	.2
Not reported.....	1	.3	105	.1

TABLE 8.—Results of Strikes Ending in October 1937, in Relation to Major Issues Involved

Major issues	Total	Strikes resulting in—					
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdiction, rival union, or faction settlements	Indeterminate	Not reported
<b>Number of strikes</b>							
All issues.....	342	145	107	68	18	3	1
Wages and hours.....	68	29	26	13			
Wage increase.....	41	18	15	8			
Wage decrease.....	5	2	1	2			
Wage increase, hour decrease.....	20	8	10	2			
Wage decrease, hour increase.....	1	1					
Hour decrease.....	1			1			
Union organization.....	230	105	73	50		1	1
Recognition.....	45	20	5	18		1	1
Recognition and wages.....	47	22	14	11			
Recognition, wages, and hours.....	81	37	33	11			
Closed shop.....	36	15	15	6			
Discrimination.....	16	8	4	4			
Other.....	5	3	2				
Miscellaneous.....	44	11	8	5	18	2	
Sympathy.....	3	1		1		1	
Rival unions or factions.....	11				11		
Jurisdiction.....	7				7		
Other.....	23	10	8	4		1	
<b>Number of workers involved</b>							
All issues.....	72,279	18,706	35,830	13,550	3,972	116	105
Wages and hours.....	15,191	2,935	11,308	948			
Wage increase.....	13,057	1,803	10,544	710			
Wage decrease.....	641	430	60	151			
Wage increase, hour decrease.....	1,466	682	704	80			
Wage decrease, hour increase.....	20	20					
Hour decrease.....	7			7			
Union organization.....	43,698	13,494	18,073	11,995		31	105
Recognition.....	6,541	1,990	226	4,189		31	105
Recognition and wages.....	6,388	1,930	2,795	1,663			
Recognition, wages, and hours.....	18,043	5,935	10,317	1,791			
Closed shop.....	8,090	1,655	3,804	2,631			
Discrimination.....	4,563	1,950	892	1,721			
Other.....	73	34	39				
Miscellaneous.....	13,390	2,277	6,449	607	3,972	85	
Sympathy.....	257	215		32		10	
Rival unions or factions.....	3,531				3,531		
Jurisdiction.....	441				441		
Other.....	9,161	2,062	6,449	575		75	

## CONCILIATION WORK OF THE DEPARTMENT OF LABOR, DECEMBER 1937

DURING December 1937 conciliators of the Department of Labor handled 116 disputes which involved directly and indirectly about 37,061 workers. This mediation service was requested by either one or both parties to the disputes. Some of these disputes had already developed into strikes before the Department of Labor was requested to intervene. In others, strikes were threatened but had not yet taken place. In some cases, although no strike was immediately threatened, a controversy between employer and workers had developed to such a stage that an outside mediator was deemed necessary.

The Department of Labor conciliators were successful in adjusting 62 of these disputes, 35 were pending at the end of the month, 8 were referred to other services, 6 were settled by the disputants themselves before the arrival of the conciliator, and 5 could not be adjusted.

The majority of these disputes concerned demands for wage increases. Many were due to alleged discrimination against union members for union activity, others were for union recognition and selection of sole bargaining agency. Some involved hours, overtime rates of pay, vacation with pay, seniority rights, and general working conditions.

These 116 disputes were scattered among 29 different States and the District of Columbia. Workers involved in the disputes are classified in table 2. There were 40 strikes and 76 controversies.

TABLE 1.—Disputes Handled by Conciliators, December 1937, in Each State

State	Total disputes		Threatened strikes and controversies		Strikes	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
Alabama.....	1	75	-----	-----	1	75
Arkansas.....	4	148	3	86	1	62
California.....	6	8,139	5	4,139	1	4,000
Colorado.....	1	75	-----	-----	1	75
Connecticut.....	7	4,478	5	1,358	2	3,120
District of Columbia.....	3	680	3	680	-----	-----
Illinois.....	2	1,738	1	1,600	1	138
Indiana.....	5	1,880	4	1,880	1	( <sup>1</sup> )
Iowa.....	5	371	2	65	3	306
Kansas.....	1	( <sup>1</sup> )	1	( <sup>1</sup> )	-----	-----
Kentucky.....	1	350	-----	-----	1	350
Louisiana.....	2	340	1	160	1	180
Maryland.....	1	4	1	4	-----	-----
Massachusetts.....	2	16	2	16	-----	-----
Michigan.....	2	300	2	300	-----	-----
Minnesota.....	2	1,500	1	500	1	1,000
Missouri.....	3	835	3	835	-----	-----
New Jersey.....	4	641	1	18	3	623
New York.....	17	12,249	11	1,558	6	1,691
North Carolina.....	3	5,175	2	36	1	5,139
Ohio.....	8	1,438	6	1,228	2	210
Oklahoma.....	2	133	1	( <sup>1</sup> )	1	33
Pennsylvania.....	18	12,335	9	1,541	9	794
Rhode Island.....	1	300	1	300	-----	-----
Tennessee.....	7	3,312	3	3,209	4	103
Texas.....	2	125	2	125	-----	-----
Vermont.....	1	806	1	806	-----	-----
Virginia.....	3	503	3	503	-----	-----
West Virginia.....	1	30	1	30	-----	-----
Wisconsin.....	1	1,185	1	1,185	-----	-----
Total.....	116	137,061	76	19,162	40	117,899

<sup>1</sup> Exact number not known.

TABLE 2.—Disputes Handled by Conciliators, by Craft of Workers Involved, December 1937

Craft	Total disputes		Threatened strikes and controversies		Strikes	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
Agriculture.....	1	4,000			1	4,000
Automobile.....	2	35	1	30	1	5
Bakery.....	2	111			2	111
Box makers.....	1	(1)	1	(1)		
Brick and clay workers.....	2	125	2	125		
Broommakers.....	1	(1)	1	(1)		
Building.....	1	600	1	600		
Building service.....	1	500	1	500		
Chemical workers.....	1	165	1	165		
Clerks.....	5	1,416	3	1,2	2	414
Drivers.....	10	1,298	8	1,733	2	565
Electrical workers.....	2	112	2	112		
Engineers.....	2	135	1	118	1	17
Fiber workers.....	1	(1)			1	(1)
Firemen.....	1	70	1	70		
Fishermen.....	1	1,000	1	1,000		
Food handlers.....	5	1,366	1	135	4	1,231
Furniture workers.....	2	205	1	130	1	75
Garment workers.....	1	280	1	280		
Glass workers.....	2	24	1	21	1	3
Hotel workers.....	5	99	5	99		
Insurance salesmen.....	1	(1)		(1)		
Laundry workers.....	7	1,467	3	233	4	234
Liquor handlers.....	2	1,125	1	425	1	700
Longshoremen.....	4	103			4	103
Mechanics.....	10	14,274	5	1,715	5	3,559
Messengers.....	1	27	1	27		
Mill carpenters.....	1	2,900	1	2,900		
Millinery.....	1	138			1	138
Miners—coal.....	2	1,150	1	800	1	350
Office workers.....	1	(1)		(1)		
Oil workers.....	5	1,409	2	1,126	3	283
Painters.....	1	30	1	30		
Paper workers.....	5	1,693	4	693	1	(1)
Printing.....	2	160	1	(1)	1	60
Rubber workers.....	3	2,803	3	2,803		
Shipping.....	3	3,113	3	3,113		
Steel and iron.....	2	1,024	1	24	1	1,000
Stove workers.....	2	433	2	433		
Textiles.....	11	17,516	9	12,365	2	5,151
Timber workers.....	1	305	1	305		
Warehousemen.....	2	150	2	150		
Total.....	116	137,061	76	119,162	40	117,899

<sup>1</sup> Exact number not known.

## *Cost of Living*

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### EXPENDITURES FOR ELECTRICAL APPLIANCES BY WORKERS IN 42 CITIES <sup>1</sup>

FIGURES are now available on expenditures for electrical appliances and equipment by white and Negro families in cities covered by the Bureau of Labor Statistics study of the money disbursements of wage earners and lower-salaried clerical workers.<sup>2</sup> Averages for expenditures and the percent of families spending for various items of electric equipment for five regions and New York City show interesting variations.

The cities with population over 50,000 from which the data for regional averages presented in this article were secured are as follows: North Atlantic: Boston, Buffalo, Johnstown, Lancaster, Manchester, Philadelphia, Pittsburgh, Portland, Rochester, Scranton, and Springfield, Mass. East North Central: Cincinnati, Cleveland, Columbus, Detroit, Grand Rapids, Indianapolis, Lansing, Milwaukee. West North Central: Denver, Kansas City, Minneapolis, St. Louis, Salt Lake City. Southern: Baltimore, Birmingham, Dallas, Houston, Jackson, Jacksonville, Louisville, Memphis, Mobile, New Orleans, Norfolk, Richmond. Pacific: Los Angeles, Sacramento, San Diego, San Francisco, Seattle. Groups of Negro families were studied in Philadelphia, Pittsburgh, New York City, Cincinnati, Indianapolis, Kansas City, St. Louis, Baltimore, Birmingham, Louisville, Memphis, New Orleans, Norfolk, Jackson, Mobile, and Richmond. Figures from New York City have been presented separately because of the distinctive expenditure patterns which characterize such a metropolitan area.

No Negro families were studied in the Pacific region. Groups of Mexican families were studied in Houston, Tex., and Los Angeles, Calif., but the data secured have not been included in the figures presented here.

The families from which the data here reported were obtained were surveyed as part of the Nation-wide study conducted by the Bureau of Labor Statistics for the purpose of revising the cost-of-living indexes

<sup>1</sup> Prepared by the Bureau's Cost of Living Division, Faith M. Williams, chief.

<sup>2</sup> Other articles on money disbursements of wage earners and lower-salaried clerical workers have appeared in the following issues of the *Monthly Labor Review*: March 1936, May 1936, June 1936, September 1936, January 1937, April 1937, June 1937, and September 1937. Radios as an item of expenditure will be covered in an article in a forthcoming number of the *Monthly Labor Review*.

which it publishes. The families were selected to represent a cross-section of employed wage earners and lower-salaried clerical workers in each of the cities studied. In 16 cities, employed Negro workers were included. All the families scheduled included one or more wage earners or lower-salaried clerical workers who were employed a minimum of 1,008 hours in at least 36 weeks in the year. No data were included from families with incomes of less than \$500 a year or from families which received either direct or work relief. An exception was made in the case of families in which the chief earner was employed in an industry normally seasonal. Such families were included if the chief earner had employment for three and one half 8-hour days in each of 30 weeks.

Families have been classified by economic level, on the basis of the total amount spent per year per expenditure unit, a measure which takes into account total family expenditure and family size and composition (table 1). An explanation of this measure was given in the Monthly Labor Review for March 1936 (pp. 558-559). A total of 12,903 white families and 1,566 Negro families are included.

TABLE 1.—Average Annual Expenditures for Electrical Appliances and Equipment by White and Negro Families, by Economic Levels and Geographic Regions, 1933-36<sup>1</sup>

Geographic region	White families				Negro families		
	All families	Economic level, i. e., families spending per expenditure unit—			All families	Economic level, i. e., families spending per expenditure unit—	
		Under \$400	\$400 to \$600	\$600 and over		Under \$400	\$400 and over <sup>2</sup>
<i>Number of families</i>							
North Atlantic <sup>3</sup> .....	3, 193	1, 285	1, 138	770	198	104	94
New York City.....	897	194	331	372	100	25	75
East North Central.....	2, 694	839	1, 023	832	201	131	70
West North Central.....	1, 767	618	649	500	209	116	93
Southern.....	2, 710	1, 027	982	701	858	676	182
Pacific.....	1, 642	408	622	612	-----	-----	-----
<i>Average annual expenditures</i>							
North Atlantic <sup>3</sup> .....	\$17. 93	\$9. 26	\$20. 34	\$28. 79	\$7. 30	\$5. 65	\$9. 08
New York City.....	8. 84	2. 99	7. 78	12. 80	8. 14	1. 20	10. 45
East North Central.....	23. 35	11. 00	23. 35	35. 74	8. 43	7. 41	10. 37
West North Central.....	22. 36	15. 20	22. 00	31. 61	13. 33	8. 50	19. 35
Southern.....	22. 36	12. 65	20. 83	38. 72	3. 20	1. 44	9. 78
Pacific.....	18. 10	8. 81	19. 21	23. 23	-----	-----	-----

<sup>1</sup> For 1 year within the period September 1933 to August 1936. Approximately 52 percent of the data apply to the year ending February 1935.

<sup>2</sup> 128 families in this group spent more than \$600 per expenditure unit as follows: North Atlantic, 28 families; New York City, 38; East North Central, 10; West North Central, 29; Southern, 23.

<sup>3</sup> Exclusive of New York City.

Average annual expenditures by the white families for all types of electrical appliances and equipment (except radios and electrically operated musical instruments) varied from \$8.84 in New York City

to \$23.35 in the East North Central area. The averages for the East North Central, the West North Central, and the Southern regions are strikingly similar; those for the two last named being identical and that for the East North Central \$1 higher. The highest average expenditure per family for electrical apparatus shown for any group is the \$38.72 invested by the southern white families spending \$600 or more per expenditure unit per year for all items. The expenditures of the southern white families for new electrical apparatus during the period of the survey may have been influenced by the fact that reductions in rates charged for electric power occurred during the year represented by the data, or in the 6 months just previous, in 7 out of the 11 southern cities included in the study for which rates are obtained by the Bureau of Labor Statistics.

Average expenditures by Negro families were lower and varied more widely from region to region than those of the white families. The average for the West North Central Negroes is four times that of the southern Negroes, \$13.33 as compared with \$3.20.

Variations in expenditures for electrical appliances and equipment from one economic level to another were greater than from one region to another within each racial group. Within each region and racial group average expenditures were consistently higher at the higher economic levels. Within the white group the greatest variation occurred in the East North Central region where the expenditures of the families in the highest bracket were three and one-fourth times those of the families in the lowest. Within the Negro group the widest variation occurred in the Southern region, where the families in the higher group showed an average expenditure six times as great as those in the lower. The number of Negro families at the level spending \$600 or more per expenditure unit did not seem large enough to justify separate averages. New York City showed a greater variation than any of the regional groups for both white and Negro families. Expenditures of white families at the highest level were four times as large as those of families at the lowest level. Negro families in the higher group had expenditures nine times those of families in the lower group.

### *Expenditures—Regional*

The percentage of families purchasing 1 or more of 12 types of household equipment operated by electricity, and average expenditures for all the items and for each item are presented in table 2.

Expenditures for electrical refrigerators were larger than those for any other item. The amount spent for this single piece of equipment represented almost two-thirds of total expenditures for electrical appliances and equipment by white families in the Southern

region and approximately half in the North Atlantic, East North Central, and West North Central areas. Expenditures for washing machines were next, and for vacuum cleaners third.

TABLE 2.—Average Expenditures <sup>1</sup> by White and Negro Families for Electrical Appliances and Equipment, by Economic Levels and Geographic Regions, 1933-36 <sup>2</sup>

NORTH ATLANTIC, EXCLUSIVE OF NEW YORK CITY							
Type of appliances	White families				Negro families		
	All families	Families spending per expenditure unit—			All families	Families spending per expenditure unit—	
		Under \$400	\$400 to \$600	\$600 and over		Under \$400	\$400 and over <sup>3</sup>
<b>Percent purchasing specified appliances</b>							
Vacuum cleaners.....	4.4	1.7	5.2	7.9	2.5	1.0	4.3
Refrigerators (electric).....	5.4	2.0	6.6	9.4	4.0	2.9	5.3
Electric stoves and hot plates.....	.7	.5	.5	1.4	0	0	0
Washing machines.....	6.2	5.3	7.4	5.8	1.0	1.0	1.1
Irons.....	5.8	5.5	5.5	6.5	8.1	7.7	8.5
Ironers and mangles.....	.2	.1	.3	.4	0	0	0
Heaters and fans.....	1.2	.2	1.7	2.1	0	0	0
Light bulbs.....	54.3	51.5	54.7	58.6	54.5	54.8	54.3
Lamps.....	10.2	6.1	10.6	16.5	8.6	1.9	16.0
Toasters.....	3.3	1.9	3.5	5.2	.5	0	1.1
Sewing machines (electric).....	.7	.3	.7	1.2	1.0	1.0	1.1
Other.....	5.2	2.1	4.9	10.8	4.5	4.8	4.3
<b>Average expenditure <sup>1</sup></b>							
All items.....	\$17.93	\$9.26	\$20.34	\$28.79	\$7.30	\$5.65	\$9.08
Vacuum cleaners.....	2.14	.83	2.80	3.38	.36	.27	.46
Refrigerators (electric).....	8.79	3.41	10.23	15.64	3.81	2.90	4.81
Electric stoves and hot plates.....	.43	.17	.35	.96	0	0	0
Washing machines.....	3.92	3.30	4.29	4.40	.53	.40	.67
Irons.....	.23	.19	.24	.28	.41	.38	.43
Ironers and mangles.....	.08	.04	.07	.16	0	0	0
Heaters and fans.....	.06	.01	.11	.06	0	0	0
Light bulbs.....	.77	.64	.76	.99	.53	.48	.58
Lamps.....	.54	.21	.54	1.10	.43	.05	.85
Toasters.....	.08	.04	.08	.13	.01	0	.01
Sewing machines (electric).....	.62	.32	.59	1.15	1.02	1.15	.88
Other.....	.27	.10	.28	.54	.20	.02	.39
<b>NEW YORK CITY</b>							
<b>Percent purchasing specified appliances</b>							
Vacuum cleaners.....	1.9	0.5	1.5	3.0	1.0	0	1.3
Refrigerators (electric).....	3.1	.5	2.7	4.8	3.0	0	4.0
Electric stoves and hot plates.....	0	0	0	0	1.0	0	1.3
Washing machines.....	.6	0	.9	.5	0	0	0
Irons.....	7.1	5.2	6.6	8.6	8.0	4.0	9.3
Ironers and mangles.....	.2	0	0	.5	0	0	0
Heaters and fans.....	.7	0	0	1.6	0	0	0
Light bulbs.....	69.1	63.4	74.3	67.5	75.0	76.0	74.7
Lamps.....	7.6	2.1	5.4	12.4	10.0	12.0	9.3
Toasters.....	2.9	1.0	2.4	4.3	2.0	0	2.7
Sewing machines (electric).....	1.1	1.0	.6	1.6	3.0	0	4.0
Other.....	2.3	.5	2.4	3.2	7.0	4.0	8.0

See footnotes at end of table.

TABLE 2.—Average Expenditures<sup>1</sup> by White and Negro Families for Electrical Appliances and Equipment, by Economic Levels and Geographic Regions, 1933-36<sup>2</sup>—Continued

NEW YORK CITY—Continued

Type of appliances	White families			Negro families			
	All families	Families spending per expenditure unit—		All families	Families spending per expenditure unit—		
		Under \$400	\$400 to \$600		\$600 and over	Under \$400	\$400 and over
	Average expenditure <sup>1</sup>						
All items.....	\$8.84	\$2.99	\$7.78	\$12.80	\$8.14	\$1.20	\$10.45
Vacuum cleaners.....	.87	.40	.75	1.21	.10	0	.13
Refrigerators (electric).....	4.37	.59	4.40	6.32	5.35	0	7.14
Electric stoves and hot plates.....	0	0	0	0	(4)	0	.01
Washing machines.....	.66	0	.97	.73	0	0	0
Irons.....	.29	.18	.29	.35	.20	.16	.21
Ironers and mangles.....	.06	0	0	.13	0	0	0
Heaters and fans.....	.01	0	0	.03	0	0	0
Light bulbs.....	.91	.64	.96	1.00	.78	.63	.82
Lamps.....	.65	.11	.23	1.30	.59	.40	.65
Toasters.....	.06	.02	.04	.11	.03	0	.04
Sewing machines (electric).....	.88	1.05	.11	1.46	1.00	0	1.33
Other.....	.08	(4)	.03	.16	.09	.01	.12

EAST NORTH CENTRAL

	Percent purchasing specified appliances						
Vacuum cleaners.....	4.7	3.0	3.9	7.5	1.0	0	2.9
Refrigerators (electric).....	7.3	2.4	7.4	12.3	2.0	1.5	2.9
Electric stoves and hot plates.....	.5	0	.4	1.1	1.0	1.5	0
Washing machines.....	8.6	8.3	8.3	9.3	3.0	3.1	2.9
Irons.....	5.7	6.0	5.6	5.5	6.0	6.1	5.7
Ironers and mangles.....	.3	.1	.4	.5	0	0	0
Heaters and fans.....	2.0	1.0	1.3	3.8	.5	0	1.4
Light bulbs.....	50.5	51.5	49.0	51.4	39.3	39.7	38.6
Lamps.....	12.5	6.2	13.3	17.8	7.5	9.2	4.3
Toasters.....	4.6	3.9	3.1	7.1	.5	.8	0
Sewing machines (electric).....	.9	.2	1.0	1.4	.5	.8	0
Other.....	5.1	3.6	4.7	7.2	0	0	0
	Average expenditure <sup>1</sup>						
All items.....	\$23.35	\$11.00	\$23.35	\$35.74	\$8.43	\$7.41	\$10.37
Vacuum cleaners.....	2.62	1.35	2.80	3.66	.63	0	1.81
Refrigerators (electric).....	12.02	3.44	12.02	20.68	3.35	2.11	5.68
Electric stoves and hot plates.....	.20	0	.14	.46	1.19	1.83	0
Washing machines.....	5.35	4.76	5.61	5.64	2.04	2.00	2.10
Irons.....	.24	.21	.23	.26	.22	.17	.31
Ironers and mangles.....	.19	.06	.19	.31	0	0	0
Heaters and fans.....	.06	.02	.03	.14	(4)	0	.02
Light bulbs.....	.71	.62	.70	.81	.34	.32	.37
Lamps.....	.78	.24	.64	1.50	.33	.46	.08
Toasters.....	.10	.05	.06	.19	.03	.05	0
Sewing machines (electric).....	.74	.13	.64	1.46	.30	.47	0
Other.....	.34	.12	.29	.63	0	0	0

WEST NORTH CENTRAL

	Percent purchasing specified appliances						
Vacuum cleaners.....	5.4	3.6	7.1	5.6	1.4	0.9	2.2
Refrigerators (electric).....	8.1	4.2	8.2	13.0	5.7	3.4	8.6
Electric stoves and hot plates.....	1.5	1.1	.9	2.8	2.9	1.7	4.3
Washing machines.....	5.7	7.3	4.8	5.0	2.9	2.6	3.2
Irons.....	8.4	6.6	9.6	9.0	7.7	6.0	9.7
Ironers and mangles.....	.4	.3	.3	.6	0	0	0
Heaters and fans.....	2.7	1.9	1.8	4.6	1.9	0	4.3
Light bulbs.....	57.6	56.1	57.3	59.8	43.5	42.2	45.2
Lamps.....	11.5	7.6	12.3	15.4	5.7	3.4	8.6
Toasters.....	5.4	4.0	6.8	5.2	1.4	2.6	0
Sewing machines (electric).....	.9	.6	.6	1.6	0	0	0
Other.....	4.6	3.9	4.3	6.0	1.4	1.7	1.1

See footnotes at end of table.

TABLE 2.—Average Expenditures<sup>1</sup> by White and Negro Families for Electrical Appliances and Equipment, by Economic Levels and Geographic Regions, 1933-36<sup>2</sup>—Continued

Type of appliances	WEST NORTH CENTRAL—Continued						
	White families				Negro families		
	All families	Families spending per expenditure unit—			All families	Families spending per expenditure unit—	
Under \$400		\$400 to \$600	\$600 and over	Under \$400		\$400 and over <sup>3</sup>	
	Average expenditure <sup>1</sup>						
All items.....	\$22.36	\$15.20	\$22.00	\$31.61	\$13.33	\$8.50	\$19.35
Vacuum cleaners.....	2.05	1.41	2.56	2.16	.75	.34	1.26
Refrigerators (electric).....	12.99	7.27	13.06	19.98	9.70	5.96	14.36
Electric stoves and hot plates.....	.80	.38	.36	1.89	.03	.01	.05
Washing machines.....	3.11	3.69	2.90	2.65	1.48	1.23	1.80
Irons.....	.41	.27	.50	.44	.33	.29	.38
Ironers and mangles.....	.15	.04	.19	.24	0	0	0
Heaters and fans.....	.20	.20	.12	.31	.10	0	.24
Light bulbs.....	.71	.62	.68	.86	.42	.31	.56
Lamps.....	.59	.24	.65	.93	.41	.19	.68
Toasters.....	.15	.08	.17	.20	.02	.03	0
Sewing machines (electric).....	.81	.71	.50	1.32	0	0	0
Other.....	.39	.29	.31	.63	.09	.14	.02
	SOUTHERN						
	Percent purchasing specified appliances						
Vacuum cleaners.....	2.7	0.8	2.5	5.7	0.1	0.1	0
Refrigerators (electric).....	7.7	3.9	7.7	13.1	1.0	.1	4.4
Electric stoves and hot plates.....	.7	.4	.7	1.0	.8	.6	1.6
Washing machines.....	4.4	5.2	4.5	3.3	.5	.4	.5
Irons.....	8.7	8.5	10.1	7.3	7.0	6.2	9.9
Ironers and mangles.....	.1	0	0	.4	0	0	0
Heaters and fans.....	6.3	1.9	10.8	6.6	.7	.3	2.2
Light bulbs.....	58.6	57.7	60.5	57.3	36.9	35.2	43.4
Lamps.....	9.8	5.9	9.3	16.1	5.2	4.1	9.3
Toasters.....	2.7	.9	3.2	4.7	.1	0	.5
Sewing machines (electric).....	1.3	.9	1.0	2.1	0	0	0
Other.....	3.1	1.7	3.1	5.4	1.3	1.0	2.2
	Average expenditure <sup>1</sup>						
All items.....	\$22.36	\$12.65	\$20.83	\$38.72	\$3.20	\$1.44	\$9.78
Vacuum cleaners.....	1.13	.27	.94	2.65	.04	.05	0
Refrigerators (electric).....	14.23	6.60	13.21	26.84	1.65	.26	6.85
Electric stoves and hot plates.....	.45	.30	.44	.67	.21	.01	.94
Washing machines.....	3.16	3.36	3.28	2.70	.39	.41	.32
Irons.....	.32	.29	.37	.30	.25	.20	.45
Ironers and mangles.....	.06	0	0	.25	0	0	0
Heaters and fans.....	.37	.21	.34	.66	.06	.06	.08
Light bulbs.....	.70	.59	.73	.84	.30	.26	.45
Lamps.....	.57	.28	.43	1.17	.25	.18	.51
Toasters.....	.06	.02	.06	.12	.02	0	.07
Sewing machines (electric).....	1.09	.68	.88	1.97	0	0	0
Other.....	.22	.05	.15	.55	.03	.01	.11
	PACIFIC						
	Percent purchasing specified appliances						
Vacuum cleaners.....	5.7	3.9	6.8	5.9	-----	-----	-----
Refrigerators (electric).....	4.5	.7	4.7	6.9	-----	-----	-----
Electric stoves and hot plates.....	1.8	1.0	2.1	2.1	-----	-----	-----
Washing machines.....	7.2	6.9	8.7	5.9	-----	-----	-----
Irons.....	7.4	7.8	6.9	7.5	-----	-----	-----
Ironers and mangles.....	.8	.7	.3	1.3	-----	-----	-----
Heaters and fans.....	1.9	1.0	2.1	2.3	-----	-----	-----
Light bulbs.....	71.0	73.8	72.0	68.1	-----	-----	-----
Lamps.....	11.2	6.1	11.9	13.9	-----	-----	-----
Toasters.....	6.9	4.2	9.2	6.4	-----	-----	-----
Sewing machines (electric).....	1.6	1.2	1.6	2.0	-----	-----	-----
Other.....	6.5	5.1	5.9	8.0	-----	-----	-----

See footnotes at end of table.

TABLE 2.—Average Expenditures<sup>1</sup> by White and Negro Families for Electrical Appliances and Equipment, by Economic Levels and Geographic Regions, 1933-36<sup>2</sup>—Continued

PACIFIC—Continued

Type of appliances	White families				Negro families		
	All families	Families spending per expenditure unit—			All families	Families spending per expenditure unit—	
		Under \$400	\$400 to \$600	\$600 and over		Under \$400	\$400 and over <sup>3</sup>
Average expenditure <sup>1</sup>							
All items.....	\$18.10	\$8.81	\$19.21	\$23.23	-----	-----	-----
Vacuum cleaners.....	2.13	1.14	2.53	2.38	-----	-----	-----
Refrigerators (electric).....	6.70	1.13	6.90	10.22	-----	-----	-----
Electric stoves and hot plates.....	.57	.08	1.07	.39	-----	-----	-----
Washing machines.....	4.21	3.43	4.79	4.16	-----	-----	-----
Irons.....	.25	.23	.21	.32	-----	-----	-----
Ironers and mangles.....	.50	.47	.20	.82	-----	-----	-----
Heaters and fans.....	.10	.04	.12	.12	-----	-----	-----
Light bulbs.....	1.07	1.09	1.05	1.07	-----	-----	-----
Lamps.....	.73	.28	.83	.94	-----	-----	-----
Toasters.....	.18	.07	.24	.20	-----	-----	-----
Sewing machines (electric).....	1.12	.55	.91	1.72	-----	-----	-----
Other.....	.54	.30	.36	.89	-----	-----	-----

<sup>1</sup> Average expenditures were computed by dividing the appropriate aggregate by the total number of families in the group to which the aggregate applies. Average expenditure per family purchasing can be readily computed by dividing the average for all families by the percent of families purchasing. For example, the average expenditure for all white families in the North Atlantic region for vacuum cleaners, \$2.14, may be divided by 0.044, giving an average expenditure of \$48.64 per family purchasing.

<sup>2</sup> For 1 year within the period September 1933 to August 1936. Approximately 52 percent of the data apply to the year ended February 1935.

<sup>3</sup> 128 families in this group spent more than \$600 per expenditure unit, as follows: North Atlantic, 28; New York City, 38; East North Central, 10; West North Central, 29; Southern, 23.

<sup>4</sup> Less than 0.05 cent.

Interesting differences in expenditure patterns between regions appear when individual items of purchase are considered. As would be expected, climatic conditions and types of heating equipment combined to make average expenditures for refrigerators, and for heaters and fans, highest in the Southern region. The percentage of families purchasing heaters and fans was also highest in the South, but the proportion of families purchasing refrigerators was largest in the West North Central region.

The highest average expenditure by white families for vacuum cleaners, washing machines, and lamps, and the largest proportion of families purchasing the two items last mentioned, occurred in the East North Central region. More families on the average, however, purchased vacuum cleaners in the Pacific and West North Central regions, with the Pacific region leading.

The highest average expenditure for electric stoves and hot plates, and irons, was recorded for the West North Central region; the proportion of families purchasing stoves and hot plates was largest in the Pacific region, and the proportion of families purchasing irons, in the Southern region.

Among the Negro families studied, those in the North Atlantic region had the highest expenditures, on the average, for, and the largest proportion of families purchasing, irons, light bulbs, lamps,

sewing machines, and "other" electrical appliances and equipment. The largest expenditures for electric stoves and hot plates, washing machines, and toasters were found in the East North Central region, but this region was exceeded by the West North Central in the proportion of families purchasing stoves and hot plates and toasters. The West North Central also led in proportion of families purchasing and in average expenditures for refrigerators, and heaters and fans. The proportion of Negro families in this region purchasing electric refrigerators was 5.7 percent, and the average expenditure \$9.70, figures which are larger than those for white families in the North Atlantic and the Pacific regions; 5.4 percent and \$8.79 for the North Atlantic, and 4.5 percent and \$6.70 for the Pacific. Southern Negro families had the lowest average expenditures reported for vacuum cleaners, refrigerators, washing machines, light bulbs, lamps, and sewing machines. The proportion of Negro families purchasing these items was also lowest in the South.

### *Expenditures—New York City*

The New York City white families included in this survey spent considerably less for electrical appliances and equipment than the families studied in any of the five regions. The total average expenditure for white families was \$8.84, as compared with \$17.93 for the North Atlantic region, the lowest regional average expenditure. These relatively low expenditures were probably due in part to the large proportion of the families studied in New York living in apartments where space is limited, and where refrigerators are, in many cases, furnished by the landlord. They may have been due to larger purchases in earlier years in New York City as compared with other regions. The proportion of families buying vacuum cleaners, refrigerators, electric stoves and hot plates, washing machines, heaters, and fans, lamps, and "other" electrical appliances and equipment was much lower for the New York families than those shown for the regions. Average expenditures for vacuum cleaners, refrigerators, electric stoves, and hot plates, washing machines, ironers, heaters and fans, and "other" electrical equipment were lower than regional figures.

The New York Negro families studied had an average expenditure of \$8.14. This figure is higher than the average expenditure for Negro families for the North Atlantic and Southern regions and only a little less than that for the East North Central region.

The proportion of Negro families in New York City purchasing light bulbs, lamps, toasters, sewing machines, and "other" items, and the average expenditures for light bulbs and lamps were larger than the regional averages for Negro families. No Negro families in New York City reported the purchase of washing machines, ironers and mangles, or heaters and fans.

## EFFECT OF CHANGES IN BUYING HABITS IN VIRGINIA

BUYING HABITS of the population of Virginia have changed materially in recent years, the State planning board reports.<sup>1</sup> In order to secure information on the trends in retail trade the board analyzed census returns for 1929, 1933, and 1935. It was found that there was a more than normal increase in the amount of business done by eating and drinking places outside the home, and that the number of general stores and the volume of trade decreased, in contrast with an increase for filling stations. Review of the figures further shows the dependence of certain lines of retail trade on business from the rural areas, the lag in the sales of building materials and household furnishings, the failure of lowered prices in the depression period to compensate for the loss in purchasing power, and the fact that absorption of unemployed persons did not restore purchasing power to the level of 1929.

The following table shows a comparison of retail sales in Virginia by business groups and dollar value in 1929, 1933, and 1935. This comparison is on a percentage basis, using the volume of business in 1929 as 100. A column is added showing the relation of 1935 sales to those in 1933.

*Indexes of Volume of Retail Sales in Virginia, by Kinds of Business, 1929, 1933, and 1935*

Classification	1933	1935	1935 (1933=100.0)
	(1929=100.0)		
All establishments.....	59.6	78.4	131.6
Filling stations.....	105.8	134.5	127.0
Eating and drinking places (exclusive of liquor stores).....	78.2	125.4	160.3
Drug stores.....	74.4	85.2	114.8
Food stores.....	73.8	90.5	123.3
General merchandise.....	70.0	78.0	111.5
Apparel group.....	51.4	72.3	140.5
General stores with food.....	50.6	54.6	107.8
Other stores (including liquor stores).....	50.1	83.9	167.4
Furniture, household, radio, etc.....	48.3	62.8	130.2
Automotive group.....	45.8	75.5	164.7
Lumber, building, hardware, etc.....	42.2	54.0	127.9

The industries shown in the table have been arranged in the order of dollar value of sales in 1933 in order "to indicate in a general way the relative rates of the survival of customer demands in the face of pronounced and general reductions of incomes." In analyzing the results the board concludes that moderate economic recovery in 1935 did not serve to bring sales up as uniformly as the depression of 1933 forced them down.

The board sees in the increased business of public eating and drinking places a change in living habits with certain social implications.

<sup>1</sup> Virginia State Planning Board. Report, vol. XI, Retail Trade. 1937.

This, it considers, may indicate either a break-up of the old family dining group; or the creation of family units that do not undertake the responsibility of housekeeping for all meals; or the increase in persons living away from their families who are consequently without home-making services.

The fall in number of stores is regarded as being influenced by the decline of the "country store" caused by the introduction of changed merchandising methods. It is thought likely that purchasers of food are turning from the purchase of bulk food products to packaged goods at fixed prices. Growth in number of filling stations and volume of business is accounted for by the changed attitude toward the automobile. It has passed from the luxury to the necessity class and is preferred over other articles formerly given precedence as necessities. The increase in filling stations accounts for an important part of the general increase in retail establishments. The depression also contributed toward the increase in retail establishments; men who could not obtain jobs sometimes opened stores, as did also some among those who returned to rural areas because of unemployment.



## COST-OF-LIVING INQUIRY IN GREAT BRITAIN <sup>1</sup>

LIVING costs of British workers and their families on a present-day standard of living are the subject of a survey begun in October 1937 by the Ministry of Labor of Great Britain. The main purpose of the inquiry is to furnish data for a revision of official basic figures from which indexes of cost of living are determined. Index figures now in use are derived from a 1918 level of costs and standards of living. As Ministry of Labor cost-of-living indexes are widely used for wage determinations, their revision to a level that will more accurately represent present-day conditions and practices was considered essential. Collective agreements now in force, affecting nearly 1,500,000 workers in various industries, provide for the automatic adjustment of wage scales to conform to changes in the cost of living as shown by Ministry of Labor cost-of-living indexes.

The random sampling method was used to obtain family budgets from representative workers. The households of 30,000 adult wage earners and small-salaried employees in agriculture and industry, distributed throughout England, Scotland, and Wales, were visited by representatives of the Ministry of Labor and volunteer workers acting under their direction, for the purpose of establishing contacts through which data could be obtained. The families thus selected were furnished with budget forms on which data for the week ending October 23, 1937, were to be entered. The form called for information on—

<sup>1</sup> Ministry of Labor Gazette (London), October 1937, p. 378.

(a) The composition of the household—the sex and age (if under 18) of each person and, in the case of wage or salary earners, their occupation and industry and the number of days worked in the previous week;

(b) Housing—the rent (or purchase payments) and rates, number of rooms in the house or dwelling, number of rooms let (if any), and rent received;

(c) Expenditure on food—the quantity and cost of each item bought, a separate page being provided for each day of the week;

(d) Expenditure on gas and electricity;

(e) Expenditure during the week on fuel, clothing, furnishing and utensils, fares, amusements, and various other items, a printed list of each of the main items being provided, with a space for "other expenditure";

(f) Garden, allotment, etc., produce—the quantities of eggs, vegetables, fruit, etc., raised and consumed in the household during the week.

The families who were requested to report their expenditures for that week will also be asked to furnish the same data, on official forms, for selected weeks in January, April, and July 1938. The Ministry of Labor will pay 2s. 6d. for each completed budget reported on the official forms, "in recognition of the time and labor involved in keeping the necessary records and in filling up the forms."

Additional information was necessary, particularly in the matter of clothing expenditures, on points for which 1 week's record would be inadequate. The selected families were accordingly requested to give the department data on clothing costs over a period of 12 weeks, on special forms furnished weekly by the department. Arrangements were made for reporting, confidentially, upon personal expenditures of wage and salary earners which might not be known to the housewife or other person making the return.

Volunteer services were used to explain the project to the household selected for the inquiry before the work was actually under way. Later, volunteers visited the households during the week studied to advise and assist in filling the questionnaires and after the end of the week to collect the completed budget.

Normal households, without paid lodgers not related to the family, formed the basis of the sample, but single adults living alone were also included. The great majority of the households selected were those of persons coming under the unemployment-insurance system—that is, manual workers, and nonmanual workers whose incomes do not exceed £250 a year. Some uninsured workers in both manual and nonmanual groups were also selected. Names of persons to be visited were taken from the registers of workers insured against unemployment, but persons actually in receipt of unemployment benefit or assistance were excluded.

## *Labor Turn-Over*

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### LABOR TURN-OVER IN MANUFACTURING, NOVEMBER 1937

THE EFFECT of the recession in industrial activity is reflected in reports on labor turn-over received from manufacturing establishments by the Bureau of Labor Statistics for November.

The increase in the lay-off rate from 4.45 in October to 5.99 per 100 employees in November was accompanied by lower quit and discharge rates. The quit rate declined from 1.05 to 0.72 and the discharge rate from 0.19 to 0.16. The total separation rate rose from 5.69 to 6.87 per 100 employees. The accession rate declined from 2.84 to 1.79 per 100 employees during the same period.

Fewer quits and discharges were reported in November 1937 than in the corresponding month in 1936. The smaller number of quits and discharges, however, was offset by a greater number of lay-offs. This caused the total separation rate to rise above the rate shown in November 1936.

To what extent all factory workers are affected by reduced production schedules cannot be determined, as some establishments have adopted a policy of working their employees in alternate shifts, thereby giving all employees on the pay roll some work during the month; other companies have reduced the number of weekly working days, while others have given their workers furloughs and still retain them on the pay roll. This variation in policy interferes with complete comparability in reports received and causes some distortion in the general lay-off rate.

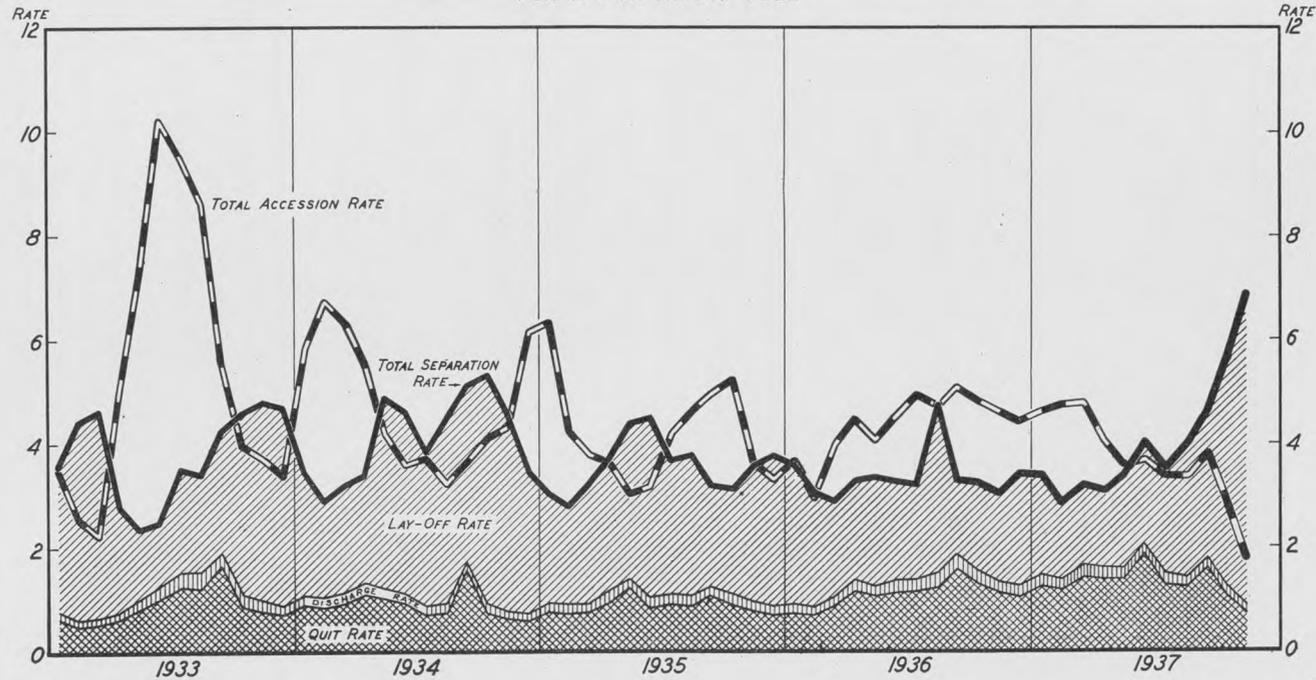
#### *All Manufacturing*

The Bureau of Labor Statistics survey of labor turn-over covers more than 5,000 representative manufacturing establishments which, in November, employed over 2,500,000 workers. The rates represent the number of changes in personnel per 100 employees on the pay rolls during the month.

The rates shown in table 1 are compiled from reports received from representative plants in 144 industries. In the 20 industries for which separate rates are shown (see table 2) reports were received from representative plants employing at least 25 percent of the workers in each industry.

# LABOR TURN-OVER RATES IN MANUFACTURING

PER 100 ON THE PAY ROLL



UNITED STATES BUREAU OF LABOR STATISTICS

Labor Turn-Over

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Table 1 shows the total separation rate broken down into quit, discharge, and lay-off rates and the accession rate for each month of 1936 and for the first 11 months of 1937 for manufacturing as a whole. The average monthly rates for 1936 are also presented.

TABLE 1.—*Monthly Labor Turn-Over Rates (per 100 Employees) in Representative Factories in 144 Industries*

Class of rate and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Quit rate:													
1937.....	1.27	1.19	1.43	1.38	1.37	1.89	1.25	1.23	1.59	1.05	0.72	-----	-----
1936.....	.71	.68	.86	1.16	1.06	1.13	1.15	1.23	1.57	1.29	1.13	1.05	1.09
Discharge rate:													
1937.....	.21	.22	.24	.23	.21	.19	.21	.19	.19	.19	.16	-----	-----
1936.....	.20	.17	.19	.21	.20	.23	.23	.27	.26	.24	.21	.22	.22
Lay-off rate: <sup>1</sup>													
1937.....	1.90	1.44	1.53	1.48	1.79	1.94	2.06	2.57	2.84	4.45	5.99	-----	-----
1936.....	2.66	2.21	1.83	1.92	2.06	1.92	1.84	3.23	1.47	1.72	1.70	2.14	2.06
Total separation rate:													
1937.....	3.38	2.85	3.20	3.09	3.37	4.02	3.52	3.99	4.62	5.69	6.87	-----	-----
1936.....	3.57	3.06	2.88	3.29	3.32	3.28	3.22	4.73	3.30	3.25	3.04	3.41	3.37
Accession rate:													
1937.....	4.60	4.71	4.74	4.04	3.56	3.69	3.36	3.36	3.78	2.84	1.79	-----	-----
1936.....	3.65	2.95	3.97	4.46	4.05	4.49	4.94	4.72	5.09	4.83	4.60	4.41	4.35

<sup>1</sup> Including temporary, indeterminate, and permanent lay-offs.

### Twenty Industries

In addition to turn-over rates for manufacturing as a whole, details of labor turn-over are available for 20 separate manufacturing industries.

Turn-over in November in plants manufacturing cigars and cigarettes appears to have been lower than in any of the 20 industries for which separate rates are shown. The total separation rate was 2.36 and the accession rate 1.45 per 100 employees. The highest lay-off rate (19.37) and total separation rate (20.60) occurred in the radio and phonograph industry. The lowest lay-off rate was reported in the cigar and cigarette establishments. This industry also registered the highest quit rate; the lowest was shown in petroleum refineries. Sawmills reported the highest discharge rate (0.25). The lowest (0.04) occurred in iron and steel plants.

Slaughtering and meat packing showed the highest accession rate (7.74). Plants manufacturing hardware reported the lowest (0.38).

Compared with the preceding month, the quit rate was higher in plants producing rubber tires. Lower quit rates prevailed in 19 industries. Higher discharge rates were indicated in 2 industries. In 17 industries lower rates were shown, and no change in one. Rayon plants and petroleum refineries reported fewer lay-offs and total separations. In 18 industries the lay-offs and total separations were more numerous than in October. Higher accession rates were indicated in the following industries: Boots and shoes, brick, tile, and terra cotta, iron and steel, and rayon. In 16 instances lower accession rates were reported.

TABLE 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries

Class of rates	November 1937	October 1937	November 1936	November 1937	October 1937	November 1936	November 1937	October 1937	November 1936
	Automobiles and bodies			Automobile parts			Boots and shoes		
Quit.....	0.63	0.96	2.12	0.70	1.13	2.09	0.62	0.84	0.85
Discharge.....	.14	.15	.33	.18	.34	.66	.10	.13	.20
Lay-off.....	11.09	2.33	2.03	13.71	4.00	1.54	8.36	5.52	3.66
Total separation.....	11.86	3.44	4.48	14.59	5.47	4.29	9.08	6.49	4.71
Accession.....	2.96	8.26	10.79	2.13	7.03	13.21	2.75	1.59	2.42
	Brick, tile, and terra cotta			Cigars and cigarettes			Cotton manufacturing		
Quit.....	0.62	0.96	1.35	1.36	1.38	1.45	0.81	1.16	1.25
Discharge.....	.14	.20	.17	.12	.14	.15	.15	.20	.23
Lay-off.....	10.22	9.32	4.10	.88	.40	2.47	5.62	5.01	1.16
Total separation.....	10.98	10.48	5.62	2.36	1.92	4.07	6.58	6.37	2.64
Accession.....	3.62	2.51	5.51	1.45	3.31	2.18	1.64	3.10	4.51
	Electrical machinery			Foundries and machine shops			Furniture		
Quit.....	0.55	0.84	0.81	0.51	0.87	1.08	0.71	1.76	1.43
Discharge.....	.22	.22	.17	.18	.22	.29	.19	.30	.42
Lay-off.....	5.33	4.06	.52	5.93	4.40	1.31	11.16	5.49	2.91
Total separation.....	6.10	5.12	1.50	6.62	5.49	2.63	12.06	7.55	4.76
Accession.....	.83	1.36	4.91	1.07	1.56	4.47	3.09	3.68	4.36
	Hardware			Iron and steel			Knit goods		
Quit.....	0.50	0.90	1.33	1.00	1.62	1.33	1.00	1.09	0.92
Discharge.....	.12	.15	.34	.04	.09	.07	.10	.12	.08
Lay-off.....	5.85	2.98	.56	6.68	3.66	.77	3.21	2.29	1.33
Total separation.....	6.47	4.03	2.23	7.72	5.37	2.17	4.31	3.50	2.33
Accession.....	.38	3.32	6.60	1.05	.73	2.22	1.66	2.29	1.88
	Men's clothing			Petroleum refining			Radios and phonographs		
Quit.....	0.68	0.87	0.66	0.28	0.53	0.47	1.06	1.29	( <sup>1</sup> )
Discharge.....	.06	.03	.09	.06	.07	.12	.17	.24	-----
Lay-off.....	10.03	6.32	2.16	2.70	3.62	2.41	19.37	11.53	-----
Total separation.....	10.77	7.22	2.91	3.04	4.22	3.00	20.60	13.06	-----
Accession.....	1.91	3.70	3.71	1.95	2.45	2.53	1.32	1.80	-----
	Rayon			Rubber tires			Sawmills		
Quit.....	0.57	0.81	1.02	0.81	0.53	0.90	1.07	2.25	1.17
Discharge.....	.13	.43	.31	.06	.07	.11	.25	.26	.24
Lay-off.....	4.42	9.43	.19	7.41	5.45	.19	13.00	10.21	7.89
Total separation.....	5.12	10.67	1.52	8.28	6.05	1.20	14.32	12.72	9.30
Accession.....	1.44	.91	2.64	.66	.67	3.64	2.88	3.02	3.08
	Slaughtering and meat packing			Woolen and worsted goods					
Quit.....	0.64	0.68	1.55	0.59	0.74	0.86	-----	-----	-----
Discharge.....	.20	.18	.31	.07	.09	.07	-----	-----	-----
Lay-off.....	7.64	5.56	4.22	13.07	5.83	1.13	-----	-----	-----
Total separation.....	8.48	6.42	6.08	13.73	6.66	2.06	-----	-----	-----
Accession.....	7.74	8.37	11.56	2.60	3.68	9.72	-----	-----	-----

<sup>1</sup> No data available.

# *Minimum Wage and Maximum Hours*

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## LAWS LIMITING HOURS OF EMPLOYMENT FOR MEN, AS OF JANUARY 1, 1938

LEGISLATION regulating the hours of labor of employees has been adopted in all of the States. The most general type of enactment is that limiting the hours of employment of women and minors. Although the regulation of the working time of men has been of slower development in the United States, several States have undertaken to extend the field to additional classes of employment during the past 2 years.

