UNITED STATES DEPARTMENT OF LABOR
W. N. DOAK, Secretary
BUREAU OF LABOR STATISTICS
CHARLES E. BALDWIN, Acting Commissioner

MONTHLY LABOR REVIEW

VOLUME 35 NUMBER 1

JULY, 1932

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1932

For sale by the Superintendent of Documents, Washington, D. C.
Subscription price per year: United States, Canada, Mexico, $1.50; Other Countries, $2.25

CERTIFICATE

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

II

Contents

	Page
Special articles:	
Recreational facilities provided by park systems in the United States	1
Productivity and labor displacement in private-wire systems	9
Employment conditions and unemployment relief:	
Unemployment insurance plan of National Electrical Manufacturers' Association	22
Unemployment in foreign countries	27
Industrial and labor conditions:	
International Labor Conference, 1932	32
Pennsylvania—Domestic service in Philadelphia homes	33
Women in industry:	
Wage-earning women and the industrial conditions of 1930	36
China—Conditions in straw-hat manufacture in Chekiang	37
Latvia—Woman and child labor	38
Retirement and pension plans:	
Administration of old-age pension laws in the United States	40
New Jersey—Results of study of retirement systems for public employees	46
California—Old-age pension law	48
Great Britain—Municipal housing for the aged	52
Insurance and benefit plans:	
Group insurance	53
Canadian trade-union benefits, 1931	56
Health and industrial hygiene:	
Nitrocellulose lacquers and their hazards	57
Cadmium poisoning	58
Effects of prolonged exposure to sulphur dioxide	61
Alsace-Lorraine—Effect of sickness insurance upon mortality rates	63
Industrial accidents:	
Regulation of employment of minors in hazardous trades	64
Pennsylvania safety conference	65
Labor laws:	
Anti-injunction laws in labor disputes	66
Michigan law prohibiting employment of certain aliens	88
Workmen's compensation:	
Montana—Injury constitutes "sickness" within hospitalization contract, although not compensable	89
New Jersey—Double compensation awarded for illegally employed minor, notwithstanding recovery of judgment	90
New York—Medical and hospital problems of workmen's compensation	92
Great Britain—Mule spinners' cancer made compensable	93
Recent workmen's compensation reports—	
Maryland	94
New York	95
West Virginia	96
Wisconsin	97
Ontario	98
Labor agreements, awards, and decisions:	
Decision of arbitrator in newspaper industry, Syracuse, N. Y	100
Recent decisions of the Industrial Commission of Colorado	101
Labor organizations:	
Canada—Membership of labor organizations, 1931	104
Japan—Annual congress of Federation of Labor	105

	Page
Family allowances:	
London conference on family allowances	106
Workers' education, training, and placement:	
Scientific placement of the handicapped	110
Rehabilitation of the unemployed in a small city	112
Cooperation:	
Sales of consumers' cooperative societies in 1931	115
Development of International Cooperative Alliance, 1929 and 1930	116
Palestine—Cooperative marketing of agricultural products	117
Industrial disputes:	
Strikes and lockouts in the United States in May, 1932	119
Conciliation work of the Department of Labor in May, 1932	121
Housing:	
Building permits in principal cities, May, 1932	125
Germany—Steel dwellings for the unemployed	141
Wages and hours of labor:	
Wages and hours of labor in motor-vehicle repair garages, 1931	143
Wages and hours of labor in cotton-goods manufacturing, 1932	150
Wages and hours of labor of union barbers in the United States, April, 1932	156
Wage-rate changes in American industries	160
Wage changes reported by trade-unions since March, 1932	163
Salaries in city school systems, 1930–31	167
New York—Salaries of clerical workers in New York City	171
Germany—Production and wages in the iron and steel industry, by Fritz Kummer	172
Portugal—General survey of wages, 1931	176
Spain—General survey of wages in 1931	177
Trend of employment:	
Summary for May, 1932	195
Employment in selected manufacturing industries in May, 1932	196
Employment in nonmanufacturing industries in May, 1932	207
Trend of employment in May, 1932, by States	210
Employment and pay roll in May, 1932, in cities of over 500,000 population	217
Employment in executive civil service of the United States, May, 1932	217
Employment in building construction in May, 1932	219
Employment on Class I steam railroads in the United States	220
Retail prices:	
Retail prices of food in May, 1932	222
Retail prices of coal in May, 1932	227
Wholesale prices:	
Index numbers of wholesale prices, May, 1932	230
Cost of living:	
Budget for dependent families or children	234
Germany—Cost of living of working-class families	235
Immigration and emigration:	
Statistics of immigration for April, 1932	241
Publications relating to labor:	
Official—United States	242
Official—Foreign countries	244
Unofficial	246

This Issue in Brief

Provision of public recreation facilities in the United States has been receiving increased attention during recent years, largely as a result of the increased leisure resulting from shortened working hours and, recently, from unemployment. An article on page 1 summarizes the results of a survey of the recreational facilities provided by the park systems of the United States.

The effect of the use of the dial telephone in private telephone exchanges and of the printer telegraph on private circuits of various kinds is the subject of a study just completed by the Bureau of Labor Statistics. The importance of private telephone exchanges is shown by the fact that they employed in 1931 about 145,000 operators. The number is being materially restricted by the extension of the dial system. The printer telegraph on private circuits is reducing the number of office employees, such as clerks and stenographers, as well as the number of telegraph and telephone operators (p. 9).

The first definite attempt of an entire industry to protect its employees from the effects of unemployment is found in the recently adopted unemployment insurance plan of the National Electrical Manufacturers' Association. There are 300 member companies which manufacture from 85 to 90 per cent of the total electrical product of the country and employ between two and three hundred thousand persons. The adoption of the plan by any company depends upon a favorable vote of at least 60 per cent of the eligible employees, and it is hoped that eventually all of these companies will be brought under the plan (p. 22).

Average earnings per hour in the cotton-goods manufacturing industry in the early part of 1932 amounted to 26.6 cents as against 32.5 cents in 1930, a decrease of approximately 6 cents. Average full-time hours per week in 1932 were the same as in 1930, namely, 53.4. Further details, by occupation, sex, etc., are contained in a summary of a recent study by the Bureau of Labor Statistics, given on page 150.

Hourly earnings of employees in motor-vehicle repair garages in 1931 averaged 57.9 cents, according to a survey made by the Bureau of Labor Statistics. Full-time hours per week averaged 53.4 and average full-time weekly earnings amounted to $30.92. These figures are for males only, practically no females being employed in this industry (p. 143).

The prevailing wage scales of union barbers in a number of cities are given in an article on page 156. No summary statements are possible owing to the existence of several systems of compensation. In many instances barbers are paid a guaranteed weekly rate of wages and in addition to this receive a specified percentage of their receipts over a stated amount; others are paid a flat weekly rate; and still others work entirely on a percentage-of-receipts basis.

The Federal anti-injunction law approved by the President on March 23, 1932, declares that antiunion contracts, commonly called "yellow-dog" contracts, are void and against public policy; this law also limits the jurisdiction of Federal equity courts in granting injunctions in labor disputes. Twelve States have enacted laws somewhat similar to the Federal anti-injunction law. Five of these laws prohibit anti-union contracts, while the anti-injunction feature is covered by all. The texts of these several laws and a general discussion of the history and constitutionality of such legislation are given in an article on page 66.

The employment of certain aliens was regulated by the State of Michigan during the 1931 session of its legislature. The law enacted disqualifies any foreigner who obtained admission to the United States illegally or any "undesirable alien" from becoming a legal resident of the State and engaging in business within the State. The law also prohibits the employment of such persons by legal residents (p. 88).

Group insurance has had a tremendous growth since it was first instituted in 1911. The insurance in force at present amounts to approximately $10,000,000,000. Even during the present depression every form of group insurance has maintained and increased its premium income. During the past five years there has been a trend away from the provision of straight-life insurance policies and the present tendency is to provide coverages for group accident and health, accidental death and dismemberment, and annuities. There is also a tendency toward the adoption of plans in which the employees contribute toward the insurance (p. 53.)

The development of the extensive industrial use of cadmium and its compounds in recent years has called attention to its potential hazards. A study of cadmium poisoning carried out at the Harvard School of Public Health shows that exposure to cadmium oxide fume or dust results in various pulmonary affections. In addition to its effects on the lungs it also affects the liver and kidneys where it is stored and from which it is eliminated very slowly (p. 58.)

MONTHLY
LABOR REVIEW
U. S. BUREAU OF LABOR STATISTICS

VOL. 35, NO. 1 WASHINGTON JULY, 1932

Recreational Facilities Provided by Park Systems in the United States

THE enormous amount of leisure time, both voluntary and enforced, which the people of the Nation have to-day is creating a problem of the greatest importance. Leaders in education, industry, government, and other fields agree that this new leisure, if wisely spent, presents a rich opportunity for individual happiness and development. A great responsibility therefore rests upon the community to provide both suitable training for the wise use of leisure and adequate opportunities for enjoying and participating in wholesome recreation activities.

The importance of the movement for the preservation and development of park recreation areas, which has been in progress for many years, has been receiving increasing recognition during recent years, with the result that more and more emphasis is being laid upon the provision and use of these facilities. A recent survey conducted by the Bureau of Labor Statistics and the National Recreation Association shows the accomplishments of the different types of communities in the provision of park and recreation centers and in supplying the special services and leadership which are necessary to make them fully useful. This article summarizes certain of the results of this survey, the full report being published as Bulletin No. 565 of the bureau.[1]

Land permanently dedicated to park use is essential to a well-balanced outdoor community recreation program. A large percentage of the public outdoor recreation facilities in American cities to-day is provided by public park and recreation departments.

Although the park movement has undergone many changes, there is probably no other respect in which the present-day park system differs more widely from that of earlier years than in the type and scope of its service to the people. The first parks were for passive and semipassive forms of recreation; to-day they are also used for a limitless variety of active recreation. The early attempts to provide active play facilities were to meet the needs of children; to-day a large percentage of these facilities is for young people and adults. Little or no attempt was formerly made to encourage or organize groups to use the parks, whereas to-day many of the clubs, leagues, and other groups using the parks are organized by the park depart-

[1] U. S. Bureau of Labor Statistics Bul. No. 565: Park recreation areas in the United States, 1930. Washington, 1932.

ment. In the early days recreational leadership in the parks was unknown; to-day it is the basis for most of the organized recreation service. Formerly the park offered landscape beauty, band concerts, floral displays, and other attractions; to-day it offers these and in addition opportunities for participation in singing, playing baseball or golf, dancing, skating, painting, swimming, etc. Not so many years ago the park season lasted only a few months; in recent years the park has become a year-round recreation center. Even to-day in many cities park authorities consider that their field of service is limited to park properties; on the other hand, many park systems provide recreation leadership and service throughout the entire city—in schools, churches, and private property, as well as within the parks. It is largely because of these changes, many of which have developed gradually, that the well-organized park department is prepared to-day to make a vital contribution to the solution of the leisure-time problem.