Legislation limiting the hours of labor was early upheld by the courts as a valid exercise of the legislative power of the State to protect the health and morals of its citizens. The constitutionality of such legislation affecting woman employees has been firmly settled. However, the courts have viewed this type of legislation for men with uncertainty. In such cases the purpose of the restriction and the type of employees covered have usually been the deciding factor. Hours legislation has been upheld where it has applied to men engaged on public works, in private employments where public safety was directly affected, and in those employments considered dangerous or unhealthy to the workmen.

As a result of legislation enacted in 1937, two comprehensive laws regulating the hours of labor of men in private employment are in effect for the first time. The Pennsylvania Legislature, by Act No. 567, has limited the employment of men to 44 hours a week. The act also provides an 8-hour day and 5½-day week. The law is not applicable to agricultural labor, domestic servants in private homes, or persons over 21 years of age earning \$25 a week or more in executive positions or in professional work. North Carolina, by an act passed in 1937 (ch. 409), has limited the hours of labor of men to 10 a day and 55 a week. There are, however, numerous exceptions, and the law is not applicable to an employer of eight or fewer employees. The Utah Legislature proposed (by H. J. Res. No. 1) an amendment to the State constitution which would authorize the regulation of hours of labor in factories; this amendment will be voted on at the next general election. In this State the law providing for an 8-hour day for men employed in mines was amended in 1937 by chapter 59,

specifying that the 8-hour period must be computed from the time the men leave the surface until they return. The hours of employment of pharmacists were limited in Colorado (ch. 165) so as not to exceed an average of 9 hours a day and not more than 108 hours in any 2 consecutive weeks.

Laws regulating hours of labor generally exempt agricultural and domestic labor. However, in 1937 the Legislature of Washington passed a law providing that the hours of labor of domestic employees may not exceed 60 hours a week. The Puerto Rico law, passed in 1935, regulates the hours of labor of employees in agricultural as well as commercial and industrial establishments.

The following tabulation shows the legal restrictions on the hours of labor of men (but not including bus or truck drivers) as of January 1, 1938.<sup>1</sup> Although the table in general covers only legislation affecting private employments, it also includes (under Federal legislation) those laws enacted by the United States regulating the hours of labor of persons employed on public works. Again, it does not cover rules or regulations of State labor departments, which in some States have the force and effect of law, nor legislation in States that have adopted codes of fair competition, similar to those established under the former National Industrial Recovery Act.

*State and Territorial Restrictions on Hours of Labor of Men in Private Employments*

Jurisdiction	Maximum hours		Occupations or industries covered	Citation
	Daily	Weekly		
Alaska.....	8	.....	Underground mines.....	Comp. L., 1933, sec. 2132.
Arizona.....	8	.....	Certain employees in mines and smelters.....	Rev. Code, 1928, sec. 1354.
	8	.....	Mines, smelters, reduction works, stamp mills, concentrating mills, chlorinating processes, cyanide processes, cement works, rolling mills, rod-mills, coke ovens, blast furnaces.	Idem, sec. 1356.
	8	.....	Certain employees in electric light and power plants.	Idem, sec. 1357.
	8	48	Laundry employees.....	Idem, sec. 1358.
Arkansas.....	<sup>1</sup> 16	.....	Certain railroad employees.....	Idem, sec. 4707.
	8	.....	Railroad telegraph and telephone operators.....	Digest, 1921, sec. 7080.
	10	.....	Saw and planing mills.....	Idem, secs. 7082, 7083, 7084.
California.....	<sup>2</sup> 16	.....	Certain railroad employees.....	Idem, sec. 7077.
	8	.....	Underground workings, mines, smelters, etc.....	Deering's Gen. L. 1931, Act No. 4933, sec. 1.
	9	( <sup>3</sup> )	Drug clerks.....	Idem, Act No. 5887, secs. 1 and 2.
	<sup>4</sup> 16	.....	Certain railway employees.....	Idem, Act No. 6479, sec. 1.
	<sup>5</sup> 13	.....	Telegraph or telephone dispatchers of trains.....	Do.
	12	.....	Employees on streetcars.....	Deering's Pol. Code, 1931, sec. 3246.

See footnotes at end of table.

<sup>1</sup> For earlier analyses, see issues of January 1929 (p. 16); January 1933 (p. 1); April 1934 (p. 831); and April 1936 (p. 1060).

## State and Territorial Restrictions on Hours of Labor of Men in Private Employments—Continued

Jurisdiction	Maximum hours		Occupations or industries covered	Citation
	Daily	Week-ly		
Colorado	8		Underground workings and mines, smelters, reduction works, stamp mills, concentrating mills, chlorinating processes, cyanide processes, and coke ovens.	Stat. 1935, ch. 97, sec. 101.
	8		Cement and plaster manufacturing plants	Idem, ch. 97, sec. 115.
	16		Certain railroad employees	Idem, ch. 139, sec. 81.
	9	7 108	Pharmacists	Acts of 1937, ch. 165.
Connecticut	8		Railway telegraph or telephone operators and train dispatchers.	Gen. Stat., 1930, sec. 3748.
Florida	13		Employees operating trains	Comp. Gen. L., 1927, sec. 6595.
Georgia	10	60	Cotton and woolen mills except engineers, firemen, watchmen, mechanics, teamsters, yard employees, clerical forces, cleaners, repairmen.	Code, 1933, sec. 54-201.
	13		Employees operating train	Idem, sec. 18-106.
Idaho	8		Underground workings and mines, smelters, ore-reduction works, stamp mills, concentrators, and other ore-refining establishments.	Code, 1932, secs. 43-704 (as amended 1935, ch. 74) to 43-706.
Indiana	11	16	Certain railroad employees	Burn's Ann. Stat., 1926, sec. 13061.
Iowa	12	16	do	Code, 1931, sec. 7984.
Kansas	8		Lead and zinc mines	Gen. Stat., 1935 secs. 49-282, 49-283.
	2	16	Certain railroad employees	Idem, sec. 66-601.
Louisiana	13	10	Employees of street railroads	Dart's Gen. Stat., 1932, sec. 8173.
	14	8	Compressed air	Acts of 1934, no. 71.
Maine	14	8	do	Acts of 1931, ch. 164.
Maryland	8		Railway telegraph or telephone operators	Ann. Code, 1924, art. 23, sec. 260.
	10		Cotton and woolen mills	Idem, art. 100, sec. 1.
	10		Employees in tobacco warehouses in Baltimore	Idem, art. 48, sec. 15.
	10		Employees in mines of Allegany and Garrett Counties.	Public Local Laws of Md., 1930 (Garrett County), sec. 390, p. 2821.
Massachusetts	16	9 in 11.	Certain street- or elevated-railway employees	Gen. L., 1932, ch. 161, sec. 103.
Michigan	16	10 in 12.	Operators of steam, surface, and elevated railroads.	Comp. L., 1929, sec. 8492.
Minnesota	17	16	Certain railway employees	Mason's Stat., 1927, sec. 4092.
	18	14	Locomotive engineers and firemen	Idem, sec. 4091.
Mississippi	10		Mill, cannery, workshop, factory, or manufacturing establishment.	Code, 1930, sec. 4646.
Missouri	8		Mining, mechanical, chemical, manufacturing or smelting, plate-glass manufacturing.	Rev. Stat., 1929, secs. 13206, 13208, 13622.
	9		Operators in interlocking towers	Idem, sec. 4851.
Montana	8		Hoisting engineers, underground mines or tunnels, stamp mills, concentrators, or smelters for treatment of ores.	Rev. Codes 1935, secs. 3068, 3071, 3072, 3073.
	9		Telephone switchboards in cities and towns with population of 3,000 or over.	Idem, sec. 3074.
	11	16	Certain railroad employees	Idem, sec. 3081.
	8		Strip mining	Idem, sec. 3546.8.
	8		Cement plants, quarries, and hydroelectric dams.	Idem, sec. 3083.1.
	8		Sugar refineries	Do.
	8	48	Retail stores in cities and towns having a population of 2,500 or over.	Idem, sec. 3073.1.
Nebraska	4	16	Employees of certain common carriers	Comp. Stat. 1929, sec. 74-902.
	13		Telegraph or telephone dispatchers of trains	Idem, sec. 74-902.
Nevada	8		Underground mines or workings of any kind; all workmen working around surface of such mines, in smelters, open mines, plaster and cement works.	Comp. L., 1929, secs. 2794, 10238, 10240, 10242.
	4	16	Employees of common carriers	Idem, sec. 6335.
	8		Railroad telephone or telegraph operators and all other persons dispatching trains.	Idem, sec. 6338.
New Jersey	16	12	Certain street-railway employees	Comp. Stat. 1910, p. 5008, sec. 57.
	14	8	Compressed air	Comp. Stat. Supp. 1911-24, sec. 107-140A (10).

See footnotes at end of table.

State and Territorial Restrictions on Hours of Labor of Men in Private Employments—Continued

Jurisdiction	Maximum hours		Occupations or industries covered	Citation
	Daily	Week-ly		
New Mexico	4	16	Certain railroad employees	Stat., 1929, sec. 116-724.
New York	14	8	Compressed air	Cahill's Consol. L., 1930, ch. 32, sec. 430.
		19	Apprentices or employees in pharmacies or drug stores.	Idem, ch. 15, sec. 1357.
		10	Brick yards	Idem, ch. 32, sec. 163.
		10	Street, surface, or elevated railroads	Idem, ch. 32, sec. 164.
	4	16	Steam or other railroads	Idem, ch. 32, sec. 165.
		8	Signalmen on railroads	Idem, ch. 32, sec. 166.
North Carolina	10	20	All employments <sup>21</sup>	Acts of 1937, chs. 406, 409.
North Dakota	2	16	Any railroad corporation or common carrier	Comp. L., 1913, sec. 4668.
		8	Coal mines or open-pit mines	Supp. (1925) to Comp. L. 1913, sec. 3084a88.
Ohio	7	15	Certain railway or street-railway employees	Page's Gen. Code, 1932, sec. 9007.
Oklahoma		8	In or about all coal mines	Stat., 1931, sec. 11112.
Oregon		10	Mill, factory, or manufacturing establishments	Code, 1930, sec. 49-602.
		8	48 Sawmills, planing mills, shingle mills, and logging camps.	Idem, sec. 49-602.
		8	Underground mines	Idem, sec. 49-604.
	22	14	Common carrier	Idem, sec. 62-1602.
	23	9	Telegraph operators or train dispatchers responsible for train movements.	Do.
	6	14	Conductor, engineer, fireman, brakeman, or flagman on steam railroad.	Code, 1930, sec. 62-1605.
Pennsylvania		8	44 All employments <sup>24</sup>	Acts of 1937, No. 567.
Puerto Rico		12	Certain railroad employees	Rev. Stat., 1911, sec. 1663.
		8	Employees in commercial, industrial, or agricultural establishments.	Acts of 1935 (Spec. sess.), No. 49.
Rhode Island	13	10	Certain street-railway employees	Gen. L., 1923, sec. 3661.
South Carolina	10	55	Cotton and woolen mills	Code, 1932, sec. 1466.
	12		Certain street-railway employees	Idem, sec. 1479.
	10		Interurban railway employees	Idem, sec. 1480.
South Dakota	4	16	Certain railroad employees	Comp. L. 1929, sec. 9715.
Texas	4	16	do	Vernon's Stats., 1936, art. 6390 (p. 1174).
Utah		8	Underground workings and mines, smelters, and other institutions for the reduction of ores.	Rev. Stats. 1933, sec. 49-3-2 (as amended 1937, ch. 59).
Washington		10	Certain street-railway employees	Rem. Rev. Stat. 1931, sec. 7648.
		8	Coal mines	Idem, sec. 7654.
		10	Those employed in transporting men in and out of mines.	Idem, sec. 7656.
	4	16	Certain railroad employees	Idem, sec. 7652.
		8	Underground coal mines	Idem, sec. 8794.
		60	Domestic employes	Acts of 1937, ch. 129.
West Virginia		8	Telephone or telegraph operators on railroads	Code, 1931, ch. 21, art. 4, sec. 1.
Wisconsin	4	16	Certain railroad employees	Stat. 1935, sec. 192.24.
Wyoming		8	Underground mines, smelters, stamp mills, sampling works, concentration plants, and all other plants for reduction or refining of ores and metals.	Rev. Stat. 1931, secs. 63-103, 63-104.
United States	28	8	Underground workers on leased mineral lands of the United States.	U. S. Code, 1934, title 30, sec. 187.
	4	16	Persons engaged in or connected with the operations of trains in the District of Columbia or in interstate commerce.	Idem, title 45, sec. 62.
	5	13	Telegraph operators and train dispatchers	Idem, title 45, sec. 62.
		8	Railroad operating employes	Idem, title 45, sec. 65.
	26	8	Licensed officers and seamen	Idem, title 46, sec. 673 (as amended 1936, 49 Stat. L. 1933).
		8	40 (27)	Sup. II to U. S. Code, 1934, title 41, sec. 35.

See footnotes at end of table.

*State and Territorial Restrictions on Hours of Labor of Men in Private  
Employments—Continued*

Jurisdiction	Maximum hours		Occupations or industries covered	Citation
	Daily	Week-ly		
United States...	28	8	Public works; rivers and harbors and harbor dredging.	U. S. Code, 1934, title 40, sec. 321.
		30	Emergency public works.....	Idem, title 40, sec. 406.
	8		Construction work in irrigation projects.....	Idem, title 43, sec. 419.
	8		Underground workers on leased mineral lands of the United States in Alaska.	Idem, title 48, sec. 447.
	8		Public works in Puerto Rico.....	Idem, title 48, sec. 737.
	30	(28).....	Idem, title 15, sec. 605b (6).	

<sup>1</sup> Consecutive hours, after which 9 hours' rest.

<sup>2</sup> Consecutive hours, after which 8 hours' rest.

<sup>3</sup> 108 hours in any 2 consecutive weeks; employee must have 1 complete day's rest in 1 of such weeks and 2 half-day rest periods in the other week.

<sup>4</sup> Consecutive hours, after which 10 consecutive hours off duty. After an aggregate of 16 hours' work in a 24-hour period, 8 consecutive hours off duty.

<sup>5</sup> In towers operated only during day; maximum, 9 hours in towers operated night and day.

<sup>6</sup> Consecutive hours, after which 10 hours' rest.

<sup>7</sup> In 2 consecutive weeks, or not more than 13 days in such 2 consecutive weeks.

<sup>8</sup> In stations kept open only during day, 12 hours is the maximum.

<sup>9</sup> After an aggregate of 13 hours in a 24-hour period, 8 hours' rest is required.

<sup>10</sup> After an aggregate of 13 hours in a 24-hour period, 10 hours' rest is required.

<sup>11</sup> Consecutive hours, or an aggregate of 16 in 24 hours must be followed by 8 hours off duty.

<sup>12</sup> Consecutive hours, after which 10 hours' rest. More than 16 hours' labor in any consecutive 24 hours is also forbidden.

<sup>13</sup> To fall within 12 consecutive hours.

<sup>14</sup> Schedule prescribed, limiting hours in ratio to air pressure.

<sup>15</sup> Hours are limited from 7 a. m. until noon and from 1 p. m. until 6 p. m.

<sup>16</sup> Consecutive hours.

<sup>17</sup> Consecutive hours, after which 8 hours' rest. Also forbids more than 16 hours' work in any consecutive 24 hours.

<sup>18</sup> Consecutive hours, after which 9 hours' rest, or less if requested by said employees.

<sup>19</sup> Hours to be so arranged that employee shall receive 1 afternoon and evening off in each week, and also 1 full day off in 2 consecutive weeks.

<sup>20</sup> Not more than 12 days in 14 consecutive days.

<sup>21</sup> Numerous occupations are exempted.

<sup>22</sup> Consecutive hours, after which 10 consecutive hours off duty. After an aggregate of 14 hours in any 24-hour period, 8 consecutive hours off duty.

<sup>23</sup> In a 24-hour period, in towers, etc., operated only in the daytime. In an emergency may work 4 additional hours each day, not exceeding 3 days per week.

<sup>24</sup> Does not apply to employment in agricultural occupations, or in domestic service in private homes, or to the work of persons over 21 earning at least \$25 a week in bona fide executive positions, or learned professions.

<sup>25</sup> Provisions covering the hours of labor on public works are included.

<sup>26</sup> While in safe harbor no seaman shall be required to do any unnecessary work on Sunday or on certain legal holidays.

<sup>27</sup> Persons contracting to furnish to the United States materials, etc., valued at more than \$10,000 must maintain an 8-hour day and a 40-hour week.

<sup>28</sup> Contracts for such work must provide for an 8-hour day.

<sup>29</sup> All loans made by the Reconstruction Finance Corporation to finance self-liquidating projects must be subject to the condition that (except in executive, administrative, and supervisory positions) employees will not be permitted to work more than 30 hours a week.



## WAGE DETERMINATIONS UNDER PUBLIC CONTRACTS LAW: WELT SHOES, GRANITE, AND HANDKERCHIEFS

WAGES were determined for three additional industries<sup>1</sup> in December 1937—men's welt shoes, the dimension-granite, and the handkerchief industry—under the powers conferred on the Secretary of Labor by the terms of the Walsh-Healey Act governing conditions on public contracts.<sup>2</sup>

<sup>1</sup> For earlier determinations see the Monthly Labor Review, September 1937 (p. 694).

<sup>2</sup> United States. The National Archives. Federal Register, Washington, December 24, 1937, p. 3417, December 30, 1937, p. 3440, and January 12, 1938, p. 76.

The minimum for the men's welt-shoe industry was established on December 21, 1937, to take effect on or after 15 days from the date of the order. A minimum wage rate of 40 cents per hour or \$16 per 40-hour week was determined as the prevailing rate on the basis of facts disclosed at a public hearing held by the Public Contracts Board. Evidence was presented by the Bureau of Labor Statistics and the Women's Bureau of the Department of Labor, the National Boot and Shoe Manufacturers Association, the Southern States Industrial Council, the Mississippi Valley Association, the Brotherhood of Shoe and Allied Craftsmen, the United Shoe Workers of America, and other representatives of employers, employees, and the public.

For the dimension-granite industry the determination was made on December 22, 1937, to become effective on all contracts awarded on or after January 15, 1938. Rates were fixed to include work on monumental stone, building stone, paving blocks, curbing, riprap, and rubble, but not crushed stone. The scales range from 57.5 to 32.5 cents per hour for a 40-hour week according to geographic area and are as follows:

(1) In Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York: 57.5 cents per hour or \$23 per week, based on a 40-hour week arrived at either on a time or piece work basis.

(2) In Pennsylvania, Maryland, Wisconsin, Minnesota, South Dakota, and all other States not included in paragraph (1) above or paragraph (3) below: 42.5 cents per hour or \$17 per week based on a 40-hour week arrived at either on a time or piece work basis.

(3) In North Carolina, Virginia, South Carolina, Georgia, Florida, Alabama, Tennessee, Kentucky, Mississippi, Louisiana, Arkansas, and Texas: 32.5 cents per hour or \$13 per week based on a 40-hour week arrived at either on a time or piece work basis.

As in other cases the determination was made only after a public hearing was held at which testimony was presented by representatives of the Granite Cutters International Association of America as well as by individual employers and employees. A special study made by the Bureau of Labor Statistics was also presented.

The decision covering the handkerchief industry was dated January 10, 1938, to become effective on or after January 26, 1938. Minimum wages for employees engaged in the performance of handkerchief contracts are fixed at 35 cents per hour or \$14 per week for a week of 40 hours.

Hearings were held to determine existing wage scales and information was also obtained from a special study presented by the Women's Bureau.

# *Wages and Hours of Labor*

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## WAGES AND HOURS IN UNION BAKERIES MAY 15, 1937

THE average wage rate for union members in the bakery trades increased 5.1 percent between May 15, 1936, and May 15, 1937, according to reports received by the Bureau of Labor Statistics from union officials in 43 cities.<sup>1</sup> The average in 1937 was 92.8 cents an hour while in 1936 it was 88.4 cents an hour. The average rate in Hebrew bakeries increased 3.1 percent and in other bakeries 6.1 percent between 1936 and 1937. In spite of the lower rate of increase, the 1937 average rate in Hebrew bakeries (\$1.255) was more than 43 cents higher than in other bakeries (82.1 cents). Although Hebrew bakeries generally have higher rates, one reason for this large difference is the fact that a large proportion of the Hebrew bakeries are located in New York City, where the average of all rates is higher than in other localities.<sup>2</sup>

According to the wage classifications listed in table 1, the greatest proportion of union members in both years received rates of 70 and under 80 cents an hour. The proportion increased, however, from 18.6 in 1936 to 20.0 in 1937. Rates of 80 cents or higher were reported for 55.9 percent of the members in 1936 and 63.7 percent in 1937. More than a third of the members who were reported at rates of under 70 cents per hour in 1936 moved into higher brackets in 1937. The change in the total percentage below 70 cents per hour was from 25.5 in 1936 to 16.3 in 1937.

In 1937 the largest proportion of members working in Hebrew bakeries received rates of \$1.30 and under \$1.40 an hour; in other bakeries the largest proportion of members received 70 and under 80 cents. The higher rates in Hebrew bakeries is again indicated by the fact that, while rates of \$1 and over were received by 35.8 percent of the union members in all bakeries, such rates were received by

<sup>1</sup> The percent of change and the averages are based on aggregates computed from 268 comparable quotations furnished by unions reporting for both years. These quotations covered 16,932 members. The membership weights in the aggregates used in each year are those reported for the second year. Including the 4,235 members for whom no 1936 rates were obtained, the 1937 average rate for all union bakers was 87.1 cents per hour. On the same basis the average hours for all members reported were 42.4 per week in 1937. See p. 473 for method and coverage of the study.

<sup>2</sup> Nearly 72 percent of the members covered in comparable reports for Hebrew bakeries were located in New York City. The average rate for these in 1937 was \$1.296 as compared with \$1.155 for those in all other cities.

85.0 percent of the members in Hebrew bakeries and by only 19.6 percent of those in other bakeries.

TABLE 1.—Distribution of Union Members in the Bakery Trades, by Hourly Rates, 1936 and 1937<sup>1</sup>

Classified hourly rates	All bakeries		Hebrew bakeries		Other bakeries	
	1937	1936	1937	1936	1937	1936
Average hourly rate.....	\$0.928	\$0.884	\$1.255	\$1.218	\$0.821	\$0.774
Percent of members whose hourly rates were—						
Under 35 cents.....		0.1				0.1
35 and under 40 cents.....	0.1	1.3			0.2	1.7
40 and under 50 cents.....	2.3	3.1	0.1	0.2	3.0	4.1
50 and under 60 cents.....	4.8	9.1	.5	.6	6.2	11.9
60 and under 70 cents.....	9.1	11.9	.9	1.2	11.8	15.4
70 and under 80 cents.....	20.0	18.6	.6	1.1	26.5	24.3
80 and under 90 cents.....	12.0	11.2	1.5	2.4	15.4	14.1
90 and under \$1.00.....	15.9	16.4	11.4	14.6	17.3	16.9
\$1.00 and under \$1.10.....	11.7	7.2	6.1	7.6	13.5	7.1
\$1.10 and under \$1.20.....	5.7	5.8	11.6	17.1	3.8	2.1
\$1.20 and under \$1.30.....	3.7	2.3	8.2	2.4	2.2	2.3
\$1.30 and under \$1.40.....	8.8	7.3	35.5	29.5	.1	( <sup>2</sup> )
\$1.40 and under \$1.50.....	5.9	5.7	23.6	23.3	( <sup>2</sup> )	-----

<sup>1</sup> Based on comparable quotations. See text footnote 1.

<sup>2</sup> Less than 1/10 of 1 percent.

Two-thirds of the union members covered in both years studied received wage-rate increases, while only 0.2 percent received decreases. Almost one-third had no change in rates during the year. (See table 2.) While the proportion of quotations showing increases for members in Hebrew bakeries was much greater than for those in other shops, they were mostly confined to unions having small memberships. About 36 percent of the union membership in Hebrew bakeries received wage-rate increases, as compared with 78 percent in other bakeries. On the other hand, 64 percent of the union membership engaged in Hebrew bakeries received no change in wage rates during the year, as compared to 22 percent of the members in other bakeries.

TABLE 2.—Changes in Union Wage Scales in the Bakery Trades, 1937 Compared With 1936

Type of bakery	Number of quotations comparable with 1936	Wage rates per hour					
		Number of quotations showing—			Percent of members affected by—		
		Increase	Decrease	No change	Increase	Decrease	No change
All types.....	268	182	4	82	67.3	0.2	32.5
Hebrew bakeries.....	56	43	1	12	35.7	.1	64.2
Other bakeries.....	212	139	3	70	77.6	.2	22.2

Table 3 indicates that the largest number (77) of wage-rate changes between May 15, 1936, and May 15, 1937, were for increases of 5 to 10 percent. Such changes affected 27.5 percent of the union members covered in both years. Slightly over 18 percent of the members received increases amounting to less than 5 percent, while over 12

percent of the members received wage-rate increases of 10 to 15 percent. Several quotations showed increases of over 30 percent, one as high as 52 percent.

TABLE 3.—Percentage Change in Union Wage Rates in the Bakery Trades Between 1936 and 1937

Classified percentage rate change	Number of quotations showing—		Percent of total members affected by—	
	Increase	Decrease	Increase	Decrease
Less than 5 percent.....	33	4	18.1	0.2
5 and under 10 percent.....	77	-----	27.5	-----
10 and under 15 percent.....	39	-----	12.4	-----
15 and under 20 percent.....	13	-----	4.1	-----
20 and under 25 percent.....	9	-----	2.5	-----
25 and under 30 percent.....	6	-----	2.2	-----
30 percent and over.....	5	-----	.5	-----

In addition to the wage scales discussed above, there were 97 quotations received in 1937 which were nonexistent in 1936. These quotations, covering 4,231 members, represent agreements by new unions, new occupations covered for the first time by old unions, and unions which had for the first time made their scales effective. The average rate for these members was considerably lower than for those having effective scales in both years—64.0 cents per hour as compared with 92.8 cents per hour. The lower scales for these workers brought under union agreements for the first time in 1937 was due to the fact that many of them were for lower-paid occupations and also that a large proportion of them were located in smaller cities.

### Union Scales of Hours

Full-time weekly hours of union members in the bakery trades for whom comparable reports were received decreased 1.6 percent between May 15, 1936, and May 15, 1937. The average hours in 1936 were 43.1, and in 1937 they were 42.4 per week. For Hebrew bakeries the change in average was from 45.9 to 45.1 and for other shops from 42.2 to 41.5.

The distribution of members covered in both years, according to the full-time hours provided in their agreements, appears in table 4. In both years more members worked a 40-hour week than worked any other scale. The proportion of the members, however, increased from 39.9 percent in 1936 to 44.1 percent in 1937. Over half of all the members were reported at hours of 40 or less per week in 1937; in 1936 the proportion was 46.1 percent.

The scales of hours in Hebrew bakeries were longer as a rule than in other types of shops. There was, however, the same tendency towards shorter hours. In 1936, 71.2 percent of the 4,180 members covered had a 45-hour week and none were reported at any less number

of hours. In 1937, the percentage on 45-hour scales was 78.1, with 6.6 percent of the members on 40- and 42-hour workweeks.

A majority of the members in other shops worked on 40-hour scales in both years. In 1937 there were increased percentages at 36, 40, 42, and 44 hours per week and decreased proportions at 45 and 48 hours. The relative decrease in the maximum workweek (48 hours) was not so great for these members as for those in Hebrew bakeries. In Hebrew bakeries the decline was from 28.3 percent to 14.8 percent during the year, a reduction of almost half the total members reported at 48 hours in 1936. About one-fourth of the members in other bakeries who had a 48-hour scale in 1936 changed to a shorter workweek during the year.

TABLE 4.—*Distribution of Union Members in the Bakery Trades, by Hours per Week 1937 and 1936*<sup>1</sup>

Classified weekly hours	All bakeries		Hebrew bakeries		Other bakeries	
	1937	1936	1937	1936	1937	1936
Average weekly hours.....	42.4	43.1	45.1	45.9	41.5	42.2
Percent of members whose hours per week were—						
32 hours.....	0.7	0.7	-----	-----	0.9	0.9
35 hours.....	.4	.4	-----	-----	.5	.5
36 hours.....	6.6	5.1	-----	-----	8.7	6.8
40 hours.....	44.1	39.9	6.1	-----	56.5	52.9
42 hours.....	5.8	3.4	.5	-----	7.6	4.5
44 hours.....	4.2	2.2	-----	-----	5.6	2.9
45 hours.....	19.4	21.3	78.1	71.2	.2	5.0
47 hours.....	.1	.1	.5	.5	-----	-----
48 hours.....	18.7	26.9	14.8	28.3	20.0	26.5

<sup>1</sup> Based on comparable quotations. See text footnote 1.

For about 82 percent of the union membership there were no changes in hours between May 15, 1936, and May 15, 1937. (See table 5.) Slightly over 16 percent had their hours reduced, while 2 percent had increases in hours. A smaller proportion, 13.5 percent, of members in Hebrew bakeries received hour decreases than members in other shops, where 17 percent had their hours reduced.

TABLE 5.—*Changes in Union Hour Scales in the Bakery Trades, 1937 Compared With 1936*

Type of bakery	Number of quotations comparable with 1936	Hours per week					
		Number of quotations showing—			Percent of members affected by—		
		Increase	Decrease	No change	Increase	Decrease	No change
All types.....	268	12	36	220	2.0	16.2	81.8
Hebrew bakeries.....	56	-----	11	45	-----	13.5	86.5
Other bakeries.....	212	12	25	175	2.6	17.1	80.3

Table 6 indicates that most of the changes in hours were for reductions of 3, 4, and 8 hours per week, with almost equal proportions of the total memberships affected by each reduction. One-half of 1 percent of the membership received increases of 4 hours in their workweek. Three quotations, covering 1.5 percent of the membership, increased their workweek by 6 hours. These increases were from a 42- to a 48-hour week.

TABLE 6.—Amount of Change in Union Hour Scales in the Bakery Trades Between 1936 and 1937

Amount of change in hours per week	Number of quotations showing—		Percent of total members affected by—	
	Increase	Decrease	Increase	Decrease
3 hours.....		11		5.6
4 hours.....	8	11	0.5	5.5
6 hours.....	3	3	1.5	.1
8 hours.....	1	11	( <sup>1</sup> )	5.0

<sup>1</sup> Less than 1/10 of 1 percent.

### Overtime and Extra Work

Almost half of the members received time and a half for overtime, and 23 percent additional received time and one-third. Work beyond the regular weekly hours was prohibited in agreements covering 10 percent of the members. The distribution of all the reports received according to the initial overtime rates was:

	Number of quotations	Percent of members covered
No overtime rate provided.....	5	1.1
Straight time.....	39	6.7
Time and one-third.....	84	23.4
Time and one-half.....	195	48.8
Double time.....	11	3.1
Specified amounts, not a multiple of the regular rate.....	28	7.1
Overtime prohibited.....	3	9.8

Frequently the agreements provide that no regularly employed member shall work overtime when substitutes are available, except in cases of emergency. In some cases a permit from the union must be secured before overtime may be worked. Other agreements set a limit on the amount of overtime permissible for each employee, usually a maximum of 2 hours per week. In a number of cases at least a certain number of hours, commonly 12, must elapse before an employee may be called to begin the next day's work.

Although in some agreements work on any holiday is prohibited, most agreements apply such prohibition only to labor holidays. Six holidays were provided in most cases, but the number varied from three to nine. The usual holidays observed are New Year's, Memo-

rial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas. Agreements for Hebrew bakeries generally provide for several religious holidays in addition to the legal holidays. The rate for work performed on the weekly day off and on holidays is in most cases the same as the overtime rate, although some provide for double pay for work on holidays. Some agreements provide full pay when holidays are observed.

Because of the necessity of night work to produce fresh goods for sale the following day, a provision for extra pay for night work is frequently found. The periods during which this extra pay applies begin between 6 and 10 p. m. and end between 4 and 6 a. m. The amount of the night bonus varies from an additional 5 cents an hour to 25 cents an hour.

A minimum of 5 or 6 hours or a full day's pay is at times provided for all those beginning a day's work.

### *Scope of the Survey and Membership Covered*

This study is one of a series of annual surveys started in 1907 by the Bureau of Labor Statistics, covering union scales in various trades in the principal cities of the United States. In recent years 70 cities have been included in the general survey, although in many of these cities there were no union members working under agreements in the bakery trades. Effective union scales for bakery workers were reported in 43 of the cities studied in 1936 and in 48 cities in 1937. The total union membership covered in 1937 was 21,167, as compared with 15,086 in 1936.

Table 8 shows the number of union members for whom reports have been received each year since 1918. The high point in membership covered was in 1920. From 1921 to 1933 there was a decline reported each year, except in 1930, when a small increase was recorded. Since 1933 there has been an increase each year, the 1937 membership being practically double that of 1933.

TABLE 8.—*Union Members in Bakery Trades Covered Each Year, 1918 to 1937*

Year	Members	Year	Members	Year	Members	Year	Members
1918.....	18,376	1923.....	21,574	1928.....	18,673	1933.....	10,960
1919.....	21,477	1924.....	21,306	1929.....	17,468	1934.....	12,722
1920.....	24,721	1925.....	20,805	1930.....	18,301	1935.....	14,418
1921.....	24,398	1926.....	20,510	1931.....	16,403	1936.....	15,086
1922.....	22,808	1927.....	19,170	1932.....	13,678	1937.....	21,167

### *Rates of Wages and Hours in Each City*

Union rates per hour and hours per week in the bakery trades, by city and occupation, on May 15, 1937, and May 15, 1936, are shown in table 9.

TABLE 9.—Union Scales of Wages and Hours in the Bakery Trades, May 15, 1937, and May 15, 1936

City, type of bakery, and occupation	May 15, 1937		May 15, 1936		City, type of bakery, and occupation	May 15, 1937		May 15, 1936	
	Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week		Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week
<i>Atlanta, Ga.</i>					<i>Cincinnati, Ohio</i>				
Dough mixers.....	Dol. 0.550	40	Dol. -----	-----	Foremen or first hands..	Dol. 0.945	40	Dol. 0.920	40
Bakers.....	.500	40	-----	-----	Bench or machine hands..	.800	40	.775	40
Bakers' helpers.....	.400	40	-----	-----	Ovenmen or mixers.....	.863	40	.838	40
Packers or slicers, female.....	.350	40	-----	-----	Helpers.....	.625	40	.600	40
<i>Baltimore, Md.</i>					<i>Cleveland, Ohio</i>				
Hebrew bakeries:					Union A:				
Foremen or ovenmen.....	1.188	48	1.188	48	First hands.....	.833	48	.750	48
Second hands.....	1.125	48	1.125	48	Second hands.....	.750	48	.625	48
<i>Boston, Mass.</i>					Helpers.....				
Hebrew bakeries:					Union B:				
Foremen.....	1.271	48	1.146	48	Hand shops:				
Second hands.....	1.167	48	1.042	48	First hands....	.792	48	.750	48
Third hands.....	1.063	48	.938	48	Second hands....	.729	48	.688	48
<i>Buffalo, N. Y.</i>					Third hands....				
Day work:					Machine shops:				
Ovenmen or mixers..	.729	48	.667	48	Mixers or ovenmen.....	.770	40	.750	40
Bench hands.....	.688	48	.625	48	Bench or machine hands..	.710	40	.690	40
Night work:					Mixer helpers or molders and dividers.....	.660	40	.640	40
Ovenmen or mixers..	.771	48	.708	48	Oven feeders....	.600	40	.580	40
Bench hands.....	.729	48	.667	48	Helpers, male....	.550	40	.530	40
Hebrew and Polish bakeries:					Helpers, female..	.400	40	.390	40
First hands.....	.773	48	-----	-----	Slicers, female...	.490	40	.470	40
Second hands.....	.729	48	-----	-----	<i>Bohemian bakeries:</i>				
<i>Butte, Mont.<sup>1</sup></i>					First hands.....				
Foremen or mixers.....	1.091	44	1.091	44	Second hands.....	.792	48	.750	48
Bench hands or ovenmen.....	.955	44	.955	44	Third hands.....	.750	48	.708	48
<i>Chicago, Ill.</i>					Third hands.....				
Retail bakeries:					Hebrew bakeries:				
First hands.....	<sup>2</sup> .771	48	.771	48	First hands.....	1.146	48	1.042	48
Second hands.....	<sup>2</sup> .729	48	.729	48	Second hands.....	1.042	48	.938	48
Wholesale bakeries:					Third hands.....	.563	48	.500	48
First hands, ovenmen, or spongers..	.780	40	.730	40	<i>Dallas, Tex.</i>				
Second hands.....	.740	40	.690	40	Hand shops:				
Bohemian bakeries:					Foremen.....	.729	48	.667	48
Small shops:					Ovenmen or mixers..	.583	48	.500	48
First hands.....	.729	48	.667	48	Bench hands.....	.642	48	.458	48
Second hands....	.667	48	.604	48	<i>Davenport, Iowa</i>				
Large shops:					See Rock Island (Ill.) district.				
First hands.....	.875	40	.800	40	<i>Denver, Colo.</i>				
Second hands....	.800	40	.725	40	Hand shops:				
Polish bakeries:					Day work:				
Retail shops:					Foremen.....	.857	4 42	.857	42
Foremen or spongers.....	.875	48	-----	-----	Bench or machine hands....	.714	4 42	.714	42
Second hands.....	.750	48	-----	-----	Night work:				
Wholesale shops:					Foremen.....	.929	4 42	.929	42
Foremen or spongers.....	.968	32	.938	32	Machine hands..	.786	4 42	.786	42
Second hands.....	.844	32	.817	32	Machine shops:				
Scandinavian bakeries:					Day work:				
First hands, spongers, or ovenmen.....	<sup>3</sup> .900	48	.900	42	Shift foremen...	.875	4 40	.875	40
Second hands.....	<sup>3</sup> .850	48	.850	42	Mixers or ovenmen.....	.800	4 40	.800	40
Helpers.....	<sup>3</sup> .550	48	.550	42	Bench or machine hands....	.750	4 40	.750	40

<sup>1</sup> After June 1, 1937: Foremen and mixers, \$1.179; benchmen, \$1.048; ovenmen, \$1.143; 42-hour week.

<sup>2</sup> 10 cents per hour more for work between 10 p. m. and 4 a. m. Scale increased \$3 per week after June 1, 1937.

<sup>3</sup> 20 cents per hour more for work between 10 p. m. and 6 a. m.

<sup>4</sup> Overtime limited to 1 hour per week.

TABLE 9.—Union Scales of Wages and Hours in the Bakery Trades, May 15, 1937, and May 15, 1936—Continued

City, type of bakery, and occupation	May 15, 1937		May 15, 1936		City, type of bakery, and occupation	May 15, 1937		May 15, 1936	
	Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week		Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week
<i>Denver, Colo.—Contd.</i>					<i>Houston, Tex.—Contd.</i>				
Machine shops—Contd.					Bench men or machine men	Dol. 0.531	48	Dol. 0.521	48
Night work:					Wrappers	0.396	48		
Shift foremen	0.950	4 40	0.950	40	Counters	0.438	48		
Mixers or ovenmen	.875	4 40	.875	40	Helpers	0.375	48	.375	48
Bench or machine hands	.825	4 40	.825	40	<i>Kansas City, Mo.</i>				
Part day and part night work:					Day work:				
Shift foremen	.913	4 40	.913	40	Foremen	1.063	40	.979	40
Mixers or ovenmen	.838	4 40	.838	40	Mixers, spongers, or ovenmen and drawers	.975	40	.896	40
Hebrew bakeries:					Bench hands	.913	40	.834	40
Foremen or ovenmen	.940	48	.854	48	Night work:				
Second hands	.894	48	.813	48	Foremen	1.188	40	1.104	40
Bench hands	.871	48	.792	48	Mixers, spongers, or ovenmen and drawers	1.100	40	1.021	40
Helpers	.653	48	.594	48	Bench and under hands	1.038	40	.959	40
<i>Des Moines, Iowa</i>					Hebrew bakeries:				
Hand shops:					Foremen	.989	45		
Foremen	.677	48	.625	48	Mixers and drawers	.911	45		
Journeyman	.604	48	.563	48	Bench hands	.856	45		
Helpers	.458	48	.417	48	<i>Los Angeles, Calif.</i>				
Machine shops:					Hebrew bakeries:				
Foremen	.800	40	.750	40	First hands	1.313	7 40	1.188	48
Ovenmen or mixers	.700	40	.650	40	Second hands	1.188	7 40	1.063	48
Benchmen	.650	40	.600	40	<i>Madison, Wis.</i>				
Machine men	.600	40	.550	40	Foremen	0.938	48	.883	40
Helpers	.500	40	.450	40	Bench hands	0.784	40	.765	40
Bread wrappers	.450	40	.400	40	Mixers, ovenmen, or spongers	0.837	40	.819	40
<i>Detroit, Mich.</i>					Machine men	0.812	40		
Union A:					Helpers	0.675	40	.625	40
First hands, mixers, or ovenmen	.800	44	.750	48	<i>Manchester, N. H.</i>				
Second hands or benchmen	.700	44	.667	48	Foremen or mixers	.792	45	.792	48
Helpers, male	.600	44			Bench hands	.625	45	.625	48
Helpers, female	.450	44			Second hands	.688	45	.688	48
Union B:					<i>Memphis, Tenn.</i>				
First hands, mixers, or ovenmen	.958	48	.813	48	Mixers, ovenmen, second hands, bench hands, machine men, or wrapping-machine operators	.563	40		
Second hands or benchmen	.813	48	.708	48	Helpers	.375	40		
Third hands	.521	48			<i>Milwaukee, Wis.</i>				
Hebrew bakeries:					Hand bakeries:				
First hands, night:					Foremen	.682	44		
1 oven	1.356	45	1.356	45	Mixers or ovenmen	.625	44		
2 ovens	1.400	45	1.400	45	Bench hands	.568	44		
Second hands	1.289	45	1.289	45	Helpers	.455	44		
Third hands	.625	48			Machine bakeries:				
<i>Duluth, Minn.</i>					Foremen	.950	40		
Foremen	.910	40	.693	44	Mixers or ovenmen	.750	40		
Bench hands	.750	40	.591	44	Bench hands	.688	40		
Mixers or ovenmen	.800	40	.614	44	Helpers	.550	40		
Machine men	.688	40			<i>Houston, Tex.</i>				
Helpers, after 1 year <sup>4</sup>	.625	40			Foremen	0.729	48	.729	48
<i>Houston, Tex.</i>					Mixers, ovenmen, or spongers	0.573	48	.573	48

<sup>4</sup> Overtime limited to 1 hour per week.

<sup>5</sup> 50 cents per hour for first 6 months, 55 cents per hour for second 6 months.

<sup>6</sup> 1 week's vacation and 4 holidays per year with full pay.

<sup>7</sup> Agreement provides 48 hours; members limited to 40 to share work.

<sup>8</sup> 10 cents per hour more for night work.

TABLE 9.—Union Scales of Wages and Hours in the Bakery Trades, May 15, 1937, and May 15, 1936—Continued

City, type of bakery, and occupation	May 15, 1937		May 15, 1936		City, type of bakery, and occupation	May 15, 1937		May 15, 1936	
	Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week		Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week
<i>Milwaukee, Wis.—Con.</i>					<i>New Haven, Conn.</i>				
Hebrew bakeries:					Foremen or mixers.....	<i>Dol.</i> 0.750	48	<i>Dol.</i> 0.750	48
Day work:					Ovenmen.....	.713	48	.713	48
Bench hands, first.....	<i>Dol.</i> 0.872	47	<i>Dol.</i> 0.809	47	Benchmen.....	.675	48	.675	48
Bench hands, second.....	.787	47	.723	47	Hebrew bakeries:				
Bench hands, third.....	.702	47	.638	47	Foremen or ovenmen.....	1.083	48	1.000	48
Night work:					Second hands.....	1.000	48	.917	48
Bench hands, first.....	.896	47			Third hands or helpers.....	.625	48	.417	48
Bench hands, second.....	.813	47			<i>New York, N. Y.</i>				
Bench hands, third.....	.728	47			Union A:				
<i>Minneapolis, Minn.</i>					First hands or ovenmen.....	.950	40	.950	40
Hand shops:					Second hands.....	.850	40	.850	40
Foremen.....	.800	45			Third hands or helpers.....	.750	40	.750	40
Mixers, ovenmen, spongers, or traveling-oven operators.....	.667	45			Union B:				
Bench hands.....	.622	45			Ovenmen.....	.925	40		
Oven helpers.....	.533	45			Bench hands.....	.825	40		
Helpers, female.....	.489	45			Junior bench hands or packers.....	.725	40		
Machine shops:					Helpers.....	.625	40		
Foremen.....	.900	44			Wrappers.....	.575	40		
Mixers, ovenmen, spongers, or traveling-oven operators.....	.750	44			Helpers, female.....	.450	40		
Bench hands or divider men.....	.700	44			Union C:				
Dough-room men.....	.650	44			First hands.....	1.050	40	1.021	48
Oven helpers or ingredient scalers.....	.600	44			Second hands.....	.950	40	.938	48
Bench-hand helpers.....	.550	44			Helpers.....	.750	40	.750	48
<i>Moline, Ill.</i>					Union D:				
See Rock Island (Ill.) district.					Foremen.....	1.250	<sup>9</sup> 40	1.250	40
<i>Nashville, Tenn.</i>					First hands.....	1.050	<sup>9</sup> 40	1.050	40
Foremen.....	.729	48			Second hands.....	.950	<sup>9</sup> 40	.950	40
Ovenmen.....	.573	48			Helpers.....	.700	<sup>9</sup> 40	.700	40
Mixers or wrapping-room foremen.....	.521	48			Bohemian bakeries:				
Bench or machine hands.....	.469	48			First hands.....	1.000	35	1.000	35
Machine operators.....	.396	48			Second hands.....	.929	35	.929	35
Helpers.....	.354	48			French bakeries:				
<i>Newark, N. J.</i>					Day work:				
Union A:					First hands.....	.933	45	.875	48
Foremen, ovenmen or mixers.....	1.050	40	1.000	40	Second hands.....	.889	45	.833	48
Bench hands.....	.925	40	.875	40	Third hands or helpers.....	.844	45	.792	48
Third hands.....	.775	40	.725	40	Night work:				
Union B:					First hands.....	1.000	42	.933	45
First hands or ovenmen.....	1.458	48	1.333	48	Second hands.....	.952	42	.889	45
Second hands or benchmen.....	1.325	48	1.200	48	Third hands or helpers.....	.905	42	.884	45
Hebrew bakeries:					German bakeries:				
Foremen or ovenmen.....	1.354	48	1.250	48	First hands.....	1.000	40	.979	48
Mixers or second hands.....	1.250	48	1.146	48	Second hands.....	.938	40	.917	48
					Helpers.....	.625	40	.521	48
					Hebrew bakeries:				
					Union A:				
					First hands or ovenmen.....	1.333	45	1.125	48
					Second hands.....	1.200	45	1.063	48
					Third hands or helpers.....	.933	45	.813	48
					Union B:				
					Mixers or ovenmen.....	1.125	40		
					First hands.....	1.188	40	1.146	48
					Second hands.....	1.025	40	.979	48
					Helpers.....	.800	40	.750	48
					Union C:				
					First hands.....	1.467	45	1.467	45
					Second hands.....	1.333	45	1.333	45
					Helpers.....	.933	45	.933	45

<sup>9</sup> Overtime limited to 2 hours per week.

TABLE 9.—Union Scales of Wages and Hours in the Bakery Trades, May 15, 1937, and May 15, 1936—Continued

City, type of bakery, and occupation	May 15, 1937		May 15, 1936		City, type of bakery, and occupation	May 15, 1937		May 15, 1936	
	Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week		Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week
<i>Oklahoma City, Okla.</i>					<i>Rochester, N. Y.</i>				
Day work:	<i>Dol.</i>		<i>Dol.</i>		Hand shops:				
Foremen.....	0.900	40	0.825	40	Foremen or first hands.....	<i>Dol.</i> 0.833	48	<i>Dol.</i> 0.730	48
Mixers or ovenmen.....	.800	40	.725	40	Second hands, mixers, or ovenmen.....	.760	48	.677	48
Bench or machine men.....	.700	40	.625	40	Third hands or bench and machine hands.....	.729	48	.642	48
Night work:					Machine shops:				
Foremen.....	1.025	40	.950	40	Foremen or first hands.....	1.000	40	.810	44
Mixers or ovenmen.....	.875	40	.800	40	Second hands, mixers, or ovenmen.....	.913	40	.740	44
Bench and machine men.....	.775	40	.700	40	Benchmen.....	.875	40	.700	44
<i>Peoria, Ill.</i>					Hebrew bakeries:				
Machine shops:					Ovenmen.....	1.179	42	1.031	48
Foremen.....	.952	42	.929	42	Mixers or bench hands.....	1.071	42	.990	48
Ovenmen or spongers.....	.833	42	.810	42	Third hands.....	.833	42	.729	48
Bench or machine hands.....	.762	42	.738	42	<i>Rock Island (Ill.) district</i>				
<i>Philadelphia, Pa.</i>					Daywork:				
Hebrew bakeries:					Foremen.....	.779	48	-----	-----
Foremen or ovenmen.....	1.249	45	1.190	45	Mixers or ovenmen.....	.673	48	-----	-----
Second hands or mixers.....	1.190	45	1.133	45	Benchmen.....	.531	48	-----	-----
Third hands.....	1.091	45	1.039	45	Night work:				
Fourth hands.....	.694	45	.661	45	Foremen.....	.904	48	.904	48
<i>Pittsburgh, Pa.</i>					Foremen or ovenmen.....				
Mixers or ovenmen.....	.800	40	.750	40	Foremen.....	.798	48	.798	48
Benchmen.....	.750	40	.700	40	Benchmen.....	.656	48	.656	48
Helpers.....	.650	40	.590	40	<i>St. Louis, Mo.</i>				
Checkers.....	.600	40	.535	40	Hand shops: <sup>11</sup>				
Packers.....	.530	40	.430	40	Foremen.....				
Hebrew bakeries:					Second hands or benchmen.....				
First hands or ovenmen.....	1.422	45	1.333	45	Foremen.....				
Second hands or mixers.....	1.356	45	1.267	45	Ovenmen or spongers.....				
Third hands or benchmen.....	1.267	45	1.178	45	Assistant spongers.....				
Polish bakeries:					Scalers or first bench hands.....				
First hands.....	.933	45	-----	-----	Bench or machine hands.....				
Second hands.....	.889	45	-----	-----	Counters.....				
Third hands.....	.844	45	-----	-----	Helpers.....				
Helpers.....	.556	45	-----	-----	Wrappers or slicers.....				
<i>Portland, Oreg.</i>					Hebrew bakeries: <sup>11</sup>				
Hand shops:					Foremen or ovenmen.....				
Foremen.....	1.050	40	-----	-----	Second hands or benchmen.....				
Mixers or ovenmen.....	1.000	40	-----	-----	Third hands.....				
Bench hands.....	.900	40	-----	-----	<i>St. Paul, Minn.</i>				
Machine shops:					Foremen.....				
Foremen.....	1.111	36	.875	40	Mixers or ovenmen.....				
Mixers or ovenmen.....	1.056	36	.840	40	Bench hands.....				
Bench or machine hands.....	1.000	36	.800	40	<i>San Francisco, Calif.</i>				
Flour blenders.....	.833	36	-----	-----	Foremen or ovenmen.....				
Pan greasers.....	.778	36	-----	-----	Mixers.....				
<i>Providence, R. I.</i>					Bench hands.....				
Foremen or ovenmen.....	.938	48	.938	48	Flour blenders.....				
Second hands, mixers, or benchmen.....	.875	48	.875	48	Helpers.....				

<sup>10</sup> \$2.10 more per week for night work.

<sup>11</sup> 1 week's annual vacation with pay.

TABLE 9.—Union Scales of Wages and Hours in the Bakery Trades, May 15, 1937, and May 15, 1936—Continued

City, type of bakery, and occupation	May 15, 1937		May 15, 1936		City, type of bakery, and occupation	May 15, 1937		May 15, 1936	
	Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week		Rates of wages per hour	Hours per week	Rates of wages per hour	Hours per week
<i>San Francisco, Calif.—Continued</i>					<i>Toledo, Ohio</i>				
Jobs:					First mixers.....	Dol. 0.750	44	Dol.	
Foremen or ovenmen.....	Dol. 0.988	40	Dol.		Bench hands or peel-oven runner-in men.....	.700	44		
Bench hands.....	.919	40			Second mixers.....	.650	44		
Helpers.....	.656	40			Traveling-oven men, peeler-out men, dividers, molders, or mixers' helpers.....	.600	44		
Small bakeries:					Peel-oven helpers, molders' helpers, or wrappers.....	.550	44		
Foremen or ovenmen.....	.935	42	0.850	42	Helpers, other.....	.500	44		
Bench hands.....	.874	42	.794	42					
Helpers.....	.629	42	.571	42					
French and Italian bakeries:									
Foremen, mixers, or ovenmen.....	.962	42	.817	45					
Bench hands.....	.864	42	.733	45					
<i>Scranton, Pa.</i>									
First bench hands.....	1.125	40	1.125	40	<i>Washington, D. C.</i>				
Second bench hands.....	.575	40			Day work:				
Third bench hands.....	.550	40			Journeyman.....	1.050	40	1.020	40
Fourth bench hands.....	.500	40			Helpers.....	.600	40	.550	40
Peel-oven tenders.....	.825	40	.825	40	Night work:				
Traveling-oven tenders.....	.550	40	.525	40	Journeyman.....	1.250	40	1.220	40
Molders.....	.775	40	.775	40	Helpers.....	.700	40	.650	40
Mixers.....	.725	40	.725	40					
Dividers.....	.675	40	.675	40	<i>Wichita, Kans.</i>				
Mixers' helpers.....	.650	40	.650	40	Mixers.....	.675	40	.650	40
Pan greasers or pan setters.....	.625	40	.625	40	Ovenmen.....	.675	40	.613	40
Helpers.....	.450	40	.450	40	Benchmen or machinemen.....	.638	40	.613	40
					Helpers.....	.500	40	.450	40
<i>Seattle, Wash.</i>									
Foremen.....	1.180	36	1.180	36	<i>Worcester, Mass.</i>				
Mixers, machinemen, or ovenmen.....	1.120	36	1.120	36	Hebrew bakeries:				
Bench hands.....	1.050	36	1.050	36	Foremen.....	1.146	48	.938	48
Helpers:					Second hands.....	1.042	48	.833	48
Rate A.....	.772	36	.772	36					
Rate B.....	.883	36	.883	36	<i>Youngstown, Ohio</i>				
<i>South Bend, Ind.</i>					Hand shops:				
Mixers.....	.660	40	.660	40	Foremen.....	.780	48	.650	48
Dividers.....	.660	44	.660	40	Mixers or ovenmen.....	.720	48	.600	48
Bench hands.....	.660	40	.550	40	Bench hands.....	.660	48	.550	48
Peel-oven men.....	.650	44	.660	40	Helpers.....	.450	48		
First hands.....	.625	48	.625	48	First helpers, female.....	.425	48	.313	48
Molders.....	.600	44	.600	40	Second helpers, female.....	.375	48	.250	48
Traveling-oven tenders.....	.560	44	.580	40					
Mixers' helpers.....	.530	44	.550	40	Machine shops:				
Second hands.....	.521	48	.521	48	Mixers or ovenmen.....	.800	40		
Molders' helpers.....	.500	44	.500	40	Bench and machine hands, or mixer helpers.....	.725	40		
Helpers:					Dumpers and feeders.....	.670	40		
Rate A.....	.480	44	.480	40	Bakeshop helpers.....	.630	40		
Rate B.....	.400	44	.400	40	Checkers.....	.620	40		
<i>Spokane, Wash.</i>					Chute men or head slicers and wrappers.....	.600	40		
Foremen, mixers, or ovenmen.....	1.100	40	.970	40	Packers or slicing and wrapping machine operators.....	.560	40		
Bench or machine hands.....	1.000	40	.920	40	Hand wrappers.....	.480	40		
Helpers.....	.700	40	.650	40					
<i>Springfield, Mass.</i>					Hebrew bakeries:				
Foremen.....	12.833	48	.833	48	Ovenmen.....	.925	48	.771	48
Second hands, mixers, or ovenmen.....	.729	48	.729	48	Mixers.....	.850	48	.709	48
Bench hands.....	13.625	48	.625	48	Bench hands.....	.738	48	.615	48
					Helpers.....	.450	48	.458	48

<sup>12</sup> 91.7 cents per hour after July 1, 1937.

<sup>13</sup> 66.7 cents per hour after July 1, 1937.

## OVERTIME WORK BY SALARIED EMPLOYEES

THE PROBLEM of overtime among salaried employees is being given consideration by numerous companies, and in this connection determined efforts are being made to eliminate the exploitation of the rank and file of these workers.

Of 53 employers whose replies to a recent inquiry on overtime practices were analyzed, 26 reported that they had some type of restrictive regulation with reference to overtime. In 20 companies some or all of the salaried workers are paid "straight time" when they work overtime. Only four establishments stated that any of their salaried force were paid for overtime at premium rates. Thirty-three of the establishments allow equivalent time off. However, the regulations and classes of employees covered differed considerably from company to company. In 23 firms evening meals are provided for employees who are called upon to do night work. These findings and the following data are taken from an article published in the November 1937 issue of *Personnel*, published by American Management Association.

Many of the companies endeavor to control overtime employment and to eliminate excessive overtime. One establishment provides a check upon overtime by supervisory control of the hours of employment through time and earnings reports, cost statements, and similar expedients. Another organization which is averse to needless overtime stipulates that any employee who remains at work more than half an hour after closing time must have his time of leaving reported by his supervisor to the personnel record office. A monthly record of overtime is referred to the vice president who is responsible for the administration of the home office, and evidence of excessive overtime is submitted to the department head for corrective measures. A third establishment endeavors to reduce inordinate overtime through strict supervision and budgeting. "Yardsticks" are set up for each office to aid in finding out whether or not overtime is justifiable.

When overtime is paid for, straight time is ordinarily allowed. In one establishment, however, employees are paid 50 cents per hour for working after 7 o'clock in the evening if their salaries are less than \$1,200 per annum and 75 cents per hour if their yearly salaries are between \$1,200 and \$3,000; but employees who receive more than \$3,000 annually are not paid for overtime.

The regulations in various companies are somewhat elastic, for instance, one company pays straight time for overtime work only in cases in which it is not practicable to allow the employees compensative time off. Several companies which give equivalent time off also meet the expense for meals.

The amounts allowed for supper money differ considerably. Among those reported are 50 cents, 75 cents, 85 cents, \$1.00, and \$1.50. One

firm which grants its nonsupervisory employees \$1.00 for dinner, as well as equivalent time off, provides that the overtime thus compensated for should be at least 2½ hours in one day. Another organization which allows time off and 85 cents for supper stipulates that the overtime so provided for shall exceed 2 hours in a single day.

While the survey here reviewed was mainly for the purpose of ascertaining the overtime policies of the companies, other data were also secured. For example, if the establishments covered in the survey "could be considered representative, it might reasonably be concluded that the 5-day week is prevalent in office organization." Twenty-nine of these establishments report that they have a 5-day week in some or all of their offices, and the information given by other companies, which do not state explicitly the number of days a week their office employees are required to work, indicates that many of these concerns also have a 5-day week. In one company a salaried employee who is called upon to work Saturday mornings receives an additional 10 percent of his weekly salary. Another organization in which it is necessary to have a skeleton force in the forenoon on Saturdays compensates the employees who are so employed by a half day off in the following week. Another concern, after negotiating with its employees on the subject, gives Saturday mornings off to those who can be spared. According to the author, these indications of the prevalence of the 5-day week in office organizations are perhaps as significant as any data regarding company overtime practices that were brought out by this survey.



## EARNINGS OF OFFICE WORKERS IN NEW YORK STATE FACTORIES, OCTOBER 1937

OFFICE workers in New York State factories earned an average of \$33.93 per week in October 1937, as compared with \$33.05 in October 1936. Male workers received \$44.76, nearly twice as much as women, who averaged only \$22.41. This ratio is by no means uniform by individual industries. These figures are from the annual (October) survey by the State Department of Labor, reported upon in its Industrial Bulletin for November 1937. The workers covered in the survey included clerks, stenographers, bookkeepers, accountants, cashiers, stock clerks, office managers, and superintendents.

The average weekly earnings of office employees in the various industry groups in October of each year from 1928 to 1937 are shown in table 1. The averages given are based upon reports from the fixed list of manufacturing firms whose reports are used by the New York Department of Labor in its monthly employment record. The department states that as substantially the same firms are represented

in these reports each year the data in the table may be assumed to indicate the trend in office salaries; but that the variations in salaries between occupations, and in the proportion of higher-salaried supervisory and technical workers in different industries, make comparisons of dollar earnings between industries questionable. These differences may also explain the variations between average salaries in New York City and in the rest of the State as well as between the earnings of men and women.

TABLE 1.—Average Weekly Earnings of Office Employees in Representative New York State Factories in October of Each Year, 1928 to 1937

Industry	Average weekly earnings in October—									
	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937
All industries.....	\$36.37	\$36.94	\$37.48	\$35.49	\$31.86	\$31.85	\$32.45	\$32.71	\$33.05	\$33.93
Stone, clay, and glass.....	35.10	34.70	35.52	34.35	31.48	28.83	27.74	26.47	26.65	28.07
Metals and machinery.....	37.63	37.72	38.29	35.06	31.27	32.39	34.29	35.30	35.56	36.83
Wood manufactures.....	37.22	37.56	36.74	38.07	32.04	30.31	30.59	30.05	30.02	32.67
Furs, leather, and rubber goods.....	29.82	29.34	30.58	28.75	24.73	24.72	23.72	24.51	24.73	23.80
Chemicals, oils, paints, etc.....	33.38	34.07	34.74	32.87	29.93	30.64	31.00	30.41	31.49	32.59
Pulp and paper.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Printing and paper goods.....	41.37	42.68	43.94	41.85	37.25	36.44	36.71	36.13	36.23	37.28
Textiles.....	30.81	30.87	33.47	33.46	29.35	31.76	29.97	26.32	26.92	26.45
Clothing and millinery.....	31.82	33.30	32.60	31.27	27.63	26.24	25.38	26.28	26.67	27.44
Food and tobacco.....	35.03	36.04	36.49	35.10	33.10	31.90	31.86	32.84	33.55	33.49
Water, light, and power.....	31.60	30.77	33.01	30.64	31.59	30.24	34.10	34.68	35.47	36.30

<sup>1</sup> Separate earnings not computed because of small number of employees.

<sup>2</sup> Not comparable with preceding years.

The average weekly earnings of men and women in October 1937 are given in table 2. The figures in this table were not based on a fixed list of concerns, as was the case with those in table 1.

TABLE 2.—Average Weekly Earnings of Men and Women in Factory Offices in New York State, October 1937

Industry <sup>1</sup>	Men			Women		
	Total State	New York City	Up-State	Total State	New York City	Up-State
All industries.....	\$44.76	\$45.25	\$44.48	\$22.41	\$23.80	\$21.50
Metals and machinery.....	44.99	40.85	45.94	22.01	23.08	21.72
Wood manufactures.....	43.54	36.18	46.19	20.41	21.11	20.27
Furs, leather, and rubber goods.....	36.70	38.22	35.20	22.28	25.67	18.94
Chemicals, oils, paints, etc.....	44.40	38.79	47.04	21.91	22.64	21.62
Printing and paper goods.....	49.98	54.45	41.97	23.05	24.01	21.75
Textiles.....	37.14	40.28	36.21	20.76	20.32	20.91
Clothing and millinery.....	38.26	37.54	40.26	23.00	23.95	20.58
Food and tobacco.....	43.21	44.95	40.46	23.25	24.47	21.97

<sup>1</sup> Separate earnings not computed for stone, clay, and glass, pulp and paper, and water, light, and power industries, because of small number of employees.

Employment in New York factory offices increased 14.1 percent and total pay rolls 17.1 percent from October 1936 to October 1937. Table 3, taken from the November 1937 Industrial Bulletin (Albany), shows the number of employees and amount of pay roll, by industry, in October 1937, with the percent of change from October 1936.

TABLE 3.—*Employment and Pay Rolls in Factory Offices in New York State, October 1937, Compared with October 1936*

Industry	Employees		Pay roll	
	Number, October 1937	Percent of change, October 1936—October 1937	Amount, October 1937	Percent of change, October 1936—October 1937
All industries.....	46, 475	+14. 1	\$1, 576, 710	+17. 1
Stone, clay, and glass.....	786	+8. 7	22, 062	+14. 5
Metals and machinery.....	16, 038	+15. 0	590, 737	+19. 1
Wood manufactures.....	1, 402	+4. 7	45, 797	+13. 9
Furs, leather, and rubber goods.....	2, 973	+21. 0	70, 745	+16. 4
Chemicals, oils, paints, etc.....	3, 954	+3. 8	128, 880	+7. 5
Pulp and paper.....	332	+9. 6	13, 534	+18. 3
Printing and paper goods.....	9, 407	+18. 2	350, 723	+21. 7
Textiles.....	2, 229	+29. 0	58, 950	+26. 7
Clothing and millinery.....	3, 724	+9. 0	102, 190	+12. 2
Food and tobacco.....	4, 007	+17. 3	134, 178	+17. 1
Water, light, and power.....	1, 623	-9	58, 914	+1. 4



## EARNINGS IN PUERTO RICAN INDUSTRIES 1936-37

THE average hourly earnings of 80,834 workers in 1,411 industrial establishments and agricultural undertakings in Puerto Rico in 1936-37 were 13.4 cents and the average actual earnings per week, \$4.76. The average earnings of approximately one-third of these workers were less than 10 cents per hour. The 55,247 males averaged 15.6 cents and the 25,481 females, 9.1 cents. The working week was most commonly 48 hours. In the year under review the average earnings of males in refrigerating plants were 43.3 cents per hour, whereas adult males in tobacco cultivation averaged as little as 7.3 cents. In the industries listed in the following table as employing women the hourly earnings of females ranged from 4.7 cents in fruit-packing shops to 19.2 cents in cigarette factories. These and the following data are taken from the Annual Report of the Commissioner of Labor of Puerto Rico, 1936-37, except when otherwise noted.

TABLE 1.—Average Hourly and Weekly Earnings and Hours of Labor in Various Industries in Puerto Rico, 1936-37

Industry, and sex of workers	Number of establishments	Number of employees	Average hours per week		Average earnings per hour	Average earnings per week	
			Full time	Actually worked		Full time	Actual
Alcohol distilleries: Males.....	6	116	55.6	50.7	\$0.178	\$9.89	\$9.03
Button factories:							
Males.....	3	335	48.0	39.8	.189	9.07	7.51
Females.....	2	145	48.0	43.6	.107	5.13	4.66
Cigar factories:							
Males.....	26	436	47.5	41.9	.203	9.64	8.52
Females.....	8	528	47.8	34.2	.171	8.17	5.86
Cigarette factories:							
Males.....	1	13	48.0	26.7	.351	16.85	9.40
Females.....	1	11	48.0	28.1	.192	9.22	5.39
Coffee cultivation:							
Males.....	106	1,170	48.0	36.0	.072	3.45	2.60
Females.....	36	278	48.0	31.3	.067	3.21	2.11
Coffee roasting: Males.....	10	87	48.0	46.3	.161	7.73	7.48
Fruit canneries:							
Males.....	4	177	52.3	30.0	.112	5.86	3.36
Females.....	4	614	50.5	28.4	.08	4.04	2.29
Fruit packing shops:							
Males.....	2	202	48.0	36.1	.094	4.51	3.41
Females.....	4	43	48.0	43.2	.047	2.26	2.02
Hat factories:							
Males.....	4	181	47.8	46.6	.219	10.47	10.23
Females.....	4	230	47.8	41.7	.128	6.12	5.35
Needlework industry:							
Children's garments:							
Males, adult.....	18	110	45.9	34.3	.154	7.07	5.29
Females.....	22	1,740	46.9	31.9	.104	4.88	3.33
Handkerchiefs and art linen:							
Males.....	43	526	46.5	33.6	.111	5.16	3.74
Females.....	40	1,953	46.2	35.0	.093	4.29	3.26
Men's shirts:							
Males.....	6	69	45.7	41.7	.160	7.31	6.68
Females.....	6	433	44.9	36.6	.111	4.98	4.07
Men's suits:							
Males.....	6	208	48.0	41.2	.143	6.86	5.90
Females.....	6	430	48.0	34.5	.139	6.67	4.80
Pants:							
Males.....	19	98	47.7	41.9	.121	5.77	5.07
Females.....	18	409	47.0	39.3	.093	4.37	3.67
Women's underwear:							
Males.....	27	251	47.4	35.6	.136	6.44	4.85
Females.....	47	2,511	46.5	33.5	.099	4.60	3.33
Women's dresses:							
Males.....	2	18	45.1	43.3	.191	8.61	8.29
Females.....	4	284	45.4	41.3	.104	4.72	4.29
Refrigerating plants: Males.....	2	5	49.6	49.6	.433	21.50	21.50
Sugar-cane planting: Males, adult.....	109	20,143	49.1	28.4	.128	6.28	3.65
Sugar factories: Males, adult.....	41	12,230	55.6	44.2	.175	9.73	7.73
Sugar refineries: Males.....	3	384	56.0	48.6	.168	9.41	8.18
Tobacco cultivation:							
Males, adult.....	112	1,515	47.9	36.3	.073	3.50	2.66
Females.....	76	676	48.0	31.4	.05	2.40	1.56
Tobacco stripping:							
Males.....	50	1,492	48.0	45.0	.122	5.86	5.50
Females.....	50	13,033	47.2	40.4	.08	3.78	3.26

The average hourly earnings of 6,954 workers in 1,268 commercial establishments in Puerto Rico in 1936-37 were 16.6 cents, the 5,927 adult males averaging 17.5 cents, the 1,020 adult females 11.8 cents and 7 boys, 4.78 cents. The average actual weekly hours for both sexes together were 48.9.

### Earnings of Home Workers

Needlework is one of Puerto Rico's principal industries, offering employment for some 50,000 women, many of whom ply this craft in their own homes<sup>1</sup> for a scant remuneration. In the last quarter of 1936 the Puerto Rican Bureau of Women and Children in Industry visited 36 towns and barrios where needlework is being carried on in homes. The survey included 306 homes where 400 home workers were interviewed as to their hours, earnings, and working conditions.

The general business practices in the industry, as disclosed in the 1933 investigation by the Island Bureau in cooperation with United States Women's Bureau, have not changed.<sup>2</sup>

In the survey of 1936 the data on earnings and working time relate to the last bundle of work completed or about to be delivered by the person interviewed. Many of these bundles were small; others were large enough to keep the needleworkers busy from 2 to 4 weeks.

The estimated hourly earnings of home workers, based on the last bundle of work, were as follows:

<i>Hourly earnings</i>	<i>Percent of home workers</i>
Less than one-half a cent.....	8¾
One-half cent and less than 1 cent.....	13¾
1 cent and less than 2 cents.....	24½
2 cents and less than 4 cents.....	30½
4 cents and less than 9 cents.....	17¾
9 cents and less than 25 cents.....	2
25 cents and over.....	¼
No report.....	3
Total.....	100

The commissions of agents and subagents reduce considerably the home workers' earnings. In 23 percent of 53 styles for which information was secured, the agent claimed as commission 20 percent of the home workers' earnings; for 41 percent of the styles, 20 to 30 percent of the earnings; for 14 percent of the styles, 30 to 40 percent of the earnings; and for the remaining styles, 40 or more percent of the earnings.

The reduction of the earnings of home workers as a result of their work's passing through so many hands is shown in the following table:

<sup>1</sup> U. S. Department of the Interior. Annual report of the Secretary, for the fiscal year ending June 30, 1937. Washington 1937. P. 331.

<sup>2</sup> See Monthly Labor Review, July 1935 (pp. 153-154).

TABLE 2.—Earnings of Agents, Subagents, and Home Workers

Garment	Amount per dozen paid by contractors	Earnings (per dozen) of			Percent of total work distributed by		
		Agent	Subagent	Home worker	Agent	Subagent	Home worker
Handkerchiefs.....	\$0.17	\$0.01	\$0.01	\$0.15	5.8	5.8	88.2
Nightgowns.....	1.60	.60	-----	1.00	37.5	-----	62.5
Slips.....	1.40	.30	.10	1.00	21.4	7.1	71.4
Hand towels.....	.35	.03	.07	.25	8.6	20.0	71.4
Costume slips.....	1.55	.23	.12	1.20	14.8	7.7	77.4
Nightgowns.....	1.93	.35	.38	1.20	18.1	20.0	62.0
	2.48	.30	1.38	.80	12.0	55.6	32.2
	2.25	.45	.50	1.30	20.0	22.2	57.7

In the annual report of the Secretary of the Interior for the fiscal year ending June 30, 1937 (p. 331), reference is made to the recently organized needlework cooperative in Puerto Rico to assist many thousands of skilled needleworkers who found themselves without employment when relief was discontinued. Established as Puerto Rico Handcraft, Inc., this organization has been for some months placing its high-grade hand-made silk garments on the market in the island and is planning to seek later an outlet in the United States.



## EMPLOYMENT, WAGES, AND HOURS IN ITALY, 1937<sup>1</sup>

IN JUNE 1937, 16 percent of the industrial establishments in 35 industries in Italy, which employed 52 percent of all workers in these industries, reported a total daily average of 1,440,106 employees, working an average of 166 hours per month, for an average hourly wage of 2.17 lire.<sup>2</sup> The workers in 28 occupations, totaling 1,083,449, classified by weekly hours of labor showed, during the last week in August 1937, the following distribution: Less than 40 hours, 16.8 percent; 40 to 45 hours, 44.4 percent; 45 to 48 hours, 28.8 percent; and over 48 hours, 10 percent. In 1936 the average hourly wage for male agricultural workers was 1.15 lire; for industrial workers, including men, women, and children, 1.74 lire.

Table 1 shows, for 35 industries in Italy for June 1937, the percentage of establishments and of workers reporting; the average number of workers employed per day; average earnings per hour per worker; and the average number of hours worked during the month per worker.

For the first 6 months of 1937, the average hourly wage for men, women, and children in Italian industry varied as follows: January, 1.79 lire; February, March, and April, 1.77 lire; May, 2.11 lire; and

<sup>1</sup> Bollettino Mensile di Statistica dell' Istituto Centrale de Statistica del Regno d'Italia, Supplemento ordinario alla "Gazzetta Ufficiale." (Rome), August 21, 1937 (p. 538); September 21, 1937 (p. 618); and October 21, 1937 (pp. 704, 705).

<sup>2</sup> Average exchange value of lira, January to August 1937 = 5.26 cents.

June, 2.17 lire. The notable increase in May and June 1937 was due in part to a resolution of April 30, 1937, which established wage increases of 10 and 12 percent in industry, effective May 9, 1937.<sup>3</sup>

TABLE 1.—*Employment and Hourly Earnings in Italy, June 1937, by Industry*

Industry	Coverage (percent of total)		Average number of workers employed per day	Average earnings per hour per worker	Average hours worked per month per worker
	Estab-lishments represented	Workers reported			
All industries.....	16	52	1,440,106	<i>Lire</i> 2.17	166
Agricultural and other food industries.....	5	26	32,365	1.66	131
Beer and soft drinks.....	14	46	4,291	2.40	181
Dairying and flour industry.....	24	47	18,731	2.01	159
Wines and liquors.....	19	41	4,829	2.02	167
Sugar.....	71	87	10,119	2.81	173
Candy.....	27	60	9,871	2.03	157
Fishing.....	5	40	4,814	1.25	136
Extractive.....	24	55	52,913	2.11	165
Building, road, and hydraulic construction.....	21	35	187,368	2.24	152
Cement (lime and gypsum).....	25	55	22,832	2.17	158
Pottery and brick kilns.....	30	51	36,731	1.97	166
Glass.....	35	56	15,623	2.34	164
Mechanical.....	34	61	273,231	2.71	183
Metallurgical.....	40	78	97,607	2.95	180
Clothing.....	25	36	14,186	1.53	171
Hats.....	20	54	9,752	2.16	131
Tanning.....	38	69	12,728	2.39	170
Shoes and leather goods.....	34	48	22,216	1.85	145
Cotton.....	53	78	161,516	1.55	166
Wool.....	47	80	70,902	1.77	170
Silk:					
Treating and spinning.....	40	57	24,781	.93	142
Weaving.....	41	72	21,157	1.64	170
Flax, hemp, and jute.....	41	74	32,377	1.35	165
Knitting and hosiery.....	50	60	27,624	1.51	166
Miscellaneous textiles.....	41	82	32,887	1.73	174
Artificial textile fibers.....	49	83	25,499	2.02	175
Chemical products.....	31	66	70,998	2.46	173
Paper.....	40	68	31,625	1.88	171
Graphic arts.....	32	49	19,698	2.60	172
Wood.....	22	39	36,911	1.90	156
Water and gas works.....	52	49	3,683	3.15	205
Buttons.....	46	83	6,353	1.24	178
Toys.....	29	33	1,030	1.02	170
Gold and silversmiths.....	43	57	3,039	2.29	164
Clothing accessories and furnishings.....	30	54	12,958	1.73	170
*Rubber and plastic materials.....	46	69	26,861	2.46	170

The percentage distribution of industrial workers in Italy, by industry and by weekly hours of labor, for the last week in August 1937, is shown in table 2, which also gives the total number of workers in each industry for the same period.

<sup>3</sup> Il Lavoro Fascista (Rome), May 1, 1937.

TABLE 2.—Percentage Distribution of Workers in Italy, by Industry and by Weekly Hours, Last Week of August 1937

Industry	Total number of persons employed	Percent working, per week—			
		Less than 40 hours	40-45 hours	45-48 hours	Over 48 hours
All industries.....	1,083,449	16.8	44.4	28.8	10.0
Treating of silk.....	25,599	14.4	82.5	3.0	.1
Silk spinning.....	16,598	24.6	53.6	21.3	.5
Silk weaving.....	25,927	18.7	39.4	37.0	4.9
Rayon.....	28,181	18.8	46.6	22.4	12.2
Cotton.....	190,207	18.6	40.4	35.6	5.4
Wool.....	89,394	19.2	31.4	42.6	6.8
Flax and hemp.....	23,724	22.6	33.9	37.6	5.9
Jute.....	13,582	38.1	38.6	16.5	6.8
Hosiery.....	23,136	18.3	53.4	21.0	7.3
Knitting.....	16,050	26.4	51.6	17.1	4.9
Hats.....	9,346	41.5	47.2	10.0	1.3
Iron.....	70,825	15.6	48.1	28.2	8.1
Welding.....	25,495	9.4	49.3	28.3	13.0
Automobiles.....	31,982	3.8	22.8	56.5	16.9
Automobile body works.....	10,731	10.2	29.6	45.4	14.8
Railway machine shops.....	15,124	16.5	47.1	25.9	10.5
Electrical shops.....	41,976	12.5	40.2	29.4	17.9
Specialized mechanical shops.....	100,688	8.3	38.1	29.9	23.7
Various shops.....	151,336	14.6	51.1	24.2	10.1
Shipyards.....	28,470	5.9	31.6	22.5	40.0
Rubber.....	20,983	13.4	42.9	38.5	5.2
Perphosphate.....	6,878	15.1	66.2	10.9	7.8
Tanning.....	12,468	20.8	61.0	15.9	2.3
Shoes.....	24,639	32.6	52.5	12.0	2.9
Paper.....	28,395	21.7	51.1	21.3	5.9
Cement.....	16,179	14.4	73.6	9.8	2.2
Glass.....	17,013	14.7	59.2	22.0	4.1
Dough products factories.....	18,523	41.7	42.4	10.9	5.0

In table 3 are presented the hourly wages of adult workers in various occupations in 5 large cities of Italy on January 1, 1937.

TABLE 3.—Wages per Hour, Adult Workers in Various Occupations in 5 Large Cities of Italy, January 1, 1937

Industry and occupation	Florence	Milan	Rome	Turin	Venice
	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>	<i>Lire</i>
Building:					
Masons.....	2.75	3.20	3.15	{ 2.90 } 3.25	3.00
Bricklayers.....	2.75	3.20	3.15	3.10	2.85
Carpenters.....	2.95	3.47	3.25	3.25	{ 2.85 } 3.00
Joiners.....	{ 2.10 } 2.65	2.62	3.15	2.89	2.85
Tinners (hydraulic brass workers).....	2.90	{ 3.38 } 3.88	3.25	{ 3.20 } 3.50	2.85 3.00
Painters.....	3.30	3.72	3.15	{ 2.85 } 3.25	3.00 4.70
Structural-iron workers.....	2.30	3.20	3.45	-----	2.35
Concrete workers.....	2.80	3.53	3.30	{ 3.25 } 3.50	2.85 3.00
Laborers.....	1.90	2.02	2.60	2.10	{ 2.10 } 2.20
Mechanical engineering:					
Fitters.....	2.31	2.55	3.25	3.30	2.25
Turners.....	2.31	2.55	3.25	2.60	2.25
Molders.....	2.31	3.20	2.90	3.30	3.00
Patternmakers.....	3.03	-----	(1)	(1)	2.25
Laborers, unskilled.....	1.87	2.08	2.20	2.00	1.80
Furniture:					
Cabinet makers.....	2.90	3.24	3.45	2.77	{ 1.99 } 3.13
Upholsterers.....	2.95	2.93	3.97	2.92	2.89
Polishers.....	2.50	2.46	3.25	2.86	2.77

See footnotes at end of table.

TABLE 3.—Wages per Hour, Adult Workers in Various Occupations in 5 Large Cities of Italy, January 1, 1937—Continued

Industry and occupation	Florence	Milan	Rome	Turin	Venice
<b>Printing:</b>					
Compositors, hand.....	3.50	{ 3.97 4.15 4.33	3.60	4.07	4.15
Compositors, machine.....	3.80	{ 3.91 4.52	3.80	4.43	4.49
Machine minders.....	3.50	{ 3.94 4.11 4.11	3.60	4.05	4.15
Bookbinders.....	3.50	{ 4.11 3.10	2.90	4.04	4.15
Laborers.....	2.25	3.10	2.40	2.36	1.78
<b>Electrical installation:</b>					
Skilled electricians.....	{ 3.18 3.78	{ 2.05 3.13	4.53	3.27	2.62
<b>Electric power distribution:</b>					
Skilled electricians.....	( <sup>1</sup> )		( <sup>1</sup> )	3.08	( <sup>1</sup> )
Unskilled laborers.....			1.45	2.15	( <sup>1</sup> )
<b>Transportation:</b>					
Motormen, street car.....	2.25	2.93	( <sup>1</sup> )	{ 2.50 2.98 2.50 2.98	( <sup>1</sup> )
Motormen, autobus.....	2.25	3.45	( <sup>1</sup> )	{ 2.50 2.98 2.34 2.82	( <sup>1</sup> )
Conductors, street car.....	2.00	2.85	( <sup>1</sup> )	{ 2.34 2.82 2.20 2.52	1.99
Conductors, autobus.....	2.00	2.95	( <sup>1</sup> )	{ 2.20 2.52 2.45 3.25	2.03
Motor drivers.....	2.12	{ 2.45 2.60	3.25 3.90	{ 2.50 2.05 2.10	2.02
Horse drivers.....	2.35		( <sup>2</sup> )	{ 2.05 2.10 1.93	1.72
Porters, freight.....	2.30	2.07	( <sup>3</sup> )	{ 2.00 2.05 2.52	2.09
Maintenance of way men.....	1.85	2.45	3.25	{ 2.05 2.52	1.65
<b>Food:</b>					
Bakers.....	{ 2.60 3.50	2.08 3.48	2.25 3.10	2.19 3.63	2.43 3.40
<b>Local authorities:</b>					
Unskilled laborers.....	{ 1.80 2.30	2.89	2.30	{ 1.78 2.11	2.14

<sup>1</sup> Paid by the month.<sup>2</sup> Daily wage of 6.50 lire, plus a share of receipts varying from 17 to 45 percent.<sup>3</sup> Piecework.

## EARNINGS OF MOTORCAR DRIVERS IN SOVIET UNION, 1937<sup>1</sup>

WHEN the first 5-year plan (1928-32) was promulgated, there were in the Soviet Union only about 18,000 freight and passenger motorcars, and these were mainly of obsolete types. In 1935 the number of motorcars had risen to 260,000, and the motorcar industry of that country had advanced to fifth place in the world and to fourth place in Europe. By the end of 1937 the Soviet Union led all the countries of Europe in the manufacture of freight motorcars and held second place in the world.

Parallel with the growth of motor-vehicle traffic there was an advance in the number and importance of chauffeurs and drivers. These workers were organized first in the Union of Workers of the Public Transport Services. In 1934, however, a special Motor Drivers'

<sup>1</sup>Joint press report of International Transportworkers' Federation and International Marine Officers' Association, Antwerp, Belgium, October 11, 1937.

Union was founded, embracing the drivers of trucks, passenger cars, buses, and taxis, as well as the workers in the repair shops. Because of the growth of the union it was divided into regional sections—one for Moscow and Leningrad, and one for the South, and one for the East.

At the time of its foundation in 1934 the Moscow and Leningrad Motor Drivers' Union had 96,424 members of a total number of 111,460 drivers and repair workers. By January 1, 1937, its membership had risen to 153,000 out of 160,000 workers in that industry in the Soviet Union. The executive organ of the union is the central committee which is elected at the congress, and under which are workers' committees, works councils, group committees, according to the nature of the enterprise. In addition the union has six regional committees.

The motor drivers of Soviet Russia have a 7-hour day; workers engaged in work harmful to health (as in accumulator rooms) a 6-hour day. Drivers and workers engaged in unhealthful work receive a month's paid vacation per year. Woman workers, in case of pregnancy, receive 4 months' leave—two before and two after childbirth—during which the average rate of wages is paid. Pupils at technical schools are given 1 to 1½ months' leave per year. The working of longer hours is punished directly by the union or by a court sentence.

The wages of bus and taxi drivers consist of a basic wage varying according to qualifications, and various allowances for good care of the car, economy in the use of fuel, tires, etc. The basic monthly wages of class 1 bus drivers are 471 rubles<sup>2</sup> and those of class 2 drivers are 421 rubles; for taxi drivers of these classes the rates are 246 and 216 rubles, respectively. In addition, bus drivers have a seniority allowance, which amounts to 10 percent of the basic wage after 2 years' service, and 20 percent after 3 years' service. The allowances are as follows: 33 rubles a month for good care of the vehicle; half a month's wages for driving half a year without a break-down; 60 percent of the value of the gasoline saved; and 65 percent of the value of the saving in tires. In this way a taxi driver's earnings total 400 to 450 rubles a month.

The wages of truck drivers are made up differently. In addition to the basic wage, which again varies according to the qualifications of the driver and the carrying capacity of the car, payment is also made for time taken up by the loading and unloading of the cars. The basic wage of a first-class driver of a 5-ton truck, for instance, is 341 rubles a month, to which are added allowances, totaling 50 to 100 rubles per quarter year, for taking good care of the car and driving without break-downs. The allowances for economy in the use of fuel and tires are the same as for other drivers. Actual earnings of truck drivers average 600 to 700 rubles a month.

<sup>2</sup> Value of ruble as fixed by Soviet law is 20 cents in United States currency.

## INCREASE OF WAGES OF LOW-PAID WORKERS IN SOVIET UNION

THE Soviet of People's Commissars of the U. S. S. R. issued a resolution on November 1, 1937, in accordance with which the lowest paid industrial and transportation workers were to receive increases of wages.<sup>1</sup> The average industrial wage rose from about 190 rubles<sup>2</sup> a month in 1935 to approximately 237 rubles a month in 1936; this average, however, included the salaries of the highest paid officials, engineers, and skilled workers, as well as those of the lowest paid unskilled laborers. The wage scale of the unskilled workers remained at an extremely low level. The majority of skilled workers had by 1935 considerably increased their money income to meet the rising cost of living because of the fact that they had been put on a piece-rate basis, but the average unskilled worker continued to work for the most part on a time basis and earned about 70 rubles a month—a wage rate which had been established in 1929 when staple food and other prices were much lower.

In 1935 70 percent of all working time was paid for on a piece-rate basis whereas in 1928 only about one-half (57.5 percent) was paid on this basis.<sup>3</sup> Although no precise figures have been published concerning the present extent of piece work, it has undoubtedly increased, as in 1936, 78 percent of all work in heavy industry was organized under the piece-work system.<sup>4</sup> The new wage increases tend to close, at least to some extent, the gap between the lowest paid workers and the higher paid piece workers. Beginning November 1, 1937, laborers working on a time basis will receive not less than 115 rubles a month; those on piece work will be paid not less than 110 rubles a month. The total wage fund is to be increased in 1938 for this purpose by 600,000,000 rubles.

<sup>1</sup> Report of Hon. Joseph E. Davies, United States Ambassador to the Soviet Union, November 11, 1937.

<sup>2</sup> Value of ruble as fixed by Soviet law is 20 cents, United States currency.

<sup>3</sup> Pravda No. 275, October 5, 1937.

<sup>4</sup> Plannovoe Khozyastvo (Planned Economy), November 1, 1937.

## *Employment Offices*

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### OPERATIONS OF UNITED STATES EMPLOYMENT SERVICE, DECEMBER 1937

OVER 1,162,000 claims for unemployment-compensation benefits were filed through offices of the United States Employment Service during the first week of January, preliminary reports reveal. This total represents the initial registrations in the 22 States (including the District of Columbia) which inaugurated benefit payment procedure at the beginning of January 1938, as well as the claims received in Wisconsin, where unemployment-compensation benefit payments have been made for some time. This large initial volume of registrations for claims received follows an increasing volume of new applications during December. In the month a total of 452,000 new applications were registered at the Employment Service offices throughout the country. A large number of placements also were made, 178,676 being reported, although declines were reported from the previous month.

The largest number of placements among the 178,676 jobs filled during December were in private employment. Altogether 129,382 private jobs were filled, 65,761 represented placements of men and 63,621 those of women. Private placements during the month were 17.9 percent less than the number reported in the previous month, the greater part of the decline being in placements of men. In addition to seasonal influences and the effects of reduced activity in certain lines of business, a large part of the decrease in placements resulted from the increased load placed upon the facilities of the offices by the expanded registration of workers. Placements on public work at prevailing wages numbered 46,663, nearly all placements being of men. The Employment Service also assisted in making 2,631 assignments on security-wage relief-work jobs.

Nearly 900,000 registrations for work were received at the employment offices during December, 452,035 representing new applications received from persons registering with the Service for the first time, and 441,235 applications representing the renewal of registrations which had been received previously but which had lapsed to an inactive status. The volume of new applications represents a gain of 51.1 percent over the number reported in November and is the highest single month's total received since December 1935.

The increase may be accounted for in large part as being made in anticipation of the inauguration of unemployment-compensation benefit payments in 22 States beginning in January 1938. Although the percentage increase in the volume of new applicants for the country as a whole was 51.1 percent, the increase in volume in those States planning to pay unemployment-compensation benefits equaled 76.7 percent. In the non-benefit-paying States, however, the average increase was only 12.9 percent. Registration with public employment offices is required in connection with the filing of claims for benefits and many claimants registered in advance of the formal filing of their claim. Increases in the volume of new applications were reported in 39 States.

As a result of this large inflow both in new applicants and in registrants previously registered but recently inactive, the active file of the Employment Service rose 10.3 percent during the month to a total of 4,874,924 registrants. The largest increases in the active file were reported among men, a gain of 11.7 percent occurring. This brought the total of male applicants to 3,816,171. Active women registrants numbered 1,058,753.

A summary of the activities during December is given in table 1.

TABLE 1.—Summary of Operations of United States Employment Service, December 1937

Activity	Number	Percent of change from—		
		November 1937	December 1936	December 1935
New applications.....	452,035	+51.1	+47.2	-9.8
Total placements.....	178,676	-20.3	-41.1	-77.7
Private.....	129,382	-17.9	-24.8	+114.0
Public.....	46,663	-26.8	-59.9	-48.7
Relief.....	2,631	-9.6	-82.5	-100.0
Active file.....	4,874,924	+10.3	-22.8	-46.0

Reports of activities of the Employment Service for veterans showed the same general trends in every field as for nonveterans. The increase in the number of veterans in the active file, however, was slightly less than the increase for nonveteran men (table 2).

TABLE 2.—Summary of Veterans' Activities, December 1937

Activity	Number	Percent of change from—		
		November 1937	December 1936	December 1935
New applications.....	17,295	+55.0	+36.8	-20.4
Total placements.....	9,810	-21.3	-48.1	-83.3
Private.....	4,822	-32.7	-35.0	+74.0
Public.....	4,673	-5.4	-55.6	-52.6
Relief.....	315	-10.5	-66.6	-99.3
Active file.....	267,915	+9.7	-22.2	-51.5

TABLE 3.—Operations of United States Employment Service, December 1937

TOTAL											
Division and State	Placements						New appli- cations		Active file		
	Total <sup>1</sup>	Private				Public		Number	Per- cent of change from Nov- ember	Dec. 31	Per- cent of change from Nov. 30
		Number	Per- cent of change from Nov- ember	Regular (over 1 month)	Temp- orary (1 month or less)	Number	Per- cent of change from Nov- ember				
United States.....	178,676	129,382	-17.9	43,740	85,642	46,663	-26.8	452,035	+51.1	4,874,924	+10.3
New England.....	5,776	3,969	-17.9	2,029	1,940	1,700	-30.5	61,893	+174.6	453,599	+22.4
Maine.....	479	151	+46.6	82	69	328	-42.8	6,138	+259.4	26,513	+45.7
New Hampshire.....	822	656	-14.8	458	198	164	-46.8	3,598	+124.5	23,607	+32.3
Vermont.....	749	388	-1.0	185	203	361	-3.7	1,641	+48.1	10,407	+41.6
Massachusetts.....	1,245	877	-30.6	448	429	368	-41.2	19,981	+119.6	260,624	+8.9
Rhode Island.....	588	432	-9.8	198	234	117	-8.6	9,736	+187.6	49,162	+35.0
Connecticut.....	1,893	1,465	-19.7	658	807	362	-16.8	20,799	+269.0	83,286	+61.7
Middle Atlantic.....	19,392	14,614	-23.6	4,926	9,688	4,496	-33.9	87,775	+68.9	1,110,677	+7.6
New York.....	10,903	8,598	-26.3	2,504	6,094	2,233	-42.8	33,211	+47.5	251,597	-1.3
New Jersey.....	3,024	2,623	-23.8	981	1,642	392	+9.5	9,343	-2	182,614	+7.7
Pennsylvania.....	5,465	3,393	-15.6	1,441	1,952	1,871	-26.4	45,221	+124.9	676,466	+11.2
East North Central.....	33,429	26,925	-19.8	10,466	16,459	5,208	-37.0	71,186	+7.0	965,104	+7.5
Ohio.....	9,486	7,039	-19.9	2,643	4,396	1,469	-40.8	16,382	+10.1	277,776	+8.4
Indiana.....	3,037	2,766	-16.8	1,590	1,176	268	-19.3	7,900	-12.7	102,665	-1.6
Illinois.....	13,805	11,571	-17.2	3,857	7,714	2,173	-38.7	16,972	-8.7	300,997	+4.6
Michigan.....	3,278	2,561	-31.8	902	1,659	575	-33.4	14,022	+42.3	147,782	+12.8
Wisconsin.....	3,823	2,988	-19.7	1,474	1,514	723	-31.2	15,910	+12.3	136,784	+14.8
West North Central.....	18,827	12,483	-25.3	5,222	7,261	6,157	-38.1	29,551	+9.8	511,236	+5.1
Minnesota.....	4,502	3,387	-20.3	1,743	1,644	1,062	-46.3	8,259	+21.2	115,566	+3.6
Iowa.....	4,096	2,816	-30.9	1,022	1,794	1,160	-39.1	4,887	+7.5	62,801	+13.2
Missouri.....	3,717	2,210	-24.4	991	1,219	1,506	+2.1	7,539	+16.3	151,854	+6.4
North Dakota.....	1,988	1,806	-23.7	607	1,199	180	-72.8	1,131	-36.2	26,911	+3.9
South Dakota.....	1,264	527	-18.0	111	416	726	-49.9	1,556	+17.3	51,581	-3.0
Nebraska.....	1,645	830	-33.3	413	417	815	-54.4	2,655	-17.8	42,455	+5.6
Kansas.....	1,615	907	-25.2	335	572	708	+2.6	3,524	+26.9	60,068	+5.0
South Atlantic.....	21,577	11,859	-17.8	5,041	6,818	9,222	-23.3	60,848	+89.1	527,263	+12.6
Delaware.....	606	540	-31.4	142	398	60	-58.3	898	+10.2	10,733	+4.7
Maryland.....	1,649	1,011	-11.2	445	566	638	-34.9	14,696	+227.6	53,404	+48.9
District of Co- lumbia.....	1,881	1,704	-7.1	735	969	177	+9.9	2,213	-10.8	26,848	-10.4
Virginia.....	3,681	1,927	+5.9	948	979	1,747	-22.4	4,598	+11.3	47,204	-4.1
West Virginia.....	1,463	994	-30.1	483	511	258	-68.1	6,981	+147.5	80,291	+18.1
North Carolina.....	4,826	3,209	-6.5	1,265	1,944	1,615	-14.4	17,888	+125.9	93,989	+25.9
South Carolina.....	1,557	614	-55.2	267	347	935	-30.4	2,938	+35.8	52,251	+7.8
Georgia.....	4,554	1,860	-29.2	756	1,104	2,691	-22.8	8,696	+40.7	99,995	+11.5
Florida.....	1,360	0	-----	0	0	1,101	+15.4	1,940	+63.0	62,638	+8
East South Central.....	10,043	4,469	-11.9	2,274	2,195	5,498	-18.5	28,069	+66.0	368,954	+6.6
Kentucky.....	2,535	1,070	-12.7	452	618	1,447	-3.0	2,547	-24.0	104,530	+1.1
Tennessee.....	2,856	2,029	+20.4	1,125	904	827	-44.5	8,043	+85.4	116,839	+4.9
Alabama.....	2,126	1,168	-43.9	570	598	903	+37.2	12,576	+109.8	88,360	+26.5
Mississippi.....	2,526	202	+155.7	127	75	2,321	-25.3	4,903	+52.1	59,225	-3.5
West South Central.....	42,305	36,670	-3.9	5,276	31,394	5,571	-7.2	44,287	+54.0	395,143	+6.9
Arkansas.....	1,739	1,481	-43.1	408	1,073	253	-8.7	3,415	+113.3	47,525	+10.7
Louisiana.....	4,367	3,688	+19.3	1,417	2,271	675	+18.8	7,473	+44.2	64,816	+9.3
Oklahoma.....	2,819	1,939	-33.0	349	1,590	878	-29.3	5,876	+61.5	98,955	+7.3
Texas.....	33,380	29,562	-0	3,102	26,460	3,765	-3.9	27,523	+60.1	184,747	+5.0
Mountain.....	9,536	5,542	-30.9	2,446	3,096	3,886	-29.5	14,408	+10.1	171,813	+15.1
Montana.....	1,164	409	-74.3	143	266	751	-36.5	1,158	+13.5	23,333	+12.0
Idaho.....	840	582	-32.6	304	278	258	-26.9	2,170	+43.6	17,862	+38.4
Wyoming.....	485	295	-19.6	83	212	136	-66.7	554	-8.7	6,389	+28.1
Colorado.....	2,792	1,664	-10.2	677	987	1,109	-31.3	4,436	-8.5	59,026	+12.5
New Mexico.....	1,005	448	-49.4	235	213	554	-15.9	1,104	-11.6	24,303	+6.8
Arizona.....	1,900	1,144	-7.9	693	451	730	+16.1	2,600	+34.6	18,394	+18.2
Utah.....	790	601	-34.0	134	467	187	-55.6	1,747	+24.6	18,408	+21.2
Nevada.....	560	399	+32.6	177	222	161	-33.7	639	+21.9	4,098	+15.1
Pacific.....	17,791	12,851	-27.0	6,060	6,791	4,925	-18.4	54,018	+34.4	371,135	+23.4
Washington.....	2,180	942	-29.7	398	544	1,230	-21.2	8,101	+32.8	71,592	+21.0
Oregon.....	1,547	675	-38.9	303	372	871	-3.9	9,370	+103.5	54,945	+28.9
California.....	14,064	11,234	-25.9	5,359	5,875	2,824	-20.9	36,547	+23.9	244,598	+23.0

<sup>1</sup> Includes 2,631 security-wage placements on work-relief projects.