The importance of recreation in the life of the people and the community's responsibility to provide recreation opportunities have been recognized by leaders of commerce, industry, and labor. Studies of industrial recreation conducted by the United States Bureau of Labor Statistics have revealed that many employers have furnished for their employees both indoor and outdoor facilities for sports and recreation. For the most part, however, employees participate in recreation activities sponsored by municipal park and recreation departments and utilize the areas and facilities provided for community use.

The American Federation of Labor and many of its affiliated groups, "realizing that individual and social development is as much a matter of having opportunity for recreation and education as it is of leisure," have given hearty indorsement to the movement for securing public recreation facilities and centers under trained leadership.

"Industry is generally alive to-day to the bearing recreational opportunities have on the location of their factories," wrote William Butterworth, president of the Chamber of Commerce of the United States. In the foreword of a handbook dealing with playgrounds and recreation, issued by the chamber he states, "The proper use of leisure, through the development of adequate recreation, is one of the most efficient means of securing our country's future. Well-directed play * * * makes for health; it raises the moral standard; it develops leadership and fair play; it creates a proper sense of responsibility and respect for authority; it makes for happiness, general welfare, and good citizenship."

Industrial and other labor groups are benefiting by the service of park and recreation departments, not only through the use of facilities and participation in the regular community programs, but through special classes and activities provided for workers.

Recreation and Unemployment

In times of business depression it is often urged that municipal appropriations for recreation service be reduced, and occasionally the cry is raised that they should be eliminated. Fortunately officials in most American cities to-day realize that the need for wholesome community recreation activities is increased and not decreased during such periods, not only because of the greater amount of leisure but because

people out of work can not afford to indulge in various forms of commercial amusements.

According to the 1930 Year Book of the National Recreation Association, expenditures for public recreation during the year were $5,000,000 more than in any previous year, in spite of the fact that 1930 was a year of depression. Attendance reports from many cities indicate that more people are using public parks, playgrounds, recreation centers, and other facilities at the present time than ever before. The increase in the adult use indicates that people who are out of work are turning to the municipal park and recreation agencies for guidance in the use of their enforced hours of leisure.

One of the greatest contributions which parks have made and are continuing to make in the present period of depression is the providing of work opportunities for large numbers of "relief workers." There is perhaps no type of municipal service in which it is possible to employ to advantage as large numbers of unskilled workers as in improving park properties. In dozens of cities funds raised for unemployment have been used to employ men for this work. New York is an example of such use of unemployment funds, valuable service having been rendered in the parks of each borough.

Municipal Park Acreage, 1930

LAND dedicated permanently to park and recreation use is a fundamental and essential factor in all park service and the acquisition of properties is a preliminary step to the establishing of park facilities and programs.

A total area of 308,804.87 acres was reported in this study, representing the city-owned park properties in 898 communities of 5,000 or more population. Some 250 communities which reported a total of nearly 37,000 acres of parks in 1925–26 [2] failed to submit information for use in the present study. A conservative estimate of the municipal park area in 1930 in towns and cities of more than 5,000 population is therefore 350,000 acres. One hundred and seventy-four communities do not have a single park, according to their officials.

Perhaps the most commonly accepted standard of park and recreation space for a city is that of 1 acre to each 100 population. Because of the high cost of land in densely settled neighborhoods, many of which were built up before the importance of providing parks was recognized, most large cities fall far short of this standard. Minneapolis, however, with a population of 454,356, has an acre of parks for each 90 people. Denver and Dallas, with 1 acre for each 23 and 42 people, respectively, are two other large cities with unusual park areas, although in both much of the acreage is outside the city limits. Several other cities of 100,000 or more inhabitants provide an acre of parks for each 50 people or less, thereby exceeding by at least 100 per cent the standard of an acre for each 100 people.

Many communities of less than 10,000 people have as yet failed to make any provision for parks and recreation areas. Nearly 28 per cent of the 448 municipalities with 5,000 to 10,000 inhabitants submitting data in this study reported having no parks. It is probable that a large percentage of those failing to report also totally lack park

[2] U. S. Bureau of Labor Statistics Bul. No. 462: Park recreation areas in the United States. Washington, 1928.

areas. Probably the school playgrounds in these communities provide some facilities for outdoor play and recreation, but there can be little doubt that there is a great need for added recreation areas in the towns and small cities.

A study of the ratio of parks to population in cities of various sizes reveals that the greatest shortage of park space is in the largest centers. There is, however, no definite relationship between the size of a city and the ratio of its park acreage to population.

Even though some cities are amply provided with parks, there are few which are not lacking both in number of parks and in park acreage. Often in the cities well provided with parks a major part of the acreage is in large outlying properties and many of the densely settled neighborhoods have no outdoor facilities for either active or passive recreation. This need has been recognized in many cities during the last five years, and many neighborhood areas have been acquired, often at great expense.

One of the most striking and encouraging facts revealed in the present study is the tremendous increase in municipal park acreage since 1925.

An analysis of the recent acquisition of park lands shows that the greatest progress has been in cities of from 25,000 to 50,000 population, which group more than doubled its park acreage during the last five years. The group of cities having from 10,000 to 25,000 inhabitants showed a remarkable increase of 63 per cent. The smallest gain in park acquisition was in the cities of from 500,000 to 1,000,000 and from 5,000 to 10,000, each of which groups added only 15 per cent. Although in many large cities population has increased faster than park acreage during the last five years, it is significant that in three of the six largest cities in the country—New York, Chicago, and Cleveland—park acquisitions have more than kept pace with population growth.

Types of Park Properties

ALTHOUGH the total park acreage in a city is the simplest measurement of the extent to which the city has provided parks, it does not indicate the adequacy of the city's park system. A well-balanced system requires not only ample park area but also a sufficient number of properly located parks of various types providing a variety of uses. Among the types of properties included in a well-balanced park system are small in-town parks, children's playgrounds, neighborhood parks, neighborhood playfields, large parks, and parkways.

Authorities differ in their opinions as to the number, size, and distribution of the various types of areas comprising an adequate park and recreation system. There is considerable agreement, however, that a greater number of children's playgrounds are needed than of any other type, the next in number needed being the neighborhood parks and the neighborhood playfields. Most of the other kinds of properties are likely to be few in number and their location dependent upon local factors such as topography, transportation facilities, population density, and the availability of suitable land and water areas.

The past five years have seen a great increase in the number of cities providing parks outside their city limits. One hundred and eighty-six cities report a total of 381 such parks as compared with 109 cities and 245 parks in 1925–26. Phoenix continues to lead with the largest out-of-the-city park of 14,640 acres, and Denver follows with

44 parks totaling nearly 11,000 acres. Seven cities report in excess of 2,000 acres in outside parks; while acreages of more than 1,000 are reported by six cities.

Park Workers

For the maintenance of the vast properties comprising city park systems, for the operation of their many facilities, and for the leadership essential to the varied recreation programs, a great staff of workers is needed. Naturally the personnel required is dependent largely upon the park acreage, the nature and extent of its development, and the kinds of service rendered to the public. In the large park systems a highly organized staff is needed, whereas in the smaller communities having only one or two parks of limited acreage no special park workers are required. In these communities the necessary maintenance work is often done by workers with the street, public works, or other department. Some of the park authorities in the larger cities and many in the smaller cities failed to report the number of workers, but a total of 44,431 persons employed for park service was reported.

Nearly one-half of these persons are employed the year round, a slightly larger number being seasonal workers. In the cities of 500,000 and over, a majority of the workers are employed on a year-round basis, but in the smaller cities the number of seasonal workers is much greater. In a few cities, such as Los Angeles, practically all park workers are employed the year round, whereas in others there is a small year-round staff supplemented by a large corps of seasonal workers.

Although the personnel required for park service can not be estimated on the basis of park acreage alone, it is of interest that in the cities of between 50,000 and 500,000, most of which reported both acreage and personnel, one worker is employed on the average for each 8 or 9 acres.

Park Expenditures

The question of expenditures for public services is one of much general interest, especially during the present period. Since parks in many cities comprise the largest and most valuable of municipal properties, information concerning their cost is of considerable importance.

Park expenditures may be roughly classified under two types: (1) Capital expenditures or outlays for land, improvements, and structures; (2) operating expenditures, including the cost of maintaining properties and of providing the various types of park service. In cities where the park system is being extended and developed the former items will be large, but in well-established systems which are not being expanded most of the funds are spent for operation.

In the present study, information concerning park expenditures was received from more than 700 cities, and it is believed that this provides more detailed data with reference to recent park finances than are available from any other source. Although a number of cities submitted little or no financial data, so many complete reports were received that a compilation of the information in them should be of much interest and value to park and other public officials.

That 1930 expenditures for park purposes exceeded $100,000,000 is one of the outstanding findings of the study. The large percentage

of this amount spent for salaries and wages is another item of special significance in the present situation, indicating as it does the importance of parks as a means of providing employment. Capital expenditures totaling nearly $200,000,000 in 416 cities during the 5-year period 1926–1930 indicate the importance of parks in city fiscal planning and also the marked impetus given to the park movement during the period. The extent to which funds for these outlays are secured from bond issues is illustrated by the amount of bond issues reported by 148 cities during these years, namely $153,000,000.

The total expenditures reported for the year 1930 by 721 cities do not represent the full amount spent for parks and community recreation in these cities. In a number of large cities, museums, zoological gardens, and other special park features are supported by private organizations many of whose expenditures were not reported in the present study. The expenditures of city playground and recreation departments, many of which conduct activities in parks and operate their own playgrounds, playfields, and centers, are not included. It is estimated that the expenditures of these departments alone for 1930 accounted for $10,000,000 of the $38,500,000 spent for community recreation service, according to the Recreation Year Book. Although in a number of cities, leadership on park and city playgrounds is provided by school authorities, no school expenditures are included in the present report. Furthermore, in some of the largest cities total expenditures were not reported by all of the park authorities.

A study of the per capita expenditures for parks in the cities of various population groups shows that the average amount spent for each person is, with one exception, least in the cities of 5,000 to 10,000 and increases in amount in each of the succeeding larger population groups. This suggests that in the larger cities, especially since the ratio of park acreage to population is generally smaller, the parks are more highly developed and intensively used and consequently require a greater amount of continuous maintenance. Furthermore, it is probably true that in the larger cities there is generally provided a more varied and highly developed recreation service during a larger part of the year that is commonly found in the smaller communities.

Sources of Park Funds

Since the establishment and operation of city parks are almost universally recognized in the United States as municipal functions, it is assumed that the expense of providing this service should be met from public funds. An analysis of the reports from 647 cities shows that more than 80 per cent of the money which was made available for park purposes in these cities in 1930 came either directly or indirectly from public taxation. The most common method of raising money for parks in 1930 was through city appropriations, 524 cities reporting this method and the total amount representing nearly 40 per cent of all the park funds received. More than 15 per cent was raised through special park tax levies and 28 per cent was secured from bond funds. In only 12 cities were assessments used as a method of financing parks, and of the total amount raised by this method 72 per cent was reported by Kansas City, Mo.

Among the sources of park revenue which supplement municipal funds in many cities are gifts, concessions, fees and charges, and the sale of property. Eighty-six cities reported gifts in 1930. In recent

years charges for the use of special recreation facilities such as golf courses, bowling greens, swimming pools, and skating rinks have resulted in a considerable income to park departments or municipalities. Receipts totaling nearly $5,000,000 were reported from fees and charges in 158 cities in 1930. Many park authorities have found it advisable to let or lease on a concession basis such park facilities and services as refreshment stands, boats, bathing-suit rentals, and dancing pavilions, although to an increasing extent such services are being handled directly by park departments. Income from concessions in 1930 was reported by 146 cities to be $2,225,644.82. About 10 per cent of the total receipts, which amounted to nearly $100,000,000, were from special funds, sale of park property, or from miscellaneous sources.

County Parks

DURING the quarter century following the establishment of the first "municipal park" in America, many cities acquired park areas, and several of them made considerable progress in the development of municipal park systems. The movement for county parks, on the other hand, developed very slowly. Twenty-five years after the establishment of the county park system in Essex County, N. J., in 1895, it is probable that not more than 15 of the 3,000 or more counties in the United States had acquired even a single park. The report on county parks published by this bureau, based on the study conducted in 1925–26, listed only 33 counties as having one or more county park areas.

In 1930 the total number of counties that had established parks was 74, according to the present study. This indicates that during the last few years there has been a marked growth in the movement for county parks. The total park acreage in 1930 was 108,484.94, representing an increase of 60 per cent over that reported five years previous. The nearly 39,000 acres in county parks reported as acquired during the 5-year period 1926–1930 represent more than one-third of the total present acreage.

Although county parks in 20 different States are included in this report, Michigan and California lead in the number of counties having one or more parks, with 16 and 12, respectively. Wisconsin, New Jersey, and New York also have counties with well-developed park systems. Six Illinois counties have established forest preserves which provide such opportunities for recreation that they have been considered as county parks in this study.

Most of the $57,500,000 spent for county park lands and improvements during the five years 1926–1930 has come from bond funds and county appropriations. Of the $22,000,000 spent for park purposes in 1930 alone in 60 counties, nearly 70 per cent was for land, buildings, and improvements. This indicates that to a considerable degree county parks are still in the making. After they are improved it is likely that a larger proportion of the annual budget will be spent for operating them.

It seems probable that the same factors which have brought about the establishment of parks in so many counties during the last few years will continue to give impetus to the movement. With the growth of cities and the increasing difficulty in securing at a reasonable price within the city limits large areas suitable for park and recreation use, there has been a tendency, as mentioned before, for cities to

acquire tracts outside and often at a considerable distance from the city. Since such areas serve not only the people in the city acquiring the park but also those in the surrounding region, and since the county is often the governmental unit controlling the region, it is reasonable that the expense of acquiring, improving, and operating the parks should be met by the county. Furthermore, in many rural counties there is no city large enough to meet the cost of providing a suitable park, but under the auspices of the county, all of its people may be served without a special burden on any community. Moreover, the problem of acquisition and operation, especially of parkways and large park areas, is much simpler under county than under joint municipal control.

As might be expected, the forms of recreation carried on in county parks are for the most part less highly organized than in the city areas. Fishing, picnicking, hiking, nature study, outings, with baseball, volley ball, horseshoes, and other sports, swimming, boating, horseback riding, and in many cases winter sports are among the most popular. In some of the county parks located near centers of population, golf, tennis, children's play activities under leadership, athletic leagues, and many of the other features commonly found in a city park program are provided. The facilities most frequently found in county parks are, in the order named, picnic places, tennis courts, baseball diamonds, children's playgrounds, bathing beaches, and athletic fields.

An idea as to the service rendered by county parks may be gained from the 1930 attendance reports, which indicate more than 63,000,000 visitors in the 37 counties reporting. One-half of the counties having parks did not estimate the number using these properties last year.

Parks in Metropolitan Districts

UNTIL recent years the opportunities which people have had for taking part in recreational activities or enjoying areas of natural beauty have been limited to those in the vicinity of their homes, except on rare occasions or during vacation periods. The shorter working-day, the 5-day week, rapid transit lines, the automobile, and good roads have helped make it possible for people to go farther afield for their recreation. In considering the recreational opportunities available for the people of a city it is therefore necessary to take into account not only the parks, playgrounds, and centers provided by the city but also the various other areas in the region which are operated by county, regional, State, and Federal authorities.

Far-seeing public officials and private citizens in many metropolitan districts, especially during the last decade, have taken steps to meet the growing need for recreation areas resulting from the concentration of population and the other factors just mentioned. The establishment of regional and county planning commissions and associations which have conducted surveys and educational campaigns, emphasizing parks as an essential feature of the regional or county plan, has been an important factor in bringing about the acquisition of additional parks in several metropolitan regions. It is probable that to an increasing extent, especially in the large cities, future park planning will be based upon regional rather than municipal needs and will involve the cooperation of all communities in the region.

Productivity and Labor Displacement in Private-Wire Systems

THE public telephone exchange and the commercial telegraph office are among the most familiar of American institutions. But the system of communication has now become so intricate as to comprise many important phases with which the public at large has generally no immediate contact. These less familiar phases of telegraphic and telephonic communication may be described, in general, as private-wire systems.

Without attempting an exact definition of the term "private-wire systems," for practical purposes we may include under that heading all telephone and telegraph facilities except the public telephone exchanges and the wire systems of the telegraph companies as made available for the general use of the public. As broadly defined in this way, private-wire systems include private telephone exchanges (most of which are branch exchanges connected with public exchanges); the railroad wires; leased-wire circuits of news agencies; the lines of brokers and investment bankers; networks used for transmitting radio programs; and the wires (other than the telephone exchanges already mentioned) connecting the offices, plants or departments of large firms or institutions for facilitating interior communication.

The nature and significance of the recent technological changes in several phases of the telephone and telegraph industries, disclosed by studies made by the United States Bureau of Labor Statistics, have been considered in articles published recently in the Monthly Labor Review.[1]

It was shown that by the end of 1930 about one-third of the public telephones in the United States were of the dial type, and that if the output of calls per operator had remained the same in 1930 as in 1921 the number of operators necessary for handling the calls in 1930 for the Bell Operating Cos. alone would have been 69,421 more than the number actually in service. As regards commercial telegraph offices, the study showed that by 1931 printer circuits accounted for nearly 90 per cent of all commercial message handlings of one large company. The proportion of male operators has been reduced to about 40 per cent of the total. In the principal telegraph offices the increased productivity of operators has resulted in a technological displacement amounting to about 50 per cent. A special study, dealing with the printer telegraph as used by the principal news-service organizations, revealed a fifteenfold increase in productivity of operators. The displacement of Morse telegraphers can not be measured exactly, but if news agencies now depended on the Morse system they would employ several times as many operators to handle Morse circuits as they now

[1] The dial telephone and unemployment, February, 1932 (pp. 235–247); Displacement of Morse operators in commercial telegraph offices, March, 1932 (pp. 501–515); Effects on employment of the printer telegraph for handling news, April, 1932 (pp. 753–758); Displacement of Morse telegraphers in railroad systems, May, 1932 (pp. 1017–1028); Productivity and displacement of labor in ticker telegraph work, June, 1932 (pp. 1269–1277).

employ on printer circuits. A descriptive and, as far as possible, statistical account of railroad wire systems indicated an extensive use of the telephone in place of the telegraph, the growing use of automatic in place of manual block signal systems, and the development of remote-control systems for regulating train movements. The study of ticker systems for handling market quotations disclosed the remarkable increase in productivity of operators of ticker telegraphs, resulting in a greater indirect displacement of Morse operators than in a direct displacement of ticker operators.

The present article, which concludes the series, is confined to private telephone exchanges, radio transmission networks, private circuits other than the highly specialized railroad, press-agency, and ticker systems, and the recently inaugurated telegraph exchange (teletypewriter service) of the telephone companies, an arrangement which is paralleled by the timed-wire service of the telegraph companies.

Operators of private telephone exchanges are not employees of telephone companies and exact statistics could be had only as a result of a country-wide census. But there is evidence of an increasing use of the dial system and of attendant displacement of operators in private as well as public exchanges. With the multiplication of wire facilities (by reducing the size of wire, duplexing, multiplexing, use of "phantom" circuits, compositing and carrier current), various new forms of private-wire circuits became economically feasible and these new arrangements are reducing the number not only of Morse telegraphers and of telephone operators but also of messengers, stenographers, and clerks of various kinds.

Private wires may be privately owned, but usually they are owned by telephone or telegraph companies. With the development of phantom circuits, duplexing, carrier current, and other arrangements for the more effective use of wires, a private wire is usually one of several channels of communication over the same wire. Such a channel is assigned, under conditions agreed upon, to an individual or an organization for restricted or private use and not as a public utility. Before the devising of means for multiplying the number of circuits or channels on one wire the cost of a private wire was too great to make possible any considerable growth of private-wire systems. The only important private system which then attained economic importance was for the purpose of reducing the amount of wire that would otherwise have been required. This was the private branch exchange.

The private branch exchange has nowadays assumed a variety of forms, and has acquired a remarkable flexibility which makes it, for many purposes, the most adequate kind of telephone equipment, irrespective of the cost of the wire plant. But its origin and early uses were due mainly to its requiring less wire. Private branch exchange telephones are connected with a public exchange not by direct wires but only by trunk line between the exchanges.

In addition to the private branch exchanges which, as the name implies, are in a sense branches or extensions of public exchanges, there are also many purely private exchanges for handling interior calls only. Many companies and institutions have exchanges of both types. But more commonly one exchange is made to serve two purposes: (1) The handling of interior calls; and (2) the establishing of connections with a public exchange, which in turn provides circuit

facilities between the telephones in the private branch exchange and telephones elsewhere.

Development of Private Telephone Exchanges

THE total number of telephones in commercial systems reported to the United States Bureau of the Census in 1907 was 5,426,973. Of these, 459,083, or 8.5 per cent were classed as private branch exchange telephones. In addition, there were 691,605 telephones in so-called mutual systems and on farmer or rural lines. When these are added to the commercial telephones, the private branch exchange telephones were only 7.5 per cent of the total. Later quinquennial census reports failed to classify telephones by the type of exchange. But the number of private branch exchanges increased rapidly from 28,276 in 1907 to 102,622 in 1922.

For the Bell Operating Cos. (which, on December 31, 1930, owned about 87 per cent of all company telephones) the relative importance of private branch exchange telephones from 1921 to 1930 is shown by Table 1.

TABLE 1.—CHANGES IN NUMBER AND PROPORTION OF COMPANY TELEPHONES, BY KINDS, BELL OPERATING COS., 1921 TO 1930

Year ending Dec. 31—	Total number of company telephones	Main telephones		Extension telephones		Private branch exchange telephones	
		Number	Per cent of total	Number	Per cent of total	Number	Per cent of total
1921	8,856,378	6,434,123	72.7	727,745	8.2	1,694,510	19.1
1922	9,461,351	6,900,796	72.9	777,562	8.2	1,782,993	18.9
1923	10,352,364	7,576,088	73.2	846,652	8.2	1,929,624	18.6
1924	11,184,594	8,206,254	73.4	916,084	8.2	2,062,256	18.4
1925	11,974,405	8,776,046	73.3	1,001,896	8.4	2,196,463	18.3
1926	12,750,427	9,309,513	73.0	1,085,989	8.5	2,354,925	18.5
1927	13,648,907	9,917,519	72.6	1,182,644	8.7	2,548,744	18.7
1928	14,439,640	10,434,755	72.3	1,282,124	8.9	2,722,761	18.8
1929	15,315,970	10,988,959	71.7	1,388,558	9.1	2,938,453	19.2
1930	15,583,101	11,112,893	71.3	1,465,755	9.4	3,004,453	19.3

Table 1 shows a remarkably constant ratio, since 1921, between the three main classes of company telephones (main, extension, and private branch exchange). The lowest per cent of private branch exchange telephones was 18.3 in 1925 and the highest per cent was 19.3 in 1930. Since the independent companies operate more largely in rural sections and smaller cities, the proportion of private branch exchange telephones belonging to independent companies is probably somewhat smaller.