TABLE 3.—Operations of United States Employment Service, December 1937—Continued

Division and State	MEN						New applications	Active file			
	Total <sup>1</sup>	Placements				Number			Percent of change from No- vember	Dec. 31	Percent of change from Nov. 30
		Number	Percent of change from No- vember	Reg- ular (over 1 month)	Temp- orary (1 month or less)						
United States.....	113,841	65,761	-28.0	18,274	47,487	45,692	-27.1	340,026	+68.7	3,816,171	+11.7
New England.....	3,385	1,660	-27.6	894	766	1,645	-31.4	43,281	+186.2	336,252	+22.9
Maine.....	394	70	+62.8	25	45	324	-43.5	4,464	+256.0	22,501	+43.5
New Hampshire.....	536	374	-27.9	272	102	161	-47.0	2,362	+129.8	18,036	+32.6
Vermont.....	524	164	-24.1	74	90	360	-4.0	1,370	+71.5	8,615	+47.8
Massachusetts.....	717	353	-40.8	162	191	364	-41.3	14,601	+134.9	189,987	+9.1
Rhode Island.....	224	122	-31.1	59	63	89	-28.2	5,911	+171.6	34,733	+34.8
Connecticut.....	990	577	-22.3	302	275	347	-13.9	14,573	+299.3	62,380	+62.1
Middle Atlantic.....	9,763	5,301	-35.1	1,753	3,548	4,213	-34.9	67,879	+101.4	876,224	+8.6
New York.....	5,633	3,469	-36.1	965	2,504	2,092	-43.0	25,489	+77.2	194,436	-1.0
New Jersey.....	1,149	750	-34.4	293	457	390	+9.6	7,029	+19.7	147,231	+8.5
Pennsylvania.....	2,981	1,082	-32.5	495	587	1,731	-29.2	35,361	+163.2	534,557	+12.6
East North Central.....	17,287	10,934	-34.1	3,980	6,954	5,111	-37.4	53,061	+22.0	773,647	+9.0
Ohio.....	5,141	2,739	-38.1	887	1,852	1,431	-41.4	12,801	+24.6	224,897	+10.5
Indiana.....	1,330	1,072	-26.9	567	505	256	-20.7	5,454	-1.2	83,016	-7.7
Illinois.....	7,124	4,946	-28.8	1,603	3,343	2,150	-38.6	11,681	+5.7	235,480	+5.1
Michigan.....	1,793	1,086	-46.2	358	728	572	-33.1	11,588	+58.5	123,922	+15.3
Wisconsin.....	1,899	1,091	-37.0	565	526	702	-32.3	11,537	+23.7	106,332	+17.0
West North Central.....	12,400	6,151	-37.3	2,210	3,941	6,069	-38.5	21,177	+23.0	414,297	+6.2
Minnesota.....	2,689	1,595	-29.4	801	1,042	1,042	-46.8	6,236	+51.1	92,389	+5.5
Iowa.....	2,636	1,394	-43.6	433	961	1,123	-40.4	3,523	+16.5	50,758	+15.1
Missouri.....	2,506	1,001	-38.4	345	656	1,504	-2.0	5,321	+32.1	121,553	+7.1
North Dakota.....	1,159	980	-36.7	336	644	177	-72.8	650	-35.1	21,182	+4.1
South Dakota.....	1,006	282	-31.7	36	246	718	-49.9	1,067	+17.8	44,548	-2.2
Nebraska.....	1,167	360	-49.0	136	224	807	-54.6	1,790	-17.9	34,771	+6.6
Kansas.....	1,237	539	-31.9	123	416	698	+2.2	2,590	+32.8	49,096	+5.4
South Atlantic.....	14,832	5,318	-31.3	1,898	3,420	9,104	-23.5	44,545	+106.1	389,923	+14.8
Delaware.....	248	182	-38.1	50	132	60	-53.3	603	+24.3	7,964	+7.8
Maryland.....	1,098	462	-32.9	236	226	636	-34.2	11,065	+28.5	42,525	+50.7
Dist. of Col.....	612	463	-25.3	198	265	149	+4.9	1,432	+7.6	18,144	-7.5
Virginia.....	2,672	958	-5.1	428	530	1,711	-23.7	3,312	+41.5	33,032	-1.7
West Virginia.....	699	243	-60.8	107	136	250	-68.9	5,573	+199.6	66,638	+19.5
North Carolina.....	3,230	1,634	-12.5	416	1,218	1,595	-14.1	11,554	+112.5	64,238	+26.6
South Carolina.....	1,300	370	-59.3	125	245	927	-30.6	2,308	+39.5	38,027	+9.4
Georgia.....	3,682	1,006	-42.1	338	668	2,675	-23.0	7,331	+62.0	73,451	+14.2
Florida.....	1,291	0	.....	0	0	1,101	+16.6	1,367	+68.8	45,904	+1.7
East South Central.....	7,842	2,340	-21.0	1,006	1,334	5,440	-18.9	22,151	+78.2	286,679	+7.6
Kentucky.....	1,860	433	-32.4	136	297	1,416	-3.5	1,663	-17.0	83,663	+1.4
Tennessee.....	1,819	994	+33.6	431	563	825	-44.6	5,934	+112.8	91,484	+5.3
Alabama.....	1,683	754	-50.7	334	420	881	+37.0	10,375	+116.3	69,366	+30.1
Mississippi.....	2,480	159	+224.5	105	54	2,318	-25.4	4,179	+47.0	42,166	-3.5
West South Central.....	29,483	23,911	-9.2	2,207	21,704	5,512	-7.1	33,218	+70.4	306,320	+8.9
Arkansas.....	1,238	983	-49.0	139	844	250	-7.4	2,758	+167.8	38,854	+12.5
Louisiana.....	3,290	2,618	+43.8	700	1,918	668	+18.7	5,692	+70.1	51,633	+11.3
Oklahoma.....	1,892	1,042	-39.8	64	978	849	-29.7	4,633	+74.2	79,891	+8.0
Texas.....	23,063	19,268	-7.6	1,304	17,964	3,745	-3.8	20,135	+61.7	135,942	+7.5
Mountain.....	6,959	3,021	-44.2	1,225	1,796	3,842	-29.9	11,467	+19.0	141,428	+17.4
Montana.....	1,061	316	-78.4	94	222	741	-36.9	921	+22.3	19,216	+14.0
Idaho.....	530	276	-47.6	105	171	254	-27.0	1,820	+51.2	15,754	+30.5
Wyoming.....	319	137	-27.5	25	112	131	-67.7	357	-13.1	5,209	+33.7
Colorado.....	1,963	854	-20.1	274	580	1,097	-31.8	3,346	-4.1	46,750	+14.4
New Mexico.....	831	279	-57.8	113	166	550	-16.2	888	-4.8	20,064	+7.5
Arizona.....	1,346	595	-22.7	425	170	726	+15.8	2,169	+40.9	15,406	+20.6
Utah.....	454	269	-49.2	65	204	183	-56.2	1,466	+59.2	15,588	+25.3
Nevada.....	455	295	+41.1	124	171	160	-33.6	500	+27.9	3,441	+18.3
Pacific.....	11,890	7,125	-40.6	3,101	4,024	4,756	-17.1	43,247	+49.8	291,401	+27.1
Washington.....	1,703	490	-41.7	146	344	1,209	-22.2	6,974	+46.5	62,135	+23.9
Oregon.....	1,299	437	-41.5	141	296	862	-3.9	8,370	+121.9	46,067	+32.7
California.....	8,888	6,198	-40.4	2,814	3,384	2,685	-18.4	27,903	+37.2	183,199	+26.9

<sup>1</sup> Includes 2,388 security-wage placements on work-relief projects.

TABLE 3.—Operations of United States Employment Service, December 1937—Continued

WOMEN

Division and State	Placements				New applications		Active file		
	Total <sup>1</sup>	Private			Number	Percent of change from November	Dec. 31	Percent of change from Nov. 30	
		Number	Percent of change from November	Regular (over 1 month)					Temporary (1 month or less)
United States.....	64,835	63,621	-3.9	25,466	38,155	112,009	+14.9	1,058,753	+5.4
New England.....	2,391	2,309	-9.1	1,135	1,174	18,612	+151.0	117,347	+20.7
Maine.....	85	81	+35.0	57	24	1,674	+268.7	4,012	+59.3
New Hampshire.....	286	282	+12.4	186	96	1,236	+115.0	5,571	+31.4
Vermont.....	225	224	+27.3	111	113	271	-12.3	1,792	+18.1
Massachusetts.....	528	524	-21.6	286	238	5,380	+86.7	70,637	+8.3
Rhode Island.....	364	310	+2.6	139	171	3,825	+216.4	14,429	+35.4
Connecticut.....	903	888	-17.9	356	532	6,226	+213.5	20,906	+60.5
Middle Atlantic.....	9,629	9,313	-15.0	3,173	6,140	19,896	+8.9	234,453	+3.8
New York.....	5,270	5,129	-17.7	1,539	3,590	7,722	-5.1	57,161	-2.4
New Jersey.....	1,875	1,873	-18.6	688	1,185	2,314	-33.3	35,383	+4.7
Pennsylvania.....	2,484	2,311	-4.4	946	1,365	9,860	+47.9	141,909	+6.3
East North Central.....	16,142	15,991	-5.7	6,486	9,505	18,125	-21.4	191,457	+1.6
Ohio.....	4,345	4,300	-1.5	1,756	2,544	3,581	-22.2	52,879	+2
Indiana.....	1,707	1,694	-8.8	1,023	671	2,446	-30.6	19,649	-5.3
Illinois.....	6,681	6,625	-5.6	2,254	4,371	5,291	-29.8	64,617	+2.5
Michigan.....	1,485	1,475	-15.0	544	931	2,434	-4.4	23,860	+1.2
Wisconsin.....	1,924	1,897	-4.6	909	988	4,373	-9.6	30,452	+7.9
West North Central.....	6,427	6,332	-8.3	3,012	3,320	8,374	-13.6	96,939	+1.0
Minnesota.....	1,813	1,792	-10.0	942	850	2,023	-24.8	23,177	-3.7
Iowa.....	1,460	1,422	-11.5	589	833	1,364	-10.4	12,043	+5.5
Missouri.....	1,211	1,209	-6.7	646	563	2,218	-9.7	30,301	+3.9
North Dakota.....	829	826	+1.0	271	555	481	-37.5	5,729	+3.2
South Dakota.....	258	245	+6.5	75	170	489	+16.2	7,033	-7.7
Nebraska.....	478	470	-12.8	277	193	765	-17.7	7,684	+1.1
Kansas.....	378	368	-12.4	212	156	1,034	+14.1	10,972	+3.5
South Atlantic.....	6,745	6,541	-2.2	3,143	3,398	16,303	+54.2	137,340	+6.8
Delaware.....	358	358	-27.4	92	266	295	-10.6	2,769	-3.3
Maryland.....	551	549	+22.3	209	340	3,631	+177.0	10,879	+42.4
District of Columbia.....	1,269	1,241	+2.1	537	704	781	-32.1	8,704	-15.8
Virginia.....	1,009	969	+19.6	520	449	1,286	-28.2	14,172	-9.3
West Virginia.....	764	751	-6.5	376	375	1,408	+46.5	13,653	+12.0
North Carolina.....	1,596	1,575	+6	849	726	6,334	+155.2	29,751	+24.3
South Carolina.....	257	244	-47.4	132	102	630	+23.8	14,224	+3.8
Georgia.....	872	854	-4.0	418	436	1,365	-17.6	26,454	+4.6
Florida.....	69	0	-----	0	0	573	+50.8	16,734	-1.6
East South Central.....	2,201	2,129	+9	1,268	861	5,918	+32.3	82,275	+3.3
Kentucky.....	675	637	+9.1	316	321	884	-34.3	20,867	.0
Tennessee.....	1,037	1,035	+10.0	694	341	2,109	+36.2	25,355	+3.4
Alabama.....	443	414	-25.3	236	178	2,201	+83.7	18,994	+14.8
Mississippi.....	46	43	+43.3	22	21	724	+90.0	17,059	-3.5
West South Central.....	12,822	12,759	+7.9	3,069	9,690	11,069	+19.4	88,823	+7
Arkansas.....	501	498	-26.3	269	229	657	+15.1	8,671	+3.3
Louisiana.....	1,077	1,070	-15.8	717	353	1,781	-3.0	13,183	+2.3
Oklahoma.....	927	897	-22.9	285	612	1,243	+27.0	18,164	+4.7
Texas.....	10,317	10,294	+18.1	1,798	8,496	7,388	+25.6	48,805	-1.5
Mountain.....	2,577	2,521	-3.0	1,221	1,300	2,941	-14.8	30,385	+5.7
Montana.....	103	93	-29.5	49	44	237	-11.2	4,117	+3.9
Idaho.....	310	306	-9.2	199	107	350	+14.0	2,108	+14.6
Wyoming.....	166	158	-11.2	58	100	197	+5	1,180	+8.0
Colorado.....	829	810	+3.4	403	407	1,090	-19.7	12,276	+6.3
New Mexico.....	174	169	-24.9	122	47	216	-31.6	4,239	+3.3
Arizona.....	554	549	+16.3	268	281	431	+9.7	2,988	+7.6
Utah.....	336	332	-12.9	69	263	281	-41.6	2,820	+2.6
Nevada.....	105	104	+13.0	53	51	139	+4.5	657	+8
Pacific.....	5,901	5,726	+1.8	2,959	2,767	10,771	-4.9	79,734	+11.5
Washington.....	477	452	-9.4	252	200	1,127	-15.6	9,457	+4.7
Oregon.....	248	238	-33.5	162	76	1,000	+20.2	8,878	+12.3
California.....	5,176	5,036	+5.7	2,545	2,491	8,644	-5.6	61,399	+12.5

<sup>1</sup> Includes 971 public placements and 243 security-wage placements on work-relief projects.

TABLE 4.—Operations of United States Employment Service, December 1937

Division and State	Placements						New applications		Active file		
	Total <sup>1</sup>	Private				Public		Number	Per cent of change from November	Dec. 31	Per cent of change from Nov. 30
		Number	Per cent of change from November	Regular (over 1 month)	Temporary (1 month or less)	Number	Per cent of change from November				
United States.....	9,810	4,822	-32.7	1,317	3,505	4,673	-5.4	17,295	+55.0	267,915	+9.7
New England.....	389	148	-22.9	74	74	200	+3.1	2,211	+88.7	28,136	+14.4
Maine.....	35	11	+57.1	5	6	24	-4.0	254	+225.6	1,769	+36.8
New Hampshire.....	44	23	-42.5	16	7	21	-4.5	129	+81.7	1,460	+30.4
Vermont.....	22	8	-20.0	5	3	14	-22.2	50	+66.7	452	+33.7
Massachusetts.....	58	22	-48.8	14	8	36	-40.0	927	+43.7	18,229	+6.2
Rhode Island.....	65	15	-31.8	6	9	50	+316.7	238	+142.9	2,083	+22.9
Connecticut.....	165	69	-1.4	28	41	55	-3.5	613	+145.2	4,143	+39.0
Middle Atlantic.....	725	349	-39.6	84	265	345	-29.7	2,567	+81.3	55,020	+5.5
New York.....	392	241	-32.7	38	203	148	-44.2	644	+41.5	11,940	-6.2
New Jersey.....	88	45	-53.1	19	26	34	+47.8	400	+40.4	10,665	+8.0
Pennsylvania.....	245	63	-49.2	27	36	163	-19.7	1,523	+125.3	32,415	+9.7
East North Central.....	1,507	883	-37.1	282	601	543	-26.1	3,071	+26.4	55,771	+8.3
Ohio.....	477	231	-39.4	72	159	194	-23.0	702	+28.3	16,018	+9.7
Indiana.....	142	81	-2.4	32	49	61	+238.9	374	+12.0	6,468	+2
Illinois.....	576	397	-38.6	112	285	178	-37.5	636	-9.8	17,477	+5.2
Michigan.....	141	81	-47.4	26	55	41	-21.2	710	+96.7	8,062	+14.1
Wisconsin.....	171	93	-32.6	40	53	69	-46.1	649	+34.6	7,746	+14.7
West North Central.....	1,854	630	-33.0	162	468	1,133	+35.9	1,286	+40.5	32,802	+6.0
Minnesota.....	233	134	-29.1	71	63	93	-54.9	345	+78.8	8,143	+2.7
Iowa.....	570	239	-39.5	34	205	247	+24.1	234	+11.4	4,352	+15.0
Missouri.....	653	68	-46.9	25	43	585	+383.5	397	+58.2	9,469	+7.5
North Dakota.....	72	54	+17.4	16	38	18	-58.1	33	-19.5	1,284	+4.1
South Dakota.....	89	33	-10.8	1	32	55	-52.6	41	+86.4	3,094	+3
Nebraska.....	87	29	-39.6	7	22	58	-39.6	100	+2.0	2,624	+6.7
Kansas.....	150	73	-24.7	8	65	77	+45.3	136	+36.0	3,836	+5.2
South Atlantic.....	1,012	400	-31.3	131	269	573	-7.9	1,820	+98.3	24,406	+11.8
Delaware.....	29	28	+55.6	3	25	1	-87.5	19	+90.0	544	+8.6
Maryland.....	97	46	-32.4	21	25	51	-33.8	490	+214.1	3,004	+38.7
District of Columbia.....	92	68	-17.1	24	44	24	-11.1	129	+20.6	2,093	-6.8
Virginia.....	193	70	-16.7	30	40	123	+35.2	136	+30.8	1,780	+1.0
West Virginia.....	86	15	-71.7	5	10	48	-50.0	261	+163.4	3,893	+18.4
North Carolina.....	159	73	-18.9	23	50	86	+8.9	413	+96.7	3,218	+21.0
South Carolina.....	69	21	-65.0	3	18	46	-19.3	75	+27.1	1,947	+7.6
Georgia.....	217	79	-37.8	22	57	138	+1.5	249	+81.8	3,632	+15.5
Florida.....	70	0	-----	0	0	56	+9.8	48	+50.0	4,295	+8
East South Central.....	577	162	-31.6	62	100	413	+3.5	942	+73.5	15,040	+6.7
Kentucky.....	233	49	-15.5	16	33	182	+51.7	74	-20.4	4,468	-1.8
Tennessee.....	116	39	-26.4	17	22	77	-42.5	310	+83.4	5,281	+5.5
Alabama.....	151	65	-46.7	26	39	86	+59.3	409	+108.7	3,685	+26.9
Mississippi.....	77	9	+125.0	3	6	68	-25.3	149	+75.3	1,606	-1.8
West South Central.....	1,581	1,073	-30.5	138	935	493	-4.1	1,313	+48.7	18,520	+7.2
Arkansas.....	110	74	-51.0	12	62	36	+20.0	139	+73.8	2,556	+16.1
Louisiana.....	218	157	+33.1	42	115	61	+45.2	273	+69.6	3,642	+6.7
Oklahoma.....	195	117	-43.5	9	108	78	-44.7	217	+85.5	4,657	+6.1
Texas.....	1,058	725	-32.1	75	650	318	+5.6	684	+30.3	7,665	+5.4
Mountain.....	687	296	-20.4	116	180	377	-21.8	765	+25.4	10,051	+18.0
Montana.....	98	18	-74.3	8	10	80	-20.8	67	+28.8	1,244	+20.2
Idaho.....	86	40	+5.3	17	23	46	-6.1	140	+70.7	1,199	+36.1
Wyoming.....	31	14	+16.7	0	14	13	-69.8	21	-27.6	401	+32.8
Colorado.....	162	69	-2.8	25	44	92	-24.6	198	-3.9	3,298	+11.2
New Mexico.....	57	15	-51.6	12	3	41	+20.6	22	-42.1	1,327	+9.0
Arizona.....	154	83	+2.5	44	39	64	+33.3	226	+76.6	1,235	+28.5
Utah.....	45	20	-42.9	3	17	24	-54.7	72	+44.0	1,169	+21.8
Nevada.....	54	37	+8.8	7	30	17	-46.9	19	-24.0	178	-11.0
Pacific.....	1,478	881	-33.4	268	613	596	-11.2	3,320	+46.1	28,169	+21.4
Washington.....	220	79	-4.8	22	57	141	-7	416	+36.8	5,498	+20.1
Oregon.....	160	41	-50.0	7	34	119	-3.3	701	+107.4	4,760	+24.0
California.....	1,098	761	-34.2	239	522	336	-17.2	2,203	+35.1	17,911	+21.2

<sup>1</sup> Includes 315 security-wage placements on work-relief projects.

# *Trend of Employment and Pay Rolls*

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## SUMMARY OF REPORTS FOR DECEMBER 1937

THERE were estimated decreases in December of 276,000 in employment and \$15,300,000 in weekly pay rolls in all manufacturing industries combined and in the 16 nonmanufacturing industries surveyed each month by the United States Bureau of Labor Statistics.

Approximately 747,000 fewer workers were employed by these industries in December 1937 than in the same month a year ago, and weekly pay rolls were \$19,100,000 smaller than in December 1936. The average number employed in the year 1937, however, was over 1,000,000 higher than the average for the year 1936, and weekly pay rolls for 1937 were \$50,900,000 larger.

A preliminary tabulation by the Interstate Commerce Commission showed that class I railroads employed 995,725 workers in December, exclusive of executives, officials, and staff assistants, a decrease of 52,050 since November.

Employment in the executive, judicial, and military services of the Federal Government was greater in December than in the preceding month, while employment in the legislative service decreased. An increase in the employment level occurred on Federal projects under The Works Program, projects operated by the Works Progress Administration, and on work projects of the National Youth Administration and Student Aid. Decreases in the number of workers employed occurred on P. W. A. construction projects, projects financed from regular Federal appropriations, and on projects financed by the Reconstruction Finance Corporation. There was a decrease in the number of workers in the Civilian Conservation Corps.

### *Industrial and Business Employment*

Decreased employment from November to December was shown in 13 of the 16 nonmanufacturing industries surveyed by the Bureau of Labor Statistics and in 79 of the 89 manufacturing industries covered. Pay rolls were lower in 10 of the nonmanufacturing and 72 of the manufacturing industries.

For all manufacturing industries combined, it is estimated that 513,000 wage earners (6.4 percent) were laid off between November and December. Although employment declines in factories have been noted for December in 13 of the preceding 18 years, the present drop

was the largest with but one exception (1920). Because of the shortening of work schedules and the spreading of work, factory pay rolls fell more sharply than employment, the estimated decline in weekly wage disbursements being \$17,600,000 or 9.6 percent.

A comparison with December 1936 shows that the factory employment level was 9.7 percent (797,000) lower in December 1937 and that weekly wage disbursements were 15 percent (\$29,203,000) lower. The average employment index for 1937 was 99.3 on the basis of 100 for 1923-25, this being 8.1 percent above the 1936 level. In terms of workers the difference between the two levels was 624,000. The average 1937 pay-roll index was 98.0, a gain of 18.9 percent compared with the 1936 level. In terms of weekly wage disbursements, the increase was nearly \$31,700,000.

The most pronounced percentage decreases in manufacturing employment from November to December were in industries for which sharp seasonal curtailment is generally reported in December. Beet-sugar plants, having passed the peak of seasonal activity, reduced their forces 42.0 percent and canning and preserving establishments reported a decline of 24.9 percent, reflecting seasonal reductions in operations. Radio and phonograph factories also reported a sharp seasonal decline (20.9 percent) in number of workers. Due to the decrease in production schedules, employment in the automobile industry declined 15.2 percent from November to December and weekly pay rolls fell 27.8 percent. Electric and steam railroad car-building companies reported 15.2 percent fewer employees in December, due primarily to the completion of orders on hand. The decrease of 15.2 percent in employment in the stove industry was somewhat larger than seasonal and the 14.8 percent decline in the stamped and enameled ware industry was also more pronounced than the usual December declines. Plants manufacturing plumbers' supplies reported a decrease (partly seasonal) of 11.0 percent in employment, and firms manufacturing jewelry reported a seasonal decline of 10.3 percent.

Decreases in employment ranging from 9.0 percent to 10.2 percent were reported in marble, slate, and granite works; in steam railroad repair shops; in sawmills; and in factories making brick, tile, and terra cotta; wirework; cottonseed oil, cake, and meal; and rayon.

Other industries of major importance in which substantial declines were shown included blast furnaces, steel works, and rolling mills; foundries and machine shops; men's clothing; glass; silk and rayon goods; cotton goods; and paper and pulp.

Among the 10 manufacturing industries reporting gains in numbers of workers over the month interval were fertilizers (8.3 percent), cane-sugar refining (6.6 percent), cast-iron pipe (4.0 percent), boots and shoes (3.7 percent), and woolen and worsted goods (2.1 percent). The increases in cane-sugar refining and wool were contraseasonal and the

gains in the remaining three industries were larger than seasonal. Smaller increases were reported in the millinery, fur-felt hat, electric railroad repair shop, slaughtering and meat packing, and chewing and smoking tobacco industries.

In the nonmanufacturing group retail trade was the only industry which increased employment to any appreciable extent. Christmas trade was largely responsible for the increase of 9.2 percent in employment in retail stores. The December index of employment in retail trade (100.1) was above the average for the year 1929 (100.0), and was at the highest level of any month since December 1930. The major portion of this increase was in the general merchandising group of retail establishments (department, variety, and general merchandising stores and mail-order houses) in which a gain of 31.8 percent or 284,000 workers was shown. Employment in this group in December 1937 exceeded the level of any preceding month, including December 1929. Employment in other lines of retail trade increased by 1.8 percent or approximately 46,500 workers. There were substantial employment gains in stores dealing in jewelry, apparel, hardware, furniture and housefurnishings, and in wood, coal, and ice firms. Retail lumber and building material dealers reported a greater-than-seasonal decline and retail automobile dealers also reported fewer workers. The important group, retail food stores, showed an employment decrease of 0.5 percent.

Anthracite mines reported a somewhat less-than-seasonal increase of 0.6 percent in employment from November to December and insurance firms hired a small additional number of workers. In the 13 nonmanufacturing industries reporting losses in employment, the most pronounced decline was in the private building-construction industry. While employment in this industry normally recedes from November to December, the current decrease of 17.2 percent is larger than the December decreases shown in 4 of the preceding 5 years for which data are available. Other industries in which substantial declines, largely seasonal, were reported were quarrying and non-metallic mining (12.0 percent) and dyeing and cleaning (4.2 percent). Metal mines further reduced their working forces in December, employment falling 6.6 percent over the month interval. Bituminous-coal mines reported a decrease of 2.0 percent in number of workers and year-round hotels also reported a seasonal curtailment of 1.8 percent. In the remaining industries surveyed (crude-petroleum producing, telephone and telegraph, power and light and manufactured gas, electric railroad and motorbus operation, wholesale trade, laundries, and brokerage) the decreases ranged from 1.6 percent to 0.3 percent.

Aggregate employment in the combined 16 nonmanufacturing industries surveyed showed a net increase (237,000 workers) between November and December, and aggregate weekly pay rolls were

\$2,300,000 greater in December than in the preceding month. Comparisons of the averages for 1937 with the averages for 1936 show that only one industry, anthracite mining, had fewer workers and smaller pay rolls in the current year. The 16 nonmanufacturing industries combined employed 382,600 more workers in 1937 than in 1936 and paid out \$19,246,000 more per week in wages and salaries. The 1937 employment level exceeded the 1936 level by 27.4 percent in metalliferous mining, by 7.9 percent in the telephone and telegraph industry, and by 10.4 percent in private building construction. Gains in average employment between 1936 and 1937 ranging from 4.5 percent to 6.1 percent were shown in wholesale trade, retail trade, electric light and power, hotels, and laundries.

There were 52,050 fewer workers (exclusive of executives, officials, and staff assistants) employed by class 1 railroads in December than in November, according to a preliminary report of the Interstate Commerce Commission. This report showed 995,725 such workers on pay rolls in December, a decrease of 5.0 percent since November. December pay-roll figures were not available when this report was prepared. For November, the wage disbursements were \$154,856,765, a decrease of 8.3 percent, or \$14,081,513, from October.

*Hours and earnings.*—The average hours worked per week by factory wage earners was 34.4 in December, according to reports covering full- and part-time workers. This average was 3.1 percent below the November figure. Average hourly earnings fell 0.1 percent to 66.6 cents and average weekly earnings fell 3.4 percent to \$22.93. Comparisons with December 1936 show that current average hours were 16.5 percent lower; average hourly earnings, 12.2 percent higher; and average weekly earnings, 5.9 percent lower than a year ago.

Of the 14 nonmanufacturing industries for which man-hour data are available, 6 showed gains over the month interval in average hours worked per week and 5 showed increases in average hourly earnings. Average weekly earnings were higher in 6 of the 16 nonmanufacturing industries covered.

A summary of employment and pay-roll indexes and average weekly earnings in December 1937 for all manufacturing industries combined, for selected nonmanufacturing industries, and for class 1 railroads, with percentage changes over the month and year intervals, except in the few industries for which data are not available, is presented in table 1.

TABLE 1.—Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, December 1937 (Preliminary Figures)

Industry	Employment			Pay roll			Average weekly earnings		
	Index December 1937	Percentage change from—		Index December 1937	Percentage change from—		Average in December 1937	Percentage change from—	
		November 1937	December 1936		November 1937	December 1936		November 1937	December 1936
All manufacturing industries combined <sup>1</sup> .....	(1923-25 = 100) 88.6	-6.4	-9.7	(1923-25 = 100) 80.9	-9.6	-15.0	\$22.93	-3.4	-5.9
Class I steam railroads <sup>2</sup> .....	56.4	-5.1	-6.9	(3)	(3)	(2)	(3)	(3)	(3)
Coal mining:.....	(1929 = 100)			(1929 = 100)					
Anthracite.....	50.9	+6	-7.2	47.2	+4.6	-14.8	27.02	+3.9	-8.2
Bituminous.....	80.5	-2.0	-4.0	81.3	+4.4	-4.5	25.49	+6.5	-4
Metalliferous mining.....	70.4	-6.6	+9.4	65.1	-9.0	+12.9	29.43	-2.5	+3.2
Quarrying and nonmetallic mining.....	43.9	-12.0	-11.2	33.4	-20.1	-15.3	19.32	-9.2	-4.7
Crude-petroleum producing.....	76.5	-9	+5.6	69.8	-7	+13.9	34.11	+3	+7.8
Public utilities:									
Telephone and telegraph.....	78.0	-1.1	+5.9	94.7	+3.6	+14.9	31.44	+4.7	+8.5
Electric light and power and manufactured gas.....	96.1	-1.2	+3.0	102.4	-1.4	+9.1	34.38	-.2	+5.9
Electric-railroad and motorbus operation and maintenance.....	72.8	-.5	+4	71.9	+1	+3.7	32.26	+6	+3.2
Trade:									
Wholesale.....	93.3	-.3	+2.5	77.8	-.7	+6.9	30.00	-.4	+4.3
Retail.....	100.1	+9.2	+5	80.6	+7.0	+6.2	21.55	-2.0	+5.6
Generalmerchandising.....	144.7	+31.8	+9	123.5	+27.2	+6.3	18.59	-3.5	+5.3
Other than generalmerchandising.....	88.4	+1.8	+4	71.7	+1.3	+6.2	24.57	-.5	+5.8
Hotels (year-round) <sup>4</sup> .....	87.3	-1.8	+3.9	76.3	-2.0	+9.3	15.25	-.2	+5.1
Laundries.....	87.3	-.8	-.3	79.2	+3	+4.0	17.03	+8	+4.4
Dyeing and cleaning.....	77.1	-4.2	-7	58.9	-6.9	+2.7	19.09	-2.8	+3.4
Brokerage.....	(3)	-1.6	-6.9	(3)	-2.6	-6.1	38.36	-1.0	+9
Insurance.....	(3)	+2	+1.8	(3)	-.8	+4.3	38.91	-.9	+2.5
Building construction.....	(3)	-17.2	-13.9	(3)	-22.7	-10.9	28.53	-6.7	+3.5

<sup>1</sup> Revised indexes; adjusted to 1933 Census of Manufactures.

<sup>2</sup> Preliminary; source—Interstate Commerce Commission.

<sup>3</sup> Not available.

<sup>4</sup> Cash payments only; the additional value of board, room, and tips cannot be computed.

<sup>5</sup> Less than  $\frac{1}{10}$  of 1 percent.

### Public Employment

During the month ending on December 15, 105,000 workers were employed on P. W. A. construction projects. Compared with the period ending in mid-November this represented a decrease of 16,000 or 13.5 percent. Employment reductions on this work, as on other construction programs, was in part seasonal. Federal and non-Federal N. I. R. A. projects employed more than 34,000 workers; and projects financed from E. R. A. A. 1935, 1936, and 1937 funds, 70,000. Pay-roll disbursements on all P. W. A. projects totaled \$8,990,000.

Construction projects financed from regular Federal appropriations employed 181,000 workers. This was a decrease of over 30,000 compared with the period ending in mid-November. The decreases reported on nonresidential building construction, forestry, public

roads, dredging, dikes, and revetments, naval vessels, and miscellaneous projects offset increases in employment on electrification projects, locks and dams, ship construction and repair other than naval vessels, and streets and roads. Employment on residential building-construction projects, underpasses, and water and sewerage construction projects remained virtually the same. Pay-roll disbursements amounted to \$17,162,000, a reduction of \$3,142,000 from the preceding month.

Employment on construction projects financed by the Reconstruction Finance Corporation totaled 4,000 for the period from mid-November to mid-December. Decreases were shown in the number of workers employed on building construction and water and sewerage projects, while an increase occurred on miscellaneous projects. Pay-roll disbursements amounting to \$550,000 were \$52,000 less than during the period ending in mid-November.

With the expansion of The Works Program to meet increasing unemployment, the number of workers engaged on projects of The Works Program was 2,280,000 in December, a net increase of more than 118,000 since November. Of the total number working on this program, 186,000 were employed on Federal projects under The Works Program, 1,668,000 on projects operated by the Works Progress Administration, and 426,000 on work projects of the National Youth Administration and on Student Aid. Pay rolls for the program as a whole totaled \$98,980,000 and were \$1,199,000 greater than in November.

In the regular services of the Federal Government increases in employment were reported in the executive, judicial, and military services, while employment in the legislative service decreased. Of the 889,000 employees in the executive service in December, 114,000 were working in the District of Columbia and 775,000 outside the District. Approximately 85.2 percent of the total number of employees in the executive service were paid from regular appropriations and 7.1 percent from emergency funds. Day labor hired by the Federal Government for construction work (force-account) was 7.7 percent of the total employment in the executive service. Among the departments reporting pronounced increases in employment were the Post Office Department, the Department of Commerce, and the Department of the Interior. Decreases occurred in the Department of Agriculture and the Department of Labor.

Workers employed in the Civilian Conservation Corps numbered 338,000, a decrease of more than 12,000 compared with November. Decreases in employment were registered for all groups of workers with the exception of nurses. There was virtually no change in the number of nurses. Of the total number in camps during the current month 292,000 were enrolled workers, 5,000 reserve officers, 300

nurses, 2,000 educational advisers, and 39,000 other supervisory and technical workers. Pay rolls for all groups of workers exceeded \$16,070,000.

For the month ending December 15, 170,000 workers were employed on road projects financed wholly from State funds, more than 22,000 less than during the preceding period. Of the total, 24,000, or 14 percent, were working on new construction and 146,000, or 86 percent, on maintenance and repairs. Pay-roll disbursements for both types of work amounted to \$10,377,000.

A summary of Federal employment and pay-roll statistics for November and December is given in table 2.

TABLE 2.—Summary of Federal Employment and Pay Rolls, December 1937<sup>1</sup>  
(Preliminary Figures)

Class	Employment		Per-centage change	Pay rolls		Per-centage change
	Decem-ber	Novem-ber		December	November	
Federal services:						
Executive <sup>2</sup> .....	889,550	<sup>3</sup> 821,271	+8.3	\$137,217,360	<sup>3</sup> \$124,664,980	+10.1
Judicial.....	2,008	1,999	+5	514,920	547,685	-6.0
Legislative.....	5,188	5,345	-2.9	1,209,723	1,216,978	-8
Military.....	326,667	323,403	+1.0	25,856,294	24,659,262	+4.9
Construction projects:						
Financed by P. W. A. <sup>4</sup> .....	104,718	121,102	-13.5	8,989,667	10,959,110	-18.0
Financed by R. F. C. <sup>5</sup> .....	4,028	4,421	-8.9	550,135	602,221	-8.7
Financed by regular Federal ap- propriations.....	180,594	211,004	-14.4	17,162,379	20,303,903	-15.5
Federal projects under The Works Program.....	186,133	184,654	+8	10,173,186	10,857,382	-6.3
Projects operated by W. P. A. National Youth Administration:	1,668,085	1,566,697	+6.5	84,570,148	82,714,339	+2.2
Works project.....	137,929	<sup>3</sup> 126,852	+8.7	2,397,423	<sup>3</sup> 2,232,473	+7.4
Student Aid.....	288,131	<sup>3</sup> 283,269	+1.7	1,839,242	<sup>3</sup> 1,976,864	-7.0
Civilian Conservation Corps.....	338,217	350,714	-3.6	16,070,030	16,335,123	-1.6

<sup>1</sup> Includes data on projects financed wholly or partially from Federal funds.

<sup>2</sup> Includes force-account and supervisory and technical employees shown under other classifications to the extent of 109,488 employees and pay-roll disbursements of \$13,385,359 for December and 112,827 employees and pay-roll disbursements of \$13,706,612 for November.

<sup>3</sup> Revised.

<sup>4</sup> Data covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds are included. These data are not shown under The Works Program. Includes 70,228 wage earners and \$5,685,040 pay roll for December; 80,541 wage earners and \$6,814,004 pay roll for November covering P. W. A. projects financed from E. R. A. A. 1935, 1936, and 1937 funds.

<sup>5</sup> Includes 116 employees and \$9,760 pay-roll disbursements for December and 167 employees and \$11,824 pay-roll disbursements for November on projects financed by the RFC Mortgage Co.



## DETAILED REPORTS FOR NOVEMBER 1937

### *Industrial and Business Employment*

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of November, insofar as industrial and business employment

is concerned, are reproduced in this section of the Monthly Labor Review.

Figures on employment and pay rolls are available for the following groups: 89 manufacturing industries; 16 nonmanufacturing industries, including private building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.

#### EMPLOYMENT, PAY ROLLS, HOURS, AND EARNINGS

The indexes of employment and pay rolls, average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in November 1937, as well as in September and October, are presented in table 1. The September and October figures may differ in some instances from those previously published because of revisions necessitated by the inclusion of late reports and other causes.

Average weekly earnings shown in table 1 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As all reporting establishments do not supply man-hour data, average hours worked per week and average hourly earnings are necessarily based on data supplied by a smaller number of reporting firms. The size and composition of the reporting sample varies slightly from month to month and therefore the average hours per week, average hourly earnings, and average weekly earnings shown in the two following tables are not strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movements of earnings and hours over the period shown.

TABLE 1.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, November, October, and September, 1937*

MANUFACTURING

[Indexes are based on 3-year average 1923-25=100 and are adjusted to 1933 Census of Manufactures. Not comparable to indexes published in pamphlets prior to October 1936. Comparable series available on request]

Industry	Employment index			Pay-roll index			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937
All manufacturing industries.....	94.7	100.5	102.1	89.5	100.1	100.1	\$23.92	\$25.39	\$24.92	35.4	37.6	37.4	Cents 66.7	Cents 66.6	Cents 65.8
Durable goods.....	92.4	97.6	97.3	89.9	101.7	99.4	26.80	28.83	28.18	36.4	39.1	38.6	73.3	73.0	72.4
Nondurable goods.....	97.3	103.6	107.3	89.0	98.2	100.9	20.54	21.37	21.30	34.4	35.9	36.1	59.6	59.6	59.0
<i>Durable goods</i>															
Iron and steel and their products, not including machinery.....	98.1	105.8	108.8	85.7	106.8	112.8	24.64	28.50	29.37	32.6	37.0	37.8	76.3	76.8	76.8
Blast furnaces, steel works, and rolling mills ..	108.6	117.5	121.4	92.9	118.9	129.7	25.33	29.96	31.65	30.7	35.7	37.5	82.8	83.7	84.2
Bolts, nuts, washers, and rivets.....	80.5	84.8	87.5	78.7	96.9	96.9	22.34	25.94	25.21	32.3	38.2	37.6	69.2	68.0	67.3
Cast-iron pipe.....	57.9	62.1	64.9	42.6	46.3	48.9	19.68	19.98	20.15	33.5	34.4	35.1	58.5	57.7	56.7
Cutlery (not including silver and plated cutlery) and edge tools.....	88.3	89.8	89.9	80.5	85.9	86.7	22.94	24.06	24.32	38.9	40.4	40.7	60.2	60.6	61.0
Forgings, iron, and steel.....	64.7	71.6	73.0	55.8	67.6	69.6	26.22	28.86	29.23	35.6	39.5	39.7	74.1	73.3	73.9
Hardware.....	91.5	94.4	92.6	99.9	114.5	101.4	24.55	27.26	24.58	35.4	39.3	36.5	69.4	69.3	67.2
Plumbers' supplies.....	89.6	93.6	94.5	63.5	76.2	72.7	22.45	25.83	24.57	33.6	39.0	37.2	66.8	66.4	65.9
Steam and hot-water heating apparatus and steam fittings.....	66.3	73.5	77.4	53.1	66.6	72.2	23.18	26.24	26.97	33.1	37.7	38.7	69.8	69.4	69.7
Stoves.....	91.1	108.3	113.4	65.0	94.2	97.8	21.02	25.59	25.37	32.3	39.3	38.9	65.5	65.4	65.3
Structural and ornamental metalwork.....	75.0	79.1	82.3	74.5	81.6	83.9	27.99	29.04	28.69	39.3	40.9	40.7	71.4	71.2	70.6
Tin cans and other tinware.....	96.8	100.8	114.0	99.8	107.5	122.6	23.07	23.85	23.97	37.5	38.6	39.7	61.9	62.0	60.8
Tools (not including edge tools, machine tools, files, and saws).....	91.7	97.0	98.4	90.3	100.7	103.6	22.95	24.20	24.54	36.7	39.0	39.7	62.2	61.9	61.6
Wirework.....	179.5	187.2	170.3	162.3	202.3	166.8	23.00	26.79	24.47	33.5	37.9	35.6	68.7	70.8	68.7
Machinery, not including transportation equipment.....	121.4	128.9	130.7	121.2	134.2	134.3	27.79	28.86	28.47	37.9	39.9	39.7	72.6	72.0	71.6
Agricultural implements.....	143.0	150.5	147.2	184.5	203.5	189.2	28.74	30.14	28.78	38.9	40.6	38.8	74.1	74.5	74.4
Cash registers, adding machines, and calculating machines.....	133.6	136.3	136.5	141.2	148.4	146.5	32.61	33.61	33.20	39.7	41.1	40.9	82.7	82.5	81.9
Electrical machinery, apparatus, and supplies.....	113.1	119.3	121.3	114.3	124.8	124.1	27.74	28.65	28.05	37.2	39.0	38.4	74.6	73.6	73.1

See footnotes at end of table.

Trend of Employment and Pay Rolls

TABLE 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, November, October, and September 1937—Continued

## MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937
<i>Durable goods—Continued</i>															
<b>Machinery, not including transportation equipment—Continued.</b>															
Engines, turbines, tractors, and water wheels.....	147.8	152.5	153.6	155.0	159.4	158.8	\$32.38	\$32.36	\$32.00	39.3	39.4	39.2	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
Foundry and machine-shop products.....	104.8	110.4	111.9	101.8	113.5	114.2	27.12	28.69	28.42	38.3	40.6	40.4	70.8	70.6	70.3
Machine tools.....	153.9	157.7	157.6	157.9	170.3	165.5	31.63	33.31	32.36	42.9	45.1	44.2	73.8	73.9	73.3
Radios and phonographs.....	156.7	200.5	208.3	123.0	165.5	173.9	20.74	21.67	21.94	33.2	35.6	36.9	62.5	61.1	60.0
Textile machinery and parts.....	77.7	82.8	84.0	70.2	80.9	85.2	24.50	26.26	27.18	37.0	39.3	41.3	66.6	67.2	65.9
Typewriters and parts.....	138.4	147.9	151.2	106.0	128.4	142.8	20.43	23.17	25.20	32.5	37.0	39.5	62.7	62.6	63.8
<b>Transportation equipment</b>	121.8	122.7	107.0	120.0	129.9	104.4	31.03	33.37	30.57	35.1	37.7	35.0	88.9	88.6	87.4
Aircraft.....	795.0	784.0	766.8	725.3	723.0	670.4	27.89	28.17	26.71	39.7	40.6	38.5	70.2	69.5	69.3
Automobiles.....	133.2	133.9	112.5	125.8	138.3	105.6	31.23	34.07	30.93	34.3	37.3	34.2	91.3	91.4	90.4
Cars, electric- and steam-railroad	65.8	67.9	68.5	81.1	82.5	79.7	29.61	29.13	27.89	38.5	38.9	37.4	76.9	74.8	74.7
Locomotives.....	61.6	64.1	64.4	51.4	55.0	55.0	32.47	34.08	33.28	41.4	44.0	43.7	73.5	77.4	76.1
Shipbuilding.....	105.9	106.8	106.2	121.4	124.4	119.0	31.02	31.54	30.34	36.9	37.3	35.8	83.8	83.0	83.2
<b>Railroad repair shops</b>	57.4	59.0	60.4	63.4	64.9	63.1	31.61	31.58	30.05	43.0	43.2	41.0	73.6	73.4	73.4
Electric railroad.....	63.1	63.3	63.4	68.2	68.0	67.7	30.63	30.46	30.24	43.6	43.7	43.6	68.5	68.0	67.9
Steam railroad.....	57.0	58.7	60.2	63.0	64.9	62.9	31.78	31.76	30.02	43.0	43.2	40.8	74.1	73.8	73.8
<b>Nonferrous metals and their products</b>	108.4	113.7	114.1	99.9	109.9	110.1	24.63	26.18	25.95	37.3	39.7	39.1	65.9	65.8	66.0
Aluminum manufactures.....	123.5	104.7	131.0	127.8	115.9	135.7	25.82	27.63	26.05	38.5	40.4	39.5	67.2	68.4	66.0
Brass, bronze, and copper products.....	105.5	113.1	114.8	92.1	106.7	113.2	24.77	26.76	27.94	33.7	36.7	38.1	73.4	73.0	73.4
Clocks and watches and time-recording devices.....	125.0	127.5	127.0	122.3	132.7	128.0	22.22	23.62	22.91	38.6	41.1	40.1	57.6	57.5	57.2
Jewelry.....	100.3	106.4	101.1	78.8	89.4	81.7	24.09	25.80	24.73	40.3	43.2	40.7	58.9	59.2	60.0
Lighting equipment.....	95.6	100.1	97.2	94.4	104.3	98.5	25.07	26.18	25.50	38.3	39.9	39.1	65.4	65.7	65.4
Silverware and plated ware.....	79.3	80.8	79.5	72.6	80.7	81.4	24.84	27.10	27.81	38.8	42.4	43.5	64.1	64.3	64.7
Smelting and refining—copper, lead, and zinc.....	88.0	92.1	93.0	83.8	90.9	88.6	27.90	29.10	28.01	39.9	41.7	40.2	69.8	69.8	69.7
Stamped and enameled ware.....	144.0	154.0	153.2	141.5	156.4	149.2	22.76	23.70	22.69	37.1	39.1	37.3	61.2	60.6	60.9
<b>Lumber and allied products</b>	63.5	69.5	71.8	55.1	65.3	68.2	19.48	21.23	21.41	37.2	40.3	40.3	52.8	53.3	53.8
Furniture.....	79.5	86.8	89.1	65.8	76.8	78.2	19.66	21.11	20.85	37.0	40.4	40.5	53.2	52.4	51.6
Lumber:															
Millwork.....	51.2	54.3	55.6	46.3	51.7	53.2	20.58	21.90	22.09	37.7	40.2	40.8	54.7	54.5	54.3
Sawmills.....	47.6	52.7	54.7	40.4	49.4	52.6	18.99	21.13	21.65	37.3	40.2	40.0	52.0	53.6	55.0

Stone, clay, and glass products.....	68.2	71.4	72.7	63.6	69.6	69.9	23.71	24.74	24.38	36.5	33.7	35.3	64.4	63.9	64.3	
Brick, tile, and terra cotta.....	45.5	50.0	52.3	36.4	44.2	46.4	19.18	21.19	21.64	35.8	39.6	39.4	53.4	53.3	54.9	
Cement.....	66.1	69.2	69.9	67.3	72.2	72.8	25.73	26.34	26.20	38.2	39.1	38.5	67.4	67.3	68.0	
Glass.....	106.7	109.9	111.1	111.9	119.2	118.7	25.21	26.10	25.68	35.8	37.5	36.8	70.5	70.0	70.0	
Marble, granite, slate, and other products.....	42.1	43.4	44.9	34.6	37.8	39.8	23.88	25.37	25.71	36.2	38.7	38.7	66.3	66.2	66.9	
Pottery.....	76.9	78.6	77.0	70.0	72.9	66.8	24.05	24.29	22.71	37.9	39.8	39.4	63.1	62.1	61.6	
<i>Nondurable goods</i>																
Textiles and their products.....	92.0	98.8	101.6	71.5	84.2	87.1	15.37	16.87	16.99	30.6	32.8	33.2	50.9	52.1	51.6	
Fabrics.....	87.2	91.9	94.9	71.5	81.0	85.3	15.24	16.45	16.79	31.5	33.6	34.4	49.2	49.4	49.2	
Carpets and rugs.....	85.7	88.7	99.4	49.7	64.2	84.5	13.77	17.07	20.05	21.2	26.4	30.8	64.9	64.6	65.0	
Cotton goods.....	91.1	93.9	98.4	76.8	85.1	92.5	13.25	14.30	14.84	31.5	33.7	34.9	42.1	42.4	42.4	
Cotton small wares.....	91.2	98.4	97.8	79.0	96.8	95.9	16.10	18.35	18.02	33.1	37.1	37.0	50.0	50.3	49.6	
Dyeing and finishing textiles.....	108.8	112.2	110.5	89.0	94.6	94.9	19.87	20.49	20.86	34.4	35.3	36.3	57.6	57.5	57.1	
Hats, fur-felt.....	83.0	83.0	85.5	61.0	62.0	69.2	19.96	20.20	21.92	28.2	26.7	30.8	71.6	72.4	70.9	
Knit goods.....	111.9	116.3	116.5	112.3	122.8	116.9	17.40	18.33	17.43	33.7	35.6	34.3	52.4	52.3	52.0	
Silk and rayon goods.....	67.6	75.4	79.9	50.8	62.4	68.2	14.54	16.02	16.55	31.7	34.2	35.1	46.2	46.9	46.9	
Woolen and worsted goods.....	59.8	68.4	70.4	42.8	52.8	57.6	16.43	17.73	18.82	27.7	30.3	32.1	59.4	58.6	58.9	
Wearing apparel.....	101.0	112.1	114.4	68.6	87.0	87.0	15.74	17.99	17.53	28.9	31.3	30.8	54.3	57.4	56.3	
Clothing, men's.....	90.7	103.5	108.7	61.1	80.2	83.9	15.82	18.14	18.12	26.1	29.5	29.8	61.1	62.1	61.7	
Clothing, women's.....	134.9	150.4	152.2	84.2	110.1	106.3	17.25	20.29	18.94	29.2	31.2	30.1	55.5	61.7	58.4	
Corsets and allied garments.....	88.1	89.7	88.9	82.1	87.3	84.2	15.52	16.17	15.62	33.6	33.3	32.6	46.0	47.8	47.5	
Men's furnishings.....	130.4	135.9	127.7	103.8	111.8	95.4	14.36	14.79	13.43	32.8	35.6	31.6	37.3	37.6	38.1	
Millinery.....	43.8	52.0	56.7	26.7	35.5	49.0	17.40	20.30	25.05							
Shirts and collars.....	114.6	120.7	119.2	102.6	112.5	103.0	13.14	13.97	12.88	33.1	34.7	32.8	40.4	40.8	40.4	
Leather and its manufactures.....	80.3	89.5	92.7	53.8	66.3	71.6	15.48	17.14	17.94	28.6	31.8	32.9	54.5	54.2	55.0	
Boots and shoes.....	80.8	90.7	94.0	46.0	58.7	64.5	13.72	15.50	16.49	26.9	30.4	31.7	52.3	51.9	53.0	
Leather.....	82.9	89.6	92.5	82.7	95.0	98.6	22.13	23.60	23.70	35.2	37.5	37.7	62.8	63.3	63.0	
Food and kindred products.....	114.6	125.0	137.8	115.9	125.0	133.2	24.46	23.77	23.03	40.3	40.9	40.5	80.2	58.8	57.0	
Baking.....	135.2	138.4	136.7	130.3	137.3	136.1	25.10	25.84	25.90	41.4	43.0	42.8	61.1	60.6	60.8	
Beverages.....	194.3	202.7	223.3	212.7	222.4	253.0	32.22	32.36	33.27	38.8	39.2	40.2	84.2	83.5	83.2	
Butter.....	83.7	86.4	91.6	67.2	70.3	73.8	22.42	22.71	22.35							
Canning and preserving.....	118.7	125.9	131.5	111.4	127.7	130.1	15.74	16.24	15.75	33.8	36.3	36.9	47.8	46.5	44.3	
Confectionery.....	91.8	95.5	85.4	89.8	98.4	89.0	17.63	18.62	18.79	38.7	41.3	40.8	45.6	45.5	46.5	
Flour.....	76.0	76.9	76.3	76.7	80.9	80.7	26.10	27.30	27.15	43.7	45.6	45.3	58.8	59.0	59.2	
Ice cream.....	65.1	68.8	82.2	61.5	63.9	74.0	29.16	28.54	27.83	46.5	46.1	46.3	61.3	60.1	59.7	
Slaughtering and meat packing.....	90.5	89.4	86.8	102.3	100.1	95.0	28.31	28.01	28.35	41.1	40.8	41.1	68.1	68.8	69.1	
Sugar, beet.....	252.1	253.0	91.6	267.4	224.3	100.7	25.09	20.97	26.01	49.6	41.6	44.7	60.8	52.4	59.6	
Sugar refining, cane.....	70.4	68.8	67.2	66.8	64.2	61.1	26.41	25.97	24.96	40.9	38.5	36.2	62.8	66.8	69.0	
Tobacco manufactures.....	62.9	62.6	62.1	57.2	57.9	56.5	18.72	17.03	17.12	37.4	37.0	37.0	44.9	45.1	46.0	
Chewing and smoking tobacco and snuff.....	56.7	56.2	55.8	63.8	68.2	70.0	17.06	18.20	18.81	33.5	35.8	37.2	51.1	51.3	51.0	
Cigars and cigarettes.....	63.6	63.3	62.8	56.4	56.6	54.9	16.66	16.80	16.79	37.9	37.9	37.0	44.2	44.4	45.5	
Paper and printing.....	106.4	107.9	107.7	101.5	105.1	103.7	27.48	28.26	27.89	37.7	38.7	38.4	75.7	75.6	75.1	
Boxes, paper.....	103.3	104.8	103.8	102.6	108.9	103.3	20.42	21.35	20.53	39.0	40.8	39.2	52.8	52.7	52.8	
Paper and pulp.....	113.6	117.3	119.1	105.4	116.7	117.6	23.26	24.90	24.71	36.9	39.5	39.2	63.2	63.1	63.0	
Printing and publishing:																
Book and job.....	98.3	98.8	98.9	93.1	92.6	92.8	29.96	29.71	29.69	38.7	38.3	38.6	78.5	78.5	77.9	
Newspapers and periodicals.....	107.0	107.5	105.9	106.1	107.3	103.8	37.42	37.59	37.03	37.1	37.1	36.9	97.1	97.4	96.5	

See footnotes at end of table.