In the larger cities the proportion of private branch exchange telephones is much larger than for the entire country. For the Bell Operating Cos., the per cent at the end of 1928 was 18.8. For the principal cities the private branch exchange telephones of the Bell companies ranged from 38.4 per cent of the total in Washington to 17.1 per cent in New Orleans (Table 2).

125620°—32——2

TABLE 2.—PERCENTAGE DISTRIBUTION OF BELL TELEPHONES IN THE UNITED STATES AND IN 15 LARGE CITIES, DECEMBER 31, 1928[1]

Area	Number of Bell telephones	Per cent of total telephones			Area	Number of Bell telephones	Per cent of total telephones		
		Main	Extension	Private branch exchange			Main	Extension	Private branch exchange
United States	14,439,640	72.3	8.9	18.8	St. Louis	213,041	71.1	7.6	21.3
					Pittsburgh	215,125	70.5	9.1	20.4
New York	1,702,889	57.1	8.0	34.9	San Francisco	252,225	59.0	9.1	31.9
Chicago	942,015	67.2	6.0	26.8	Milwaukee	146,677	73.3	8.2	18.5
Philadelphia	375,756	66.1	9.8	24.1	Washington	154,041	52.3	9.3	38.4
Boston	424,781	70.2	8.4	21.4	New Orleans	71,844	72.4	10.5	17.1
Detroit	321,439	66.8	8.4	24.8	Minneapolis	126,888	70.4	9.5	20.1
Los Angeles	357,504	66.9	7.9	25.2	Atlanta	64,546	70.6	10.0	19.4
Cleveland	226,186	65.9	9.7	24.4					

[1] Data derived in part from Bell System Technical Journal, January, 1930, p. 90.

Private exchanges vary widely in size, form, and function. Among the smaller exchanges there is a manual board limited to 7 telephones and 3 trunk lines and a dial board limited to 8 telephones and 2 trunk lines. These are used in homes and small offices. On the other extreme is an exchange for handling 480 trunk lines and 9,600 telephones. The complicated nature and important rôle of private branch exchanges are illustrated by an exchange which handles 1,600 telephones, 148 trunk lines connecting with a public exchange and 151 tie lines connecting with other private branch exchanges. This is a manual exchange and there are 42 switchboard positions. There is 24-hour service and 60 operators are employed.[2]

The number of operators required to handle private branch exchanges was estimated by telephone officials in 1931 at 135,000 for exchanges connected with the Bell System and at 145,000 for the entire country. Purely private exchanges, as distinguished from private branch exchanges, add somewhat to the numbers.

The operators at these exchanges are not employees of the telephone companies. In some cases they have other duties as well as the handling of a switchboard. The numbers mentioned must therefore be regarded as estimates. In the absence of systematic reports to a responsible agency by the many thousands of employers of private branch exchange operators, an accurate statement of the total number is impossible. And yet from the point of view of numbers, conditions of employment, and displacement by technological changes, the operators of private branch exchanges are not materially less important than the operators of public exchanges. In both cases the principal technological change is the substitution of the machine switchboard (the dial system) for the manual switchboard.

The number of operators displaced by conversion of a private branch exchange to the dial system varies so widely that it is impossible to estimate with accuracy the net results of the change. The principal factors are (1) the busy-hour load, that is, the largest number of calls at any particular period; (2) the holding time, that is, the average length of telephone conversations; and (3) the proportion of

[2] Bell System Technical Journal, January, 1930, pp. 12–15.

interior calls. Each installation becomes a case study, both as a basis for decision as to whether or not conversion to dial should be made and as to the effects on number of operators after the change. Following are a few illustrative instances.

A large bank with an automatic exchange for interior calls and a manual exchange for outside calls estimated a reduction of one-third in the total operating force as a result of installing the automatic exchange. In this case the principal object was a separation of interior calls from outside calls in order to be able to give special attention to incoming calls.

Another bank reported that conversion to the dial system for interior calls made possible the handling of all connections by 5 operators in place of 11.

A third bank reported that 6 operators sufficed in place of 20 under full manual operation.

In a railroad station with 240 telephones the installation of the dial system meant a displacement of 10 out of 12 operators.

In another large railroad station the automatic system required only one-fourth as many operators as were necessary under manual operation.

A ship terminal had an exchange with 13 positions, 24-hour service, and 28 operators. As a result of transition to the dial system, the number of operators was reduced to one for each shift.

One manufacturing plant with 30 telephones and another with 50, each eliminated one operator by means of automatic boards. A third manufacturer eliminated two out of three operators.

A branch plant of an industrial firm had employed five operators at a manual board, and after installing an automatic exchange found that two operators were more than adequate.

One of the largest manufacturing firms of the country, with numerous auxiliary and branch plants, found that in several of its establishments the automatic exchanges reduced the operating force more than 60 per cent.

An incidental feature of labor displacement resulting at times from dial installations is illustrated by the case of a plant which had employed 340 watchmen and which found it possible, by means of an automatic reporting and recording arrangement, to eliminate 60 of these.

Although the extent of the transition to the dial system in private exchanges can not be measured by means of readily available data, some indications of change are apparent from the reports of one of the companies which manufacture automatic equipment. This company reported a detailed and classified list of private automatic exchanges equipped with its type of apparatus in January, 1931. The list included 1,581 exchanges and 116,704 telephones. The number of telephones per exchange ranged from 5 to 1,334, the average number being approximately 74. The wide distribution is indicated by Table 3.

TABLE 3.—NUMBER AND DISTRIBUTION (JANUARY, 1931) OF ONE TYPE OF PRIVATE AUTOMATIC TELEPHONE EXCHANGE AS INDICATED BY REPORTS OF INSTALLATIONS BY THE MANUFACTURER

Kinds of establishments	Number of exchanges	Number of telephones	
		Total	Average per exchange
Extractive industries	77	6,634	86
Financial institutions	210	14,233	68
Government organizations	89	12,772	144
Hospitals	83	5,057	61
Hotels, theaters, public buildings	73	3,747	51
Manufacturing plants	442	33,295	75
Mercantile establishments	72	7,038	98
Private estates and clubs	78	1,990	25
Professional firms and business offices	49	3,353	68
Public institutions	26	1,297	50
Public utilities	78	5,031	65
Publishers	19	1,495	79
Railroads	88	9,424	107
Schools and colleges	197	11,338	56
Total	1,581	116,704	74

Although each private automatic exchange is a case study from the point of view of exact determination of the saving of operating time, nevertheless the experience of company officials in the installing of the exchanges included in Table 3 indicates that conversion to the dial system for interior calls only, with outside calls handled manually, generally displaces from 40 to 50 per cent of the operators. That the tendency is progressively toward automatic operation is indicated by the fact that more installations were made in 1929 and 1930 than during any previous years.

For a time the automatic telephone was viewed as being suited to the purely private exchange, for interior communication only, but not well adapted to the private branch exchange. It is now so flexible as to meet the requirements of many types of branch exchanges for handling not only interior connections but outside calls as well. Many telephone companies as well as manufacturers of telephone equipment are advertising the advantages of the dial system for varied uses.

Private branch exchanges have not adopted the dial system so extensively as have public exchanges, and they have hitherto been an important source of employment opportunities for operators of public exchanges which have been converted to the dial basis of operation. With the progressive extension of automatic operation to private exchanges, these, as well as public exchanges, have fewer employment opportunities to offer.

Increase of Wire Facilities

THE growth of private systems other than telephone exchanges depended on cheaper wire facilities. The first big step in expanding wire facilities without materially increasing the cost was the duplexing of a wire. One of the principal telegraph companies began duplexing its wires as early as 1873, carrying out the process as fast as the factory could supply the equipment, and thus virtually doubling the capacity of its wire plant. A combination of two methods of duplexing made possible (though not practicable except for limited uses)

the quadruplexing of wires for the simultaneous transmission of four messages (two in each direction).

Telegraph companies commonly used 1-way wire with ground return. For telephoning, the 2-way metallic circuit was found desirable. In the annual report of one of the telephone companies for 1907 a contrast was drawn between the cost of telephone and telegraph circuits. The basis of the contrast was the fact that in telegraphy one wire provided at least one circuit and on all trunk lines either two or four circuits, while communication by telephone required the exclusive use of two wires (a complete metallic circuit) for the length of time necessary to make the connection, carry on the conversation, and restore the circuit to idle status in preparation for a new connection.

In 1910 a radical change was reported. When there were two metallic circuits between the same points (as New York and Chicago), the terminals of the circuits were tied together through coils in such a manner as to create a third circuit (known as a "phantom circuit" because it required no additional wires). Thus there were three channels available for telephone conversations over two metallic circuits. Furthermore, each of the four wires between New York and Chicago was duplexed for telegraphic uses, and eight telegraphic messages were sent by the Morse method over the wires while at the same time three telephone conversations were under way.

In 1911 it was announced by the same company that by the joint use of the same wire plant for telephone and telegraph (by a process known as compositing), the wire mileage necessary for telephone and telegraph combined would need to be only about half the mileage necessary without joint use.

The phantom circuit made possible three telephone channels on five wires (two 2-way metallic circuits), and compositing made possible the duplexing of each wire for telegraph channels. But as late as 1916 it was still officially reported by telephone authorities that a telephone connection gave to the subscriber the exclusive use of the wire, so far as telephoning was concerned, as long as the connection was maintained. In 1918 a new method was announced which made possible as many as 10 telephone conversations over two 2-way metallic circuits. In addition there was an increased capacity for simultaneous use for telegraphy. Concisely, "a pair of wires is available either for 5 simultaneous telephone conversations or for 40 simultaneous telegraph messages, or partly for one and partly for the other." The new methods, known as multiplex telephony or carrier current, depend on variations in the frequency. Frequencies dependent on the human voice approximate 1,000 cycles per second. Carrier current frequencies of 100,000 cycles per second or more do not interfere with ordinary frequencies, nor do they interfere, when properly regulated, with each other.

The miles of phantomed circuit of the Bell Operating Cos. increased from 776,258 at the end of 1921 to 2,206,123 at the end of 1930. Miles of carrier channel of the same companies increased from 178,994 at the end of 1924 to 1,497,750 at the end of 1930. Additional mileage without additional wires is largely dependent on increasing demand. This, in turn, is being stimulated by inducements offered to users of private-wire facilities.