TABLE 1.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, November, October, and September, 1937—Continued*

## MANUFACTURING—Continued

Industry	Employment index			Pay-roll index			Average weekly earnings <sup>1</sup>			Average hours worked per week <sup>1</sup>			Average hourly earnings <sup>1</sup>		
	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937	November 1937	October 1937	September 1937
<i>Nondurable goods—Continued</i>															
<b>Chemicals and allied products, and petroleum refining</b> .....	122.7	126.5	128.6	132.1	137.5	139.0	\$28.07	\$28.32	\$28.19	38.5	39.2	39.0	<i>Cents</i> 73.8	<i>Cents</i> 73.4	<i>Cents</i> 74.0
Other than petroleum refining.....	122.4	126.7	128.9	129.6	136.1	137.7	25.59	25.99	25.92	39.5	40.3	40.2	65.8	65.4	66.1
Chemicals.....	129.8	135.2	137.4	141.7	150.6	150.9	30.25	30.84	30.47	38.7	39.6	38.9	78.2	77.9	78.4
Cottonseed—oil, cake, and meal.....	121.0	127.1	120.7	113.0	118.9	112.4	13.18	13.14	13.14	53.5	54.1	53.2	24.8	24.5	24.9
Druggists' preparations.....	112.5	114.8	114.1	125.8	128.9	127.3	24.33	24.47	24.29	39.2	39.6	40.8	58.3	58.4	57.8
Explosives.....	95.4	97.3	97.6	106.6	110.5	106.4	31.64	32.18	30.89	39.7	40.5	38.9	79.8	79.5	79.5
Fertilizers.....	75.3	80.5	84.6	77.4	83.2	97.2	17.02	17.16	19.16	38.6	38.8	41.1	44.1	44.2	46.7
Paints and varnishes.....	128.0	131.6	132.4	124.8	134.1	131.6	26.95	28.17	27.53	38.8	40.5	39.6	69.6	69.7	69.6
Rayon and allied products.....	374.0	387.5	407.1	360.3	374.9	393.6	23.79	23.89	23.88	37.0	37.4	38.4	64.4	63.8	64.6
Soap.....	100.4	102.8	103.1	116.9	121.1	122.1	28.23	28.55	28.68	39.2	40.0	39.9	72.4	71.9	72.7
Petroleum refining.....	123.9	125.7	127.2	140.4	142.3	143.1	34.42	34.43	34.16	35.8	35.9	35.5	97.0	96.9	97.4
<b>Rubber products</b> .....	90.9	97.7	98.0	82.0	94.3	97.4	24.11	25.83	26.64	31.6	33.8	34.5	79.0	79.0	79.1
Rubber boots and shoes.....	71.9	77.5	78.7	62.1	70.4	75.9	21.70	22.83	24.24	35.9	37.5	40.0	60.4	60.9	60.6
Rubber goods, other than boots, shoes, tires, and inner tubes.....	128.2	137.3	134.7	121.7	139.5	132.6	21.93	23.61	22.60	36.0	38.8	37.5	60.9	61.4	60.6
Rubber tires and inner tubes.....	80.8	87.0	88.3	72.9	84.3	90.4	26.26	28.24	29.76	27.2	29.3	30.8	97.2	96.6	97.0

## NONMANUFACTURING

[Indexes are based on 12-month average 1929=100]

<b>Coal mining:</b>															
Anthracite.....	50.5	51.0	48.2	45.1	51.0	31.5	\$26.00	\$29.14	\$18.99	28.3	31.4	20.8	90.7	91.2	90.8
Bituminous.....	82.1	82.9	80.5	77.8	86.0	77.7	24.00	26.25	24.37	26.9	29.6	27.5	87.8	88.7	89.0
<b>Metalliferous mining</b> .....	75.4	82.9	84.1	71.6	81.7	82.2	30.05	31.26	31.22	43.1	44.2	43.6	69.9	70.8	71.6
Quarrying and nonmetallic mining.....	49.9	53.3	54.7	41.7	49.3	50.1	21.48	23.70	22.86	38.9	42.6	42.1	55.0	55.4	53.9
Crude-petroleum producing.....	77.2	77.5	78.2	70.2	69.9	71.2	34.12	33.64	33.93	39.9	39.9	40.0	84.3	83.3	83.9



INDEXES OF EMPLOYMENT AND PAY ROLLS, JANUARY 1936 TO  
NOVEMBER 1937

Indexes of employment and pay rolls are given in tables 2 and 3 for all manufacturing industries combined, for the durable- and non-durable-goods groups of manufacturing industries, and for 13 non-manufacturing industries, including 2 subgroups under retail trade, by months, from January 1936 to November 1937, inclusive. The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to November 1937.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 89 manufacturing industries and cover wage earners only. The base used in computing these indexes is the 3-year average, 1923-25, as 100. In November 1937 reports were received from 25,315 manufacturing establishments employing 4,684,590 workers, whose weekly earnings were \$112,034,042. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 89 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, dyeing and cleaning, and building construction cover wage earners only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, including executives. For crude-petroleum producing they cover wage earners and clerical field force.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

# EMPLOYMENT & PAY ROLLS ALL MANUFACTURING INDUSTRIES 1923-25=100



TABLE 2.—Indexes of Employment and Pay Rolls in All Manufacturing Industries Combined and in the Durable- and Nondurable-Goods Groups <sup>1</sup>

[Adjusted to 1933 Census of Manufactures—3-year average 1923-25=100]

Month	Manufacturing											
	Total				Durable goods <sup>2</sup>				Nondurable goods <sup>3</sup>			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	86.8	96.5	73.8	90.7	78.7	90.4	66.9	86.6	95.4	103.0	82.5	96.0
February.....	86.9	99.0	73.7	95.8	78.6	93.2	66.6	92.5	95.8	105.2	82.7	99.9
March.....	87.9	101.1	77.6	101.1	80.2	96.4	71.8	100.0	96.1	106.1	84.9	102.6
April.....	89.1	102.1	79.3	104.9	82.3	98.6	76.0	106.4	96.3	105.9	83.5	102.9
May.....	89.8	102.3	80.8	105.2	84.0	99.9	78.5	107.5	96.0	104.8	83.8	102.3
June.....	90.1	101.1	81.1	102.9	84.7	98.8	79.0	104.6	95.9	103.5	83.9	100.8
July.....	91.2	101.4	80.2	100.4	84.6	98.9	75.9	100.7	98.2	104.1	85.6	100.0
August.....	93.5	102.3	83.5	103.8	84.7	98.1	77.0	104.0	102.8	106.9	91.8	103.5
September.....	95.5	102.1	83.6	100.1	85.7	97.3	77.2	99.4	105.9	107.3	91.6	100.9
October.....	96.7	<sup>4</sup> 100.5	89.0	<sup>4</sup> 100.1	89.2	<sup>4</sup> 97.6	85.3	101.7	104.7	<sup>4</sup> 103.6	93.7	<sup>4</sup> 98.2
November.....	96.9	94.7	90.7	89.5	91.0	92.4	88.9	89.9	103.3	97.3	92.9	89.0
December.....	98.1	-----	95.2	-----	92.7	-----	93.4	-----	104.0	-----	97.5	-----
Average.....	91.9	-----	82.4	-----	84.7	-----	78.0	-----	99.5	-----	87.9	-----

<sup>1</sup> Comparable indexes for earlier years will be found in the April 1937 issue of the Monthly Labor Review.<sup>2</sup> Includes the following groups of manufacturing industries: Iron and steel; machinery; transportation equipment; railroad repair shops; nonferrous metals; lumber and allied products; and stone, clay, and glass products.<sup>3</sup> Includes the following groups of manufacturing industries: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.<sup>4</sup> Revised.

TABLE 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1936 to November 1937<sup>1</sup>

[12-month average 1929=100]

Month	Anthracite mining				Bituminous coal				Metalliferous mining				Quarrying and non-metallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	59.1	54.1	54.4	42.7	79.8	84.6	70.6	79.9	54.2	66.8	41.7	58.4	39.4	45.7	25.5	34.6
February.....	61.2	52.7	76.7	41.0	80.2	84.8	78.4	82.4	55.5	69.6	42.8	63.4	36.9	46.7	23.9	37.8
March.....	52.5	48.9	42.6	37.8	80.4	85.9	70.2	88.4	55.9	73.1	45.1	70.6	42.2	49.1	30.9	41.3
April.....	49.8	54.0	28.6	63.9	77.5	72.6	62.6	54.4	57.5	76.2	45.5	76.9	48.4	53.1	36.1	48.1
May.....	54.9	51.0	56.3	44.4	76.2	77.8	62.2	67.8	60.8	78.5	47.7	79.8	52.0	54.9	42.1	51.4
June.....	51.2	51.1	42.0	50.9	75.7	77.9	61.5	71.2	61.9	79.5	48.2	77.7	53.5	55.4	44.0	52.6
July.....	48.4	45.0	37.2	35.2	75.5	75.8	62.6	66.4	61.3	82.0	46.1	77.8	54.4	55.5	43.9	50.8
August.....	41.1	41.2	31.4	27.2	76.9	78.8	65.4	73.8	61.6	83.4	48.2	83.0	55.3	54.9	46.2	53.2
September.....	47.6	48.2	34.9	31.5	78.2	80.5	71.0	77.7	63.1	84.1	50.0	82.2	54.9	54.7	44.8	50.1
October.....	49.9	51.0	48.5	51.0	81.1	82.9	79.2	86.0	64.2	82.5	53.7	81.7	54.6	53.3	46.2	49.3
November.....	51.5	50.5	40.3	45.1	82.3	82.1	80.7	77.8	62.9	75.4	54.6	71.6	52.6	49.9	43.5	41.7
December.....	54.8	-----	55.4	-----	83.9	-----	85.0	-----	64.4	-----	57.7	-----	49.4	-----	39.4	-----
Average.....	51.8	-----	45.7	-----	79.0	-----	70.8	-----	60.3	-----	48.4	-----	49.5	-----	38.9	-----

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power, and manufactured gas				Electric-railroad and motorbus operation and maintenance <sup>2</sup>			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	71.1	72.7	55.7	61.2	70.1	74.4	75.0	83.6	86.1	92.1	84.8	92.3	70.7	72.5	65.0	68.0
February.....	70.8	73.5	55.7	64.1	69.9	74.8	76.2	82.2	86.1	92.2	84.7	93.6	71.7	72.5	68.3	68.7
March.....	70.9	74.2	56.0	63.9	70.2	75.4	77.2	87.2	86.8	92.4	85.9	94.8	71.2	72.6	67.8	69.2
April.....	71.3	75.8	57.1	67.7	70.8	76.6	76.0	86.3	88.0	93.1	86.2	95.5	71.3	72.9	65.9	69.4
May.....	72.7	76.7	58.0	68.2	71.6	77.7	78.5	89.5	89.0	94.6	87.0	97.9	71.5	73.3	66.1	70.1
June.....	73.7	78.5	58.9	70.4	72.1	78.5	77.4	88.6	90.4	96.3	88.1	100.4	71.7	73.3	66.8	71.1
July.....	75.4	78.5	60.4	70.5	73.1	79.7	79.9	92.1	91.7	97.5	89.8	102.2	72.4	73.4	66.5	70.8
August.....	75.0	79.3	59.7	70.8	73.5	79.8	81.2	92.1	93.1	98.3	89.8	102.6	72.4	73.4	66.5	73.1
September.....	74.5	78.2	60.4	71.2	73.7	80.1	78.8	92.3	93.5	98.6	91.4	104.0	72.8	73.7	66.4	71.6
October.....	73.6	77.5	59.6	69.9	73.8	79.9	83.1	94.3	94.0	98.5	92.7	105.3	73.1	73.4	67.7	71.4
November.....	73.2	77.2	60.1	70.2	73.7	79.1	81.6	91.1	93.5	97.3	91.8	103.8	73.0	73.2	69.7	71.9
December.....	72.4	-----	61.3	-----	73.6	-----	82.4	-----	93.2	-----	93.8	-----	72.5	-----	69.3	-----
Average.....	72.9	-----	58.6	-----	72.2	-----	78.9	-----	90.5	-----	88.8	-----	72.0	-----	67.2	-----

<sup>1</sup> Comparable indexes for earlier years for all of these industries, except year-round hotels, will be found in the February 1935 and subsequent issues of the Monthly Labor Review. Comparable indexes for year-round hotels will be found in the September 1935 issue of the Monthly Labor Review.

<sup>2</sup> Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

TABLE 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1936 to November 1937—Continued

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	85.6	90.7	66.6	72.6	80.4	85.4	62.1	68.0	88.2	95.1	76.4	83.8	78.4	82.9	59.1	64.7
February.....	85.0	92.0	66.6	74.1	79.7	85.2	61.6	67.9	85.1	93.9	73.9	82.9	78.3	82.9	59.1	64.8
March.....	85.6	92.1	69.0	75.0	81.9	88.5	63.5	70.5	90.9	100.3	77.3	87.6	79.5	85.4	60.7	67.0
April.....	85.7	91.9	67.9	75.4	85.2	88.8	65.3	71.9	97.4	99.6	81.0	89.1	82.0	86.0	62.1	68.3
May.....	84.6	90.8	68.2	76.1	85.0	89.9	65.8	73.5	95.5	102.1	80.8	91.5	82.3	86.7	62.7	69.8
June.....	84.6	90.3	68.4	76.3	85.5	90.5	66.4	74.4	96.4	102.9	81.3	92.5	82.6	87.2	63.3	70.6
July.....	85.4	90.6	69.0	76.9	83.2	87.6	65.1	72.8	90.7	95.9	77.3	87.3	81.2	85.4	62.6	69.8
August.....	86.3	91.8	69.7	79.0	82.4	86.2	64.4	72.3	89.4	93.8	76.4	85.7	80.5	84.2	61.9	69.5
September.....	88.0	93.0	70.5	78.3	86.6	90.7	66.6	74.4	98.5	103.7	82.8	92.4	83.5	87.3	63.3	70.7
October.....	89.0	94.0	71.5	79.3	88.7	92.1	68.3	75.9	103.9	108.1	87.2	96.2	84.7	87.9	64.4	71.7
November.....	89.7	93.5	73.1	78.3	90.1	91.7	70.1	75.3	109.3	109.8	91.4	97.1	85.1	86.9	65.7	70.8
December.....	91.0	-----	72.8	-----	99.6	-----	75.9	-----	143.4	-----	116.2	-----	88.1	-----	67.6	-----
Average.....	86.7	-----	69.4	-----	85.7	-----	66.3	-----	99.1	-----	83.5	-----	82.2	-----	62.7	-----

Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936	1937
January.....	81.9	85.5	64.9	70.4	81.5	88.5	68.3	76.4	71.5	76.8	51.6	55.6
February.....	82.8	86.4	66.5	72.5	81.2	88.6	67.8	76.3	70.3	76.2	49.0	54.6
March.....	82.8	86.9	66.0	72.7	82.1	88.7	69.9	77.5	74.7	81.1	56.4	61.7
April.....	83.2	88.4	66.3	74.5	83.2	88.5	70.9	78.5	81.8	84.9	64.1	68.8
May.....	84.1	87.7	67.0	73.6	85.5	90.3	75.6	81.4	87.3	88.6	72.2	73.9
June.....	83.9	86.9	66.6	74.0	87.2	93.5	75.8	85.5	87.5	92.1	69.2	79.2
July.....	83.3	86.1	66.0	73.3	90.5	95.2	79.0	86.9	85.5	86.0	64.8	68.0
August.....	83.2	86.8	66.1	74.4	89.6	94.2	76.7	86.0	83.5	84.9	63.2	69.0
September.....	84.2	88.1	67.5	76.1	89.6	93.7	76.6	84.4	86.7	86.7	66.1	72.8
October.....	85.4	89.2	69.6	77.7	87.6	89.9	75.3	81.5	86.5	85.3	66.7	71.4
November.....	84.6	88.9	69.6	77.9	87.0	88.0	74.5	79.2	81.3	80.0	60.2	62.9
December.....	84.0	-----	69.8	-----	87.6	-----	76.1	-----	77.7	-----	57.3	-----
Average.....	83.6	-----	67.2	-----	86.1	-----	73.9	-----	81.2	-----	61.7	-----

## TREND OF INDUSTRIAL AND BUSINESS EMPLOYMENT, BY STATES

A comparison of employment and pay rolls, by States and geographic divisions, in October and November 1937, is shown in table 4 for all groups combined, and for all manufacturing industries combined, based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 89 manufacturing industries presented in table 1. The totals for all groups combined include all manufacturing industries, each of the nonmanufacturing industries presented in table 1 except building construction, and seasonal hotels.

TABLE 4.—Comparison of Employment and Pay Rolls in Identical Establishments in October and November 1937, by Geographic Divisions and by States

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll November 1937	Percentage change from October 1937	Amount of pay roll (1 week) November 1937	Percentage change from October 1937	Number of establishments	Number on pay roll November 1937	Percentage change from October 1937	Amount of pay roll (1 week) November 1937	Percentage change from October 1937
				<i>Dollars</i>					<i>Dollars</i>	
New England.....	13,982	868,906	-5.4	19,350,140	-8.5	3,578	587,633	-7.2	12,253,884	-12.0
Maine.....	797	50,184	-7.5	966,099	-14.7	292	39,130	-8.9	699,562	-18.2
New Hampshire.....	615	36,015	-5.3	669,543	-9.8	207	28,268	-6.6	486,891	-12.8
Vermont.....	476	16,693	-8.7	342,829	-17.6	148	9,823	-10.8	193,463	-21.8
Massachusetts.....	8,518	470,998	-5.5	10,842,080	-5.6	1,758	271,167	-8.6	5,322,067	-9.0
Rhode Island.....	1,270	86,609	-5.8	1,702,711	-16.6	427	67,088	-6.9	1,195,150	-21.1
Connecticut.....	2,506	208,407	-3.9	4,826,878	-9.5	746	172,167	-4.7	3,886,751	-11.2
Middle Atlantic.....	32,649	2,229,394	-3.4	57,938,056	-7.4	5,440	1,261,331	-4.8	31,135,736	-10.2
New York.....	20,571	978,083	-3.2	26,918,278	-5.5	2,256	447,532	-5.3	11,688,612	-9.2
New Jersey.....	4,292	355,193	-2.5	9,121,229	-4.8	848	260,617	-2.4	6,593,470	-5.5
Pennsylvania.....	7,786	896,118	-3.9	21,898,549	-10.6	2,336	553,182	-5.2	12,937,654	-12.7
East North Central.....	24,706	2,416,811	-3.8	64,856,575	-8.9	83,49	1,839,512	-4.6	50,262,234	-10.4
Ohio.....	8,111	636,124	-5.5	16,527,288	-10.3	2,551	469,217	-7.1	12,337,080	-12.8
Indiana.....	2,631	286,794	-6.8	7,067,199	-13.4	947	231,082	-6.8	5,746,174	-15.8
Illinois.....	6,326	644,531	-3.4	16,832,205	-7.0	2,447	444,107	-4.7	11,500,183	-9.6
Michigan.....	3,859	591,876	-1.3	17,873,795	-8.5	945	517,194	-1.2	16,123,536	-8.0
Wisconsin.....	6,379	257,436	-3.6	6,506,088	-6.2	1,458	177,912	-2.1	4,555,321	-6.7
West North Central.....	12,127	447,670	-2.9	10,817,173	-4.0	2,424	215,708	-5.6	5,212,311	-6.3
Minnesota.....	2,303	93,737	-2.3	2,447,830	-3.9	421	43,490	-3.9	1,145,587	-4.3
Iowa.....	1,933	68,641	-3.7	1,609,478	-4.8	412	37,577	-6.4	927,908	-6.4
Missouri.....	3,123	174,828	-4.1	4,130,538	-5.6	876	92,619	-7.2	2,054,784	-9.3
North Dakota.....	597	5,892	-1.3	142,836	-2.4	56	663	-3.9	19,781	-4.3
South Dakota.....	570	8,525	-3	215,862	-1.0	38	2,133	-3.9	57,618	+3.0
Nebraska.....	1,588	36,428	-9	857,154	+(-)	162	12,838	-3.5	330,111	+1.9
Kansas.....	2,013	59,619	-5.1	1,413,475	-3.6	459	26,838	-2.9	676,522	-4.2

See footnotes at end of table.

TABLE 4.—Comparison of Employment and Pay Rolls in Identical Establishments in October and November 1937, by Geographic Divisions and by States—Continued

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll November 1937	Percentage change from October 1937	Amount of pay roll (1 week) November 1937	Percentage change from October 1937	Number of establishments	Number on pay roll November 1937	Percentage change from October 1937	Amount of pay roll (1 week) November 1937	Percentage change from October 1937
				<i>Dollars</i>					<i>Dollars</i>	
South Atlantic.....	11,252	873,562	-2.0	17,073,905	-5.3	2,818	573,167	-2.7	10,173,426	-6.6
Delaware.....	221	15,337	-8.4	373,930	-6.9	89	11,138	-10.3	267,209	-8.3
Maryland.....	1,641	156,090	-2.7	5,197,013	-6.6	536	92,672	-4.0	2,125,057	-8.6
District of Columbia.....	1,111	42,682	+1.1	1,098,490	+3.3	34	3,212	+1.9	109,624	+1.2
Virginia.....	2,161	118,689	-1.8	2,265,005	-4.8	470	80,431	-2.8	1,481,493	-6.1
West Virginia.....	1,280	157,249	-3.2	3,957,237	-7.4	254	59,919	-2.8	1,513,563	-7.0
North Carolina.....	1,509	160,534	-2.0	2,341,596	-6.0	581	143,616	-2.0	2,060,982	-6.7
South Carolina.....	782	80,225	-3	1,166,386	-2.5	222	71,536	-4	1,006,972	-2.6
Georgia.....	1,515	116,439	-3.4	1,841,476	-6.0	384	89,162	-4.3	1,246,738	-7.9
Florida.....	1,032	46,317	+5.2	832,772	+3.0	198	21,481	+1.4	361,788	+9
East South Central.....	4,549	305,485	-3.3	5,580,355	-7.7	1,021	188,122	-4.8	3,166,660	-10.1
Kentucky.....	1,282	87,501	-2.0	1,849,416	-8.1	294	36,510	-3.5	696,828	-11.8
Tennessee.....	1,337	105,606	-5.1	1,873,763	-7.3	383	76,945	-6.7	1,310,367	-9.7
Alabama.....	1,303	91,319	-3.2	1,535,874	-8.1	250	61,856	-4.1	986,488	-9.7
Mississippi.....	627	21,059	+8	321,302	-6.0	94	12,811	-1	172,977	-9.3
West South Central.....	5,038	215,445	-1.9	4,822,134	-3.7	1,175	105,839	-3.4	2,300,893	-5.8
Arkansas.....	<sup>11</sup> 704	28,641	-4.5	524,275	-7.2	216	18,266	-7.0	309,734	-10.1
Louisiana.....	1,029	50,721	-1.2	986,287	-3.4	232	25,832	-2.2	435,705	-7.5
Oklahoma.....	1,470	48,030	-2.5	1,168,534	-4.5	143	12,201	-5.2	288,278	-9.2
Texas.....	<sup>12</sup> 1,835	88,053	-1.0	2,143,038	-2.4	554	49,640	-2.1	1,267,176	-3.2
Mountain.....	4,490	154,181	-4.6	4,054,062	-4.9	569	47,844	-7.6	1,208,185	-3.3
Montana.....	700	22,515	-8.4	660,041	-11.4	81	5,035	-2.8	129,299	-12.4
Idaho.....	509	14,208	-2.9	360,203	-2.3	56	4,976	-6.0	124,101	-4.6
Wyoming.....	355	10,949	-1	316,534	-1.0	39	2,434	-1.1	75,801	+1.0
Colorado.....	1,252	49,348	-5.9	1,259,881	-3.7	187	19,635	-11.6	495,044	-5.0
New Mexico.....	322	7,265	-1.4	161,261	-4.2	33	908	-4	15,492	-5.2
Arizona.....	498	19,152	-5.0	508,546	-10.8	42	3,557	-3.0	89,042	-7.8
Utah.....	636	26,939	-2.4	674,831	+6	107	9,950	-6.6	260,320	+7.4
Nevada.....	218	3,805	+2	112,765	-8	24	949	-2.5	28,726	-1.3
Pacific.....	10,064	449,201	-7.2	12,300,572	9.9	2,523	243,212	-11.3	6,442,256	-15.1
Washington.....	3,124	100,151	-9.0	2,573,923	-12.2	569	54,701	-14.3	1,341,505	-18.9
Oregon.....	1,420	52,866	-11.6	1,303,345	-17.8	306	29,336	-18.2	659,954	-23.6
California.....	<sup>13</sup> 5,520	296,184	-5.8	8,423,304	-7.8	1,648	159,175	-8.8	4,440,797	-11.3

<sup>1</sup> Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling.<sup>2</sup> Includes laundering and cleaning, and water, light, and power.<sup>3</sup> Includes laundries.<sup>4</sup> Weighted percentage change.<sup>5</sup> Includes automobile, and miscellaneous services, restaurants, and building and contracting.<sup>6</sup> Includes construction, but not public works.<sup>7</sup> Does not include logging.<sup>8</sup> Less than 1/10 of 1 percent.<sup>9</sup> Includes financial institutions, miscellaneous services, and restaurants.<sup>10</sup> Weighted percentage change including hired farm labor.<sup>11</sup> Includes automobile dealers and garages, and sand, gravel, and building stone.<sup>12</sup> Includes business and personal service.<sup>13</sup> Includes banks, insurance, and office employment.

**INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL  
METROPOLITAN AREAS**

A comparison of employment and pay rolls in October and November 1937 is made in table 5 for 13 metropolitan areas which had a population of 500,000 or over in 1930. Cities within these areas, but having a population of 100,000 or over are not included as data concerning them are tabulated separately and are available on request. Footnotes in the table indicate which cities are excluded. The figures represent reports from cooperating establishments and cover both full- and part-time workers in miscellaneous manufacturing and nonmanufacturing industries as well as in the manufacturing and nonmanufacturing industries presented in table 1 except building construction.

TABLE 5.—*Comparison of Employment and Pay Rolls in Identical Establishments in October and November 1937 by Principal Metropolitan Areas*

Metropolitan area	Number of establishments	Number on pay roll November 1937	Percentage change from October 1937	Amount of pay roll (1 week) November 1937	Percentage change from October 1937
New York <sup>1</sup> .....	15, 258	651, 289	-2.1	\$17, 112, 560	-4.1
Chicago <sup>2</sup> .....	4, 424	470, 235	-3.4	12, 789, 375	-7.5
Philadelphia <sup>3</sup> .....	2, 410	221, 318	-2.8	5, 981, 897	-4.4
Detroit.....	1, 659	385, 235	- .5	12, 303, 806	-7.8
Los Angeles <sup>4</sup> .....	2, 866	155, 909	-2.5	4, 376, 119	-5.1
Cleveland.....	1, 768	144, 892	-4.8	3, 839, 101	-10.5
St. Louis.....	1, 651	133, 848	-4.1	3, 255, 480	-6.8
Baltimore.....	1, 204	103, 221	-1.7	2, 460, 135	-6.6
Boston <sup>5</sup> .....	3, 712	172, 262	-4.7	4, 153, 203	-3.3
Pittsburgh.....	1, 280	227, 297	-5.5	5, 746, 523	-14.4
San Francisco <sup>6</sup> .....	1, 651	86, 407	-3.5	2, 568, 518	-5.7
Buffalo.....	863	64, 343	-7.8	1, 743, 553	-14.2
Milwaukee.....	1, 074	105, 855	-3.4	2, 858, 105	-5.6

<sup>1</sup> Does not include Elizabeth, Jersey City, Newark, and Paterson, N. J.; and Yonkers, N. Y.

<sup>2</sup> Does not include Gary, Ind.

<sup>3</sup> Does not include Camden, N. J.

<sup>4</sup> Does not include Long Beach, Calif.

<sup>5</sup> Does not include Cambridge, Lynn, and Somerville, Mass.

<sup>6</sup> Does not include Oakland, Calif.



## UNEMPLOYMENT IN FOREIGN COUNTRIES, LAST QUARTER OF 1937

UNEMPLOYMENT totals for foreign countries moved upward in the last quarter of 1937, and according to official announcements these increases were believed to be more than seasonal in certain industrial countries. Statistics covering trade-union members, unemployed registered with public exchanges, and compulsorily insured workers are drawn upon in the accompanying table dealing with the unemployment situation.

Special importance is attached to the increase in the number of registered unemployed in Great Britain, where the total for December 1937 was 1,665,407, as compared with 1,628,719 for the same month of the previous year. While winter weather is stated to have affected outdoor employments adversely and there was also a seasonal decline in other trades, it is believed that the condition of world markets and the uncertainties of price movements contributed to the higher unemployment.

Even though unemployment in Austria, Belgium, Canada, France, Germany, Norway, and Sweden has tended to increase substantially in recent months over the lows established during the summer of 1937, the totals are well below the same months of the previous year. In Denmark the number of trade-unionists unemployed rose sharply in November 1937, a similar movement in 1936 having occurred a month later. Registration in Poland was larger at the end of the year than in December 1936. Registration of the unemployed in Germany increased from 469,053 in September 1937 to 994,590 in December.

The table following gives statistics of unemployment in foreign countries as shown in official reports, by years from 1931 to 1936, and by months beginning with November 1936 and including the latest month for which figures are available.

Beyond comparisons of the figures in a single series for different periods, it is not possible to use the official unemployment statistics to measure volume of unemployment in a single country or to compare conditions in one country with those in another, owing to the fact that the coverage is not always complete. For example, only insured persons may be reported in some instances, or certain classes, such as agricultural labor, may be excluded.

## Statement of Unemployment in Foreign Countries

Year and date (end of month)	Australia		Austria	Belgium			
	Trade-unionists unemployed		Compulsory insurance, number of unemployed in receipt of benefit	Unemployment-insurance societies			
	Number	Percent		Wholly unemployed		Partially unemployed	
				Number	Percent	Number	Percent
1931.....	117,866	27.4	253,368	79,186	10.9	121,890	16.9
1932.....	120,454	29.4	309,969	161,468	19.0	175,259	20.7
1933.....	104,035	25.1	328,844	168,033	17.0	170,023	17.2
1934.....	86,865	20.5	287,528	182,855	19.0	166,229	17.2
1935.....	71,823	15.6	261,768	165,469	17.9	118,754	12.8
1936.....	53,992	12.2	259,185	122,256	13.4	91,451	10.0
<i>1936</i>							
November.....			257,063	112,881	12.1	94,332	10.1
December.....	46,863	10.7	290,452	131,565	14.4	92,619	10.2
<i>1937</i>							
January.....			316,050	131,645	14.5	97,737	10.7
February.....			309,178	124,669	13.7	82,125	9.0
March.....	44,004	9.9	277,126	113,296	12.4	79,711	8.7
April.....			239,280	97,979	10.8	66,163	7.3
May.....			215,176	95,888	10.6	75,673	8.4
June.....	43,584	9.7	196,067	86,344	9.5	78,052	8.6
July.....			187,360	84,348	9.3	78,831	8.7
August.....			178,081	88,825	9.8	89,606	9.9
September.....	42,145	9.3	176,308	90,574	9.9	84,282	9.3
October.....			188,262				
November.....			224,166				
December.....			268,784				
<i>1936</i>							
November.....			176,658	10.8	10,764	83,552	20.0
December.....	14.3	619,143	198,492	12.1	14,933	127,478	30.3
<i>1937</i>							
January.....	14.5	667,486	210,894	12.9	16,797	140,262	33.0
February.....	13.7	677,947	221,464	13.2	16,724	133,795	31.4
March.....	12.9	627,258	210,244	12.4	14,909	122,687	28.6
April.....	11.1	503,632	176,348	10.3	8,776	74,793	17.5
May.....	9.5	385,061	137,677	8.0	6,526	63,310	14.8
June.....	10.4	303,535	113,838	6.6	4,617	60,199	13.9
July.....	8.9	248,127	110,861	6.4	3,327	66,006	15.2
August.....	7.6	233,318	108,063	6.2	2,984	65,853	15.1
September.....	7.7	230,692	106,496	6.1	2,910	72,387	16.5
October.....	8.9	237,737	107,782	6.1	3,800	84,684	19.2
November.....	11.2	333,455			5,028	103,878	24.5
December.....		451,484			9,714	152,850	34.5

Year and date (end of month)	Canada		Czechoslovakia		Danzig, Free City of	Denmark	
	Percent of trade-unionists unemployed	Number of unemployed on live register	Trade-union funds—unemployed in receipt of benefit		Number of unemployed registered	Trade-union unemployment funds—unemployed	
			Number	Percent		Number	Percent
1931.....	16.8	291,332	102,179	8.3	24,898	53,019	17.9
1932.....	22.0	554,059	184,555	13.5	33,244	99,508	31.7
1933.....	22.3	738,267	247,613	16.9	31,408	97,417	28.8
1934.....	18.2	676,994	245,953	17.4	20,326	81,756	22.2
1935.....	15.4	686,269	235,623	15.9	17,983	76,195	19.8
1936.....	13.3	622,687	208,539	13.1	13,553	78,669	19.3
<i>1936</i>							
November.....	12.7	510,205	176,658	10.8	10,764	83,552	20.0
December.....	14.3	619,143	198,492	12.1	14,933	127,478	30.3
<i>1937</i>							
January.....	14.5	667,486	210,894	12.9	16,797	140,262	33.0
February.....	13.7	677,947	221,464	13.2	16,724	133,795	31.4
March.....	12.9	627,258	210,244	12.4	14,909	122,687	28.6
April.....	11.1	503,632	176,348	10.3	8,776	74,793	17.5
May.....	9.5	385,061	137,677	8.0	6,526	63,310	14.8
June.....	10.4	303,535	113,838	6.6	4,617	60,199	13.9
July.....	8.9	248,127	110,861	6.4	3,327	66,006	15.2
August.....	7.6	233,318	108,063	6.2	2,984	65,853	15.1
September.....	7.7	230,692	106,496	6.1	2,910	72,387	16.5
October.....	8.9	237,737	107,782	6.1	3,800	84,684	19.2
November.....	11.2	333,455			5,028	103,878	24.5
December.....		451,484			9,714	152,850	34.5

<sup>a</sup> Provisional figure.

## Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Estonia	Finland	France	Germany	Great Britain
	Number unemployed remaining on live register	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered	Number of persons registered with employment exchanges
1931.....	3,632	11,522	56,112	4,573,218	2,668,000
1932.....	7,121	17,581	273,412	5,579,858	2,757,000
1933.....	8,210	17,139	276,033	4,733,014	2,520,616
1934.....	2,970	10,011	345,033	2,718,309	2,159,231
1935.....	1,779	7,163	426,931	<sup>1</sup> 2,151,039	2,036,422
1936.....	1,276	4,796	432,120	<sup>1</sup> 1,592,630	1,754,975
1936					
November.....	2,102	5,348	407,831	1,197,140	1,623,602
December.....	1,988	4,398	410,785	1,478,862	1,628,719
1937					
January.....	2,388	6,805	426,072	1,853,460	1,689,223
February.....	2,064	5,383	410,219	1,610,947	1,627,845
March.....	1,801	4,482	386,254	1,245,338	1,601,201
April.....	1,191	3,554	368,381	960,764	1,454,443
May.....	638	3,126	345,503	776,321	1,451,330
June.....	486	2,076	321,725	648,421	1,356,598
July.....	403	2,089	313,553	562,892	1,379,459
August.....	470	2,794	311,315	509,257	1,358,621
September.....	473	3,450	305,341	469,053	<sup>2</sup> 1,339,204
October.....	788	3,705	319,223	501,847	1,390,249
November.....	1,473	3,924	332,850	572,521	1,499,203
December.....	1,727	3,770	365,452	994,590	1,665,407

Year and date (end of month)	Great Britain and Northern Ireland				Hungary		
	Compulsory insurance				Employment exchanges, applications for work	Trade-unionist unemployed	
	Wholly unemployed		Temporary stoppages			Christian (Buda-pest)	Social Democratic
	Number	Percent	Number	Percent			
1931.....	2,129,359	16.7	587,494	4.6	52,305	977	27,635
1932.....	2,272,590	17.6	573,805	4.5	66,235	1,026	29,772
1933.....	2,110,090	16.4	456,678	3.5	60,595	1,085	26,716
1934.....	1,801,913	13.9	368,906	2.9	52,157	996	22,291
1935.....	1,714,844	13.2	312,958	2.3	52,048	967	18,315
1936.....	1,497,587	11.3	251,379	1.9	52,114	800	15,637
1936							
November.....	1,429,736	10.7	191,585	1.5	50,371	841	13,815
December.....	1,424,451	10.7	197,722	1.5	50,863	923	15,044
1937							
January.....	1,489,092	11.2	187,874	1.4	54,407	969	15,640
February.....	1,460,026	10.9	164,739	1.3	56,192	1,012	16,148
March.....	1,406,530	10.5	169,740	1.3	56,782	1,011	15,878
April.....	1,305,280	9.8	130,788	1.0	53,865	943	14,984
May.....	1,245,589	9.3	210,401	1.6	50,273	936	13,637
June.....	1,166,881	8.7	203,329	1.6	45,740	729	13,513
July.....	1,136,287	8.5	249,345	1.9	43,915	815	13,169
August.....	1,148,487	8.6	208,941	1.6	45,904	843	12,584
September.....	1,138,731	8.5	194,997	1.5	44,946	864	12,895
October.....	1,215,000	8.9	179,856	1.3	45,187	896	12,896
November.....	1,284,386	9.4	222,204	1.6	36,968	1,116	13,840
December.....	1,338,850	9.8	326,026	2.4			

<sup>1</sup> Includes the Saar.<sup>2</sup> New series.

## Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Irish Free State	Italy	Japan		Latvia	Netherlands	
	Compulsory insurance—number unemployed	Number of unemployed registered wholly unemployed	Official estimates unemployed		Number unemployed remaining on live register	Unemployment insurance societies—unemployed	
			Number	Percent		Number	Percent
1931.....	25,230	734,454	422,755	6.1	8,709	82,800	18.1
1932.....	62,817	1,006,442	485,681	6.8	14,587	153,500	29.5
1933.....	72,255	1,018,955	408,710	5.6	8,156	163,000	31.0
1934.....	103,671	963,677	372,941	5.0	4,972	160,400	32.1
1935.....	<sup>1</sup> 119,498		356,103	4.6	4,825	173,673	36.3
1936.....	99,834				3,851	168,668	36.2
<i>1936</i>							
November.....	<sup>4</sup> 110,859		322,948	4.1	4,025	156,575	33.7
December.....	105,078		322,969	4.1	5,613	163,381	35.0
<i>1937</i>							
January.....	100,177		333,210	4.2	6,358	172,014	36.9
February.....	91,680		328,528	4.1	6,178	161,107	34.5
March.....	93,426		315,845	4.0	6,110	149,115	31.9
April.....	92,363		307,958	3.9	3,290	133,523	28.5
May.....	88,480		300,343	3.8	2,127	124,711	26.5
June.....	64,011		299,341	3.7	1,446	119,325	25.3
July.....	63,288		<sup>5</sup> 292,050	3.6	1,146	122,982	26.0
August.....	65,670		<sup>5</sup> 283,940	3.5	1,093	124,610	26.3
September.....	68,928				1,075	124,012	26.1
October.....	68,809				1,077	126,621	26.6
November.....	94,414				<sup>6</sup> 2,304	<sup>8</sup> 135,140	28.6
December.....	97,855					<sup>8</sup> 152,581	32.3

Year and date (end of month)	New Zealand	Norway		Poland	Rumania	
	Number unemployed registered by employment exchanges <sup>6</sup>	Trade-unionists (10 unions) unemployed		Number unemployed remaining on live register	Number unemployed registered with employment offices	Number unemployed remaining on live register
		Number	Percent			
1931.....	41,430		22.3	27,479	299,502	35,851
1932.....	51,549	14,790	30.8	<sup>7</sup> 32,705	255,582	38,899
1933.....	46,971	16,588	33.4	<sup>7</sup> 35,591	249,660	29,060
1934.....	39,235	15,963	30.7	35,121	342,166	16,871
1935.....	38,234	14,783	25.3	36,103	381,935	13,852
1936.....	36,890	13,267	18.8	32,643		13,549
<i>1936</i>						
November.....	39,056	14,330	18.8	35,119		11,526
December.....	35,286	16,632	21.7	36,260	402,814	16,224
<i>1937</i>						
January.....	31,416	18,045	23.2	35,435	532,662	18,778
February.....	28,941	18,163	23.1	34,440	545,651	19,653
March.....	27,907	18,457	23.2	32,951	525,041	17,392
April.....	27,953	17,561	21.8	31,824	443,140	12,609
May.....	28,302	14,813	18.1	26,298	334,527	10,784
June.....	29,326	13,020	15.6	22,028	294,334	6,396
July.....	30,443	12,772	15.2	18,572	278,361	5,822
August.....	27,323	13,221	15.6	20,045	261,386	5,878
September.....	25,053	14,503	17.0	25,431	252,719	6,083
October.....		16,286	19.1	29,063	263,615	6,343
November.....				32,239	329,474	
December.....				<sup>8</sup> 33,906	463,175	

<sup>1</sup> Incomplete figures.<sup>6</sup> New series from 1933 on.<sup>4</sup> Special employment period.<sup>5</sup> Preliminary figure.<sup>7</sup> Revised figures.

## Statement of Unemployment in Foreign Countries—Continued

Year and date (end of month)	Sweden		Switzerland				Yugo- slavia
	Trade-unionists unemployed		Unemployment funds				Number of unem- ployed regis- tered
	Number	Percent	Wholly unem- ployed		Partially unem- ployed		
			Number	Percent	Number	Percent	
1931.....	64,815	17.2	-----	5.9	-----	12.1	
1932.....	89,922	22.8	-----	9.1	-----	12.2	14,761
1933.....	97,316	23.7	-----	10.8	-----	8.5	15,997
1934.....	80,216	18.9	-----	9.8	-----	6.1	15,647
1935.....	81,385	16.1	-----	11.8	-----	5.9	16,752
1936.....	71,552	13.6	-----	13.2	-----	5.3	19,436
<i>1936</i>							
November.....	67,869	12.8	65,900	12.3	20,000	3.6	14,239
December.....	99,776	18.5	78,864	14.3	18,176	3.3	22,069
<i>1937</i>							
January.....	85,717	15.8	87,300	16.6	17,500	3.3	35,170
February.....	80,637	14.5	84,100	16.0	16,000	3.0	39,510
March.....	83,024	14.9	66,985	12.7	14,488	2.7	35,324
April.....	68,156	12.1	51,300	9.7	12,100	2.2	24,765
May.....	51,903	9.2	37,800	7.2	10,200	1.9	16,936
June.....	49,109	8.6	34,082	6.4	10,217	1.9	11,258
July.....	42,451	7.4	34,300	6.6	10,300	1.9	11,543
August.....	40,953	7.1	34,800	6.7	10,900	2.0	10,845
September.....	43,474	7.5	36,404	6.8	11,194	2.1	12,250
October.....	52,870	9.0	40,000	7.6	13,000	2.4	13,719
November.....	69,533	11.7	-----	-----	-----	-----	18,494
December.....	-----	-----	-----	-----	-----	-----	29,988

# Building Operations

## SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, DECEMBER 1937<sup>1</sup>

BUILDING activity as measured by the value of permits issued showed a marked increase (52.8 percent) in December over the preceding month. All classes of construction registered gains. The greatest, 81.9 percent, was in new nonresidential construction. New residential construction and additions, alterations, and repairs increased 47.9 and 19.6 percent, respectively. This pick-up in building activity, however, can almost wholly be attributed to the increase in the value of permits issued in New York City, where a new building code goes into effect January 1.

Compared with a year ago permit valuations showed an increase of 25.5 percent. New nonresidential construction in December was 48.6 percent above the corresponding month of 1936, while the value of permits issued for additions, alterations, and repairs increased 32.6 percent and new residential construction rose 7.4 percent.

### *Comparison of December 1937 with November 1937 and December 1936*

A summary of building construction in 1,498 identical cities in December 1937, November 1937, and December 1936 is given in table 1.

TABLE 1.—*Summary of Building Construction in 1,498 Identical Cities, December 1937*

Class of construction	Number of buildings			Estimated cost		
	Decem- ber 1937	Percentage change from—		December 1937	Percentage change from—	
		Novem- ber 1937	Decem- ber 1936		Novem- ber 1937	Decem- ber 1936
All construction.....	33,319	-25.6	-13.0	\$150,573,355	+52.8	+25.5
New residential.....	7,924	+1.7	-12.9	63,692,062	+47.9	+7.4
New nonresidential.....	5,622	-38.8	-24.7	59,902,207	+81.9	+48.6
Additions, alterations, and repairs.....	19,773	-28.8	-9.0	26,979,086	+19.6	+32.6

<sup>1</sup> More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, December 1937," copies of which will be furnished upon request.

A summary of the estimated cost of housekeeping dwellings and of the number of families provided for in new dwellings in 1,498 identical cities, having a population of 2,500 and over, is shown in table 2 for the months of December 1937, November 1937, and December 1936.

TABLE 2.—Estimated Cost of Housekeeping Dwellings and Number of Families Provided for in 1,498 Identical Cities, December 1937

Type of dwelling	Estimated cost of housekeeping dwellings			Number of families provided for in new dwellings		
	December 1937	Percentage change from—		December 1937	Percentage change from—	
		November 1937	December 1936		November 1937	December 1936
All types.....	\$62,566,515	+47.7	+6.2	15,911	+48.7	+11.3
1-family.....	26,330,660	-10.9	-31.2	6,950	-3.6	-16.7
2-family <sup>1</sup> .....	5,126,616	+183.2	+108.7	1,569	+127.7	+86.6
Multifamily <sup>2</sup> .....	31,109,239	+183.0	+71.0	7,392	+164.2	+44.5

<sup>1</sup> Includes 1- and 2-family dwellings with stores.

<sup>2</sup> Includes multifamily dwellings with stores.

### Analysis by Size of City, December 1937

Table 3 shows the estimated cost of building construction for which permits were issued in December 1937 compared with November 1937 and December 1936, by size of city and by class of construction.

TABLE 3.—Estimated Cost of Building Construction for Which Permits Were Issued, by Size of City

Size of city	Number of cities	Total construction			New residential buildings		
		Estimated cost, December 1937	Percentage change from—		Estimated cost, December 1937	Percentage change from—	
			November 1937	December 1936		November 1937	December 1936
Total, all reporting cities...	1,498	\$150,573,355	+52.8	+25.5	\$63,692,062	+47.8	+7.4
500,000 and over.....	14	92,328,811	+137.3	+104.2	44,872,002	+150.4	+102.1
100,000 and under 500,000.....	78	19,311,438	+8	-34.4	5,840,782	-17.7	-57.9
50,000 and under 100,000.....	95	9,051,952	-27.6	-10.4	2,793,084	-19.1	-42.1
25,000 and under 50,000.....	155	7,886,962	-6.2	-27.3	2,401,910	-39.3	-43.6
10,000 and under 25,000.....	429	10,763,223	-7.4	-21.4	4,266,901	-28.8	-45.7
5,000 and under 10,000.....	337	5,198,705	-5	-31.2	2,367,133	-16.6	-45.0
2,500 and under 5,000.....	390	6,032,264	+121.4	+95.8	1,150,250	-36.3	-41.4

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1930)
	Estimated cost, December 1937	Percentage change from—		Estimated cost, December 1937	Percentage change from—		
		November 1937	December 1936		November 1937	December 1936	
Total, all reporting cities...	\$59,902,207	+81.9	+48.6	\$26,979,086	+19.6	+32.6	58,511,755
500,000 and over.....	36,784,552	+219.1	+140.1	10,672,257	+12.7	+38.8	21,449,853
100,000 and under 500,000.....	7,696,544	+14.7	-23.8	5,774,112	+7.9	+5.7	14,853,267
50,000 and under 100,000.....	3,770,971	-48.5	+18.4	2,487,897	+44.7	+18.9	6,333,524
25,000 and under 50,000.....	3,311,368	+51.3	-25.4	2,173,684	-3.9	+9	5,511,096
10,000 and under 25,000.....	4,651,845	+47.8	+17.3	1,844,477	-25.6	-1.3	6,569,618
5,000 and under 10,000.....	1,666,411	+11.0	-32.6	1,165,161	+31.7	+49.6	2,381,711
2,500 and under 5,000.....	2,020,516	+280.7	+145.5	2,861,498	+639.6	+864.0	1,412,686

The estimated cost of housekeeping dwellings for which permits were issued in the 1,498 identical cities reporting for November and December 1937, together with the number of family dwelling units provided in new dwellings, by size of city, is given in table 4.

TABLE 4.—Estimated Cost of Housekeeping Dwellings and Number of Families Provided for in 1,498 Identical Cities, by Size of City, December 1937

Size of city	Estimated cost of house keeping dwellings			Number of families provided for in—							
	December 1937	November 1937	Percentage change	All types		1-family dwellings		2-family dwellings <sup>1</sup>		Multi-family dwellings <sup>2</sup>	
				December 1937	November 1937	December 1937	November 1937	December 1937	November 1937	December 1937	November 1937
Total, all reporting cities..	\$62,566,515	\$42,361,302	+47.7	15,911	10,699	6,950	7,212	1,569	689	7,392	2,798
500,000 and over.....	44,615,002	17,896,566	+149.3	11,050	4,058	2,916	1,560	1,245	149	6,889	2,349
100,000 and under 500,000....	5,432,073	6,953,904	-21.9	1,529	1,966	1,172	1,597	142	195	215	174
50,000 and under 100,000....	2,718,532	3,439,049	-21.0	750	903	517	736	66	102	167	65
25,000 and under 50,000....	2,369,910	3,538,726	-33.0	608	914	543	777	31	57	34	80
10,000 and under 25,000....	4,036,901	5,992,184	-32.6	995	1,531	915	1,373	41	102	39	56
5,000 and under 10,000....	2,243,847	2,759,499	-18.7	648	791	576	704	27	41	45	46
2,500 and under 5,000....	1,150,250	1,781,374	-35.4	331	536	311	465	17	43	3	28

<sup>1</sup> Includes 1- and 2-family dwellings with stores.  
<sup>2</sup> Includes multifamily dwellings with stores.