While these remarkable changes were multiplying the capacity of the wires of telephone companies, the trunk lines of the telegraph companies were also being made to do several times as much work as previously. Duplexing and quadruplexing have already been mentioned. In connection with the development of the teletype, or printer telegraph, a method known as multiplex telegraphy was devised. A synchronized distributor, revolving rapidly, divided the time on the wire in a manner which allowed four messages to be sent in each direction in such rapid succession that in effect one wire was used for the simultaneous transmission of eight messages.

As a result of these various developments, relatively little new wire equipment was needed except for replacement. But any new needs which arose were met at a fraction of the former cost. Telephone company officials in 1919 announced a new type of cable which reduced the weight of the wire to 80 pounds per mile. The new wire was reported to be as efficient in transmitting speech over long distances as the best open wire weighing 870 pounds per mile. It was reported, also, that the old heavy-wire cables could be made efficient by the new process at small cost.

These various developments made possible an almost unlimited reserve of wire facilities and established the economic basis of the private-wire systems which, in recent years, have included an ever-growing proportion of telephonic and especially of telegraphic communication.

Radio-Program Transmission

One of the most recent extensive uses of wire facilities has been for the transmitting of radio programs from the point of origin to the broadcasting stations. Early instances of transmission to a network of stations were the speeches of President Harding in 1923 during his trip to Alaska, when addresses delivered at St. Louis and Kansas City were broadcast locally, and, by means of long-lines transmission, were broadcast also from Washington, New York, and Providence. Eight years later the Bell System furnished facilities for program transmission over 11 large networks of stations, mainly under the control of two large companies. These networks included more than 40,000 circuit miles of telephone wire given over to program transmission and more than 200 broadcasting stations located throughout the country except in such sparsely settled areas as New Mexico, Montana, and Idaho.

The effects of radio-program transmission by telephone on the number of workers are so intricate as to defy analysis. It is possible that the number of employees of telephone companies which furnish transmission facilities has been somewhat increased, althougn the maintenance of facilities for this purpose is largely incidental. The development of radio networks by means of the telephonic relaying of the same program to a large number of broadcasting stations has made it possible to dispense with the services of a considerable variety and number of workers who would otherwise be necessary for programs of local origin. Widespread unemployment among musicians and stage entertainers is no doubt due in part to chain broadcasting, which, in turn, is dependent on telephonic transmission of radio programs.

Private Telephone Lines

THE first private-wire telephone circuits for business organizations were installed little more than a quarter of a century ago. In 1931, telephone officials reported that the Bell System alone was furnishing about 1,000 private-wire telephone services other than private telephone exchanges. A list of more than 500 business firms with such services included organizations throughout the country with circuits in some cases extending from coast to coast. The volume of messages is of course unknown. The direct handling of the messages of so large a number of important companies and organizations has diminished the volume of long-distance calls, which would otherwise have been handled by operators of public telephone exchanges, but the measurement of labor displacement from this cause is obviously impossible.

Private Telegraph Lines for Interior Communication

ASIDE from railroad, press, and ticker circuits, the principal private telegraph lines are those used by financial houses which operate in connection with the rapidly fluctuating prices on security and commodity exchanges. The larger firms maintain telegraphic connections not only with their branches but with other firms known as correspondents. A directory of such firms in 1930 included 125 companies which maintained private-wire systems connecting them with branches and correspondents in other cities. The total number of houses connected telegraphically with the 125 systems was about 1,250. Some of these had connections with more than one system, so that the number of connecting circuits totaled about 1,360. Many of these systems extend all the way across the continent.[3]

In addition to brokers and investment firms, the principal users of private telegraph wires for interior communication are the larger companies and institutions with numerous plants or branches or departments. If there is need for recording the communications, the telegraph instead of the telephone, or in addition to the telephone, is likely to be used. Morse circuits or printer circuits or both are maintained by thousands of organizations. Some of these have almost country-wide circuits. Others are illustrated by the case of an office building with two circuits from the manager's office, one to the head janitor's office and the other to the engineering and maintenance department.

Technological Displacement by Telegraph Systems of Interior Communication

IN RECENT years private interior communication has increased rapidly. The growth in size of business units due to mergers and other causes has resulted in a much larger use of private telegraph and telephone lines for coordinating production. Intensive use of wire facilities has also been stimulated by national sales programs for trying to force consumption to keep pace with production. The speedier tempo of life has made wire communication seem natural and essential. Finally, the perfecting of the teletype or printer telegraph has made possible its use for a variety of purposes.

[3] See Commerce and Finance, Private Wire Numbers, June 11, 1930, and Aug. 19, 1931.

The growth of private circuits has undoubtedly increased interior communications much beyond the volume that would have been practicable through commercial telegraph offices. But much of the demand for telegraphic facilities could obviously have been met without resort to private circuits. Labor displacement has therefore resulted from a limitation if not an actual reduction of the operating staffs of commercial telegraph offices.

When private Morse circuits have been added, employment opportunities have been created. But Morse circuits have been supplanted more often than they have been added. Within the organizations which have introduced private printer circuits, displacement has assumed varied forms. The printer telegraph, in its operation, is merely a typewriter, and in fact was formerly called a telephone typewriter. An ordinary typist can operate it satisfactorily after a few days' incidental training. Communications may be typed in duplicate, for record, as on an ordinary typewriter. At the receiving end, in the same building or across the continent, the communication is automatically typed, and, by means of a network of circuits, more than a score of receiving printers may be made automatically to type the same communication simultaneously.

Because of these features of the printer telegraph, it is apparent that telegraphing, in systems of interior communication by printer circuits, is an incidental process. The typing of a communication makes a record for filing; dispenses with addressing of envelopes and use of postal facilities; instantly transmits the communication to one or many receiving printers, the reception being automatic; and reduces the amount of messenger service. It combines many of the functions both of the letter and of the telephone message. If more than one person is to receive the same communication, there is a further reduction in the amount of clerical work, because of automatic reception on more than one circuit.

In summary, private printer telegraph circuits involve labor displacement in one or more of the following forms:

(1) Elimination of the services of operators in commercial telegraph offices, transmission becoming merely incidental to the routine work of the regular clerical force of the organization which maintains the private-wire service.

(2) Elimination of messenger service or its equivalent in the handling of messages.

(3) Elimination of the service of telephone operators to the extent that private-wire telegraphic service takes the place of the telephone.

(4) Elimination of postal service to the extent that communication is diverted from mail to wire.

(5) Elimination of Morse telegraphers where Morse circuits have been in use.

(6) Reduction of the amount of stenographic work, especially in offices where the same communications are to be sent to more than one person.

(7) Reduction in the amount of clerical and messenger service, especially in hotels and institutions where efficiency depends on speedy handling of interdepartmental information and of instructions from operating centers.

Although it is impossible to measure the amount of displacement, illustrative cases are abundant. Since the recent perfecting of the

printer telegraph for use on local and private circuits the number of teletypewriters used for private interior communication between departments or plants of the same organization has grown rapidly. The users range widely over the fields of public institutions and private enterprises. Various reasons are assigned for using the teletype, and a reduction of labor cost is often incidental, and almost always difficult to measure. A few examples, however, will indicate the trend.

By far the most extensive field of employment for telegraph operators in private-wire systems for interior telegraphic communication is the brokerage business. It has been held that the specialized nature of the business prevented the satisfactory use of the printer telegraph. The two main phases of the business, from the point of view of the telegrapher, are the market-quotation service and the order-and-report service. The recent rapid extension of ticker systems to virtually all sections of the country has almost eliminated Morse telegraphers in transmitting market quotations. The handling of orders to buy and sell and of general interoffice communications continued until recently to be almost a monoply of Morse telegraphers. Since 1927 even this field has been taken over in part by the teletype. A study of six prominent stock-brokerage firms was made in 1931. At the time of the study they had 130 branches and 141 correspondents. In their main offices they employed 60 Morse operators and 58 printer operators; and in branch offices, 99 Morse operators and 116 printer operators—a total of 159 Morse operators and 174 printer operators. Of the displaced Morse operators, 19 remained in the employ of two of the firms as printer operators and 17 remained in the employ of two of the firms in other capacities. The rapid encroachment of the printer system on Morse telegraphy even in the field of brokerage and investment houses is further shown by the fact that by the end of 1930 there were 1,163 teletypes (including spares) installed in the offices of such firms (including investment houses and commodity as well as security brokers).

Instances of displacement by the introduction of the teletype in a variety of institutions and organizations illustrate other phases of displacement besides the supplanting of Morse operators.

A steel foundry company put in a teletype circuit between two of its plants. The operation of the teletype was incidental to the typing of communications. A Morse circuit which had required two operators was eliminated. Long-distance telephoning was discontinued. Most of the correspondence which had been sent by mail was now handled by teletype.

A sales company handling steel products installed a teletype circuit between its office and its warehouse. The proportion of orders classed as rush orders was increased from 20 to 40 per cent of the total, and at the same time there was a saving of 20 man-hours daily.

A steel manufacturer connected his laboratory with three other points in his establishment, thereby eliminating two messenger boys as well as securing virtually instantaneous transmission of operating data and instructions.

An office building installed a transmitting teletype in its manager's office and two receiving teletypes, one in the head janitor's office and one in the engineering and maintenance department. Two workers for handling messages and telephone calls were displaced.

A broker installed two teletype circuits for transmitting information regarding stocks and bonds between departments in the same building. One clerk was eliminated.

A company furnishing specialized financial data installed teletype circuits between its branches for handling reports and between its main office and the offices of its principal clients. Two telephone operators formerly used at a single office for sending information to clients were no longer needed; special messenger service was eliminated; and the use of the mails was greatly reduced.

A manufacturer connected his office with his factory 16 miles away. Two Morse telegraphers and one typist were eliminated. The office opens two hours later than the factory. Automatic reception makes possible the use of the teletype by the factory to send messages to the office before the office is opened, with a further saving of time.

A food manufacturing corporation, which receives a large number of small orders at frequent intervals, connected its office with its warehouse and shipping department. An official of the company reported that the teletype handled a volume of orders which would require several clerks if handled by telephone, and the telephone would give slower and less accurate service. Typing by the teletype operators would need to be done in any case; transmission was incidental to the regular clerical work.

An automobile manufacturer installed teletype circuits connecting four separate plants, handled by four ordinary typists. The plants had been connected by Morse circuits, with a sending and receiving operator at each point. The teletypes required no additional employees. The eight Morse operators were eliminated.

A public utility company connected five of its offices with teletypes for handling service orders and merchandise orders. The amount of overtime was greatly reduced; service was improved; and a messenger with an automobile was eliminated.

A public utility company installed one master transmitting teletype and 20 receiving teletypes—10 in the telephone order department, 5 in the main branches, and 5 in the subbranches. One typing sufficed for all. A typist and a messenger were eliminated at each of the five main branches—a total displacement of 10.

A Radical Departure: The Telegraph Exchange

THE evolution of the telegraph has differed from that of the telephone mainly in the fact that telegraphic communications have been received, transmitted, and delivered by telegraph companies; while telephonic communications have been by direct vocal contacts, the telephone companies merely furnishing the facilities and establishing the talking circuit or connection. The telegram is literally a written or recorded communication; and the original nature of the record (a code which required specialized training and skill) made necessary the intervention of a third party (a telegraph company) for the actual handling of the message as well as for the furnishing of facilities.

The printer telegraph in its most recent form not only makes technically possible the direct transmission of telegrams by the simple process of operating a typewriter, but also makes economically feasible the widespread use of private printer circuits. In the customers' offices of commercial telegraph companies there are more than 10,000

printer telegraphs (more commonly called simplex printers by telegraph companies), originally installed and still principally used merely for connecting customers' offices with company offices. In the offices of public institutions, hotels, business firms, and other organizations throughout the country there are more than 10,000 printer telegraphs (formerly called telephone typewriters and now officially designated as teletypewriters) originally installed and still mainly used for purposes of interior communication over private circuits.

The simplex printers in the offices of customers of the telegraph companies operate over circuits supervised by the telegraph companies. The teletypewriters installed for interior communication usually operate over circuits leased from telephone companies. In 1931 the telegraph companies instituted an arrangement known as timed-wire service for tying together the simplex printers in their customers' offices and making possible direct telegraphic communication. At about the same time, the telephone companies announced a special teletypewriter service which would make possible direct communication between any two offices having private teletypewriter circuits. In both cases (whether two simplex printers under the arrangement sponsored by the telegraph companies or two teletypewriters under the system initiated by the telephone companies), a message typed in the transmitting office will be automatically and directly typed in the receiving office. For transferring the message from the private circuit of the transmitting office to the private circuit of the receiving office, two methods are used: (1) The message is automatically placed on a perforated tape in code in the central office and thereby transmitted over the company's circuit and transferred to the private circuit of the receiving office; and (2) the two private circuits (transmitting and receiving) are merged with a company trunk-line circuit to form a single circuit over which the message is sent as in the case of a telephone connection.

It is possible to use the same wire facilities for carrying on a telephone conversation and at the same time sending a telegram. The telegram can be sent when there is no one to receive it, as it is automatically printed at the receiving end. Sending a telegram is merely a matter of operating a typewriter. Such facts as these were at the basis of a telephone company official's venture in prophecy when he stated: "Teletypewriters are now numbered in the thousands. Their future lies in the millions. They are as inevitable as the telephone."

In so far as telegraphic communication is thus transformed, telegraph operators will cease to handle telegrams and will merely provide circuit facilities as is now the case with telephone calls. Message handling, which is now the major part of the work of telegraph offices, will be transferred to the offices and homes of customers (or subscribers) and will become largely incidental to routine procedure.

EMPLOYMENT CONDITIONS AND UNEMPLOYMENT RELIEF

Unemployment Insurance Plan of National Electrical Manufacturers' Association

THE National Electrical Manufacturers' Association, having a membership of 300 companies with a total output comprising 85 to 90 per cent of the electrical product of the country, announced the adoption of an unemployment-insurance plan on June 3. This is the first instance of an entire industry associating its members in a definite attempt to provide protection for employees against the contingency of unemployment. The proposed plan is called the "Nema Unemployment Benefit Plan." It is estimated that between two and three hundred thousand persons are employed by the members of the association, including the General Electric Co., which has had a similar plan in effect since August, 1930, and it is hoped that eventually all of these companies will be brought under the "Nema" plan. The adoption of the plan by any company depends upon a favorable vote of at least 60 per cent of the eligible employees.

The provisions of the plan are as follows:

Eligibility

1. Any employee receiving normal wage or salary of not more than $2,500 per year, with continuous service with the company of one year, is eligible for participation for such period as his normal wage or salary does not exceed $2,500 per year in the company unemployment benefit plan (hereinafter called the "plan") and may by agreement in writing participate in the plan. Any employee having elected to participate in the plan may thereafter resign.

Normal employee contributions

2. Every employee participating in the plan shall pay into a trust created by the company for the benefit of said employees, to be known as the company unemployment benefit plan trust (hereinafter referred to as the "trust") 1 per cent of his actual weekly or monthly earnings for five years after the beginning of his participation, or for such shorter or longer period as may be determined from time to time by the administrators of the plan, but only so long as such earnings are 50 per cent or more of his average normal full time weekly or monthly earnings. These normal contributions shall cease in abnormal times of unemployment, as outlined in article 18 hereof.

Normal company contributions

3. The company will contribute to the trust an amount equal to that contributed by the participating employees, such contributions to be made at such times as the administrators may determine.

Contribution when company regularizes employment

4. If the company regularizes and guarantees employment for at least 50 per cent of the normal wage or salary paid each year to employees participating in the plan, the contribution of the company for such employees need not be made,

but such employees will continue to pay into the trust 1 per cent of their actual weekly or monthly earnings, which amount shall be set aside as a special fund for the benefit only of such participating employees. If an employee participating in this special fund leaves the company or dies, the amount to his credit in the special fund, plus interest at the average rate earned by the special fund, shall be paid to him or to his beneficiaries, as the case may be.

Payments, loans, and repayments

5. Three per cent of the normal contributions paid into the trust by participating employees and an equal amount contributed to the trust by the company may be considered by the administrators as available for payment to employees or former employees in need, as provided for in article 7 hereof. Twenty-seven per cent of such normal contributions and 27 per cent of the contributions made by the company may be considered by the administrators as available for making loans to participating employees as provided for in article 8 hereof. The balance of the normal contributions of the participating employees and the company, together with all emergency contributions paid into the trust and all interest thereon, less any expenses of conducting the plan, shall be made available by the trustee or trustees for unemployment payments as specified herein.

6. No unemployment payments from the normal contributions paid into the trust by participating employees or the company are to be made from the trust for at least six months after its creation, and thereafter only to employees who have made their normal contributions for at least six months.

7. Payments to any employee or former employee of the company who is in need will be considered by the administrators, and after investigation payment will be made in such amount and for such period as may be approved by the administrators.

8. The administrators are authorized to make loans to those employees who have been contributing to the trust for six months. Such loans may be made in amounts not exceeding $200 each, with or without interest, as may be determined by the administrators.

9. Repayments of loans shall be made to the trust in such manner and at such times and in such amounts as the administrators may require.

Unemployment payments

10. The administrators will define unemployment. The following is a suggested definition: Unemployment commences when a participating employee is temporarily laid off because of lack of work. Unemployment ceases when such employee is offered work within the company capable of being performed by him, at a rate of compensation not less than the regular rate normally paid for such work, that will result in earnings of at least 50 per cent of his average normal full-time earnings and not less than his weekly unemployment payment. Temporary work outside the company shall not prevent a participating employee from receiving part-time unemployment payments, but such payments can only be made after investigation by and with the approval of the administrators.

11. When a participating employee is given notice of temporary lay-off by the company, notice shall also be given to the administrators.

12. For the first two weeks of unemployment there shall be no payment from the trust to a participating employee.

13. After the first two weeks of unemployment, payment to a participating employee will be made.

14. Unemployment payments to a participating employee shall be approximately 50 per cent of his normal average earnings for full time, but in no case more than $20 per week.

15. Payment to any individual participating employee of unemployment benefits shall continue for the period of unemployment determined by the administrators, but in no event for more than 10 weeks in any 12 consecutive months, provided, however, that during the period of an unemployment emergency payments to participating employees shall be made for such time and in such amounts as the administrators shall determine.

16. When because of lack of work a participating employee is working part time and within the period of 13 weeks immediately preceding has lost time equivalent to two weeks normal full time, he will be eligible for payments from the trust amounting to the difference between the amount he is receiving as wage or salary from the company and the maximum he would be entitled to for unemployment benefits as herein outlined and as provided for from time to time.

17. When an unemployment emergency has been declared and emergency contributions are being made and when the amount received from normal contributions has been expended and the only moneys available for distribution arise from emergency contributions, the administrators shall, in their sole discretion, determine to whom and in what amounts and for what periods of time any payments shall be made.

When normal contributions cease

18. When participating employees are temporarily laid off, or are working part time, and weekly unemployment payments from the trust amount to 2 per cent or more of the normal average weekly earnings of all of the participating employees (as of the preceding quarter ending March 31, June 30, September 30, or December 31), the administrators shall notify the company of this fact and thereupon normal payments by participating employees provided for in article 2 shall cease. Thereafter the administrators shall notify the company weekly of the amounts of the payments made from the trust and the ratio of such payments to the normal average weekly earnings of all participating employees.

Emergency contributions

19. The company agrees upon receipt of the notification provided for in the preceding article 18 to declare that an unemployment emergency has arisen, and thereafter and so long as weekly unemployment payments from the trust amount to 2 per cent or more of the normal average weekly earnings of participating employees the following emergency contributions shall be made to the trust:

(*a*) From all those employed by the company at the particular works where an unemployment emergency has been declared and receiving 50 per cent or more of their normal average full-time earnings, 1 per cent of such earnings. This includes all the clerical and supervisory staff and all officers of the company connected with the particular works.

(*b*) All the general and district, commercial, general manufacturing, engineering, and administrative employees of the company at all works and offices in the United States not on a particular works' pay roll shall contribute such proportion of 1 per cent as is determined by the ratio of the number of participating employees of the works at which an emergency exists to the total number of eligible employees of all works of the company.

(*c*) The company will contribute to the trust an amount equal to that contributed by the employees of the company as provided in this article.

(*d*) The method of collection of emergency contributions shall be in accordance with instructions issued by the comptroller of the company.

Normal contributions resumed

20. As soon after an unemployment emergency has been declared, as weekly unemployment payments made by the trustee or trustees amount to less than 2 per cent of the normal average weekly earnings of participating employees, the administrators shall so notify the company and the company shall thereupon declare the unemployment emergency terminated. After an unemployment emergency has terminated, normal contributions to the trust from the participating employees and the company shall be resumed in the manner provided in articles 2 and 3. After a participating employee has received payments from the trust in time of unemployment, the administrators shall, after his return to work and after considering the condition of the trust and the length of time he has been a participating employee before receiving such payments, decide whether he shall again be called upon to pay into the trust the amount of such payments, and the length of time they shall continue.

Payments when employees leave, die, or resign

21. When a participating employee leaves the company for any reason or dies, the trustee or trustees of the trust shall pay to him, if living, or, if not living, to the beneficiary or beneficiaries designated by him in a writing filed with the trustee or trustees, or, in default of such designation, to his estate, an amount to be determined as follows:

From his normal contributions will be deducted any payments made to him. If at the works where he was employed the plan has a net operating loss (arising from other than receipts and repayments of normal contributions) his pro rata share of the loss will then be deducted and the balance shall be paid as above

provided. No payment will be made until any loan to the employee has been repaid.

22. Employees who become participators in the plan and thereafter voluntarily resign from the plan will receive no refund or repayment until they leave the employ of the company, at which time their pro rata share will be computed and paid as provided in article 21.

23. When amounts are paid in accordance with articles 21 and/or 22, an equal amount shall be paid to the company.

24. Certification of the amount due to a participating employee when he leaves the company made by the comptroller of the company shall be accepted as final.

25. Payments from the trust by the trustee or trustees are contingent upon the availability of trust funds at the time of the application.