### Construction During Calendar Years, 1936 and 1937

Cumulative totals for the 12 months of 1937 compared with the calendar year 1936 are shown in table 5. The data are based on reports received from cities having a population of 2,500 and over.

TABLE 5.—Estimated Cost of Building Construction in Reporting Cities of 2,500 Population and Over, 1936 and 1937, by Class of Construction

Class of construction	Estimated cost of building construction		Percentage change
	1937	1936	
All construction.....	\$1,650,901,097	\$1,482,761,951	+11.3
New residential.....	729,913,571	695,216,807	+5.0
New nonresidential.....	556,687,404	475,417,075	+17.1
Additions, alterations, and repairs.....	364,300,122	312,128,069	+16.7

Table 6 presents the estimated cost of housekeeping dwellings and number of family dwelling units provided in cities with a population of 2,500 and over, for the calendar years 1936 and 1937.

TABLE 6.—*Estimated Cost of Housekeeping Dwellings and Number of Families Provided for in Reporting Cities of 2,500 Population and Over, 1936 and 1937, by Type of Dwelling*

Type of dwelling	Estimated cost		Percent- age change	Number of families provided for		Percent- age change
	1937	1936		1937	1936	
All types.....	\$718, 182, 439	\$686, 281, 530	+4. 6	178, 679	169, 714	+5. 3
1-family.....	509, 479, 894	462, 205, 927	+10. 2	117, 296	105, 949	+10. 7
2-family <sup>1</sup> .....	33, 817, 188	25, 134, 613	+34. 5	11, 893	9, 096	+30. 7
Multifamily <sup>2</sup> .....	174, 885, 357	198, 940, 990	-12. 1	49, 490	54, 669	-9. 3

<sup>1</sup>Includes 1- and 2-family dwellings with stores.

<sup>2</sup>Includes multifamily dwellings with stores.

The information on building permits issued December 1937, November 1937, and December 1936 is based on reports received by the Bureau of Labor Statistics from 1,498 identical cities having a population of 2,500 and over.

The information is collected by the Bureau of Labor Statistics direct from local building officials, except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. The cost figures shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. In addition to permits issued for private building construction, the statistics include the value of contracts for Federal and State buildings in the cities covered. Information concerning public building is collected by the Bureau from various Federal and State agencies having the power to award contracts for building construction. These data are then added to the data concerning private construction received from local building officials. In December 1937 the value of Federal and State buildings for which contracts were awarded in these 1,498 cities amounted to \$5,704,000; in November 1937, to \$1,835,000; and in December 1936, to \$11,006,000.

### *Construction from Public Funds*

The value of contracts awarded and force-account work started during December 1937, November 1937, and December 1936 on construction projects financed from various Federal funds is shown in table 7.

TABLE 7.—Value of Contracts Awarded and Force-Account Work Started on Projects Financed From Federal Funds, December 1937, November 1937, and December 1936 <sup>1</sup>

Federal agency	Value of contracts awarded and force-account work started—		
	December 1937	November 1937 <sup>2</sup>	December 1936 <sup>3</sup>
Total.....	\$110,860,323	\$88,767,808	\$100,474,254
Public Works Administration:			
Federal.....	419,974	476,373	6,762,468
Non-Federal:			
N. I. R. A.....	1,383,466	4,136,314	10,771,709
E. R. A. A.....	47,971,377	33,569,177	<sup>3</sup> 39,059,108
Federal projects under The Works Program.....	4,004,945	11,450,901	14,984,802
Regular Federal appropriations.....	57,080,561	39,135,043	28,896,167

<sup>1</sup> Preliminary, subject to revision.

<sup>2</sup> Revised.

<sup>3</sup> Revised; includes \$3,754,281 low-cost housing projects (Housing Division, P. W. A.).

The value of public-building and highway-construction awards financed wholly from appropriations from State funds, as reported by the various State governments for December 1937, November 1937, and December 1936, is shown in table 8.

TABLE 8.—Value of Public-Building and Highway-Construction Awards Financed Wholly From State Funds

Type of project	Value of contracts		
	December 1937	November 1937	December 1936
Public buildings.....	\$4,335,282	\$1,305,240	\$869,921
Highway construction.....	2,572,449	6,629,309	6,717,757

# Retail Prices

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## SUMMARY

### *Food, Electricity, and Gas*

THE continued decline of meat prices, combined with a sharp drop in the price of eggs, lowered the food cost index 1.2 percent between November and December. The comparatively sharp decline during the last 4 months of the year, however, carried the December index 0.4 percent below the level of December 1936.

A downward trend in prices of electricity was shown during the year with rate reductions occurring in 22 of the 51 cities. Fourteen cities reported changes in prices of gas. Lower prices of manufactured gas in some localities are reflected in the all-gas index.



## FOOD

### *Prices in December 1937*

RETAIL food costs declined 1.2 percent between November and December largely as a result of the continued decline in meat prices and a sharp break in the price of eggs. Lower costs were reported for 43 of the 51 cities included in the index, with higher costs in the other 8 cities.

The food cost index for December 14 was 82.6 percent of the 1923-25 average. This is 0.4 percent below the level of a year ago. Food costs are 27.6 percent higher than in December 1932, when the index was 64.7. They are 21.9 percent below the level of December 1929, when indexes for all commodity groups were well above their present level.

### DETAILS BY COMMODITY GROUPS

The cost of cereals and bakery products declined 0.3 percent between November 16 and December 14. Prices were lower for 8 of the 13 items in the group. Flour decreased 1.7 percent, continuing the decline which began in July. There was no change in the average

price of white bread. Corn meal and hominy grits showed decreases of 2.5 and 2.7 percent respectively.

Meat costs continued to decline in all reporting cities and were 4.7 percent below the November level. Price decreases were reported for 18 of the 21 items in the group. Beef and veal costs combined declined 4.9 percent, and pork costs dropped 7.7 percent. Reductions of more than 5 percent were reported for five of the six beef items and for all seven pork items. Lamb and poultry costs declined 1.8 percent and 1.0 percent respectively. Prices rose slightly for both pink and red salmon, continuing the upward trend of the past 10 months.

The cost of dairy products made a seasonal advance of 1.9 percent and reached the highest level for the year. The price of butter, which rose 5.3 percent, was higher than for any December since 1929. The average price of milk increased 0.1 percent; an increase of 1.0 cent a quart in Buffalo and Peoria, and a decrease of 0.5 of a cent in Seattle, were the only important changes.

Egg prices, which are usually near their peak at this season of the year, broke sharply, with a decrease of 9.7 percent. Seven of the ten cities that reported increases for eggs were in the West Central States.

The fruit and vegetable index rose 3.9 percent as a result of a 5.0 percent increase in the cost of the fresh items of the group. The more important increases for staple products were cabbage, 24.4 percent; sweetpotatoes, 11.4 percent; onions, 7.1 percent; potatoes, 3.8 percent; and apples, 2.8 percent. Oranges, with a drop of 16.4 percent, was the only fresh item which showed a decrease. The cost of the canned items decreased 0.7 percent, while the dried products declined 2.6 percent. Prices of items in these subgroups were generally lower, with the largest decreases for canned and dried beans.

Beverage and chocolate costs declined 1.0 percent, due to a decrease of 1.5 percent in coffee prices and a 2.6 percent decline for cocoa. A price increase of 0.2 percent was reported for both tea and chocolate prices.

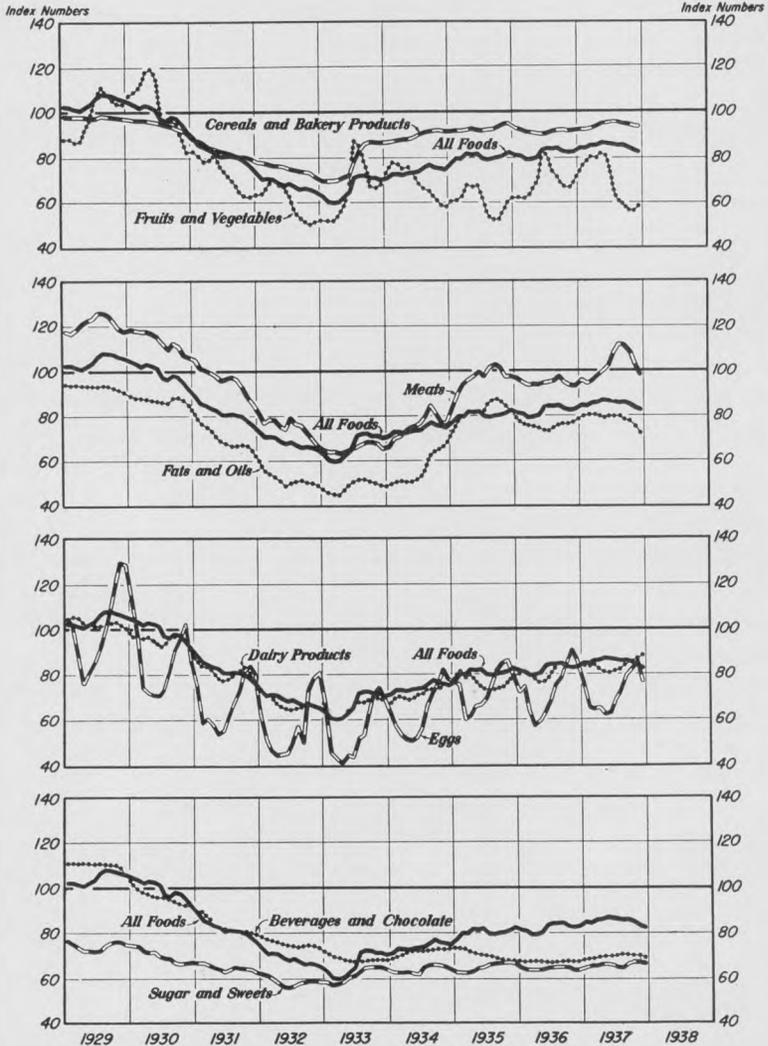
The cost of fats and oils declined 3.6 percent. The price of lard dropped 8.4 percent, following the trend of pork prices. Lard compound and vegetable shortening decreased 2.1 percent and 1.6 percent respectively.

The cost index for the sugar and sweets group moved down 0.5 percent. Prices were lower for all items in the group. Sugar, the most important item, declined 0.5 percent.

Indexes of retail food costs for December and November 1937, together with indexes for December 1936, 1932, and 1929 are shown in table 1. The chart shows trends in the cost of all foods and of each major commodity group for the period January 1929 to December 1937, inclusive.

## RETAIL COST OF FOOD

1923-25=100



UNITED STATES BUREAU OF LABOR STATISTICS

TABLE 1.—Indexes of Retail Food Costs in 51 Large Cities Combined,<sup>1</sup> by Commodity Groups

December and November 1937 and December 1936, 1932, and 1929

Commodity group	1937		1936	1932	1929
	Dec. 14	Nov. 16	Dec. 15	Dec. 15	Dec. 15
All foods.....	82.6	83.6	82.9	64.7	105.7
Cereals and bakery products.....	93.7	94.0	91.9	71.1	97.8
Meats.....	98.0	102.8	93.0	66.8	117.6
Dairy products.....	88.2	86.6	82.5	65.7	100.5
Eggs.....	76.7	84.9	85.9	80.6	128.7
Fruits and vegetables.....	58.4	56.2	69.1	51.8	103.7
Fresh.....	56.2	53.5	67.6	50.7	104.1
Canned.....	79.9	80.5	81.6	66.8	94.6
Dried.....	62.4	64.1	70.6	49.5	106.9
Beverages and chocolate.....	69.4	70.1	67.8	72.8	105.3
Fats and oils.....	72.0	74.8	77.2	49.0	90.7
Sugar and sweets.....	66.8	67.1	63.9	58.5	75.1

<sup>1</sup> Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined with the use of population weights.

The prices of 55 of the 84 items included in the index declined between November and December, 25 increased, and 4 showed no change. Compared with a year ago, the December prices were higher for 47 items and lower for 36 items.

The brands and grades used for reporting retail food prices to the Bureau of Labor Statistics were recently reviewed by several large distributing companies. Since the Bureau requests that prices be furnished in each city on the brands or grades of the various items that are sold in largest volume, a number of changes were necessary. These changes have been incorporated in the retail food price report for December. Prices for November have been recomputed on a comparable basis. All commodities affected by the changes are indicated in table 2 as revised.

Average prices of each of the 84 foods for 51 cities combined are shown in table 2 for December and November 1937 and for December 1936.

TABLE 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined<sup>1</sup>

December and November 1937 and December 1936

[\*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article	1937		1936
	Dec. 14	Nov. 16	Dec. 15
Cereals and bakery products:			
Cereals:			
*Flour, wheat.....pound..	<i>Cents</i> 4.3	<i>Cents</i> <sup>2</sup> 4.4	<i>Cents</i> 4.9
*Macaroni.....do.....	15.2	15.1	15.2
*Wheat cereal.....28-oz. package..	24.5	24.5	24.2
*Corn flakes.....8-oz. package..	7.7	<sup>2</sup> 7.6	8.0
*Corn meal.....pound.....	5.0	5.1	5.4
Hominy grits.....24-oz. package..	9.1	9.4	9.8
*Rice.....pound.....	8.1	8.1	8.6
*Rolled oats.....do.....	7.4	<sup>2</sup> 7.3	7.4
Bakery products:			
*Bread, white.....do.....	8.9	8.9	8.2
Bread, whole-wheat.....do.....	9.8	9.8	9.3
Bread, rye.....do.....	10.0	10.1	9.0
Cake.....do.....	25.4	25.4	25.4
Soda crackers.....do.....	16.6	<sup>2</sup> 16.7	18.2

See footnotes at end of table.

TABLE 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined—Continued

December and November 1937 and December 1936

[\*Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article	1937		1936
	Dec. 14	Nov. 16	Dec. 15
Meats:			
Beef:	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
*Sirloin steak.....pound..	39.4	41.5	39.2
*Round steak.....do.....	36.1	38.4	35.1
*Rib roast.....do.....	31.6	33.7	29.7
*Chuck roast.....do.....	24.8	26.1	23.2
*Plate.....do.....	16.9	17.9	15.5
Liver.....do.....	24.8	25.1	25.3
Veal:			
Cutlets.....do.....	43.6	44.7	40.5
Pork:			
*Chops.....do.....	31.1	34.1	31.4
Loin roast.....do.....	25.3	28.6	25.9
*Bacon, sliced.....do.....	40.0	43.1	39.7
Bacon, strip.....do.....	33.8	36.2	34.3
*Ham, sliced.....do.....	47.1	49.7	48.4
Ham, whole.....do.....	28.4	29.9	30.7
Salt pork.....do.....	23.7	25.2	24.9
Lamb:			
Breast.....do.....	14.7	14.6	11.9
Chuck.....do.....	24.4	24.7	20.4
*Leg.....do.....	29.9	31.0	26.1
Rib chops.....do.....	38.0	38.3	32.7
Poultry:			
*Roasting Chickens.....do.....	35.4	35.8	29.1
Fish:			
Salmon, pink.....16 oz. can..	14.0	14.0	12.9
*Salmon, red.....do.....	27.0	26.7	24.8
Dairy products:			
*Butter.....pound.....	45.5	43.2	40.0
*Cheese.....do.....	29.4	29.6	29.3
Cream.....½ pint.....	15.0	14.9	15.4
Milk, fresh (delivered and store) <sup>3</sup> .....do.....	12.7	12.7	12.2
*Milk, fresh (delivered).....do.....	13.0	13.0	12.4
*Milk, evaporated.....14½-oz. can..	7.5	<sup>2</sup> 7.5	7.9
*Eggs.....dozen.....	39.0	<sup>2</sup> 43.2	44.7
Fruits and vegetables:			
Fresh:			
Apples.....pound.....	4.4	<sup>2</sup> 4.3	6.0
*Bananas.....do.....	6.2	6.2	6.6
Lemons.....dozen.....	36.8	36.6	27.3
*Oranges.....do.....	28.6	34.2	28.9
Beans, green.....pound.....	13.9	12.4	11.2
*Cabbage.....do.....	3.7	3.0	3.7
Carrots.....bunch.....	5.8	5.1	5.3
Celery.....stalk.....	8.8	8.6	9.0
Lettuce.....head.....	8.1	7.3	7.5
*Onions.....pound.....	4.3	4.0	3.2
*Potatoes.....do.....	2.0	1.9	3.2
Spinach.....do.....	8.1	6.2	7.1
Sweetpotatoes.....do.....	3.7	3.3	4.1
Canned:			
Peaches.....no. 2½ can..	19.5	19.6	18.5
Pears.....do.....	21.7	21.8	22.1
Pineapple.....do.....	23.1	23.1	22.5
Asparagus.....no. 2 can..	30.1	30.0	27.1
Beans, green.....do.....	11.5	11.6	12.2
*Beans with pork.....16-oz. can..	7.6	8.0	7.4
*Corn.....no. 2 can..	12.1	12.2	13.0
*Peas.....do.....	16.0	16.0	16.2
*Tomatoes.....do.....	9.0	9.1	9.5
Tomato soup.....10½-oz. can..	7.4	7.5	8.1
Dried:			
Peaches.....pound.....	16.2	16.5	17.4
*Prunes.....do.....	9.8	<sup>2</sup> 10.0	10.4
*Raisins.....15-oz. package..	10.2	10.3	9.8
Black-eyed peas.....pound.....	8.3	8.5	9.6
Lima beans.....do.....	9.7	10.1	11.7
*Navy beans.....do.....	6.9	7.2	9.2
Beverages and chocolate:			
*Coffee.....do.....	25.0	<sup>2</sup> 25.3	24.5
*Tea.....do.....	<sup>4</sup> 17.7	<sup>2</sup> 17.7	71.0
Cocoa.....8-oz. can..	9.8	10.1	10.1
Chocolate.....8-oz. package..	16.5	16.5	16.0

See footnotes at end of table.

TABLE 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined—Continued  
December and November 1937 and December 1936

[\* Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article	1937		1936
	Dec. 14	Nov. 16	Dec. 15
Fats and oils:	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>
*Lard.....pound.....	14.7	16.1	16.8
Lard compound.....do.....	13.5	13.8	15.3
*Vegetable shortening.....do.....	20.1	20.4	21.4
Salad oil.....pint.....	25.2	25.1	25.1
Mayonnaise.....½ pint.....	17.5	17.6	16.9
*Oleomargarine.....pound.....	17.6	17.7	18.8
Peanut butter.....do.....	19.0	19.1	18.8
Sugar and sweets:			
*Sugar.....do.....	5.6	5.6	5.5
Corn sirup.....24-oz. can.....	14.4	14.4	14.2
Molasses.....18-oz. can.....	14.4	14.5	14.4
Strawberry preserves.....pound.....	22.4	22.4	20.9

<sup>1</sup> Prices for individual cities are combined with the use of population and consumption weights.

<sup>2</sup> November prices for revised brands and/or grades for comparison with December. See p. 531. For prices comparable with October and preceding months, see Retail Prices, November 1937, table 2.

<sup>3</sup> Average prices of milk delivered by dairies and sold in grocery stores, weighted according to the relative proportion distributed by each method.

<sup>4</sup> Quarter pound.

#### DETAILS BY REGIONS AND CITIES

The average decrease of 1.2 percent in the composite food index resulted from lower costs in 43 cities and increases in 8. The decreases were largest in Boston and Providence, where the cost of meats and eggs dropped considerably more than the average for all cities combined. In addition, there was a decline of 5.1 percent in fruit and vegetable costs in Providence. The largest increase occurred in Peoria, where egg prices rose and advances in the costs of dairy products and fruits and vegetables were greater than the average for other cities.

Indexes of retail costs of food by cities and regions are given in table 3 for December and November 1937 and for December of earlier years.

TABLE 3.—Indexes of the Average Retail Cost of All Foods, by Regions and Cities <sup>1</sup>  
December and November 1937 and November 1936, 1935, 1933, 1932, and 1929

[1923-25=100]

Region and city	1937		1936	1935	1933	1932	1929
	Dec. 14	Nov. 16	Dec. 15	Dec. 17	Dec. 19	Dec. 15	Dec. 15
Average: 51 cities combined.....	82.6	83.6	82.9	82.0	69.3	64.7	105.7
New England.....	81.0	83.8	80.9	80.5	69.1	66.0	105.8
Boston.....	78.7	81.9	78.4	78.3	67.3	65.3	105.4
Bridgeport.....	86.6	88.9	86.0	86.7	72.7	68.6	106.3
Fall River.....	84.7	86.4	82.6	81.2	69.3	63.9	105.1
Manchester.....	82.1	83.5	82.7	82.9	70.6	65.0	103.0
New Haven.....	86.1	87.9	86.3	85.6	73.2	69.0	107.8
Portland, Maine.....	81.4	82.8	81.7	81.0	70.1	65.0	104.1
Providence.....	80.6	83.7	81.3	79.9	68.8	64.0	104.8

See footnotes at end of table.

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TABLE 3.—Indexes of the Average Retail Cost of All Foods, by Regions and Cities—Continued  
December and November 1937 and November 1936, 1935, 1933, 1932, and 1929  
[1923-25=100]

Region and city	1937		1936	1935	1933	1932	1929
	Dec. 14	Nov. 16	Dec. 15	Dec. 17	Dec. 19	Dec. 15	Dec. 15
Middle Atlantic.....	84.0	84.9	83.4	83.1	70.7	66.6	106.0
Buffalo.....	81.8	81.1	81.6	82.0	68.8	65.0	106.4
Newark.....	85.6	88.5	84.6	84.5	72.0	69.8	105.7
New York.....	86.0	87.3	83.3	84.1	72.2	69.5	105.5
Philadelphia.....	83.9	83.3	85.9	84.2	71.3	65.4	107.2
Pittsburgh.....	81.1	83.5	81.1	80.1	67.3	62.3	105.8
Rochester.....	82.8	83.1	83.4	81.7	67.9	61.6	104.5
Scranton.....	77.0	77.3	81.1	78.9	69.1	63.5	107.7
East North Central.....	82.9	83.6	83.4	81.8	68.1	62.2	107.0
Chicago.....	84.2	85.0	84.6	82.6	68.6	64.5	110.1
Cincinnati.....	83.3	83.5	85.1	84.9	68.3	63.4	111.2
Cleveland.....	81.9	83.7	81.8	79.6	67.7	60.7	101.8
Columbus, Ohio.....	81.0	80.9	83.9	83.2	69.4	61.2	106.2
Detroit.....	82.5	82.4	81.8	80.9	66.9	58.0	104.7
Indianapolis.....	81.6	81.8	84.0	81.3	67.5	62.7	108.3
Milwaukee.....	85.7	86.9	85.9	83.9	69.4	66.1	106.3
Peoria.....	82.5	81.5	85.1	82.9	69.7	63.2	106.9
Springfield, Ill.....	80.9	80.5	83.6	80.9	65.9	61.3	105.4
West North Central.....	84.3	85.2	87.1	84.8	69.2	64.0	107.1
Kansas City.....	82.0	83.4	85.4	83.2	68.8	66.3	107.1
Minneapolis.....	87.1	87.5	91.2	86.6	72.1	65.7	108.9
Omaha.....	80.9	80.2	84.7	81.8	66.3	61.2	103.9
St. Louis.....	86.3	88.0	87.7	86.6	68.9	63.5	108.1
St. Paul.....	83.9	84.1	86.5	84.4	71.1	63.2	106.1
South Atlantic.....	81.0	81.8	83.4	82.7	69.1	63.1	104.2
Atlanta.....	76.6	77.5	80.0	80.8	65.5	59.2	103.2
Baltimore.....	86.1	86.6	86.7	86.1	72.0	66.2	104.7
Charleston, S. C.....	82.2	83.3	84.1	82.3	70.3	63.5	104.6
Jacksonville.....	79.4	79.7	80.6	79.8	64.9	60.3	100.0
Norfolk.....	79.8	80.0	83.6	83.2	69.1	63.7	110.9
Richmond.....	76.0	76.4	82.0	78.5	67.0	60.8	100.9
Savannah.....	80.8	82.3	82.9	82.9	68.2	63.7	105.9
Washington, D. C.....	83.6	85.6	85.3	85.7	72.0	65.2	104.7
East South Central.....	77.2	77.4	79.5	77.7	65.4	60.4	103.9
Birmingham.....	72.8	72.8	75.3	72.6	62.0	58.3	101.3
Louisville.....	86.9	87.1	88.5	88.4	70.9	63.9	108.6
Memphis.....	78.6	79.3	81.6	79.6	68.7	62.0	105.7
Mobile.....	76.6	78.0	77.7	76.8	65.2	60.9	103.1
West South Central.....	80.7	81.2	81.6	80.8	68.6	62.5	104.9
Dallas.....	78.7	78.8	79.4	80.5	68.2	63.3	105.7
Houston.....	80.4	81.2	81.9	80.3	66.9	58.8	103.5
Little Rock.....	78.5	79.2	80.8	78.5	66.3	59.3	107.8
New Orleans.....	84.2	84.8	84.4	83.4	72.0	66.8	105.0
Mountain.....	84.9	85.6	86.6	84.8	<sup>2</sup> 67.7	64.8	102.5
Butte.....	80.6	80.1	82.0	78.7	62.1	62.2	104.9
Denver.....	87.8	88.0	89.5	86.6	70.0	66.7	103.0
Salt Lake City.....	80.9	82.8	82.8	83.1	<sup>3</sup> 65.4	62.4	101.1
Pacific.....	80.0	80.9	80.1	78.6	<sup>2</sup> 69.3	66.4	102.4
Los Angeles.....	74.9	75.3	76.3	74.0	<sup>1</sup> 66.5	62.4	99.2
Portland, Oreg.....	82.3	83.4	82.0	80.1	65.3	65.7	104.3
San Francisco.....	85.1	86.2	83.2	82.4	<sup>1</sup> 73.8	72.2	105.8
Seattle.....	81.5	83.2	82.6	81.6	68.3	65.4	103.7

<sup>1</sup> Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined for the regions and for the United States, with the use of population and consumption weights.

<sup>2</sup> Revised.

The Bureau of Labor Statistics collects prices in nine cities that cannot be included in the food cost indexes, since no prices are available for the 1923-25 base period. These cities were selected from areas

which were not adequately represented by the 51 cities in the current food cost indexes.

Average prices for each of these cities for which data were available have been released since June 1935. Consumption weights have been provided for these cities, making it possible to measure changes in food costs from one period to another. Percentage changes in food costs between November and December 1937 are shown in table 4 for these nine cities.

TABLE 4.—Percentage Changes in Retail Food Costs for Specified Cities  
December 1937 Compared With November 1937

Region and city	Percentage change Dec. 14, 1937, compared with Nov. 16, 1937								
	All foods	Cereals and bakery products	Meats	Dairy products	Eggs	Fruits and vegetables	Beverages and chocolate	Fats and oils	Sugar and sweets
West North Central:									
Cedar Rapids.....	-0.4	-0.2	-4.3	+7.5	-2.1	-0.6	-0.4	-2.0	-2.1
Sioux Falls.....	-4	-4	-4.3	+1.5	-7.9	+5.7	-1.1	-4.9	-7
Wichita.....	-1	-1.3	-2.0	+1.3	+7.7	+4	+6	-3.6	-1.4
South Atlantic:									
Columbia, S. C.....	+3	-7.3	-2.4	+2.2	+4.5	+6.2	-3.1	-3.4	-1.1
Winston-Salem.....	-1.4	-2.4	-4.8	+1.6	+3	+4	+5	-3.7	-5
East South Central:									
Jackson.....	+2	+2.5	+3	+3.9	-1.7	-4.2	+1.1	-1.5	+2.2
Knoxville.....	-3	-3.4	-7.8	+1.6	+4.2	+9.5	+2	-5.5	-4
West South Central:									
El Paso.....	-3	-3	-5.6	+2.8	+2.7	+2.6	-4	-1.2	-1.3
Oklahoma City.....	+4.4	+9	+4	+6	0	+20.8	+1	-4	+5

## ELECTRICITY

THE December 1934 issue of Retail Prices introduced a revised technique, whereby the prices for November 15, 1934, were given for three typical services of electricity for household customers for 51 cities, and a statement concerning the basis for the application of the rates in computing the prices. Since that time prices of electricity for household use have been computed quarterly. This publication presents comparable figures showing net monthly bills and average prices per kilowatt-hour as computed from rate schedules in effect on December 15, 1937, and a résumé of changes affecting the cost of electricity to domestic customers since December 15, 1936. Twenty-four cities have reported changes. Net monthly bills and average prices per kilowatt-hour before and after the change, and percentage change in the net monthly bills, are shown for these cities.

### Prices on December 15, 1937

Residential rates for electricity are secured quarterly from 51 cities. These rates are used for computing average prices and typical bills in each city for the quantities of electricity which most nearly approximate the consumption requirements for the usual domestic services for a five-room house, including living room, dining room, kitchen, and two bedrooms. The blocks of consumption which have been selected

as representative of average conditions throughout the country are 25 and 40 kilowatt-hours for the use of electricity for lighting and small appliances alone; 100 kilowatt-hours for lighting, small appliances, and a refrigerator; and 250 kilowatt-hours for the addition of an electric range to the preceding equipment.

The technical specifications which are used as the basis for the application of these rates are:

Floor area (1,000 square feet).		
Connected load:		
Lighting and appliances	-----	700
Refrigeration	-----	300
Cooking	-----	6,000
Measured demand:		
Lighting and appliances	-----	600
Refrigeration	-----	100
Cooking	-----	2,300
Outlets: Fourteen 50-watt.		
Active room count: In accordance with schedule of rates.		

Typical bills and average prices per kilowatt-hour for the various blocks of consumption are shown in table 5 for each of the 51 cities.

TABLE 5.—Total Net Monthly Bill and Price per Kilowatt-Hour for Specified Amounts of Electricity Based on Rates as of December 15, 1937, by Cities

Region and city	Type of ownership <sup>1</sup>	Net monthly bill				Net monthly price per kilowatt-hour			
		25 kilowatt-hours Lighting and small appliances	40 kilowatt-hours Lighting and small appliances	100 kilowatt-hours Lighting, appliances, and refrigerator	250 kilowatt-hours Lighting, appliances, refrigerator, and range	25 kilowatt-hours Lighting and small appliances	40 kilowatt-hours Lighting and small appliances	100 kilowatt-hours Lighting, appliances, and refrigerator	250 kilowatt-hours Lighting, appliances, refrigerator, and range
<b>New England:</b>					<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	
Boston	P	\$1.55	\$2.30	\$5.10	\$9.60	6.2	5.8	5.1	3.8
Bridgeport	P	1.31	2.05	4.87	8.70	5.3	5.1	4.9	3.5
Fall River	P	1.58	2.38	4.98	9.13	6.3	5.9	5.0	3.7
Manchester	P	2.00	2.80	5.00	8.00	8.0	7.0	5.0	3.2
New Haven	P	1.31	2.05	4.87	8.70	5.3	5.1	4.9	3.5
Portland, Maine	P	1.85	2.60	4.70	7.70	7.4	6.5	4.7	3.1
Providence	P	1.76	2.66	5.50	9.50	7.0	6.7	5.5	3.8
<b>Middle Atlantic:</b>									
Buffalo	P	1.13	1.70	3.06	5.31	4.5	4.3	3.1	2.1
Newark	P	1.84	2.54	4.44	8.69	7.4	6.4	4.4	3.5
<b>New York:</b>									
Bronx	P	1.69	2.46	4.81	8.16	6.8	6.1	4.8	3.3
Brooklyn	P	1.69	2.46	4.81	8.16	6.8	6.1	4.8	3.3
Manhattan	P	1.69	2.46	4.81	8.16	6.8	6.1	4.8	3.3
Queens	P	1.69	2.46	4.81	8.16	6.8	6.1	4.8	3.3
Richmond	P	1.95	3.02	6.08	10.67	7.8	7.5	6.1	4.3
Philadelphia	P	2.19	3.17	5.62	9.09	8.8	7.9	5.6	3.6
Pittsburgh	P	1.40	2.15	3.76	6.76	5.6	5.4	3.8	2.7
Rochester	P	1.25	2.00	4.00	7.50	5.0	5.0	4.0	3.0
Scranton	P	1.59	2.26	4.56	7.81	6.3	5.7	4.6	3.1
<b>East North Central:</b>									
Chicago	P	1.25	2.00	4.25	8.00	5.0	5.0	4.3	3.2
Cincinnati	P	1.34	1.94	3.65	6.65	5.4	4.9	3.7	2.7
Cleveland	P	1.00	1.45	2.50	4.75	4.0	3.6	2.5	1.9
Columbus	M	1.00	1.60	3.75	7.25	4.0	4.0	3.8	2.9
	M	.85	1.27	2.80	5.55	3.4	3.2	2.8	2.2
	M	1.25	1.95	4.50	8.50	5.0	4.9	4.5	3.4
	M	1.00	1.58	3.80	8.30	4.0	4.0	3.8	3.3

See footnotes at end of table.

TABLE 5.—Total Net Monthly Bill and Price per Kilowatt-Hour for Specified Amounts of Electricity Based on Rates as of December 15, 1937, by Cities—Continued

Region and city	Type of ownership	Net monthly bill				Net monthly price per kilowatt-hour			
		25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours	25 kilowatt-hours	40 kilowatt-hours	100 kilowatt-hours	250 kilowatt-hours
		Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range	Lighting and small appliances	Lighting and small appliances	Lighting, appliances, and refrigerator	Lighting, appliances, refrigerator, and range
East North Central—Contd.									
Detroit <sup>3 4</sup>	P	\$1.39	\$1.95	\$3.48	\$6.95	Cents 5.6	Cents 4.9	Cents 3.5	Cents 2.8
Indianapolis	P	1.38	2.10	4.40	8.15	5.5	5.3	4.4	3.3
Milwaukee	P	1.41	1.90	3.48	6.35	5.7	4.8	3.5	2.5
Peoria	P	1.50	2.01	3.57	6.32	6.0	5.0	3.6	2.5
Springfield, Ill.	P	1.25	1.90	<sup>5</sup> 3.02	<sup>5</sup> 5.22	5.0	4.8	<sup>5</sup> 3.0	<sup>5</sup> 2.1
	M	1.25	1.90	3.02	4.80	5.0	4.8	3.0	1.9
West North Central:									
Kansas City <sup>2</sup>	P	1.66	2.35	4.08	7.91	6.6	5.9	4.1	3.2
Minneapolis	P	1.47	1.99	3.61	6.60	5.9	5.0	3.6	2.6
Omaha	P	1.19	1.90	3.88	7.78	4.8	4.8	3.9	3.1
St. Louis <sup>2 3</sup>	P	1.21	1.74	3.20	6.35	4.8	4.4	3.2	2.5
	P	1.09	1.45	2.91	5.81	4.4	3.6	2.9	2.3
St. Paul	P	1.60	2.15	3.85	7.00	6.4	5.4	3.9	2.8
South Atlantic:									
Atlanta:									
Immediate	P	1.45	2.12	3.95	6.57	5.8	5.3	3.9	2.6
Inducement <sup>6</sup>	P	1.22	1.90	3.85	6.57	4.9	4.7	3.8	2.6
Baltimore	P	1.13	1.80	3.90	8.20	4.5	4.5	3.9	3.3
Charleston, S. C.:									
Immediate	P	1.60	2.50	5.35	8.85	6.4	6.2	5.3	3.5
Objective <sup>6</sup>	P	1.50	2.25	4.20	6.82	6.0	5.6	4.2	2.7
Jacksonville	M	1.75	2.70	4.95	7.95	7.0	6.8	5.0	3.2
Norfolk	P	1.38	2.10	4.65	7.65	5.5	5.3	4.7	3.1
Richmond	P	1.38	2.10	4.65	7.65	5.5	5.3	4.7	3.1
Savannah	P	1.62	2.37	4.57	7.97	6.5	5.9	4.6	3.2
Washington	P	.98	1.56	3.10	5.65	3.9	3.9	3.1	2.3
East South Central:									
Birmingham:									
Immediate	P	1.25	2.00	3.75	7.30	5.0	5.0	3.8	2.9
Objective <sup>6</sup>	P	<sup>7</sup> 1.00	1.56	3.20	6.95	4.0	3.9	3.2	2.8
Louisville <sup>4</sup>	P	1.13	1.75	3.71	7.31	4.5	4.4	3.7	2.9
Memphis	P	1.38	2.20	4.25	8.75	5.5	5.5	4.3	3.5
Mobile:									
Present	P	1.45	2.13	3.95	6.58	5.8	5.3	4.0	2.6
Objective <sup>6</sup>	P	1.20	1.80	3.50	6.13	4.8	4.5	3.5	2.5
West South Central:									
Dallas	P	1.19	1.90	4.30	8.10	4.8	4.8	4.3	3.2
Houston	P	1.20	1.80	3.83	7.08	4.8	4.5	3.8	2.8
Little Rock: <sup>2</sup>									
Present	P	<sup>8</sup> 1.93	2.88	5.20	8.67	<sup>8</sup> 8.0	7.2	5.2	3.5
Centennial <sup>6</sup>	P	<sup>8</sup> 1.78	2.63	5.10	8.67	<sup>8</sup> 7.4	6.6	5.1	3.5
New Orleans	P	1.88	2.85	5.50	10.25	7.5	7.1	5.5	4.1
Mountain:									
Butte	P	1.55	2.38	4.43	7.93	6.2	5.9	4.4	3.2
Denver <sup>2</sup>	P	1.53	2.45	4.90	9.49	6.1	6.1	4.9	3.8
Salt Lake City: <sup>2</sup>									
Present	P	1.63	2.40	4.92	7.85	6.5	6.0	4.9	3.1
Objective <sup>6</sup>	P	1.63	2.30	3.83	7.14	6.5	5.7	3.8	2.9
Pacific:									
Los Angeles:									
	P	1.10	1.65	2.97	5.10	4.4	4.1	3.0	2.0
	<sup>9</sup> M	1.10	1.65	2.97	5.10	4.4	4.1	3.0	2.0
Portland, Oreg.:									
	P	1.25	1.88	3.37	6.07	5.0	4.7	3.4	2.4
	P	1.25	1.88	3.37	6.07	5.0	4.7	3.4	2.4
San Francisco:									
	P	1.30	1.77	3.09	5.89	5.2	4.4	3.1	2.4
Seattle:									
	P	1.25	2.00	3.20	6.08	5.0	5.0	3.2	2.4
	M	1.25	2.00	3.20	6.10	5.0	5.0	3.2	2.4

<sup>1</sup> Type of ownership is indicated as follows: P, private utility; M, municipal plant.

<sup>2</sup> Prices include 2-percent sales tax.

<sup>3</sup> Prices include free lamp-renewal service.

<sup>4</sup> Prices include 3-percent sales tax.

<sup>5</sup> Revised.

<sup>6</sup> The "Inducement" rate in Atlanta, the "Objective" rate in Charleston (S. C.), Birmingham, Mobile, and Salt Lake City, and the "Centennial" rate in Little Rock are designed to encourage greater use of electricity.

<sup>7</sup> Minimum charge.

<sup>8</sup> Based on 24 kilowatt-hours in accordance with billing policy of operating company.

<sup>9</sup> The municipal plant absorbed 1 of the privately owned utilities Jan. 31, 1937.

*Price Changes, December 16, 1936, to December 15, 1937*

Changes in prices of electricity to residential customers since December 15, 1936, have been recorded for 24 of the 51 reporting cities. Rate reductions occurred in 22 widely separated cities, representing all regional areas. For seven of these cities—Cincinnati, Washington, D. C., Birmingham, Dallas, Salt Lake City, Los Angeles, and San Francisco—lowered rates were also reported during the 12 months prior to December 15, 1936. An increase in the Missouri State sales tax, effective June 8, 1937, advanced the price of electricity to customers in Kansas City and St. Louis.

Rate decreases lowered the cost for current for all 4 services in 14 of the 22 cities. These reductions amounted to 4.4 percent or more for each service in Scranton, Philadelphia, Indianapolis, Atlanta, San Francisco, and the Borough of Queens<sup>1</sup> in New York. The greatest general reduction covering all services was reported for Scranton, where decreases ranged from 12.4 percent for customers using 100 kilowatt-hours to 23.1 percent for those using 25 kilowatt-hours—the latter decrease being greater than that shown for any other city for the use of current for lighting and small appliances only. Other cities whose rate reductions were, in a lesser degree, most advantageous to the smaller users are: Fall River; Portland, Maine; Newark; Minneapolis; Birmingham ("Immediate" rate); Dallas; Salt Lake City ("Present" rate); Portland, Oreg.; New York (Bronx, Brooklyn, Manhattan, and Queens).

The greatest reductions for customers using 250 kilowatt-hours per month occurred in Cleveland where the municipal and privately owned utilities reported decreases of 25.0 and 26.6 percent respectively for this service. Other cities in which lower rates were most beneficial to customers using major appliances are: Bridgeport, New Haven, Philadelphia, Pittsburgh, Cincinnati, Milwaukee, Washington (D. C.), Los Angeles, and San Francisco.

Customers in Indianapolis using the intermediate amounts of current, 40 and 100 kilowatt-hours per month, received the greatest benefits from lowered rates. This condition was reversed for one company serving part of the customers in the Borough of Queens, New York. In Atlanta the price reductions under the "Immediate" rate were greatest for customers using major appliances, while the "Inducement" rate provided decreases for small users only.

Net monthly bills, average prices per kilowatt-hour, and percentage change from December 16, 1936, to December 15, 1937, inclusive, are published in the special Retail Price report for December 1937, copy of which will be furnished upon request of the Bureau.

<sup>1</sup> Smaller decreases were reported by companies serving other boroughs.

## GAS

THERE was introduced in Retail Prices for November 1935 a revised technique whereby the first of a series of quarterly reports on prices for each of four consumption factors typical of the use of gas for domestic purposes were presented for 50 cities. This publication gives comparable figures showing net monthly bills and average prices per therm and per thousand cubic feet as computed from rates in effect on December 15, 1937; and also a résumé of changes affecting the cost of gas to domestic customers during the preceding year. Fourteen cities have reported changes. Net monthly bills and average prices per thousand cubic feet and per therm before and after the change, and percentage changes in the net monthly bills, are shown for these cities.

*Prices on December 15, 1937*

Residential rates for gas are secured from 50 cities. These rates are used in computing average prices and typical bills for each city for quantities of gas which approximate the average residential consumption requirements for each of four combinations of services. In order to put the rate quotations upon a comparable basis it is necessary to convert the normal consumption requirements used for computing monthly bills into an equivalent heating value expressed in therms (1 therm = 100,000 B. t. u.). This procedure is necessary because of the wide range in the heating value of a cubic foot of gas between different cities. The equipment and blocks of consumption which have been selected as representative of average conditions throughout the country are based upon the requirements of a five-room house, including living room, dining room, kitchen, and two bedrooms.

These specifications are:	<i>Therms</i>
Range.....	10.6
Range and manual type water heater.....	19.6
Range and automatic storage or instantaneous type water heater.....	30.6
Range, automatic storage or instantaneous type water heater, and refrigerator.....	40.6

Typical net monthly bills and prices per thousand cubic feet and per therm for these services for each city, presented in table 7, have been computed from rate schedules in effect on December 15, 1937.

TABLE 7.—Total Net Monthly Bill and Prices per Thousand Cubic Feet and per Therm for Specified Amounts of Gas, Based on Rates as of December 15, 1937, by Cities

Region and city	Kind of gas <sup>1</sup>	Heating value per cubic foot in British thermal units	Monthly consumption in cubic feet and net monthly bill based on specified numbers of therms <sup>2</sup>								Monthly price based on consumption of specified numbers of therms <sup>2</sup>							
			10.6 therms		19.6 therms		30.6 therms		40.6 therms		Per thousand cubic feet for—				Per therm for—			
			Range		Range and manual-type water heater		Range and automatic <sup>3</sup> water heater		Range, automatic <sup>3</sup> water heater, and refrigerator		10.6 therms	19.6 therms	30.6 therms	40.6 therms	10.6 therms	19.6 therms	30.6 therms	40.6 therms
			Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Cubic feet	Bill	Range	Range and manual-type water heater	Range and automatic <sup>3</sup> water heater	Range, automatic <sup>3</sup> water heater, and refrigerator	Range	Range and manual-type water heater	Range and automatic <sup>3</sup> water heater	Range, automatic <sup>3</sup> water heater, and refrigerator
New England:																		
Boston.....	M	535	1,980	2.48	3,660	4.16	5,720	5.70	7,590	7.19	Dollars	Dollars	Dollars	Dollars	Cents	Cents	Cents	Cents
	M	535	1,980	2.28	3,660	4.21	5,720	5.63	7,590	7.12								
Fall River.....	M	528	2,010	2.53	3,710	4.06	5,800	5.94	7,690	7.64								
Manchester.....	M	525	2,020	2.85	3,730	4.82	5,830	6.27	7,730	6.92								
New Haven.....	M	528	2,010	2.41	3,710	4.11	5,800	5.60	7,690	8.09								
Portland, Maine.....	M	525	2,020	3.03	3,730	5.16	5,830	6.51	7,730	8.03								
Providence.....	M	510	2,080	2.57	3,840	4.16	6,000	6.10	7,960	7.86								
Middle Atlantic:																		
Buffalo.....	X	900	1,180	.77	2,180	1.42	3,400	2.21	4,510	2.93								
Newark.....	M	525	2,020	2.69	3,730	4.31	5,830	6.06	7,730	7.29								
New York: <sup>4</sup>																		
Bronx.....	M	540	1,960	2.30	3,630	4.26	5,670	6.65	7,520	8.82								
Brooklyn.....	M	540	1,960	2.34	3,630	3.80	5,670	5.25	7,520	6.42								
	M	540	1,960	2.43	3,630	4.05	5,670	6.03	7,520	7.82								
	M	540	1,960	2.58	3,630	4.37	5,670	6.56	7,520	8.54								
Manhattan.....	M	540	1,960	2.30	3,630	4.26	5,670	6.65	7,520	8.82								
Queens.....	M	540	1,960	2.30	3,630	4.26	5,670	6.65	7,520	8.82								
Richmond.....	M	540	1,960	3.10	3,630	5.10	5,670	7.08	7,520	8.87								
Philadelphia.....	M	530	2,000	1.80	3,700	3.25	5,770	5.00	7,660	6.61								
Pittsburgh.....	N	1,130	940	1.00	1,730	1.04	2,710	1.63	3,590	2.15								
	N	1,100	960	1.00	1,780	1.07	2,780	1.67	3,690	2.21								
	N	1,100	960	1.00	1,780	1.07	2,780	1.67	3,690	2.21								
Rochester.....	M	537	1,970	1.97	3,650	3.65	5,700	5.56	7,560	7.05								
Seranton.....	M	520	2,040	2.89	3,770	4.57	5,880	5.77	7,810	7.60								

East North Central:																		
Chicago	X	800	1,330	1.94	2,450	3.33	3,830	4.69	5,080	5.39	1.46	1.36	1.23	1.06	18.3	17.0	15.3	13.3
Cincinnati	X	865	1,230	.91	2,270	1.63	3,540	2.45	4,690	3.16	.74	.72	.69	.67	8.6	8.3	8.0	7.8
Cleveland	N	1,100	960	<sup>5</sup> .75	1,780	.89	2,780	1.43	3,690	1.05	.78	.50	.51	.52	7.1	4.5	4.7	4.8
Columbus	N	1,050	1,010	<sup>5</sup> .75	1,870	1.03	2,910	1.60	3,870	2.13	.74	.55	.55	.55	7.1	5.2	5.2	5.2
	N	1,050	1,010	<sup>5</sup> .75	1,870	.90	2,910	1.40	3,870	1.86	.74	.48	.48	.48	7.1	4.6	4.6	4.6
Detroit <sup>6</sup>	N	1,010	1,050	1.55	1,940	2.51	3,030	3.68	4,020	4.75	<sup>7</sup> 1.47	<sup>7</sup> 1.29	<sup>7</sup> 1.21	<sup>7</sup> 1.18	14.6	12.8	12.0	11.7
Indianapolis	M	570	1,860	1.58	3,440	2.92	5,370	4.57	7,120	6.05	.85	.85	.85	.85	14.9	14.9	14.9	14.9
Milwaukee	M	520	2,040	1.76	3,770	2.89	5,880	4.26	7,810	5.51	.86	.77	.72	.71	16.6	14.7	13.9	13.6
Peoria	N	1,000	1,060	2.12	1,960	3.64	3,060	4.67	4,060	5.57	2.00	1.86	1.53	1.37	20.0	18.6	15.3	13.7
Springfield, Ill.	N	1,000	1,060	1.91	1,960	3.36	3,060	4.66	4,060	5.56	1.80	1.71	1.52	1.37	18.0	17.1	15.2	13.7
West North Central:																		
Kansas City <sup>4</sup>	N	<sup>8</sup> 1,040	1,020	1.33	1,880	2.12	2,940	3.05	3,900	3.88	1.31	1.13	1.04	1.00	12.6	10.8	10.0	9.6
Minneapolis	X	800	1,330	1.98	2,450	3.13	3,830	4.54	5,080	5.78	1.49	1.28	1.19	1.14	18.7	16.0	14.8	14.2
Omaha	M	555	1,910	1.46	3,530	3.27	5,510	3.26	7,320	4.16	.76	.64	.59	.57	13.7	11.6	10.6	10.2
St. Louis <sup>4</sup>	X	800	1,330	2.05	2,450	3.35	3,830	4.92	5,080	6.23	1.54	1.37	1.29	1.23	19.4	17.1	16.1	15.3
St. Paul	M	550	1,930	1.98	3,560	3.16	5,560	4.59	7,380	5.87	1.03	.89	.83	.79	18.7	16.1	15.0	14.5
South Atlantic:																		
Atlanta	N	980	1,080	1.78	2,000	2.70	3,120	3.77	4,140	4.38	1.65	1.35	1.21	1.06	16.8	13.8	12.3	10.8
Baltimore	M	500	2,120	1.80	3,920	3.33	6,120	4.78	8,120	6.08	.85	.85	.78	.75	17.0	17.0	15.6	15.0
Charleston, S. C.:																		
Immediate	M	550	1,930	2.70	3,560	4.98	5,560	7.19	7,380	9.01	1.40	1.40	1.29	1.22	25.5	25.5	23.5	22.2
Objective <sup>9</sup>	M	550	1,930	<sup>(10)</sup>	3,560	4.42	5,560	5.92	7,380	7.28	<sup>(10)</sup>	1.24	1.06	.99	22.6	22.6	19.3	17.9
Jacksonville	M	535	1,980	4.03	3,660	6.34	5,720	8.20	7,590	9.88	2.03	1.73	1.43	1.30	38.0	32.4	26.8	24.3
Norfolk	M	530	2,000	2.40	3,700	4.36	5,770	6.62	7,660	8.51	1.20	1.18	1.15	1.11	22.6	22.2	21.6	21.0
Richmond	M	525	2,020	2.63	3,730	4.78	5,830	6.05	7,730	7.76	1.30	1.28	1.04	1.00	24.8	24.4	19.8	19.1
Savannah	M	535	1,980	2.48	3,660	4.58	5,720	7.15	7,590	9.49	1.25	1.25	1.25	1.25	23.3	23.3	23.3	23.3
Washington, D. C.	X	604	1,750	1.51	3,250	2.71	5,070	4.01	6,720	5.16	.86	.83	.79	.77	14.2	13.8	13.1	12.7
East South Central:																		
Birmingham	M	520	2,040	1.63	3,770	3.02	5,880	4.70	7,810	6.25	.80	.80	.80	.80	15.4	15.4	15.4	15.4
Louisville <sup>6</sup>	X	900	1,180	.92	2,180	1.43	3,400	2.06	4,510	2.63	.78	.66	.61	.58	8.7	7.3	6.7	6.5
Memphis	N	980	1,080	1.51	2,000	2.48	3,120	3.60	4,140	4.21	1.40	1.24	1.15	1.02	14.3	12.7	11.8	10.4
Mobile:																		
Present	N	960	1,100	2.25	2,040	3.43	3,190	4.75	4,230	5.43	2.05	1.68	1.49	1.28	21.2	17.5	15.5	13.4
Objective <sup>9</sup>	N	960	1,100	2.05	2,040	2.99	3,190	4.06	4,230	4.69	1.86	1.47	1.27	1.11	19.3	15.3	13.3	11.5
West South Central:																		
Dallas	N	1,050	1,010	1.26	1,870	1.84	2,910	2.54	3,870	3.19	1.25	.98	.87	.82	11.9	9.4	8.3	7.9
Houston	N	1,030	1,030	1.17	1,900	1.74	2,970	2.43	3,940	3.06	1.14	.91	.82	.78	11.0	8.9	7.9	7.5
Little Rock <sup>4</sup>	N	1,000	1,060	1.11	1,960	1.61	3,060	2.23	4,060	2.79	1.04	.82	.73	.69	10.4	8.2	7.3	6.9
New Orleans	N	950	1,120	1.26	2,060	2.10	3,220	3.15	4,270	4.09	1.12	1.02	.98	.96	11.9	10.7	10.3	10.1
Mountain:																		
Butte	N	850	1,250	1.11	2,310	1.59	3,600	2.17	4,780	2.70	.89	.69	.60	.57	10.5	8.1	7.1	6.7
Denver <sup>4</sup>	N	825	1,280	2.18	2,380	3.35	3,710	4.20	4,920	4.84	1.70	1.41	1.13	.98	20.6	17.1	13.7	11.9
Salt Lake City <sup>4</sup>	N	865	1,230	2.12	2,270	3.27	3,540	4.16	4,690	4.86	1.72	1.44	1.17	1.04	20.0	16.7	13.6	12.0
Pacific:																		
Los Angeles	N	1,100	960	1.25	1,780	1.81	2,780	2.42	3,690	2.95	1.30	1.01	.87	.80	11.8	9.2	7.9	7.3
Portland, Oreg.	M	570	1,860	2.34	3,440	3.98	5,370	5.33	7,120	6.61	1.26	1.16	.99	.93	22.0	20.3	17.4	16.3
San Francisco	N	1,150	920	1.27	1,700	1.82	2,660	2.49	3,530	3.10	1.38	1.07	.94	.88	12.0	9.3	8.1	7.6
Seattle <sup>6</sup>	M	500	2,120	3.10	3,920	5.36	6,120	5.32	8,120	6.45	1.46	1.37	.87	.79	29.2	27.3	17.4	15.9

See footnotes on p. 542.

<sup>1</sup> Different kinds of gas are indicated as follows: M, manufactured; N, natural; X, mixed manufactured and natural.

<sup>2</sup> Typical monthly consumption for each service for a 5-room house (1 therm equals 100,000 B. t. u.).

<sup>3</sup> Automatic-storage or instantaneous water heater.

<sup>4</sup> Prices include 2-percent sales tax.

<sup>5</sup> Minimum charge.

<sup>6</sup> Prices include 3-percent sales tax.

<sup>7</sup> Revision based on the average heating value of gas served from December 1936 to December 1937. This revision has been extended back through December 1936, during which period prices per thousand cubic feet had been based on an estimated heating value of 1,000 B. t. u.

<sup>8</sup> Revised March 1937 for change from 1,000 to 1,040 B. t. u. per cubic foot—effective date not available.

<sup>9</sup> The "Objective" rates in Charleston and Mobile are designed to encourage a greater use of gas. An intermediate rate called the "Inducement" rate, also available in Mobile, provides a price lower than that of the "Present" rate for a part of the monthly consumption for customers whose increase in the use of gas is not sufficient to entitle them to the advantages of the "Objective" rate.

<sup>10</sup> The "Objective" rate is not applicable for customers using 10.6 therms for the reason that the bill would be higher than that computed under the "Immediate" rate.

### *Indexes of Changes in the Price of Gas*

Series of indexes (1923-25=100) for all gas and for manufactured, natural, and mixed manufactured and natural gas have been computed for two of the services for which typical bills are published quarterly—10.6 therms, illustrating the use of gas for a range; and 30.6 therms, typical of heat requirements for both range and automatic water heater. These indexes have been computed for quarterly periods from March 1923 to December 1937, inclusive, and are based upon bills for these services for each of the 50 cities reporting to the Bureau. They are published annually in December.

Composite indexes and city indexes for each service together with the basic data used in their computation and a statement of methodology were published in "Changes in Retail Prices of Gas, 1923-1936," Bulletin No. 628 of the Bureau of Labor Statistics.

Changes in composite indexes since December 15, 1936, were relatively unimportant to manufactured gas customers using 10.6 therms for range only, and to all customers served with natural gas or mixed manufactured and natural gas. The sharp drop of 5.1 percent in prices of 30.6 therms of manufactured gas in June 1937, followed by an equally abrupt advance of 4.9 percent in December resulted in large measure from the introduction of a summer rate which was available to customers in the Bronx, Manhattan, and Queens boroughs of New York. This rate provided a price considerably lower than the winter rate for all gas consumed in excess of 3,000 cubic feet (16.2 therms). The influence of these changes is also reflected in the all-gas index for 30.6 therms for 50 cities combined.

Table 8 presents composite indexes for the 50 cities combined, together with separate indexes for manufactured, natural, and mixed gas, for December of specified years from 1924 to 1935 and for the quarterly periods from March 1936 to December 1937, inclusive.

TABLE 8.—Indexes of Retail Prices of Gas

March, June, September, and December 1937 and 1936 and December of specified years,  
1924-35

[1923-25=100]

Date	10.6 therms, range				30.6 therms, range and water heater			
	All gas	Manu- factured	Natural	Mixed	All gas	Manu- factured	Natural	Mixed
	50 cities	1923, 40 cities; 1937, 24 cities	1923, 7 cities; 1937, 19 cities	1923, 3 cities; 1937, 7 cities	50 cities	1923, 40 cities; 1937, 24 cities	1923, 7 cities; 1937, 19 cities	1923, 3 cities; 1937, 7 cities
1924: December.....	100.0	100.1	98.7	98.9	100.0	100.0	102.0	98.9
1926: December.....	99.9	99.6	107.1	101.0	99.6	99.4	108.1	101.0
1928: December.....	99.5	99.1	119.4	101.0	97.3	98.3	108.5	101.0
1930: December.....	99.3	100.3	119.2	99.3	94.0	96.7	108.3	98.8
1932: December.....	97.4	99.3	119.2	98.1	89.7	92.8	108.3	97.5
1934: December.....	97.4	100.1	115.0	98.3	88.5	92.7	104.5	92.9
1935: December.....	97.2	100.0	114.1	98.3	86.8	90.4	104.0	92.5
1936: March.....	97.1	100.0	114.0	<sup>1</sup> 98.0	86.6	90.3	103.2	92.0
June.....	96.9	99.9	112.9	98.1	86.4	90.2	101.4	92.1
September.....	96.9	99.9	113.0	98.1	86.4	90.2	<sup>1</sup> 101.4	92.0
December.....	96.5	99.8	113.0	98.3	85.0	90.0	<sup>1</sup> 101.4	<sup>1</sup> 92.2
1937: March.....	96.4	99.8	112.8	98.2	85.0	89.9	101.3	92.2
June.....	96.5	99.8	112.8	98.3	82.2	85.3	101.2	<sup>1</sup> 92.3
September.....	96.6	100.0	112.8	98.4	82.1	85.2	101.2	92.5
December.....	96.6	100.0	112.8	98.4	84.7	89.4	101.2	92.5

<sup>1</sup> Revised.

*Price Changes, December 16, 1936–December 15, 1937*

Price changes occurred during the year in the following 14 cities: New York (Bronx, Manhattan, and Queens), Scranton, Milwaukee, Kansas City, Minneapolis, Omaha, St. Louis, St. Paul, Charleston (S. C.), Richmond, Savannah, Washington (D. C.), Birmingham, and Los Angeles.

New rate schedules were introduced in 9 of the 14 cities, changes were reported in the heating value of the gas served in 3, and an increase in State sales tax advanced the price to the consumer in the remaining 2.

General rate reductions reported for eight cities resulted in lower prices of gas for all residential customers in Scranton, Omaha, and Los Angeles; and for customers using major appliances in addition to a range in Richmond, New York, Charleston (S. C.), Milwaukee, and St. Paul. The greatest reductions occurred in Richmond where prices dropped 18.6 percent for customers using 30.6 therms, and 21.0 percent for those using 40.6 therms. Substantial reductions during the summer months only were also reported for New York. An "Objective" rate schedule made available in Charleston (S. C.) provided lower prices to customers whose consumption of gas had increased sufficiently to produce a monthly bill equal to or greater than that computed under the old rate for the corresponding month of the preceding year.

Although there were decreases in the cost of gas to the larger consumers in Milwaukee and St. Paul, prices for 10.6 therms for range only advanced 1.8 percent and 14.2 percent respectively, in these cities. A rate increase in Minneapolis advanced prices slightly for all services. Prices also advanced in Savannah and Birmingham due to decreases in the heating value of the gas served. In Washington an increase in the heating value lowered the price slightly.

Typical net monthly bills, prices per thousand cubic feet and per therm, and percentage change from December 16, 1936, to December 15, 1937, inclusive, are published in the special Retail Price report for December 1937, copy of which will be furnished upon request to the Bureau.

## Wholesale Prices

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### WHOLESALE PRICES, DECEMBER AND YEAR 1937

WHOLESALE commodity prices for the year 1937 were 6.8 percent above the 1936 level, according to the all-commodity index, which advanced from 80.8 to 86.3. Prices rose steadily until April, when the year's high point—88.0—was reached. A downward tendency was evidenced during May and June, followed by a pronounced rise in July. After July, however, when the index stood at 87.9, a sharp decline began and continued throughout the year. By December the index had fallen to 81.7, representing a decline of 7.1 from the July level.

Each of the 10 major commodity groups averaged higher in 1937 than in 1936. The miscellaneous commodity group registered the greatest gain—10.4 percent. During the year period metals advanced 10.0 percent; building materials and housefurnishing goods, 9.8 percent; hides and leather products, 9.6 percent; farm products, 6.8 percent; textile products, 6.7 percent; chemicals and drugs, 4.4 percent; foods, 4.1 percent; and fuel and lighting materials, 1.8 percent.

Between 1936 and 1937 the semimanufactured articles group of commodities advanced 12.4 percent. Finished product prices rose 6.3 percent, and raw materials increased 6.1 percent. According to the index for "All commodities other than farm products," nonagricultural commodity prices advanced 6.8 percent. Industrial commodity prices, as measured by the index for "All commodities other than farm products and foods" rose 7.2 percent.

Commodity prices generally have advanced sharply from the low of February 1933, when the all-commodity index receded to 59.8. The group increases during this period range from 17.8 for chemicals and drugs to 111.2 percent for farm products. Although each of the commodity groups in 1937 was above the depression low point, each is below the year 1929.

A comparison of the 1937 group and subgroup indexes with 1936, 1929, and the low points falling between June 1930 and June 1935 is shown in table 1.

TABLE 1.—Index Numbers of Wholesale Prices for Year 1937 Compared With 1936, 1929, and Low Points Between June 1930, and June 1935

[1926=100]

Group and subgroup	Index		Percentage change, 1936 to 1937	Low between June 1930 and June 1935		Percentage change, low to 1937	Index, year 1929	Percentage change, 1929 to 1937
	Year 1937	Year 1936		Month	Index			
All commodities.....	86.3	80.8	+6.8	February 1933...	59.8	+44.3	95.3	-9.4
Farm products.....	86.4	80.9	+6.8	do.....	40.9	+111.2	104.9	-17.6
Grains.....	98.3	88.3	+11.3	December 1932.....	31.7	+210.1	97.4	+0.9
Livestock and poultry.....	95.5	84.7	+12.8	January 1933.....	37.8	+152.6	106.1	-10.0
Other farm products.....	77.2	76.0	+1.6	February 1933.....	44.2	+74.7	106.6	-27.6
Foods.....	85.5	82.1	+4.1	do.....	53.7	+59.2	99.9	-14.4
Dairy products.....	83.1	83.9	-1.0	March 1933.....	50.9	+63.3	105.6	-21.3
Cereal products.....	87.6	86.2	+1.6	February 1933.....	60.4	+45.0	88.0	-0.5
Fruits and vegetables.....	74.2	71.9	+3.2	October 1932.....	52.2	+42.1	97.8	-24.1
Meats.....	99.1	87.8	+12.9	December 1933.....	46.0	+115.4	109.1	-9.2
Other foods.....	75.6	75.9	-0.4	February 1933.....	54.1	+39.7	93.9	-19.5
Hides and leather products.....	104.6	95.4	+9.6	do.....	68.0	+53.8	109.1	-4.1
Shoes.....	105.0	99.8	+5.2	March 1933.....	83.2	+26.2	106.3	-1.2
Hides and skins.....	113.5	94.6	+20.0	June 1932.....	32.5	+249.2	112.7	+0.7
Leather.....	96.8	85.6	+13.1	February 1933.....	55.3	+75.0	113.2	-14.5
Other leather products.....	102.6	95.5	+7.4	April 1933.....	77.2	+32.9	106.4	-3.6
Textile products.....	76.3	71.5	+6.7	February 1933.....	51.2	+49.0	90.4	-15.6
Clothing.....	87.9	81.1	+8.4	July 1932.....	60.9	+44.3	90.0	-2.3
Cotton goods.....	84.3	80.3	+5.0	February 1933.....	49.1	+71.7	98.8	-14.7
Knit goods.....	65.1	61.2	+6.4	March 1933.....	47.1	+38.2	88.5	-26.4
Silk and rayon.....	32.5	31.2	+4.2	September 1934.....	24.3	+33.7	80.4	-59.6
Woolen and worsted goods.....	91.1	82.9	+9.9	February 1933.....	53.2	+71.2	88.3	+3.2
Other textile products.....	68.4	67.0	+2.1	do.....	66.2	+8.3	93.1	-26.5
Fuel and lighting materials.....	77.6	76.2	+1.8	May 1933.....	60.4	+28.5	83.0	-6.5
Anthracite.....	77.8	80.5	-3.4	May 1935.....	73.0	+6.6	90.1	-13.7
Bituminous coal.....	98.6	97.4	+1.2	April 1933.....	78.1	+26.2	91.3	+8.0
Coke.....	103.1	94.7	+8.9	March 1933.....	75.2	+37.1	84.6	+21.9
Electricity.....	(1)	83.4	-----	April 1934.....	88.3	-----	94.5	-----
Gas.....	(1)	85.2	-----	January 1935.....	87.6	-----	93.1	-----
Petroleum products.....	60.5	57.3	+5.6	May 1933.....	31.2	+93.9	71.3	-15.1
Metals and metal products.....	95.7	87.0	+10.0	April 1933.....	76.9	+24.4	100.5	-4.8
Agricultural implements.....	94.0	94.2	-----	June 1933.....	83.0	+13.3	98.7	-4.8
Iron and steel.....	98.2	87.6	+12.1	May 1933.....	75.2	+30.6	94.9	+3.8
Motor vehicles <sup>2</sup> .....	89.3	83.3	+7.2	April 1933.....	82.7	+8.0	100.0	-10.7
Nonferrous metals.....	89.6	71.6	+25.1	February 1933.....	46.2	+93.9	106.1	-15.6
Plumbing and heating.....	78.8	75.0	+5.1	do.....	59.4	+32.7	95.0	-17.1
Building materials.....	95.2	86.7	+9.8	August 1932.....	69.6	+36.8	95.4	-2.2
Brick and tile.....	93.5	88.7	+5.4	March 1933.....	74.9	+24.8	94.3	-8.8
Cement.....	95.5	95.5	0	November 1931.....	74.6	+28.0	91.8	+4.0
Lumber.....	99.0	84.5	+17.2	August 1932.....	55.5	+78.4	93.8	+5.5
Paint and paint materials.....	83.4	80.1	+4.1	July 1932.....	66.8	+24.9	94.9	-12.1
Plumbing and heating.....	78.8	75.0	+5.1	February 1933.....	59.4	+32.7	95.0	-17.1
Structural steel.....	113.2	95.0	+19.2	January 1932.....	77.3	+46.4	98.1	+15.4
Other building materials.....	99.1	90.2	+9.9	June 1932.....	77.6	+27.7	97.7	+1.4
Chemicals and drugs.....	83.9	80.4	+4.4	March 1933.....	71.2	+17.8	94.2	-10.9
Chemicals.....	89.9	87.2	+3.1	July 1934.....	78.5	+14.5	99.1	-9.3
Drugs and pharmaceuticals.....	79.1	74.4	+6.3	April 1933.....	54.6	+44.9	71.5	+10.6
Fertilizer materials.....	71.2	65.9	+8.0	February 1933.....	61.5	+15.8	92.1	-22.7
Mixed fertilizers.....	73.2	68.4	+7.0	April 1933.....	60.0	+22.0	97.2	-24.7
Housefurnishing goods.....	89.7	81.7	+9.8	do.....	71.5	+25.5	94.3	-4.9
Furnishings.....	93.4	85.3	+9.5	do.....	71.7	+30.3	93.6	-0.2
Furniture.....	85.9	78.0	+10.1	do.....	71.5	+20.1	95.0	-9.6
Miscellaneous.....	77.8	70.5	+10.4	do.....	57.8	+34.6	82.6	-5.8
Automobile tires and tubes.....	55.8	47.2	+18.2	do.....	37.4	+49.2	54.5	+2.4
Cattle feed.....	110.5	94.4	+17.1	December 1932.....	37.1	+197.8	121.6	-0.1
Paper and pulp.....	91.7	80.7	+13.6	April 1933.....	70.6	+29.9	88.9	+3.1
Rubber, crude.....	40.5	34.2	+18.4	June 1932.....	5.8	+598.3	42.3	-4.3
Other miscellaneous.....	84.7	81.1	+4.4	March 1933.....	72.6	+16.7	98.4	-13.9
Raw materials.....	84.8	79.9	+6.1	February 1933.....	48.4	+75.2	97.5	-13.0
Semimanufactured articles.....	85.3	75.9	+12.4	July 1932.....	55.5	+53.7	93.9	-9.2
Finished products.....	87.2	82.0	+6.3	February 1933.....	65.7	+32.7	94.5	-7.7
All commodities other than farm products.....	86.2	80.7	+6.8	April 1933.....	63.7	+35.3	93.3	-7.6
All commodities other than farm products and foods.....	85.3	79.6	+7.2	do.....	65.3	+30.6	91.6	-6.9

<sup>1</sup> Data not yet available.<sup>2</sup> Preliminary revision.

Index numbers for the groups and subgroups of commodities for each year 1929 to 1937, inclusive, are shown in table 2.

TABLE 2.—Index Numbers of Wholesale Prices, by Groups and Subgroups of Commodities

[1926=100]

Group and subgroup	1937	1936	1935	1934	1933	1932	1931	1930	1929
All commodities	86.3	80.8	80.0	74.9	65.9	64.8	73.0	86.4	95.3
Farm products	86.4	80.9	78.8	65.3	51.4	48.2	64.8	88.3	104.9
Grains	98.3	88.3	82.5	74.5	53.1	39.4	53.0	78.3	97.4
Livestock and poultry	95.5	84.7	85.1	51.5	43.4	48.2	63.9	89.2	106.1
Other farm products	77.2	76.0	73.4	70.5	55.8	51.4	69.2	91.1	106.6
Foods	85.5	82.1	83.7	70.5	60.5	61.0	74.6	90.5	99.9
Dairy products	83.1	83.9	79.8	72.7	60.7	61.3	81.8	95.5	105.6
Cereal products	87.6	86.2	94.1	88.7	75.0	66.4	73.1	81.5	88.0
Fruits and vegetables	74.2	71.9	63.6	67.5	61.7	58.0	72.4	96.6	97.8
Meats	99.1	87.8	94.5	62.9	50.0	58.2	75.4	98.4	109.1
Other foods	75.6	75.9	77.7	66.6	61.1	60.7	69.8	80.9	93.9
Hides and leather products	104.6	95.4	89.6	86.6	80.9	72.9	86.1	100.0	109.1
Shoes	105.0	99.8	98.0	98.1	90.2	86.0	93.7	102.0	106.3
Hides and skins	113.5	94.6	80.8	68.6	67.1	42.1	60.2	91.0	112.7
Leather	96.8	85.6	80.1	75.0	71.4	65.1	86.2	101.3	113.2
Other leather products	102.6	95.5	85.0	86.6	81.1	90.1	101.4	105.5	106.4
Textile products	76.3	71.5	70.9	72.9	64.8	54.9	66.3	80.3	90.4
Clothing	87.9	81.1	79.8	82.5	72.2	63.0	75.9	86.2	90.0
Cotton goods	84.3	80.3	83.4	86.5	71.2	54.0	66.1	84.7	98.8
Knit goods	65.1	61.2	61.8	63.2	58.9	51.6	60.9	80.0	88.5
Silk and rayon	32.5	31.2	30.2	26.7	30.6	31.0	43.5	60.2	80.4
Woolen and worsted goods	91.1	82.9	76.1	79.7	69.3	57.7	68.2	79.0	88.3
Other textile products	68.4	67.0	68.5	73.1	72.5	67.9	75.1	84.2	93.1
Fuel and lighting materials	77.6	76.2	73.5	73.3	66.3	70.3	67.5	78.5	83.0
Anthracite	77.8	80.5	79.7	80.1	82.2	88.4	91.1	89.1	90.1
Bituminous coal	98.6	97.4	96.7	94.5	82.8	82.0	84.6	89.4	91.3
Coke	103.1	94.7	88.6	84.8	77.9	77.7	82.4	84.0	84.6
Electricity	(1)	83.4	87.8	91.8	94.3	104.7	98.8	97.7	94.5
Gas	(1)	85.2	89.3	93.4	97.5	101.3	98.7	97.3	93.1
Petroleum products	60.5	57.3	51.3	50.5	41.0	45.4	39.5	61.5	71.3
Metals and metal products	95.7	87.0	86.4	86.9	79.8	80.2	84.5	92.1	100.5
Agricultural implements	94.0	94.2	93.7	89.6	83.5	84.9	92.1	95.0	98.7
Iron and steel	98.2	87.6	86.7	86.7	78.6	79.4	83.3	89.1	94.9
Motor vehicles <sup>2</sup>	89.3	83.3	84.1	87.6	83.2	87.1	89.5	94.0	100.0
Nonferrous metals	89.6	71.6	68.6	67.7	59.6	49.8	61.9	82.4	106.1
Plumbing and heating	78.8	75.0	68.9	72.6	67.1	66.8	84.7	88.6	95.0
Building materials	95.2	86.7	85.3	86.2	77.0	71.4	79.2	89.9	95.4
Brick and tile	93.5	88.7	89.4	90.2	79.2	77.3	83.6	89.8	94.3
Cement	95.5	95.5	95.3	93.2	86.1	77.2	79.4	91.8	91.8
Lumber	90.0	84.5	81.1	84.5	70.7	58.5	69.5	85.8	93.8
Paint and paint materials	83.4	80.1	79.8	79.5	73.3	71.1	79.4	90.5	94.9
Plumbing and heating	78.8	75.0	68.9	72.6	67.1	66.8	84.7	88.6	95.0
Structural steel	113.2	95.0	92.0	90.8	83.1	80.9	83.1	87.3	98.1
Other building materials	99.1	90.2	90.1	90.3	82.7	79.5	84.8	93.3	97.7
Chemicals and drugs	83.9	80.4	80.5	75.9	72.6	73.5	79.3	89.1	94.2
Chemicals	89.9	87.2	86.9	79.6	79.6	79.5	83.0	93.7	99.1
Drugs and pharmaceuticals	79.1	74.4	73.9	72.1	56.3	57.7	62.8	68.0	71.5
Fertilizer materials	71.2	65.9	66.3	67.1	65.9	66.9	76.8	85.6	92.1
Mixed fertilizers	73.2	68.4	70.6	72.5	64.5	69.3	82.0	93.6	97.2
Housefurnishing goods	89.7	81.7	80.6	81.5	75.8	75.1	84.9	92.7	94.3
Furnishings	93.4	85.3	84.2	84.1	76.6	75.4	82.2	91.4	93.6
Furniture	85.9	78.0	77.0	79.0	75.1	75.0	88.0	94.0	95.0
Miscellaneous	77.8	70.5	68.3	69.7	62.5	64.4	69.8	77.7	82.6
Automobile tires and tubes	55.8	47.2	45.7	44.9	42.1	41.1	46.0	51.3	54.5
Cattle feed	110.5	94.4	88.3	89.4	57.9	46.0	62.7	99.7	121.6
Paper and pulp	91.7	80.7	80.0	82.7	76.6	75.5	81.4	86.1	88.9
Rubber, crude	40.5	34.2	25.4	26.5	12.2	7.3	12.8	24.5	42.3
Other miscellaneous	84.7	81.1	80.0	82.1	76.2	83.7	88.0	95.5	98.4
Raw materials	84.8	79.9	77.1	68.6	56.5	55.1	65.6	84.3	97.5
Semimanufactured articles	85.3	75.9	73.6	72.8	65.4	59.3	69.0	81.8	93.9
Finished products	87.2	82.0	82.2	78.2	70.5	70.3	77.0	88.0	94.5
All commodities other than farm products	86.2	80.7	80.2	76.9	69.0	68.3	74.6	85.9	93.3
All commodities other than farm products and foods	85.3	79.6	77.9	78.4	71.2	70.2	75.0	85.2	91.6

<sup>1</sup> Data not yet available.

<sup>2</sup> Preliminary revision.

*Wholesale Price Level in December*

Sharp declines in prices of farm products, foods, and hides and leather products largely accounted for a decrease of 1.9 percent in the all-commodity index during December.

The decrease brought the combined index of 784 price series to 81.7 percent of the 1926 average, representing a decrease of 7.2 percent from the year's high point (April) and a decrease of 3.0 percent from December 1936.

Each of the 10 commodity groups, except fuel and lighting materials, averaged lower during the month. The decreases ranged from 0.5 percent for the metals and metal products and miscellaneous commodity groups to 4.0 percent for foods.

The number of items for which prices increased, decreased, or remained steady during December are shown in table 3.

TABLE 3.—Number of Commodities Changing in Price from November to December 1937

Group	Increases	Decreases	No change
All commodities.....	94	278	412
Farm products.....	32	33	2
Foods.....	34	50	38
Hides and leather products.....	1	27	13
Textile products.....	2	62	48
Fuel and lighting materials.....	9	9	6
Metals and metal products.....	2	26	102
Building materials.....	2	28	56
Chemicals and drugs.....	5	14	70
Housefurnishing goods.....	1	10	50
Miscellaneous.....	6	19	27

Wholesale prices of raw materials declined 2.3 percent in December to the lowest level reached in the past 3 years. Compared with December 1936, raw material prices dropped 11.9 percent. Semi-manufactured commodity prices declined 2.6 percent during the month and are 5.6 percent below a year ago. The fluctuations in the finished products group have been less pronounced. Although the December index is 1.6 percent below the November level, it is 1.8 percent above December 1936.

The index for the large group "All commodities other than farm products," marking the movement in prices of nonagricultural commodities, fell 1.5 percent. The index for "All commodities other than farm products and foods," representing the trend in prices of industrial commodities, dropped 0.8 percent. That the decline in the general index during the year was caused primarily by weakening prices of farm products and foods is shown by the fact that the price level for "All commodities other than farm products" was 0.5 percent above a year ago and that for "All commodities other than farm products and foods" was 1.7 percent above December 1936.

A comparison of the December level of wholesale commodity prices with November 1937 and December 1936 is given in table 4.

TABLE 4.—Comparison of Index Numbers for December 1937 With November 1937 and December 1936

[1926=100]

Commodity group	December 1937	November 1937	Change from a month ago	December 1936	Change from a year ago
All commodities.....	81.7	83.3	Percent -1.9	84.2	Percent -3.0
Farm products.....	72.8	75.7	-3.8	88.5	-17.7
Foods.....	79.8	83.1	-4.0	85.5	-6.7
Hides and leather products.....	97.7	101.4	-3.6	99.7	-2.0
Textile products.....	70.1	71.2	-1.5	76.3	-8.1
Fuel and lighting materials.....	78.4	78.2	+3	76.5	+2.5
Metals and metal products.....	96.3	96.8	-.5	89.6	+7.5
Building materials.....	92.5	93.7	-1.3	89.5	+3.4
Chemicals and drugs.....	79.5	80.2	-.9	85.3	-6.8
Housefurnishing goods.....	89.7	90.4	-.8	83.2	+7.8
Miscellaneous.....	75.0	75.4	-.5	74.5	+7
Raw materials.....	75.4	77.2	-2.3	85.6	-11.9
Semimanufactured articles.....	77.7	79.8	-2.6	82.3	-5.6
Finished products.....	85.3	86.7	-1.6	83.8	+1.8
All commodities other than farm products.....	83.5	84.8	-1.5	83.1	+5
All commodities other than farm products and foods.....	83.6	84.3	-.8	82.2	+1.7

Largely because of decreases of 9.7 percent in meats and 6.0 percent in fruits and vegetables, the wholesale foods group declined 4.0 percent to the lowest level reached since May 1936. Quotations were lower for cheese, dried apples, prunes, raisins, canned corn, fresh beef, mutton, cured and fresh pork, veal, cocoa beans, coffee, copra, salt mackerel, glucose, lard, oleo oil, and tallow. Dairy products advanced 1.1 percent and cereal products increased 0.6 percent. Higher prices were reported for powdered milk, corn meal, and pepper. The December food index—79.8—is 6.7 percent below the December 1936 comparative.

Wholesale market prices of farm products decreased 3.8 percent principally because of a drop of 9.0 percent in livestock and poultry prices. Sharp declines were reported in prices of cows, steers, hogs, sheep, eggs, apples, lemons, oranges, hops, tobacco, and wool. Grains advanced 3.3 percent. Quotations were higher for corn, wheat, calves, cotton, seeds, onions, and sweetpotatoes. The December 1937 group index—72.8—is at the lowest point reached in the past 3 years, and is 17.7 percent below a year ago.

The hides and leather products group index declined 3.6 percent as a result of lower prices for shoes, luggage, hides, skins, and leather. In the past 4 months this group decreased 9.6 percent.

Continued weakness in prices of cotton goods and raw silk together with lower prices for clothing, knit goods, woolen and worsted goods

and certain other textiles such as raw jute caused the textile products index to fall 1.5 percent.

The building materials group index declined 1.3 percent because of decreases of 1.6 percent in paint and paint materials, 1.1 percent in lumber, and 1.0 percent in brick and tile. Pronounced price decreases were reported for concrete blocks, Ponderosa pine and spruce lumber, carbon black, red lead, litharge, Chinawood oil, rosin, door and window frames, sewer pipe, and prepared roofing. Wholesale prices of cement and structural steel remained unchanged at the November level.

Primarily due to falling prices for fats, oils, calcium acetate, copper sulphate, glycerine, menthol, ground bones, and mixed fertilizers, the chemicals and drugs group index decreased 0.9 percent. Calcium chloride, granulated salt, soda phosphate, and tankage prices advanced.

The housefurnishing goods group index decreased 0.8 percent during the month. Both furniture and furnishings shared in the decline.

Falling prices for nonferrous metals including antimony, electrolytic copper, pig lead, lead pipe, quicksilver, copper rods and wire, and pig zinc; also concrete reinforcing bars, locks, and knobs resulted in a decline of 0.5 percent in the metals and metal products group index. Average wholesale prices of agricultural implements and motor vehicles advanced slightly. Plumbing and heating fixtures remained steady.

Cattle feed prices decreased 1.9 percent during December and paper and pulp declined 0.7 percent. Lower prices were also reported for cylinder and neutral oils, garden hose, and soap products. Crude rubber advanced 2.0 percent and automobile tires and tubes remained unchanged at last month's level.

Fuel and lighting materials advanced 0.3 percent. Coal, coke, and electricity prices were higher and gas and petroleum products were lower.

### *Index Numbers of Wholesale Prices by Commodity Groups*

In table 5 are presented index numbers of wholesale prices by commodity groups, by years from 1926 to 1937, inclusive, and by months from January 1936 through December 1937.

TABLE 5.—Index Numbers of Wholesale Prices, by Groups of Commodities

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
<b>By years:</b>											
1926-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927-----	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928-----	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929-----	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930-----	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931-----	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932-----	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933-----	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
1934-----	65.3	70.5	86.6	72.9	73.3	86.9	86.2	75.9	81.5	69.7	74.9
1935-----	78.8	83.7	89.6	70.9	73.5	86.4	85.3	80.5	80.6	68.3	80.0
1936-----	80.9	82.1	95.4	71.5	76.2	87.0	86.7	80.4	81.7	70.5	80.8
1937-----	86.4	85.5	104.6	76.3	77.6	95.7	95.2	83.9	89.7	77.8	86.3
<b>By months:</b>											
1936:											
January-----	78.2	83.5	97.1	71.7	75.1	86.7	85.7	80.5	81.4	67.8	80.6
February-----	79.5	83.2	96.1	71.0	76.1	86.7	85.5	80.1	81.5	68.1	80.6
March-----	76.5	80.1	94.9	70.8	76.2	86.6	85.3	79.3	81.4	68.3	79.6
April-----	76.9	80.2	94.6	70.2	76.4	86.6	85.7	78.5	81.5	68.6	79.7
May-----	75.2	78.0	94.0	69.8	76.0	86.3	85.8	77.7	81.5	69.2	78.6
June-----	78.1	79.9	93.8	69.7	76.1	86.2	85.8	78.0	81.4	69.7	79.2
July-----	81.3	81.4	93.4	70.5	76.2	86.9	86.7	79.4	81.2	71.0	80.5
August-----	83.8	83.1	93.6	70.9	76.3	87.1	86.9	79.8	81.4	71.5	81.6
September-----	84.0	83.3	94.6	70.9	76.1	86.8	87.1	81.7	81.7	71.3	81.6
October-----	84.0	82.6	95.6	71.6	76.8	86.9	87.3	82.2	82.0	71.5	81.5
November-----	85.1	83.9	97.0	73.5	76.8	87.9	87.7	82.5	82.3	73.4	82.4
December-----	88.5	85.5	99.7	76.3	76.5	87.6	89.5	85.3	83.2	74.5	84.2
1937:											
January-----	91.3	87.1	101.7	77.5	76.6	90.9	91.3	87.7	86.5	76.2	85.9
February-----	91.4	87.0	102.7	77.5	76.8	91.7	93.3	87.8	87.9	77.3	86.3
March-----	94.1	87.5	104.2	78.3	76.2	90.0	95.9	87.5	88.4	79.5	87.8
April-----	92.2	85.5	106.3	79.5	76.8	96.5	96.7	86.9	89.0	81.1	88.0
May-----	89.8	84.2	106.7	78.7	77.2	95.8	97.2	84.5	89.3	80.5	87.4
June-----	88.5	84.7	106.4	78.2	77.5	95.9	96.9	83.6	89.5	79.4	87.2
July-----	89.3	86.2	106.7	78.3	78.1	96.1	96.7	83.9	89.7	79.0	87.9
August-----	86.4	86.7	108.1	77.1	78.4	97.0	96.3	82.2	91.1	77.3	87.5
September-----	85.9	88.0	107.6	75.3	78.7	97.1	96.2	81.4	91.1	77.0	87.4
October-----	80.4	85.5	106.7	73.5	78.5	96.4	95.4	81.2	91.0	76.2	85.4
November-----	75.7	83.1	101.4	71.2	78.2	96.8	93.7	80.2	90.4	75.4	83.3
December-----	72.8	79.8	97.7	70.1	78.4	96.3	92.5	79.5	89.7	75.0	81.7

Index numbers by groups and subgroups of commodities for each month of 1937 and the average for the year 1937 are shown in table 6.

TABLE 6.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities

[1926=100]

Group and subgroup	January 1937	February 1937	March 1937	April 1937	May 1937	June 1937	July 1937	August 1937	September 1937	October 1937	November 1937	December 1937	Year 1937
All commodities-----	85.9	86.3	87.8	88.0	87.4	87.2	87.9	87.5	87.4	85.4	83.3	81.7	86.3
Farm products-----	91.3	91.4	94.1	92.2	89.8	88.5	89.3	86.4	85.9	80.4	75.7	72.8	86.4
Grains-----	113.0	111.5	113.2	119.2	113.9	105.7	105.2	92.0	91.9	77.0	69.2	71.5	98.3
Livestock and poultry	91.4	89.9	93.7	93.6	95.9	98.3	105.0	108.2	106.7	98.5	86.2	78.4	95.5
Other farm products..	84.8	86.3	88.5	83.4	79.0	77.4	75.1	71.4	71.2	70.1	70.7	69.3	77.2
Foods-----	87.1	87.0	87.5	85.5	84.2	84.7	86.2	86.7	88.0	85.5	83.1	79.8	85.5
Dairy products-----	88.9	88.7	90.2	78.5	73.1	72.0	76.4	79.7	84.8	85.7	89.2	90.2	83.1
Cereal products-----	88.1	89.3	90.1	89.8	88.7	90.4	92.3	87.9	86.1	84.6	81.5	82.0	87.6
Fruits and vegetables.	82.4	87.8	86.5	83.5	84.1	84.5	71.2	65.3	64.0	62.2	61.5	57.8	74.2
Meats-----	90.6	90.3	92.0	94.9	95.9	98.0	106.0	112.1	113.4	107.4	98.3	88.8	99.1
Other foods-----	82.1	78.8	78.2	77.0	75.2	74.3	74.6	73.6	75.5	73.4	73.6	71.5	75.6

TABLE 6.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities—Continued

Group and subgroup	January 1937	February 1937	March 1937	April 1937	May 1937	June 1937	July 1937	August 1937	September 1937	October 1937	November 1937	December 1937	Year 1937
Hides and leather products.....	101.7	102.7	104.2	106.3	106.7	106.4	106.7	108.1	107.6	106.7	101.4	97.7	104.6
Shoes.....	99.7	101.4	102.3	103.8	106.1	107.5	107.4	107.4	107.5	107.6	106.9	105.6	105.0
Hides and skins.....	116.0	114.9	118.5	121.4	117.7	114.6	116.2	122.1	120.7	117.1	94.6	85.5	113.5
Leather.....	94.3	95.5	97.1	100.7	100.6	98.8	98.7	100.0	98.9	97.2	92.7	86.9	96.8
Other leather products.....	101.1	101.7	101.7	102.3	102.3	102.3	102.7	103.2	103.3	103.3	103.1	102.7	102.6
Textile products.....	77.5	77.5	78.3	79.5	78.7	78.2	78.3	77.1	75.3	73.5	71.2	70.1	76.3
Clothing.....	83.9	84.2	84.8	86.8	87.2	89.1	90.1	90.0	89.7	89.4	87.3	86.7	87.9
Cotton goods.....	91.9	91.3	94.0	95.1	92.6	89.7	86.8	82.2	76.8	73.1	70.5	68.7	84.3
Knit goods.....	64.4	64.7	64.9	65.9	65.7	64.6	64.8	65.7	66.5	65.8	64.2	63.4	65.1
Silk and rayon.....	34.5	33.7	33.6	33.8	32.5	32.5	33.9	32.9	32.4	30.6	30.1	29.4	32.5
Woolen and worsted goods.....	91.9	93.1	92.6	93.5	93.3	93.2	94.4	93.9	92.4	90.1	85.1	83.5	91.1
Other textile products.....	66.2	65.9	66.5	68.8	68.9	67.5	69.3	71.1	70.0	69.0	69.0	68.5	68.4
Fuel and lighting materials.....	76.6	76.8	76.2	76.8	77.2	77.5	78.1	78.4	78.7	78.5	78.2	78.4	77.6
Anthracite.....	81.6	81.6	77.8	72.4	74.2	74.5	76.6	76.8	78.7	78.8	79.8	80.0	77.8
Bituminous coal.....	96.8	97.4	97.5	98.6	98.5	98.5	98.6	98.7	99.2	99.3	99.2	101.1	98.6
Coke.....	97.6	97.6	97.7	102.8	105.1	105.0	104.9	104.9	105.0	105.3	105.4	105.5	103.1
Electricity.....	81.0	80.8	77.8	77.1	78.8	79.5	80.0	79.4	80.5	81.0	83.1	(1)	(1)
Gas.....	82.2	80.7	79.8	80.7	83.0	84.2	84.0	82.6	84.0	83.6	83.1	(1)	(1)
Petroleum products.....	58.3	59.1	58.6	59.8	60.9	61.5	61.8	62.0	62.2	61.7	60.6	59.5	60.5
Metals and metal products.....	90.9	91.7	96.0	96.5	95.8	95.9	96.1	97.0	97.1	96.4	96.8	96.3	95.7
Agricultural implements.....	93.0	93.1	93.1	92.1	93.8	94.1	94.2	94.2	94.2	94.2	95.9	96.1	94.0
Iron and steel.....	91.7	92.0	97.5	99.6	99.6	99.7	99.8	99.9	99.8	99.7	99.3	99.0	98.2
Motor vehicles <sup>2</sup> .....	86.3	86.3	86.3	86.9	86.9	86.9	87.0	90.2	91.2	92.2	95.3	96.3	89.3
Nonferrous metals.....	84.8	89.4	101.1	97.0	91.7	91.9	92.7	93.3	92.6	85.5	78.5	75.1	89.6
Plumbing and heating.....	77.1	77.4	77.6	78.7	78.7	78.7	78.7	78.8	80.6	80.6	79.6	79.6	78.8
Building materials.....	91.3	93.3	95.9	96.7	97.2	96.9	96.7	96.3	96.2	95.4	93.7	92.5	95.2
Brick and tile.....	89.7	91.0	91.8	94.9	95.0	95.0	95.4	95.5	95.0	93.4	92.9	92.0	93.5
Cement.....	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5	95.5
Lumber.....	93.0	99.0	102.1	103.0	103.0	102.2	101.3	99.5	99.0	97.3	94.8	93.8	99.0
Paint and paint materials.....	83.7	83.4	83.9	83.9	83.7	83.6	83.9	84.1	84.6	84.2	81.5	80.2	83.4
Plumbing and heating.....	77.1	77.4	77.6	78.7	78.7	78.7	78.7	78.8	80.6	80.6	79.6	79.6	78.8
Structural steel.....	104.7	104.7	112.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	114.9	113.2
Other building materials.....	93.9	95.0	98.9	99.9	101.3	101.1	101.0	101.0	100.8	100.2	98.7	96.9	99.1
Chemicals and drugs.....	87.7	87.8	87.5	86.9	84.5	83.6	83.9	82.2	81.4	81.2	80.2	79.5	83.9
Chemicals.....	96.4	95.6	95.3	94.2	91.1	90.1	89.9	87.0	85.7	85.3	84.2	83.5	89.9
Drugs and pharmaceuticals.....	79.0	83.0	83.0	82.9	79.2	78.0	78.2	78.2	78.3	78.3	76.8	75.1	79.1
Fertilizer materials.....	70.6	70.7	70.3	70.7	70.6	70.5	71.3	71.7	71.8	72.5	71.9	72.0	71.2
Mixed fertilizers.....	71.4	71.7	71.7	72.0	72.2	72.3	74.2	74.8	74.8	74.9	74.5	74.4	73.2
Housefurnishing goods.....	86.5	87.9	88.4	89.0	89.3	89.5	89.7	91.1	91.1	91.0	90.4	89.7	89.7
Furnishings.....	89.0	91.2	91.7	92.1	92.5	92.5	92.6	95.0	94.9	94.9	94.8	93.5	93.4
Furniture.....	84.0	84.5	85.0	85.8	86.1	86.6	86.8	87.1	87.1	87.1	86.0	85.9	85.9
Miscellaneous.....	76.2	77.3	79.5	81.1	80.5	79.4	79.0	77.3	77.0	76.2	75.4	75.0	77.8
Automobile tires and tubes.....	51.8	53.1	55.0	56.4	56.4	56.4	56.4	56.4	55.4	56.4	57.4	57.4	55.8
Cattle feed.....	135.4	129.4	135.0	146.8	139.9	116.9	116.5	82.9	81.2	83.6	83.3	81.7	110.5
Paper and pulp.....	84.8	87.5	90.2	93.9	94.6	95.0	94.2	94.1	93.4	92.4	90.4	89.8	91.7
Rubber, crude.....	44.3	44.3	50.9	49.3	44.6	41.0	39.6	38.2	38.4	33.6	30.6	31.2	40.5
Other miscellaneous.....	83.1	84.2	84.8	85.3	85.5	85.8	85.7	85.4	85.1	84.6	83.5	82.7	84.7
Raw materials.....	88.1	88.3	90.1	88.7	87.1	86.1	86.5	84.8	84.4	80.7	77.2	75.4	84.8
Semimanufactured articles.....	85.4	85.5	89.6	89.5	87.5	86.8	87.0	86.6	85.3	82.5	79.8	77.7	85.3
Finished products.....	84.9	85.4	86.4	87.4	87.5	87.7	88.8	89.0	89.1	88.1	86.7	85.3	87.2
All commodities other than farm products.....	84.6	85.0	86.3	86.9	86.7	86.8	87.5	87.6	87.6	86.4	84.8	83.5	86.2
All commodities other than farm products and foods.....	83.4	84.1	85.5	86.5	86.3	86.1	86.3	86.1	85.9	85.1	84.3	83.6	85.3

<sup>1</sup> Data not yet available.<sup>2</sup> Preliminary revision

In table 7 the price trend since 1926 is shown for the following groups of commodities: Raw materials, semimanufactured articles, finished products, all commodities other than farm products, and all commodities other than farm products and foods.

The "All commodities other than farm products" group includes all commodities except those designated as farm products and the index for this group represents the movement in prices of nonagricultural commodities. All commodities with the exception of those designated as farm products and foods are included in the group "All commodities other than farm products and foods." The index for this group reflects the trend in prices of industrial commodities. The commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Finished products" are as follows:

*Raw materials.*—All farm products (67 quotations), bananas, cocoa beans, coffee (2 quotations), copra, pepper, hides and skins (7 quotations), raw silk (4 quotations), hemp, jute, sisal, coal (6 quotations), crude petroleum (3 quotations), iron ore (2 quotations), scrap steel, gravel, sand, crushed stone, crude sulphur, phosphate rock, nitrate of soda, tankage, crude rubber (3 quotations); total, 109.

*Semimanufactured articles.*—Oleo oil, raw sugar, vegetable oil (6 quotations), leather (7 quotations), print cloth (2 quotations), tire fabric (2 quotations), cotton yarn (5 quotations), rayon (4 quotations), silk yarn (6 quotations), worsted yarn (3 quotations), artificial leather (2 quotations), jute yarn (2 quotations), bar iron (2 quotations), steel bars (3 quotations), steel billets, malleable castings, pig iron (7 quotations), wire rods, skelp, steel strips, aluminum, antimony, ingot copper, pig lead, nickel, quicksilver, brass rods, copper rods, silver, pig tin, pig zinc, barytes, butyl acetate, carbon black, iron oxide black, prussian blue, ethyl acetate, chrome green, copal gum, chinawood oil, linseed oil, rosin, turpentine, whiting, yellow chrome, plaster, tar, pine oil, camphor, opium, wood pulp (4 quotations), paraffin wax; total, 93.

*Finished products.*—Butter (18 quotations), cheese (3 quotations), milk (3 quotations), cereal products (28 quotations), canned fruit (6 quotations), dried fruit (6 quotations), canned vegetables (7 quotations), meats (14 quotations), beverages (3 quotations), powdered cocoa, fish (6 quotations), glucose, grape jam, lard, molasses, oleomargarine, peanut butter, salt, tomato soup, cornstarch, granulated sugar, edible tallow, tea, vegetable oil (2 quotations), vinegar, shoes (21 quotations), other leather products (6 quotations), clothing (20 quotations), cotton goods (except print cloth, tire fabric, and yarn) (26 quotations), knit goods (9 quotations), woolen textiles (15 quotations), burlap, rope (3 quotations), thread (2 quotations), twine (3 quotations), coke (4 quotations), electricity, gas, fuel oil (2 quotations), gasoline (5 quotations), kerosene (2 quotations), agricultural implements (31 quotations), angle bars, augers, axes, reinforcing bars, steel barrels, boiler tubes, bolts (4 quotations), butts, sanitary cans, chisels, files, hammers, hatchets, knives, knobs, locks, nails, pipe (3 quotations), planes, plates, rails, rivets (2 quotations), saws (2 quotations), steel sheets (3 quotations), spikes, structural steel, terne-plate, tie plates, tin plate, vises, wire fence (4 quotations), wood screws, motor vehicles (7 quotations), babbitt metal, lead pipe, brass sheets, copper sheets, zinc sheets, solder, brass tubes, wire (2 quotations), plumbing and heating (8 quotations), brick and tile (12 quotations), cement, lath (2 quotations), lumber (16 quotations), shingles (2 quotations), prepared paint (6 quotations), paint materials (9 quotations), asphalt, building board (2 quotations), doors, frames (2 quotations), glass (4 quotations), lime (2 quotations), sewer pipe,

prepared roofing (4 quotations), slate roofing, window sash, acid (12 quotations), alcohol (3 quotations), aluminum sulphate, ammonia (2 quotations), anilin oil, arsenic, baking powder (2 quotations), benzene, bleaching powder, borax, calcium compounds (4 quotations), coal-tar colors (4 quotations), coppers, copper sulphate, creosote oil, formaldehyde, logwood extract, naphthalene, potash, quebracho extract, sal soda, salt cake, granulated salt, sodium compounds (5 quotations), tallow, toluene, caffeine, castor oil, chlorine, chloroform, cream of tartar, Epsom salts, glycerine, iodine, menthol, peroxide of hydrogen, phenol, potassium iodide, quinine sulphate, soda phosphate, strychnine, zinc chloride, ammonia sulphate, ground bones, kainit, manure salts, muriate potash, sulphate potash, superphosphate, mixed fertilizers (6 quotations), housefurnishing goods (61 quotations), automobile tires and tubes (4 quotations), cattle feed (4 quotations), box-board (3 quotations), paper (4 quotations), wooden barrels, batteries (2 quotations), caskets (2 quotations), cigar boxes, matches (2 quotations), mirrors, lubricating oil (4 quotations), pipe covering, rubber heels (2 quotations), rubber hose, shipping cases, soap (5 quotations), starch, tobacco products (5 quotations); total, 582.