Adoption of plan by employees

26. The plan may be adopted at any works and the company will contribute as provided in article 3 upon an affirmative vote of 60 per cent or more of the employees of that works with continuous service of one year or more, receiving a wage or salary not in excess of $2,500 per year.

Creation of trust

27. The company will create the trust and any necessary renewals thereof and will select the trustee or trustees. The trustee or trustees will be custodians of the fund contributed by the participating employees and by the company under the plan, and of all contributions made by the company and any employees of the company during the period of an unemployment emergency.

28. The trustee or trustees shall make no payments out of the moneys in the trust except at such times and in such amounts and to such persons as the administrators may in writing designate, and except that upon the termination of the trust the trustee or trustees will upon request of the company pay over and deliver all moneys and/or securities to any successor trustee or trustees appointed by the company. The trustee or trustees shall be under no obligation to see that payments made as and when ordered by the administrators are proper or in accordance with the plan.

29. The trustee or trustees shall invest moneys paid into the trust only in the readily marketable obligations of the Government of the United States of America or of any of its 48 State governments, or of any city, county or other governmental subdivision of the State of , none of which shall have a maturity of over five years from the date of purchase, the intent being that investments of the trust shall, in so far as possible, always be readily convertible into cash.

Expenses of administration

30. For two years after the inauguration of the plan the company will pay the administration expenses, including the salaries of those necessary for its administration. After such period the expenses of administering the plan will be determined and an agreement reached between the company and the administrators as to a proper method for bearing such administration expenses.

General administration

31. The plan will be administered in units of each works.

32. The administration of the plan at each works shall be vested in a board of not less than 4 nor more than 16 administrators, all of whom shall be officers or employees of the company, one half representing and elected by the participating employees and the other half appointed by the president of the company, with a chairman elected by the administrators from among their own number. The chairman shall have a vote. No action shall be taken by the administrators except by the concurrent vote of a majority of the whole board.

33. The board of administrators may adopt by-laws and rules for carrying out the provisions of the plan and the duties imposed upon them, which by-laws and rules shall be in conformity with the provisions and intent of this plan, and the board of administrators shall make such rules and regulations governing receipts, loans, and payments under the plan and such interpretation of its words and provisions as in their discretion are necessary or advisable.

34. The board of administrators shall cause the accounts of the trust operations to be audited annually.

35. From time to time after the plan has been in operation for two years the administrators may decide, in view of experience in operation, what the normal amount to be collected from participating employees shall be, the percentages to be set aside for payments and loans as hereinabove in articles 7 and 8 provided, the amount to be paid to participating employees in case of unemployment, the amount of loans that may be made and the terms upon which repayment shall be made, and the determination of the administrators in this regard shall, when communicated to the company and the trustee, operate as an amendment of this plan.

36. This plan may be further modified, amended, or changed at any time by a two-thirds vote of the administrators at each participating works, provided, however, that such amendment shall only be effective after action at three meetings of the board of administrators, the second of which meetings shall be held not less than 30 days nor more than 90 days after the first meeting, and the third meeting not less than 30 days after the second meeting. After the second meeting any proposed amendment to the plan shall be posted on the works bulletin board.

Abandonment of plan

37. If because of the enactment of any law, Federal or State, or for any other reason it appears to the company that it would not be good policy to continue its contributions to the plan, it will confer with the administrators and will give them at least 400 days' notice of its determination to abandon its support of the plan. Upon the day fixed by the company in accordance with such notice, all obligations of the company to contribute to the trust shall cease and determine, and, except as provided in articles 38 and 39, thereupon the money in the trust shall be divided among the company and the participating employees in the manner provided in article 21.

38. If, after the company shall have given notice of its intention to withdraw its support of the plan, the participating employees shall by the affirmative vote of 60 per cent or more of their number decide to continue the plan and trust without the support of the company, then and in that case there shall be paid to the company one-half of the amount which would have been paid to it upon the total abandonment of the plan by the company and by the participating employees.

39. If, after the company shall have given notice of its intention to withdraw its support of the plan, the participating employees by the affirmative vote of 66⅔ per cent of their number elect to abandon the plan, each participating employee will be paid the same amount he would receive if he then left the employ of the company, as provided in article 21. An equal amount will be paid to the company, less the amount, if any, the company may have received in accordance with the provisions of article 38. Any balance then remaining to the credit of a works shall be applied by the trustee or trustees to a purpose or purposes selected by the board of administrators as beneficial to the employees at that works.

40. If it is decided to abandon the plan as provided in article 39, no further normal payments or contributions shall be made by the participating employees, and no unemployment or other payments shall be made and no loans shall be granted. Repayment of loans granted prior to the decision to abandon the plan shall continue until fully paid. Relief payments may be continued if funds are available. Final distribution of the money paid into the trust shall take place approximately 18 months after the decision to abandon the plan.

Unemployment in Foreign Countries

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

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES[1]

Date (end of month)	Australia		Austria	Belgium			
	Trade-unionists unemployed		Compulsory insurance, number unemployed in receipt of benefit	Unemployment insurance societies			
				Wholly unemployed		Partially unemployed	
	Number	Per cent		Number	Per cent	Number	Per cent
1930							
May	(2)		162,678	12,119	1.9	38,761	6.1
June	80,595	18.5	150,075	12,226	1.9	41,336	6.5
July	(2)		153,188	15,302	2.4	48,580	7.7
August	(2)		156,145	17,747	2.8	51,649	8.2
September	90,379	20.5	163,894	23,693	3.8	61,623	9.9
October	(2)		192,778	27,322	4.3	54,804	8.5
November	(2)		237,745	38,973	6.1	76,043	12.0
December	104,951	23.4	294,845	63,585	9.3	117,167	17.0
1931							
January	(2)		331,239	77,181	11.1	112,734	16.2
February	(2)		334,041	81,750	11.7	121,906	19.4
March	113,614	25.8	304,084	81,305	11.3	125,972	17.7
April	(2)		246,845	70,377	10.0	110,139	15.6
May	(2)		208,852	56,250	7.9	97,755	13.8
June	118,424	27.6	191,150	62,642	8.9	101,616	14.4
July	(2)		194,364	64,644	9.1	116,747	16.3
August	(2)		196,321	70,893	9.9	120,669	16.8
September	120,694	28.3	202,130	74,175	10.3	119,433	16.6
October	(2)		228,101	82,811	11.3	122,733	16.8
November	(2)		273,658	93,487	13.3	134,799	19.2
December	118,732	28.0	329,627	128,884	17.0	159,941	21.1
1932							
January	(2)		358,114	153,920	20.0	179,560	23.2
February	(2)		361,948	168,204	21.3	180,079	22.8
March	120,366	28.3	352,444	155,653	19.4	185,267	23.0
April	(2)		303,888	152,530	18.8		
May			271,481				

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Canada	Czechoslovakia			Danzig (Free City of)	Denmark	
	Per cent of trade-unionists unemployed	Number of unemployed on live register	Trade-union insurance funds—unemployed in receipt of benefit		Number of unemployed registered	Trade-union unemployment funds—unemployed	
			Number	Per cent		Number	Per cent
1930							
May	10.3	77,069	41,098	3.8	16,232	27,966	9.4
June	10.6	73,464	37,853	3.4	14,975	24,807	8.7
July	9.2	77,309	46,800	4.1	15,330	26,200	9.3
August	9.3	88,005	52,694	4.7	15,687	26,232	9.0
September	9.4	104,534	57,542	5.3	16,073	27,700	9.0
October	10.8	122,379	61,213	5.5	17,307	32,880	11.4
November	13.8	155,203	65,904	5.9	20,272	44,200	15.3
December	17.0	239,564	93,476	8.3	24,429	71,100	24.6
1931							
January	16.0	313,511	104,580	9.5	27,081	70,961	24.2
February	15.6	343,972	117,450	10.0	28,192	73,427	26.0
March	15.5	339,505	119,350	10.0	27,070	67,725	22.1
April	14.9	296,756	107,238	8.9	24,186	45,698	15.3
May	16.2	249,686	93,941	7.6	20,686	37,856	12.3
June	16.3	220,038	82,534	6.6	19,855	34,030	11.3
July	16.2	209,233	82,759	6.6	20,420	36,369	11.8
August	15.8	214,520	86,261	6.9	21,509	35,060	11.8
September	18.1	228,383	84,660	6.7	22,922	35,871	12.1
October	18.3	253,518	88,600	6.9	24,932	47,196	16.0
November	18.6	336,874	106,015	8.2	28,966	66,526	22.3
December	21.1	480,775	146,325	11.3	32,956	91,216	30.4
1932							
January	22.0	583,138	186,308	14.0	34,912	106,464	35.1
February	20.6	631,736	197,612	14.8	36,258	112,346	37.3
March	20.4	633,907	----------	----------	36,481	113,378	37.5
April	23.0	555,832	----------	----------	33,418	90,704	29.9
May	----------	484,604	----------	----------	----------	79,931	26.1

Date (end of month)	Estonia	Finland	France	Germany			
					Trade-unionists		
	Number unemployed remaining on live register	Number of unemployed registered	Number of unemployed in receipt of benefit	Number of unemployed registered	Per cent wholly unemployed	Per cent partially unemployed	Number unemployed in receipt of benefit
1930							
May	2,065	4,666	859	2,634,718	19.5	12.0	1,889,240
June	910	3,553	1,019	2,640,681	19.6	12.6	1,834,662
July	762	4,026	856	2,765,258	20.5	13.9	1,900,961
August	1,039	5,288	964	2,883,000	21.7	14.8	1,947,811
September	1,414	7,157	988	3,004,000	22.5	15.1	1,965,348
October	3,282	10,279	1,663	3,252,000	23.6	15.4	2,071,730
November	5,675	10,740	4,893	3,683,000	26.0	16.1	2,353,980
December	6,163	9,336	11,952	4,384,000	31.7	16.9	2,822,598
1931							
January	5,364	11,706	28,536	4,887,000	34.2	19.2	3,364,770
February	4,070	11,557	40,766	4,972,000	34.5	19.5	3,496,979
March	2,765	11,491	50,815	4,756,000	33.6	18.9	3,240,523
April	2,424	12,663	49,958	4,358,000	31.2	18.0	2,789,627
May	1,368	7,342	41,339	4,053,000	29.9	17.4	2,507,732
June	931	6,320	36,237	3,954,000	29.7	17.7	2,353,657
July	634	6,790	35,916	3,976,000	31.0	19.1	2,231,513
August	933	9,160	37,673	4,215,000	33.6	21.4	2,376,589
September	2,096	12,176	38,524	4,355,000	35.0	22.2	2,483,364
October	5,425	14,824	51,654	4,623,480	36.6	22.0	2,534,952
November	7,554	18,095	92,157	5,059,773	38.9	21.8	2,771,985
December	9,055	17,223	147,009	5,668,187	42.2	22.3	3,147,867
1932							
January	9,318	20,944	241,487	6,041,910	43.6	22.6	3,481,418
February	9,096	18,856	293,198	6,128,429	44.1	22.6	3,525,486
March	8,395	16,723	303,218	6,034,100	44.6	22.6	3,323,109
April	6,029	----------	282,013	5,934,202	43.9	22.1	2,906,890
May	----------	----------	262,184	5,582,620	----------	----------	----------