TABLE 7.—Index Numbers of Wholesale Prices, by Special Groups of Commodities

[1926=100]

Year and month	Raw materials	Semi-manufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods	Year and month	Raw materials	Semi-manufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
1926 .....	100.0	100.0	100.0	100.0	100.0	1936—Continued.					
1927 .....	96.5	94.3	95.0	94.6	94.0	July .....	79.8	75.2	81.6	80.3	79.5
1928 .....	99.1	94.5	95.9	94.8	92.9	August .....	81.5	75.6	82.4	80.9	79.7
1929 .....	97.5	93.9	94.5	93.3	91.6	September .....	81.8	75.9	82.3	80.9	79.6
1930 .....	84.3	81.8	88.0	85.9	85.2	October .....	82.1	76.2	82.0	80.9	80.1
1931 .....	65.6	69.0	77.0	74.6	75.0	November .....	83.1	78.6	82.6	81.7	81.0
1932 .....	55.1	59.3	70.3	68.3	70.2	December .....	85.6	82.3	83.8	83.1	82.2
1933 .....	56.5	65.4	70.5	69.0	71.2	1937:					
1934 .....	68.6	72.8	78.2	76.9	78.4	January .....	88.1	85.4	84.9	84.6	83.4
1935 .....	77.1	73.6	82.2	80.2	77.9	February .....	88.3	85.5	85.4	85.0	84.1
1936 .....	79.9	75.9	82.0	80.7	79.6	March .....	90.1	89.6	86.4	86.3	85.5
1937 .....	84.8	85.3	87.2	86.2	85.3	April .....	88.7	89.5	87.4	86.9	86.5
1936:						May .....	87.1	87.5	87.5	86.7	86.3
January .....	78.1	74.8	82.4	80.9	78.8	June .....	86.1	86.8	87.7	86.8	86.1
February .....	79.1	74.6	82.2	80.7	79.0	July .....	86.5	87.0	88.8	87.5	86.3
March .....	77.4	74.4	81.3	80.2	78.9	August .....	84.8	86.6	89.0	87.6	86.1
April .....	77.0	74.5	81.6	80.1	78.9	September .....	84.4	85.3	89.1	87.6	85.9
May .....	75.8	74.1	80.5	79.2	78.8	October .....	80.7	82.5	88.1	86.4	85.1
June .....	77.6	73.9	80.7	79.4	78.8	November .....	77.2	79.8	86.7	84.8	84.3
						December .....	75.4	77.7	85.3	83.5	83.6

Index numbers for the groups and subgroups of commodities for November and December 1937 and December of each of the past 7 years are presented in table 8.

TABLE 8.—Index Numbers of Wholesale Prices, by Groups and Subgroups of Commodities

[1926=100]

Group and subgroup	De- cem- ber 1937	No- vem- ber 1937	De- cem- ber 1936	De- cem- ber 1935	De- cem- ber 1934	De- cem- ber 1933	De- cem- ber 1932	De- cem- ber 1931	De- cem- ber 1930
All commodities.....	81.7	83.3	84.2	80.9	76.9	70.8	62.6	68.6	79.6
Farm products.....	72.8	75.7	88.5	78.3	72.0	55.5	44.1	55.7	75.2
Grains.....	71.5	69.2	109.0	76.6	91.5	60.4	31.7	47.0	64.0
Livestock and poultry.....	78.4	86.2	85.0	87.4	57.2	38.0	38.7	51.7	76.3
Other farm products.....	69.3	70.7	84.4	72.8	75.1	64.3	51.3	61.2	78.1
Foods.....	79.8	83.1	85.5	85.7	75.3	62.5	58.3	69.1	82.4
Dairy products.....	90.2	89.2	88.9	83.7	79.6	65.1	59.5	79.8	89.2
Cereal products.....	82.0	81.5	87.1	97.2	92.2	84.7	61.7	72.2	75.9
Fruits and vegetables.....	57.8	61.5	75.4	63.7	62.4	63.0	52.8	63.5	75.4
Meats.....	88.8	98.3	87.2	97.5	69.0	46.0	49.4	63.2	89.2
Other foods.....	71.5	73.6	84.0	77.5	74.3	63.4	66.1	67.2	77.0
Hides and leather products.....	97.7	101.4	99.7	95.4	85.1	89.2	69.6	79.8	91.4
Shoes.....	105.6	106.9	99.4	100.1	97.2	98.6	83.8	89.2	97.7
Hides and skins.....	85.5	94.6	110.4	96.5	67.4	74.9	41.7	48.8	69.4
Leather.....	86.9	92.7	92.6	87.6	71.8	80.1	59.2	78.6	91.5
Other leather products.....	102.7	103.1	96.3	87.1	85.7	87.6	81.9	99.7	104.8
Textile products.....	70.1	71.2	76.3	73.2	70.0	76.4	53.0	60.8	73.7
Clothing.....	86.7	87.3	83.1	81.0	78.4	87.9	62.5	70.8	83.5
Cotton goods.....	68.7	70.5	90.3	86.0	84.3	85.5	51.7	56.4	75.6
Knit goods.....	63.4	64.2	63.0	62.2	61.9	71.2	49.3	58.5	72.3
Silk and rayon.....	29.4	30.1	33.8	33.7	27.1	29.6	29.3	39.0	87.2
Woolen and worsted goods.....	83.5	85.1	90.5	81.0	74.0	84.3	54.2	63.9	73.9
Other textile products.....	68.5	69.0	65.3	68.1	68.6	75.9	66.6	71.3	77.8
Fuel and lighting materials.....	78.4	78.2	76.5	74.6	73.7	73.4	69.3	68.3	74.0
Anthracite.....	80.0	79.8	82.3	82.9	82.3	81.5	88.7	94.8	89.6
Bituminous coal.....	101.1	99.2	97.3	98.7	96.5	90.6	80.2	83.8	89.1
Coke.....	105.5	105.4	97.8	89.6	85.6	83.6	75.3	81.1	83.8
Electricity.....	(1)	(1)	82.7	84.9	93.1	94.0	104.1	104.1	100.7
Gas.....	(1)	(1)	83.1	84.5	89.3	92.2	96.5	98.2	95.4
Petroleum products.....	59.5	60.6	58.0	52.8	49.8	61.6	45.0	39.6	51.1
Metals and metal products.....	96.3	96.8	89.6	86.8	85.9	83.5	79.4	82.2	87.9
Agricultural implements.....	95.1	95.9	93.0	94.6	92.7	85.1	84.5	85.5	94.4
Iron and steel.....	99.0	99.3	90.9	86.9	85.6	83.6	78.8	81.0	86.6
Motor vehicles <sup>1</sup> .....	95.6	95.3	83.7	83.5	86.3	83.7	85.5	89.7	90.2
Nonferrous metals.....	75.1	78.5	78.6	70.6	67.5	66.6	48.3	53.8	71.7
Plumbing and heating.....	79.6	79.6	76.7	71.1	68.8	72.5	67.5	79.9	85.3
Building materials.....	92.5	93.7	89.5	85.5	85.1	85.6	70.8	75.7	84.8
Brick and tile.....	92.0	92.9	88.5	88.9	91.2	85.7	75.1	80.0	87.1
Cement.....	95.5	95.5	95.5	95.5	93.9	91.2	81.1	74.6	90.6
Lumber.....	93.8	94.8	89.6	81.5	81.2	83.0	56.5	65.8	78.2
Paint and paint materials.....	80.2	81.5	82.4	80.0	78.8	77.5	68.1	76.6	83.7
Plumbing and heating.....	79.6	79.6	76.7	71.1	68.8	72.5	67.5	79.9	85.3
Structural steel.....	114.9	114.9	101.7	92.0	92.0	86.8	81.7	81.7	81.7
Other building materials.....	96.9	98.7	92.6	90.0	89.8	88.6	80.1	81.5	89.3
Chemicals and drugs.....	79.5	80.2	85.3	80.6	77.8	73.7	72.3	76.1	85.6
Chemicals.....	83.5	84.2	93.3	87.7	82.2	79.2	79.7	80.8	89.9
Drugs and pharmaceuticals.....	75.1	76.8	77.4	74.7	73.4	59.0	54.7	61.0	65.7
Fertilizer materials.....	72.0	71.9	68.6	64.5	65.3	68.1	63.1	70.1	81.4
Mixed fertilizers.....	74.4	74.5	71.4	67.7	73.7	69.9	65.6	77.1	90.6
Housefurnishing goods.....	89.7	90.4	83.2	81.0	81.2	81.0	73.6	78.5	88.8
Furnishings.....	93.5	94.8	86.9	84.7	84.2	82.9	74.7	76.6	85.6
Furniture.....	85.9	86.0	79.4	77.1	78.2	79.3	72.7	80.6	92.5
Miscellaneous.....	75.0	75.4	74.5	67.5	71.0	65.7	63.4	66.8	73.5
Automobile tires and tubes.....	57.4	57.4	50.1	45.0	47.5	43.2	44.6	40.8	50.2
Cattle feed.....	81.7	83.3	130.7	70.8	123.1	60.3	37.1	53.9	78.2
Paper and pulp.....	89.8	90.4	82.9	79.2	81.5	82.5	73.0	80.8	84.0
Rubber, crude.....	31.2	30.6	41.9	27.2	26.4	18.0	6.8	9.5	18.6
Other miscellaneous.....	82.7	83.5	82.2	80.2	80.7	79.0	81.3	85.9	90.3
Raw materials.....	75.4	77.2	85.6	77.7	73.1	61.9	52.1	60.2	74.2
Semimanufactured articles.....	77.7	79.8	82.3	75.2	71.0	72.3	57.7	63.7	75.1
Finished products.....	85.3	86.7	83.8	83.1	79.5	74.8	68.4	73.3	82.8
All commodities other than farm products.....	83.5	84.8	83.1	81.3	77.8	74.0	66.5	71.3	80.5
All commodities other than farm products and foods.....	83.6	84.3	82.2	78.7	78.0	77.5	69.0	72.3	80.3

<sup>1</sup> Date not yet available.

## Weekly Fluctuations

A decided downward tendency was evidenced in wholesale commodity prices throughout the 4 weeks of December.

The foods group registered the greatest decline—3.2—during the 4-week period November 27 to December 25. Hides and leather products dropped 1.8 percent; building materials, 1.3 percent; textile products, 0.9 percent; housefurnishing goods, 0.8 percent; farm products, 0.7 percent; chemicals and drugs, 0.5 percent; and miscellaneous commodities, 0.1 percent. The metals and metal products group advanced slightly from the last week of November to the last week of December and fuel and lighting materials remained steady.

Weekly price variations in the commodity groups during December are shown by the index numbers in table 9. The percentage changes from week to week are given in table 10.

TABLE 9.—Weekly Index Numbers of Wholesale Prices, by Commodity Groups, December and November 1937

[1926=100]

Commodity group	Dec. 25 1937	Dec. 18 1937	Dec. 11 1937	Dec. 4 1937	Nov. 27 1937	Nov. 20 1937	Nov. 13 1937	Nov. 6 1937
All commodities.....	81.2	81.5	81.9	82.0	82.0	82.9	83.2	83.8
Farm products.....	72.0	73.2	73.4	73.9	73.4	75.9	77.8	77.7
Foods.....	78.9	79.7	80.7	80.7	81.5	83.2	83.6	84.3
Hides and leather products.....	98.4	98.2	98.3	99.8	100.2	101.8	103.0	104.2
Textile products.....	69.4	69.5	69.9	69.8	70.0	70.5	71.0	71.6
Fuel and lighting materials.....	78.6	78.6	78.6	78.6	78.6	78.6	79.0	78.9
Metals and metal products.....	96.2	96.4	96.2	96.3	96.1	96.6	94.6	95.1
Building materials.....	92.5	92.8	93.0	93.0	93.7	93.8	94.0	94.4
Chemicals and drugs.....	79.2	79.1	78.9	79.4	79.6	79.8	80.0	80.1
Housefurnishing goods.....	91.4	92.1	92.1	92.1	92.1	92.1	92.1	92.2
Miscellaneous.....	74.9	74.8	74.8	75.1	75.0	75.4	75.0	75.5
Raw materials.....	75.3	75.2	75.3	75.7	75.4	77.0	78.2	78.6
Semimanufactured articles.....	77.4	77.6	77.8	78.4	78.9	79.7	80.0	81.1
Finished products.....	85.0	85.5	85.9	85.9	86.1	86.6	86.5	87.0
All commodities other than farm products.....	83.1	83.4	83.8	83.8	84.0	84.5	84.5	85.1
All commodities other than farm products and foods.....	83.6	83.7	83.7	83.9	83.9	84.2	84.0	84.3

TABLE 10.—Weekly Changes (Percent) During December 1937, by Groups of Commodities

Commodity group	Percentage change from—				
	Nov. 27 to Dec. 25	Dec. 18 to Dec. 25	Dec. 11 to Dec. 18	Dec. 4 to Dec. 11	Nov. 27 to Dec. 4
All commodities.....	-1.0	-0.4	-0.5	-0.1	0.0
Farm products.....	-0.7	-0.4	-0.3	-0.7	+0.7
Foods.....	-3.2	-1.0	-1.2	0	-1.0
Hides and leather products.....	-1.8	+0.2	-1	-1.5	-0.4
Textiles.....	-0.9	-1	-0.6	+1	-0.3
Fuel and lighting materials.....	0	0	0	0	0
Metals and metal products.....	+1	-0.2	+0.2	-0.1	+0.2
Building materials.....	-1.3	-0.3	-0.2	0	-0.7
Chemicals and drugs.....	-0.5	+0.1	+0.3	-0.6	-0.3
Housefurnishing goods.....	-0.8	-0.8	0	0	0
Miscellaneous.....	-1	+0.1	0	-0.4	+0.1
Raw materials.....	-1	+0.1	-0.1	-0.5	+0.4
Semimanufactured articles.....	-1.9	-0.3	-0.6	-0.4	-0.6
Finished products.....	-1.3	-0.6	-0.5	0	-0.2
All commodities other than farm products.....	-1.1	-0.4	-0.5	0	-0.2
All commodities other than farm products and foods.....	-0.4	-0.1	0	-0.2	0

*Monthly Average Wholesale Prices and Index Numbers of Individual Commodities*

The table showing monthly average wholesale prices and index numbers of individual commodities formerly appearing in the Wholesale Price separate is now published semiannually instead of monthly. The December 1937 issue of the pamphlet showed the average for the year 1937 and information for the last 6 months of 1937. The monthly figures will be furnished upon request.

# Recent Publications of Labor Interest

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JANUARY 1938

## Agriculture

*Selected references on practices and use of labor on farms—Part I.* Compiled by William A. Newman and Loring K. Macy. Washington, U. S. Works Progress Administration, 1937. 284 pp. (National Research Project, Studies of Changing Techniques and Employment in Agriculture, Report No. A-3, Part I.)

The references are grouped under five main heads—crops (grains, cotton, tobacco, etc.), fruits and vegetables, livestock, implements and operations, and seasonal distribution of labor. The material is also classified by State under the various subheadings.

*Proceedings of third annual convention of Southern Tenant Farmers' Union, Muskogee, Okla., January 14-17, 1937.* Memphis, Tenn., Southern Tenant Farmers' Union, 1937. 84 pp.

Although concerned mainly with living and working conditions of tenant farmers and farm laborers, the proceedings also included discussion of consumers' cooperation and an account of the working of the Delta Cooperative Farm, and the cooperative store run in connection therewith, at Hillhouse, Miss.

## Civil Service

*Personnel administration in the Federal Government.* By Lewis Meriam. Washington, Brookings Institution, Institute for Government Research, 1937. 62 pp. (Pamphlet No. 19.)

A critical comparison of existing personnel organization and techniques in the Federal service and the proposed changes in the present system, which contemplate the abolition of the United States Civil Service Commission and the creation of a one-man personnel agency. The recommendations of the author center around measures to strengthen the present system, chiefly through greater appropriations for the Civil Service Commission and an expansion of personnel administrative units within the various governmental divisions.

*The British civil service.* By Herman Finer. London, Fabian Society and George Allen & Unwin, Ltd., 1937. 254 pp.

Discusses the historical development, general organization, practices and policies in recruiting, remuneration, promotion and discipline, and the "spirit and operation," of the civil-service system of Great Britain. An appendix presents the salary scales and provisions for annual leave applying to the general clerical and the executive classifications.

## Consumer Problems

*Analysis of condition, quality, and size requirements of United States and State standards for fresh fruits and vegetables, and legal standards for dairy products.* Washington, U. S. Consumers' Project, 1937. 18 pp., folders.

*Report of Virginia State Planning Board: Vol. XI, Retail trade.* [Richmond?], 1937. Various paging, maps, charts; mimeographed.

An article on social effects of changes in buying habits in Virginia, based on this report, is published in this issue of the Monthly Labor Review.

### Cooperative Movement

*Co-ops: How far can they go?* Washington, U. S. Department of Agriculture, Extension Service and Agricultural Adjustment Administration, 1937. 13 pp.

Distinguishes among the various types of cooperative associations and shows the distinction between cooperatives and other businesses, discusses relations between producers' and consumers' cooperatives, and quotes opinions from various sources as to how far cooperative effort is practicable.

*Cooperative societies [Great Britain]—statistical summaries, 1926-36.* London, Registry of Friendly Societies, 1937. 3 pp.

*Sixty-ninth annual cooperative congress [of Cooperative Union, Ltd.], held in Bath, England, May 17-19, 1937.* Manchester, Cooperative Union, Ltd., Holyoake House, Hanover Street, 1937. 764 pp.

### Economic and Social Problems

*Books and articles on the economic history of Germany.* Compiled by Walther Vogel. (In Economic History Review, London, November 1937, pp. 116-124.)

Practically all the references are to material in the German language, published in Germany.

*Books and articles on the economic history of Great Britain and Ireland.* Compiled by J. de L. Mann. (In Economic History Review, London, November 1937, pp. 111-115.)

*How much compensation? A problem of transfer from private to public enterprise.* By Ernest Davies. London, Victor Gollancz, Ltd., and New Fabian Research Bureau, 1937. 59 pp. (N. F. R. B. No. 33.)

The British Labor Party has advocated the policy of public purchase of key industries and their operation by public corporations. The author of this booklet views compensation to the present owners as a necessary transitional stage and discusses the principles of compensation, the various possible methods, and the detailed problems of the transitional period. There is some discussion of past experience in connection with public corporations, such as the London Passenger Transport Board.

*Money.* By Emile Burns. London, Victor Gollancz, Ltd., 1937. 94 pp. (New People's Library, Vol. I.)

A simplified analysis of the nature of money and its relations to trade, production, and income including wages.

*The national capital, and other statistical studies.* By Sir Josiah Stamp. London, P. S. King & Son, Ltd., 1937. 299 pp., charts.

These collected papers contain both factual data and studies of statistical method relating to several important topics, which include estimates of Great Britain's capital wealth, profits in Great Britain and the United States, and methods of estimating national income in various countries.

*The world's wealth, its use and abuse.* By Broadus Mitchell. New York, Henry Holt & Co., 1937. 772 pp.

A considerable part of the volume is devoted to subjects directly concerned with labor. These include wages, wage theories, trade unionism, labor under the "New Deal," and proposed systems of social reorganization. Other topics usually discussed in general works on economics are also included.

*Prolonged unemployment, technical progress and the conquest of new markets.* By Fritz Sternberg. (In International Labor Review, International Labor Office, Geneva, October 1937, pp. 446-485; charts.)

During the long period of relatively slow technological progress before the World War, there was a comparatively small amount of unemployment and, at the same time, a rise in real wages. These conditions are attributed by the author mainly to the rapid expansion of the markets and investments of industrialized areas in other regions and the attendant high rates of profit for capital investments. The author states that, in the foreseeable future, the severe restriction of opportunity for expanding external markets and investments is likely to be combined with continued technological progress due to competitive pressure. He holds also that the checking of unemployment and the sharing by workers in the benefits of technological progress are no longer automatic adjustments incidental to external expansion and must be dependent increasingly on labor organization and general planning.

*When clients organize.* By Helen Seymour. Chicago, American Public Welfare Association, 850 East 58th Street, 1937. 38 pp.; bibliography.

Makes available what the issuing office believes to be the first successful attempt at a general account and interpretation of pressure organizations of unemployed and destitute persons as a factor in the administration of relief. According to a foreword to the report, the self-organization of the jobless "helped to prevent them from being used by the extreme right or the extreme left as hired storm troopers of reaction or revolution."

### Education and Guidance

*A review of educational legislation, 1935 and 1936.* By Ward W. Keesecker. Washington, U. S. Office of Education, 1937. 39 pp. (Bulletin, 1937, No. 2, advance pages; chapter VIII of volume I of biennial survey of education in United States, 1934-36.)

Among the enactments reviewed are those containing provisions concerning vocational education; training, salaries, employment, tenure, and retirement of teachers; and the higher education of Negroes.

*Educational experiments in social settlements.* By Gaynell Hawkins. New York, American Association for Adult Education, 1937. xvi, 145 pp.

Endeavors to show through a study of certain social settlements "the extent to which they are actual and potential agencies for adult education."

*The Federal adult education project for the deaf.* By William J. Marra. (In American Annals of the Deaf, Washington, D. C., November 1937, pp. 406-410.)

A brief account of a successful school for the adult deaf in Kansas City, Mo., which since the establishment of the project in 1934 up to the time the report was prepared had had a total class attendance of 2,609.

*Vocational services under Jewish auspices.* New York, Council of Jewish Federations and Welfare Funds, 71 West 47th Street, 1937. 35 pp.; mimeographed. (Section of 1936 year book of Jewish social work.)

Reports on the vocational-guidance and placement activities of two types of Jewish agencies—those established solely for these activities, and those offering such services through a separately organized department.

*Education in 1936—being report of Board of Education, and statistics of public education for England and Wales.* London, Board of Education, 1937. 199 pp. (Cmd. 5564.)

A chapter on technical and commercial education in England contains information on the release of students by employers during working hours for attendance on courses of instruction, provision for unemployed boys and girls, and classes for unemployed adults. In other parts of the report more detailed information is given on adult education.

*Education in Japan under Department of Education—administration and work.* Tokyo, Department of Education, 1937. 43 pp., charts.

Includes information on pensions and allowances for elementary school teachers, and on salaries of principals and teachers in secondary schools, 1926 to 1935.

### Employment and Unemployment

*Employment resulting from P. W. A. construction, 1933-37.* By Herman B. Byer. Washington, U. S. Bureau of Labor Statistics, 1938. 11 pp., charts. (Serial No. R. 661, reprint from January 1938 Monthly Labor Review.)

*Unemployment in the learned professions: An international study of occupational and educational planning.* By Walter M. Kotschnig. London, Oxford University Press, 1937. 347 pp.

Parts I and II deal with increases and shifts in student enrollments and their cause and effect in regard to the moot question of over-crowded professions. In Part III the various aspects of controlling student enrollments are portrayed and presented in their relation to the market of intellectual labor. The final section deals with the need for occupational and educational planning. Although primarily a treatise on unemployment in the professions throughout the world, the analysis also treats of several other aspects of present conditions which affect professional workers.

*The trend of employment and unemployment in the Saorstát in the years 1935 and 1936.* Dublin, Department of Industry and Commerce, 1937. 29 pp.

### Forestry

*Skogsbyggdagens arbets- och levnadsvillkor: Del II, Önskemål och förslag (enligt avgiivna utlåtanden).* Stockholm, Socialstyrelsen, 1937. 227 pp.

Report on working and living conditions of forestry workers in Sweden, including wages, cost of living, and housing, together with proposals for improving these conditions and for better regulation of the lumber trade in general.

### Health and Industrial Hygiene

*New health frontiers: Proceedings of fifteenth annual conference of the Milbank Memorial Fund, April 29 and 30, 1937.* New York, Milbank Memorial Fund, 1937. 107 pp.

The discussions covered the subjects of hygienic aspects of housing, health problems of adult life, and nutrition and public health.

*Public welfare and medical care.* Addresses delivered at meeting of American Public Welfare Association, Indianapolis, Ind., May 27, 1937. Chicago, American Public Welfare Association, 850 East Fifty-eighth Street, 1937. Various paging.

*Socialized medicine in the Soviet Union.* By Henry E. Sigerist, M. D. New York, W. W. Norton, Inc., 1937. 378 pp., illus.

An account of the development of the medical system in the Soviet Union with special reference to socialist and communist theories.

*Environment and employee efficiency.* New York, American Management Association, 330 West 42d Street, 1937. 28 pp., illus. (Office Management Series, No. 81.)

Papers presented at a conference on office management, covering noise, air conditioning, and lighting, in offices.

*Toxicology.* By William D. McNally, M. D. Chicago, Industrial Medicine, 1937. 1022 pp.

Contains the results of recent research in the field of toxicology, as well as the fundamental facts and basic principles, and is designed to serve the medical and legal professions. Considerable space is given to carbon-monoxide, lead, and arsenic, as these causes of poisoning are most frequently encountered in court and industrial work.

### Housing

*Third annual report of Federal Housing Administration, for year ending December 31, 1936.* Washington, 1937. 65 pp.

Statistics of operation show the organizations financing mortgage loans, types of dwellings upon which money is loaned, and ratio of property valuation to borrower's income.

*The housing market.* Washington, National Housing Committee, 1937. 32 pp., maps, charts.

Basing its conclusions on existing statistics of income, dwellings built, rents, and tenancy, the committee presents a program for future residential building.

*Revival of the building industry.* By Bryant Putney. Washington, 1937. 13 pp. (Editorial Research Reports, Vol. 2, 1937, No. 20.)

Cites reasons for the failure of housing construction to meet the country's needs, and discusses Federal efforts to stimulate building.

*Three million houses.* By Sir Charles Morgan-Webb. New York, Committee for the Nation, 205 East 42d Street, 1937. 197 pp., illus.

A description of the post-war housing program in Great Britain.

### Immigration

*Ukrainians in the United States.* By Wasyl Halich. Chicago, University of Chicago Press, 1937. 174 pp., maps, illus.; bibliography.

Discusses the causes of emigration of Ukrainians to this country, the periods in which such emigration took place, the numerical importance of these immigrants in the United States, and their distribution, occupations, professions, businesses, and social institutions.

*Industrial Accidents and Workmen's Compensation*

*Fatal accidents in the United States, 1935.* Washington, U. S. Bureau of the Census, 1937. (Vital Statistics, Special Reports, Vol. 3, No. 38, pp. 181-212.)

Presents distribution of accidental deaths for the United States, individual States, cities of 100,000 or more, and age groups, by cause and type of accident.

*Kansas accidental deaths, 1936.* Topeka, Kansas State Board of Health, 1937. 17 pp., charts.

The study shows that 1 in every 12 deaths was the result of an accident, and that 1 in every 7 accidental deaths was occupational. The number of occupational deaths is listed as 257, of which 109 were due to accidents on farms. Total occupational deaths, however, would presumably include a number of the 588 additional deaths from the 493 motor-vehicle accidents reported, as 150 commercial vehicles were involved.

*1936 annual statistical report issued by Industrial Commission of Ohio: A statistical study of all accident and occupational disease claims filed with Industrial Commission of Ohio during calendar year 1936, with a summary of the years 1927-36, inclusive.* Columbus, Industrial Commission, 1937. 27 pp.

A total of 203,956 claims were filed, covering 1,066 fatalities, 7 permanent total disabilities, 1,873 permanent partial disabilities, and 35,076 temporary disabilities of more than 7 days' duration, 22,609 of 7 days' duration or less, and 143,325 involving no time loss. Occupational disease was reported as the cause in 1,376 cases, less than 0.7 percent of the total claims.

*Coal-mine explosions in Ohio, 1874-1936.* By C. W. Owings. Washington, U. S. Bureau of Mines, 1937. 37 pp.; mimeographed. (Information Circular 6956.)

Gives reports on 163 explosions or ignitions known to have occurred in the State during the 63-year period covered, resulting in the death of 190 and injury to at least 265 persons. The various causes of these accidents are considered and recommendations as to preventive measures are summarized.

*Fifth report of Department of Labor and Industries, Washington, covering period of 1932-36, inclusive.* Olympia, 1937. 312 pp.

Devoted almost entirely to detailed statistical tabulations covering the experience of the accident and medical-aid funds under the compulsory and exclusive workmen's compensation act of the State. Accident frequency rates per 1,000,000 man-hours worked are shown for reported fatal injuries as 0.766 in 1933, 0.760 in 1934, 0.825 in 1935, and 0.821 in 1936, and for compensable nonfatal injuries as 47.6 in 1933, 48.2 in 1934, 49.1 in 1935, and 50.4 in 1936.

*Twentieth annual report of Workmen's Compensation Board, British Columbia, for the year ended December 31, 1936.* Victoria, 1937. 24 pp.

A total of 29,667 claims were filed with the Board during the year as against 26,280 in 1935, an increase of 13 percent, which practically corresponds with the increase in the number of workers. Awards made in the 13,547 cases closed in 1936 amounted to \$2,332,727. The administrative cost of the accident fund was 3.01 percent of the receipts collected from employers, leaving 96.99 percent for providing compensation to injured workers and their dependents.

*Beretning fra Direktoratet for Ulykkesforsikringen for aaret 1935.* København, Denmark, 1937. 117 pp. (Særtryk af Socialt Tidsskrift, September 1937.)

Contains a summary of the activities in 1935 of the Danish Directorate of Accident Insurance and the Accident Insurance Council, under the compulsory insurance act of 1933; important decisions; and statistical tables covering 1,984 fatal and 73,670 nonfatal injuries, 1928-33, by industries.

Printed in Danish, with summary of statistics and industry classification in French.

*Beretning om arbejds- og fabriktilsynets virksomhed i aaret 1936.* København, Denmark, Direktoratet for Arbejds- og Fabriktilsynet, 1937. 150 pp., diagrams, illus. (Særtryk af Socialt Tidsskrift, Juli-August 1937.)

Annual report on activities of Factory Inspectorate of Denmark, covering, separately, factories, elevators, boilers, and bakeries. Includes recommendations for accident prevention, a summary of the results of an investigation of hygienic conditions and occupational diseases, and, in an appendix, a detailed analysis of the 1935 accident data.

Printed in Danish with summary in French.

*Työssä sattuneet tapaturmat vuonna 1934.* Helsinki, Finland, Sosiaaliministeriö, Sosiaalinen Tutkimustoimisto, 1937. 61 pp.

Annual report on industrial accidents in Finland, giving an analysis of the experience for 1934, accompanied by detailed tabulations for insured workers and for government employees. Distribution by industry is shown for man-hour exposure, pay rolls, insurance premiums, compensation payments, accidents, time loss, and causes, covering 70,279 injuries to insured workers and 5,535 to government employees. Distribution of closed cases of insured workers is shown by age, degree of disability, cause, industry group, and location of injury.

Printed in Finnish and Swedish, with nomenclature, table of contents, and general remarks in French.

*Statistics of compensation and proceedings under Workmen's Compensation Acts and Employers' Liability Act, 1880, in Great Britain during the year 1935.* London, Home Office, 1937. 32 pp. (Cmd. 5557.)

Reports were received, from employers and insurers, of 2,640 fatal and 422,699 nonfatal injuries. These included 17 fatal and 19,081 disabling cases of industrial disease. Compensation awards totaled £766,012 for fatal and £5,442,478 for nonfatal injuries. The aggregate average number of workers covered by the acts was reported as 7,231,870.

*Proceedings of Eighth All-Ohio Safety Congress, Columbus, April 20-22, 1937.* Columbus, Industrial Commission of Ohio, Division of Safety and Hygiene, 1937. 551 pp.

Papers presented and discussions on industrial safety at the general and sectional sessions, attended by more than 1,500 registered delegates and visitors.

*List of respiratory protective devices approved by U. S. Bureau of Mines.* By H. H. Schrenk. Washington, U. S. Bureau of Mines, 1937. 6 pp.; mimeographed. (Information Circular 6952.)

Supersedes Information Circular 6918 and lists approvals as of April 10, 1937.

*Some results of first-aid training of all the employees of a mine or plant.* By J. J. Forbes. Washington, U. S. Bureau of Mines, 1937. 13 pp.; mimeographed. (Information Circular 6957.)

*What's wrong with mine safety programs?* By D. Harrington. Washington, U. S. Bureau of Mines, 1937. 9 pp.; mimeographed. (Information Circular 6958.)

Emphasizes the responsibility of owners or operators and the necessity for their active interest in accident prevention.

*Safety standards for motion-picture-machine operators.* Washington, U. S. Bureau of Labor Statistics, 1938. 17 pp. (Serial No. R. 647, reprint from January 1938 Monthly Labor Review.)

*Higiene y seguridad del trabajo.* By Mariano R. Tissebaum. Santa Fe, Argentina, Instituto Social de la Universidad Nacional del Litoral, 1936. 90 pp., illus. (Temas Obreros, No. 5.)

Safety and health standards agreed upon by the International Labor Organization; and legislative provisions in Argentina pertaining to the safety and health of workers in oil fields, mines, motorized agriculture, and industrial and commercial establishments; seats for workers; work of women and minors; home work; and work which is especially dangerous or unhealthful.

## Industrial Relations

*Collective bargaining for today and tomorrow—approach and method.* Edited by Henry C. Metcalf. New York, Harper & Bros., 1937. 182 pp.

Transcript of discussions presented at a series of round-table conferences conducted by the Bureau of Personnel Administration (New York), by economists, Government officials, trade-unionists, industrialists, and authorities on personnel administration, dealing with various phases of employer-employee relations that are presented as evolving through legislation, Government intercession, and changing industrial and social conditions. A bibliography of selected references lists many of the most recent publications on subjects related to the conference discussions.

*Regulation of contracts of employment of indigenous workers.* Geneva, International Labor Office (American Branch, 734 Jackson Place, Washington, D. C.), 1937. 239 pp. (Second item on agenda of International Labor Conference, 24th session, Geneva, 1938; report II.)

The general nature and scope of the question and the situation in the principal territories concerned are examined, and the following problems of regulation are discussed: The requirement that contracts be in writing, their contents, and administrative supervision of their conclusion; application of the requirements to women, young persons, and children; medical examination of workers; length of contract period; transfer of workers under contract; termination of contracts; repatriation of workers after contract termination; reengagement contracts; and penal sanctions.

*Compulsory arbitration of labor disputes.* (In Congressional Digest, Washington, December 1937, pp. 289-320.)

Factual material and pro and con discussions.

*The legality of "peaceful coercion" in labor disputes.* By Bernard Eskin. (In University of Pennsylvania Law Review and American Law Register, Philadelphia, March 1937, pp. 456-483.)

Brief analysis of legal theories regarding group action growing out of labor controversies, as indicated by court decisions.

*Municipal and county labor boards.* (In The Commonwealth, official journal of Commonwealth Club of California, San Francisco, December 28, 1937, part 2, pp. 142-175.)

Includes a brief report on the extent to which local governments (city and county) are in fact involved in extensive industrial disputes in their respective localities; a review of the organization and functioning of local machinery, where such exists, for interceding in labor disputes; and a pro and con discussion of the desirability of municipal and county labor boards patterned after and acting in conjunction with State and national labor relations boards. The appendix presents the text of the ordinance creating the Toledo (Ohio) Industrial Peace Board, with comments upon the achievements of that agency, by the board itself and by organized employers and employees; and a similar treatment of the Newark (N. J.) Municipal Labor Board.

*The relative status of the sit-down strike in the development of labor law.* By R. J. Howard. (In Virginia Law Review, Charlottesville, May 1937, pp. 799-815.)

*Sit-down strikes—a new problem for government.* (In Illinois Law Review, Chicago, March 1937, pp. 942-959.)

*How to handle grievances.* By Glenn Gardiner. New York, Elliott Service Co., 219 East 44th Street, 1937. vii, 52 pp.

A working manual for foremen and others in supervisory positions, who deal with employees' grievances.

*El ABC de las huelgas.* By Mario Pavon Flores. Mexico, D. F., Editorial "Masas," 1937. 196 pp.

This volume, by a Mexican professor of industrial law who has been active in the interests of the Mexican workers, covers the origin and growth of the strike movement, kinds of strikes, general principles and practices followed, and ultimate objectives of strikes. With special reference to Mexico, the author discusses the right to strike, settlement of labor conflicts, legal forms to be used in conducting strikes, court decisions in connection with strikes and collective labor agreements, strike regulations in the statutes of the Confederation of Mexican Workers, and the attitude of the Mexican Government toward strikes.

### Labor Organization

*Wharton Assembly addresses, 1937.* Philadelphia, University of Pennsylvania Press, 1937. 77 pp.

The five addresses reproduced in this compilation were given before the student body of the Wharton School of Finance and Commerce of the University of Pennsylvania during the academic year 1936-37. Three of them deal with the Committee for Industrial Organization, from different viewpoints. George M. Harrison, a vice president of the American Federation of Labor, discussed the issues involved in the cleavage in the American labor movement; George Sokolsky, journalist, spoke on C. I. O. tactics, particularly the sit-down strike, in their relation to established legal concepts; and Philip Murray, chairman of the Steel Workers' Organizing Committee, outlined the objectives of the C. I. O. as exemplified in the organizing and collective-bargaining movements in the steel industry.

The other addresses were: "Problems Confronting Your American Democracy," by Sir Wilmott Lewis, Washington correspondent of the London Times; and "The Debate Over the Constitution," by Henry Wolf Bikle, general counsel of the Pennsylvania Railroad Co.

*The evolution of the German Labor Front.* By Taylor Cole. (In Political Science Quarterly, New York, December 1937, pp. 532-558.)

Covers developments up to August 1936.

*A pocket history of the British workers to 1919.* By Raymond Postgate. (In Fact, London, August 1937, pp. 7-93.)

Condensed historical review of workers' movements in Great Britain, from the beginning of craft organization at the close of the eighteenth century to 1919, including trade unionism, chartism, the reformist movements, syndicalism, and socialism.

### Minimum Wage

*Report of the Massachusetts Minimum Wage Commission for year ended November 30, 1936.* Boston, 1937. 18 pp.

Review of the year's activities of the commission, during which period it functioned as part of the State department of health. The report covers inspection and enforcement activities and the decisions of three new wage boards and the directory orders based thereon.

### Mining Industry

*Forty-fifth annual report of State Mining Department of Alabama—coal mines, 1936.* Birmingham, 1937. 95 pp., illus.

Data on accidents, employment, equipment, operating conditions, and production, with a directory of mines in the State.

*Annual report of coal mines, Washington, for year ending December 31, 1936.* Olympia, Department of Labor and Industries, 1937. 18 pp.

Covers accidents, employment, equipment, development, and production.

*Annual report of Division of Mines and Mining, Indiana, for fiscal year ended June 30, 1936.* [Indianapolis, 1937.] 14 pp. (Reprinted from 1936 yearbook.)

Data on accidents, employment, wages, and production, with a directory of mines in the State.

### Negro in Industry

*Bibliography on Negro labor.* Compiled in office of Lawrence A. Oxley. Washington, U. S. Bureau of Labor Statistics, 1937. 34 pp.; mimeographed.

*Negro year book: An annual encyclopedia of the Negro, 1937-38.* Edited by Monroe N. Work. Tuskegee Institute, Ala., Negro Year Book Publishing Co., 1937. 575 pp. (9th ed.)

Part 1 of this handbook contains information on the achievements of Negroes in the United States; their interests in relation to national recovery, agriculture, business, government, education, and religion; the problems of race relations, crime, lynching; statistics of population, occupations, and mortality; historical data concerning slavery and Negro soldiers in United States wars. Other parts of the volume deal with the Negro in Latin America, Europe, and Africa, and the Negro in poetry and the fine arts. A bibliography is furnished, as well as a directory of Negro newspapers, national organizations, and social-service centers.

*Occupational characteristics of white-collar and skilled Negro workers of Atlanta, Georgia.* Atlanta, Works Progress Administration of Georgia, 1937. 110 pp., charts, bibliography; mimeographed.

Presents data on social background, occupational shifts and trends, and relationships of the workers to social agencies.

### Personnel Management

*Office personnel practices.* New York, American Management Association, 330 West 42d Street, 1937. 40 pp. (Office Management Series No. 79.)

*Significant developments in office management.* New York, American Management Association, 330 West 42d Street, 1937. 39 pp. (Office Management Series No. 78.)

## Planning

*National and regional planning.* Joint congress of International Federation for Housing and Town Planning and International Housing Association, Paris 1937. London, International Federation for Housing and Town Planning, 25 Bedford Row, W. C. 1, 1937. 110 pp., maps.

Short statements, in English, French, or German, on national and regional planning in a number of foreign countries. Each statement has been summarized in the other two languages.

## Prices

*Revised method of calculation of the wholesale price index of the United States Bureau of Labor Statistics.* By Jesse M. Cutts and Samuel J. Dennis. Washington, U. S. Bureau of Labor Statistics, 1937. 12 pp. (Serial No. R. 666, reprint from Journal of American Statistical Association, December 1937.)

*Some problems involved in establishing milk prices.* By E. W. Gaumnitz and O. M. Reed. Washington, U. S. Agricultural Adjustment Administration, Division of Marketing and Marketing Agreements, 1937. 227 pp., charts.

*Statystyka cen, 1936.* Warsaw, Główny Urząd Statystyczny, 1937. 146 pp. Statistics of prices in Poland in 1936, tabulated by provinces and districts. Printed in Polish, with table of contents, introduction, and some table heads in French.

## Prison Labor

*The prison labor problem in California.* Washington, U. S. Prison Industries Reorganization Administration, 1937. 84 pp., charts.; mimeographed.

While commending the good features of the California penal system, the report calls attention to the serious overcrowding in two of the State's institutions and the need for institutional diversification. The desirability of expansion of industrial production in the prisons, in order to keep the inmates busy, is also emphasized and new industries suggested.

## Profit Sharing

*Profit-sharing and other supplementary-compensation plans covering wage earners.* By F. Beatrice Brower. New York, National Industrial Conference Board, Inc., 247 Park Avenue, 1937. 22 pp. (Studies in Personnel Policy, No. 2.) Reviewed in this issue.

## Railroads

*Government ownership and operation of railways for the United States.* By Lewis C. Sorrell. New York, Prentice-Hall, Inc., 1937. 330 pp., charts; bibliography.

The author is professional adviser to the Transportation Conference and the Railway Business Association. The book is essentially an argument against public ownership and operation of railways. An eight-page section is devoted to "The Railway Labor Interest."

*Railways of thirty nations: Government versus private ownership.* By P. Harvey Middleton. New York, Prentice-Hall, Inc., 1937. 328 pp., illus.; bibliography.

Sponsored by the Railway Business Association. The author attempts to show that public ownership of railways in the United States is undesirable.

## Relief Measures and Statistics

*Annual report of Director of Emergency Conservation Work, fiscal year ending June 30, 1937.* Washington, 1937. 49 pp., folders.

Reviews the various activities of the Civilian Conservation Corps for the year covered, and gives an account of the experience of a typical enrollee.

*Aid to dependent children in their own homes—a study of the causes of dependency.* Olympia, Wash., State Department of Social Security, 1937. 26 pp.; mimeographed. (Monograph No. 26.)

In order to determine the causes of dependency, an investigation was made of the condition of 5,467 Washington families receiving direct aid for dependent children at certain specified periods. The report includes data on occupations of living fathers, major causes of dependency as revealed by the study, and education of living mothers.

*Report on old-age assistance in New Hampshire, February 1, 1936, to December 31, 1936.* Concord, State Board of Welfare and Relief, 1937. 63 pp.

*Offentlig forsorg og aldersrente i regnskabsaaret, 1934–35.* Copenhagen, Danmarks Statistiske Departement, 1937. 116 pp.

Statistics of operation of the old-age pension system and other forms of public assistance in Denmark, 1934–35.

*Report of the Minister of Public Welfare, Province of Ontario, for fiscal year 1935–1936.* Toronto, 1937. 109 pp.

The subjects dealt with include old-age pensions, mothers' allowances, children's aid, industrial schools, and unemployment relief.

### Textile Industry

*The world textile industry—economic and social problems.* Geneva, International Labor Office (American branch, 734 Jackson Place, Washington, D. C.), 1937. In 2 volumes, 354 and 288 pp. (Studies and Reports, Series B, No. 27.)

Reprint, with certain alterations and additions, of the report originally prepared and distributed in proof as a basis for discussion at the Tripartite Technica Conference on the Textile Industry held in Washington, D. C., in April 1937.

*First annual report of the Spindles Board [Great Britain].* London, Board of Trade, 1937. 20 pp. (Cmd. 5579.)

Covers total spindle capacity in Great Britain and the acquisition and disposal of unused mills and machinery under the Cotton Spinning Industry Act of 1936, which called for the purchase and scrapping of redundant and idle spinning mills and machinery through a special Government agency created for the purpose.

### Unemployment Insurance and Relief

*The administration of unemployment compensation benefits in Wisconsin, July 1, 1936, to June 30, 1937.* By Walter Matscheck and R. C. Atkinson. Chicago, Public Administration Service, 850 East 58th Street, 1937. 92 pp. (Publication No. 58.)

This report on the first year's experience under the Wisconsin unemployment-compensation law contains a summary of the law, an account of the administrative organization and personnel and procedures in filing and registering claims, a discussion of the time factors in the payment of claims, and conclusions from the Wisconsin experience. The appendix contains copies of the various forms and reports used by employers and employees.

*The Unemployment Insurance Statutory Committee [Great Britain].* By Sir William Beveridge. London, London School of Economics and Political Science, 1937. 55 pp. (Political Pamphlet No. 1.)

Reviews the work of the Committee since its establishment in 1934.

*Les remèdes contre le chômage en Europe.* Louvain, Belgium, Union Internationale d'Études Sociales de Malines, 1936. 120 pp.

A collection of papers on the remedies for unemployment which have been adopted in Austria, Belgium, France, Great Britain, and Italy.

### Wages and Hours of Labor

*Earnings and hours in bituminous-coal mining, 1936.* Washington, U. S. Bureau of Labor Statistics, 1937. 11 pp. (Serial No. R. 652, reprint from November 1937 Monthly Labor Review.)

*Löhne und ernährungskosten in Deutschland, 1820 bis 1937.* By Jürgen Kuczynski. Liepāja, Latvia, Gottl. D. Meyer, 1937. 45 pp.

Statistical report on money wages and cost of food in Germany from 1820 to 1937.

*The forty hour week—a case for collective action.* By Michael Stewart. London, Victor Gollancz, Ltd., and New Fabian Research Bureau, 1937. 35 pp. (N. F. R. B. No. 34.)

A summary of arguments for further reductions in working hours. The pamphlet also contains a brief historical account of reductions in hours; discussions of specific problems, such as the effect of shorter hours on overhead cost and shifts; and an examination of the possibility of action by a single country without corresponding reductions of hours in other countries.

### Women in Industry

*Women's hours and wages in District of Columbia in 1937.* By Ethel L. Best and Arthur T. Sutherland. Washington, U. S. Women's Bureau, 1937. 44 pp. (Bulletin No. 153.)

Data from an advance summary of this study were published in the September 1937 Monthly Labor Review.

### Youth Problems

*How fare American youth? A report to the American Youth Commission of the American Council on Education.* By Homer P. Rainey and others. New York, D. Appleton-Century Co., Inc., 1937. 186 pp., charts.

In this review of the various angles of the youth problem the following are among the subjects considered: Adult education, arts and crafts, vocational education, occupational preferences, vocational adjustment, youth surveys, employment and unemployment, wages, Negro youth, and National Youth Administration activities.

*Surveys of youth—finding the facts.* By D. L. Harley. Washington, American Council on Education, 1937. 106 pp. (American Council on Education Studies, Ser. IV—American Youth Commission, Volume 1, No. 1.)

Identifies and gives a brief description of 180 national, regional, State, and local surveys carried on in the United States since 1931. An appendix contains references to some recent youth surveys made in Great Britain.

*Foundations of NYA guidance, including bibliographies and annotated references.* By Mildred E. Lincoln. Albany, National Youth Administration for New York State, 1937. 108 pp.

### General Reports

*Labor in depression and recovery, 1929 to 1937.* By Witt Bowden. Washington, U. S. Bureau of Labor Statistics, 1937. 37 pp. (Serial No. R. 651, reprint from November 1937 Monthly Labor Review.)

*Annual report of Secretary of Interior, for fiscal year ending June 30, 1937.* Washington, 1937. xxii, 410 pp.

Contains the reports of the various branches of the Department, among them the Safety Division of the Bureau of Mines, Office of Education, Office of Indian Affairs, and Office of Adviser on Negro Affairs. Data on employment of Indians, taken from the volume, are published in this issue of the Monthly Labor Review.

*Twenty-fifth annual report of Secretary of Labor, for fiscal year ended June 30, 1937.* Washington, 1937. 139 pp.

In addition to the Secretary of Labor's review of labor conditions in the United States, and certain recommendations on public policy on labor matters, this report contains a detailed account of the current activities of each of the bureaus and divisions of the Department of Labor.

*Annual report of Commissioner of Labor of Puerto Rico [fiscal year July 1, 1936, to June 30, 1937].* San Juan, 1937. 161 pp.

Data concerning average earnings and hours in specified industries, and earnings of home workers in the needlework industry, from this publication, are given in this issue of the Monthly Labor Review. The report also contains information on collective agreements, strikes, wage claims, workmen's compensation, employment-office activities, homesteading, women and children in industry, and labor legislation.

*Statistisches Jahrbuch für das Deutsche Reich.* Berlin, Statistisches Reichsamt, 1937. Various paging.

Statistics of wages, employment and unemployment, employment of the partially disabled, prices, cost of living, housing, welfare work, social insurance, the youth movement, and legal aid, in Germany in 1937 and preceding years, with a summary review of the same conditions in foreign countries.

*Statistical abstract, 1937, Irish Free State.* Dublin, Department of Industry and Commerce, 1937. xvi, 198 pp.

The data include statistics of population and population movements in 1936; mortality rates by causes, 1929 to 1935; employment and total earnings by industry, 1931 to 1935; industrial analyses of live employment-exchange registers, by months, 1935 and 1936; and number insured under various social-insurance systems, 1936.

*Report of New Zealand Department of Labor [fiscal year April 1, 1936, to March 31, 1937].* Wellington, 1937. 46 pp.

Sections of the report are devoted to such subjects as employment and unemployment, the Industrial Conciliation and Arbitration Amendment Act of 1936, and hours of labor fixed by award for various occupations.

*Report of Director of Labor and Chief Inspector of Factories and Shops, Queensland, for year ended June 30, 1937.* Brisbane, Department of Labor, 1937. 76 pp.

*Annual report on working of Factories and Steam Boilers Department, South Australia, for year ended December 31, 1936.* Adelaide, 1937. 27 pp.

Largely a statistical report, it shows volume of employment by industries, wages paid, extent of overtime work, accidents, and related labor facts.

*Report of Department of Labor and Social Welfare, Union of South Africa, for year ended December 1936, with which are included reports of chief inspector of factories, workmen's compensation commissioner, and wage board.* Pretoria, 1937. 100 pp.

Reviews the work of the department in connection with unemployment relief, training and placement of the unemployed, social-welfare work, and administration of industrial laws.

*World economic review, 1936: Part II, Foreign countries.* Washington, U. S. Bureau of Foreign and Domestic Commerce, 1937. 275 pp.

For many of the countries, data are given on employment, unemployment, wages, and prices.

*Bulletin de l'Institut International de Statistique (session d'Athènes, 1936).* Athens, Greece, 1937. 303 pp.

Reports presented at the 23d session of the International Statistical Institute, Athens, 1936, covering vital and health statistics, prices, cost of living, etc., in different countries.

*University debaters' annual: Constructive and rebuttal speeches delivered in debates of American colleges and universities during the college year 1936-1937.* Edited by Edith M. Phelps and Julia E. Johnsen. New York, H. W. Wilson Co., 1937. 533 pp.

The current volume contains the texts of debates and lists of references on 11 topics. Four of these deal with labor problems—hours, wages, strikes, and cooperation—and three others deal with closely related subjects, namely, the Constitution in relation to social change, government ownership of electric utilities, and teachers' oaths of allegiance.

*Secretarial assistance in teachers colleges and normal schools.* By Luther Jordan Bennett. New York, Columbia University, Teachers College, 1937. 86 pp., maps, charts. (Contributions to Education, No. 724.)

One chapter deals with general conditions of employment—wages, working hours, vacations, etc.