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Great Britain and Northern Ireland				Great Britain	Hungary	
	Compulsory insurance				Number of persons registered with employment exchanges	Trade-unionists unemployed	
	Wholly unemployed		Temporary stoppages			Christian (Budapest)	Social-Democratic
	Number	Per cent	Number	Per cent			
1930							
May	1,339,595	11.1	516,303	4.2	1,770,051	875	19,875
June	1,341,818	11.1	569,931	4.7	1,890,575	829	18,960
July	1,405,981	11.6	664,107	5.5	2,011,467	920	19,081
August	1,500,990	12.4	618,658	5.1	2,039,702	847	21,013
September	1,579,708	13.1	608,692	5.0	1,114,955	874	22,252
October	1,725,731	13.9	593,223	4.8	2,200,413	999	22,914
November	1,836,280	14.8	532,518	4.3	2,274,338	975	23,333
December	1,853,575	14.9	646,205	5.3	2,392,738	935	24,648
1931							
January	2,044,209	16.5	618,633	5.0	2,613,749	953	26,191
February	2,073,578	16.7	623,844	5.0	2,627,559	965	27,089
March	2,052,826	16.5	612,821	5.0	2,581,030	996	27,092
April	2,027,896	16.3	564,884	4.6	2,531,674	1,042	27,129
May	2,019,533	16.3	558,383	4.5	2,596,431	843	26,131
June	2,037,480	16.4	669,315	5.4	2,629,215	751	23,660
July	2,073,892	16.7	732,583	5.9	2,662,765	876	26,329
August	2,142,821	17.3	670,342	5.4	2,732,434	941	28,471
September	2,217,080	17.9	663,466	5.3	2,879,466	932	28,716
October	2,305,388	18.1	487,591	3.8	2,755,559	1,020	28,998
November	2,294,902	18.0	439,952	3.4	2,656,088	1,169	29,907
December	2,262,700	17.7	408,117	3.2	2,569,949	1,240	31,906
1932							
January	2,354,044	18.4	500,746	4.0	2,728,411	1,182	32,711
February	2,317,784	18.2	491,319	3.8	2,701,173	1,083	32,645
March	2,233,425	17.5	426,989	3.3	2,567,332	1,024	31,340
April	2,204,740	17.3	521,705	4.1	2,652,181	----------	----------
May	2,183,683	17.1	638,157	5.0	2,741,306	----------	----------

Date (end of month)	Irish Free State	Italy		Latvia	Netherlands	
	Compulsory insurance—number unemployed	Number of unemployed registered		Number unemployed remaining on live register	Unemployment insurance societies—unemployed	
		Wholly unemployed	Partially unemployed		Number	Per cent
1930						
May	(2)	367,183	22,825	1,421	26,211	6.3
June	19,146	322,291	21,887	779	23,678	5.5
July	(2)	342,061	24,209	607	29,075	6.7
August	(2)	375,548	24,056	573	32,755	7.6
September	20,775	394,630	22,734	1,470	35,532	8.2
October	22,990	446,496	19,081	6,058	41,088	9.6
November	25,622	534,356	22,125	8,608	46,807	11.8
December	26,167	642,169	21,788	10,022	81,204	18.2
1931						
January	28,681	722,612	27,924	9,207	100,340	23.2
February	26,825	765,325	27,110	8,303	109,235	23.5
March	25,413	707,486	27,545	8,450	102,743	21.8
April	23,970	670,353	28,780	6,390	68,860	14.3
May	23,016	635,183	26,059	1,871	60,189	12.2
June	21,427	573,593	24,206	1,584	59,573	11.7
July	21,647	637,531	25,821	2,169	69,026	13.3
August	21,897	693,273	30,636	4,827	70,479	15.3
September	23,427	747,764	29,822	7,470	72,738	15.7
October	26,353	799,744	32,828	13,605	84,548	18.0
November	30,865	878,267	30,967	18,377	107,372	18.5
December	30,918	982,321	32,949	21,935	147,107	27.8
1932						
January	31,958	1,051,321	33,277	26,163	145,124	27.0
February	31,162	1,147,945	26,321	22,222	139,956	25.4
March	30,866	1,053,016	31,636	22,922	119,423	21.6
April	32,252	1,000,025	32,720	----------	121,378	21.7
May	----------	968,456	----------	----------	112,325	22.5

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	New Zealand	Norway			Poland	Rumania
	Trade-unionists, number unemployed	Trade-unionists (10 unions) unemployed		Number unemployed remaining on live register	Number unemployed registered with employment offices	Number unemployed remaining on live register
		Number	Per cent			
1930						
May	5,884	5,239	12.2	16,376	224,914	25,096
June	(2)	4,700	10.8	13,939	204,982	22,960
July	(2)	4,723	10.8	11,997	193,687	23,236
August	7,197	5,897	13.4	12,923	173,627	24,209
September	(2)	7,010	15.7	17,053	170,467	39,110
October	(2)	8,031	18.0	20,363	165,154	36,147
November	8,119	9,396	21.4	24,544	209,912	42,689
December	(2)	11,265	25.5	27,157	299,797	36,212
1931						
January	(2)	11,692	26.3	28,596	340,718	38,804
February	(2)	(2)		29,107	358,925	43,270
March	[3] 38,028	11,213	24.9	29,095	372,536	48,226
April	[3] 36,981	(2)		28,477	351,679	41,519
May	[3] 40,507			25,206	313,104	33,484
June	[3] 45,264			22,736	274,942	28,093
July	[3] 47,772			20,869	255,179	29,250
August	[3] 50,033			22,431	246,380	22,708
September	[3] 51,375			27,012	246,426	22,909
October	[3] 50,266	[4] 9,048	[4] 19.6	29,340	255,622	28,800
November	[3] 47,535	10,577	22.8	32,078	266,027	43,917
December	[3] 45,140	12,633	27.2	34,789	312,487	49,393
1932						
January	[3] 45,677	14,160	30.4	34,636	338,434	51,612
February	[3] 44,210	14,354	30.6	37,796	350,145	57,606
March		15,342	32.5	38,952	352,754	
April		14,629	30.8	36,993	328,700	
May					288,000	

See footnotes at end of table.

STATEMENT OF UNEMPLOYMENT IN FOREIGN COUNTRIES—Continued

Date (end of month)	Saar Territory	Sweden		Switzerland				Yugoslavia
				Unemployment funds				
	Number unemployed registered	Trade-unionists unemployed		Wholly unemployed		Partially unemployed		Number of unemployed registered
		Number	Per cent	Number	Per cent	Number	Per cent	
1930								
May	7,362	28,112	8.3	5,356	2.2	13,129	5.4	8,704
June	6,330	28,956	8.1	5,368	1.7	17,688	5.7	6,991
July	7,095	27,170	7.8	4,751	1.9	15,112	6.2	7,236
August	7,099	28,539	8.1	5,703	2.3	19,441	7.9	6,111
September	7,527	34,963	9.8	7,792	2.5	26,111	8.3	5,973
October	9,013	43,927	12.2	7,399	3.0	23,309	9.4	6,609
November	12,110	57,070	15.3	11,666	4.7	25,793	10.5	7,219
December	15,245	86,042	22.9	21,400	6.6	33,483	10.4	9,989
1931								
January	18,921	69,437	19.8	20,551	8.3	30,977	12.5	11,903
February	20,139	66,923	18.4	20,081	7.9	30,879	12.2	14,424
March	18,292	72,944	19.3	18,991	5.4	41,880	12,4	12,029
April	18,102	64,534	17.5	10,389	4.0	27,726	10.6	11,391
May	14,886	49,807	13.2	9,174	3.5	26,058	9.9	6,929
June	15,413	45,839	12.1	12,577	3.6	34,266	9.7	4,431
July	17,685	46,180	12.4	12,200	3.3	39,000	11.3	6,672
August	20,205	48,590	12.7	9,754	3.6	33,346	12.4	7,466
September	21,741	54,405	13.7	15,188	4.0	42,998	11.2	7,753
October	24,685	65,469	16.4	18,000	4.8	47,200	13.2	10,070
November	28,659	79,484	19.9	25,200	6.6	51,900	14.4	10,349
December	35,045	110,149	27.2	41,611	10.1	61,256	14.9	14,502
1932								
January	38,790	93,272	24.5	44,600	10.6	67,600	14.8	19,665
February	42,394	93,900	23.0	48,600	11.3	70,100	15.0	21,435
March	44,883	98,772	24.4	40,423	9.0	62,659	14.0	23,251
April	----------	82,500	21.0	35,400	7.7	58,900	12.6	----------

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

[2] Not reported.

[3] New series of statistics showing unemployed registered by the employment exchanges. Includes not only workers wholly unemployed but also those intermittently employed.

[4] Strike ended. Provisional figure.

INDUSTRIAL AND LABOR CONDITIONS

International Labor Conference, 1932

THE sixteenth session of the International Labor Conference [1] was held in Geneva, April 12 to April 30, with 336 delegates and advisers present from 49 countries.

The agenda of the conference contained four items: Fee-charging employment agencies; invalidity, old-age, and widows' and orphans' insurance; juvenile employment in nonindustrial occupations; and revision of the convention for the safety of dockers. There were two other questions before the conference, dealing, respectively, with the amendment of the standing orders and the reports on the application of conventions. The first item on the agenda was the subject of preliminary discussion, and it was unanimously decided by the conference to place the question of the abolition of fee-charging employment agencies on the agenda of the next session with a view to the adoption of a draft convention. The conference also voted that a questionnaire covering a number of points should be sent to the different governments in preparation for the second discussion. The question of invalidity, old-age, and widows' and orphans' insurance was also the subject of first discussion. It was agreed to include it on the agenda of the next session with a view to the adoption of a draft convention providing for this type of insurance for employed workers in general and for land workers.

A draft convention was adopted by the conference providing that the age of admission of children to employment in nonindustrial occupations should be fixed at 14 years or the school-leaving age, whichever is the higher. The convention also provides that light work for children over 12 years of age may be authorized, subject to specified safeguards, and that a higher age limit shall be fixed for dangerous and unhealthful trades and for street trading. Lower age limits were fixed for India, subject to review after five years.

The convention relating to the protection against accidents of workers employed in loading and unloading ships, which was adopted in 1929, was amended in certain technical points to facilitate its ratification by the chief maritime countries. A recommendation was adopted advocating a conference among the different governments for the purpose of securing uniformity in the application of the convention and a resolution was passed authorizing the International Labor Office to review the position in 1934 in regard to reciprocity in the recognition of national certificates of compliance by ships with the terms of the convention.

A committee, appointed to deal with the annual reports presented by the different countries regarding the observance of conventions ratified by them, reported that the application of ratified conventions was becoming increasingly effective. A resolution relating to unemployment, which condemned any policy of wage reduction and suggested an investigation of the question of the institution of the 44-hour

[1] International Labor Office. Industrial and Labor Information, issues of Apr. 25 and May 9, 1932.

week in all industrial countries with a view to the adoption of international regulations on the subject, was adopted. The director of the international labor office was requested, in a resolution referring to the economic crisis, to endeavor to secure the cooperation of the Council of the League of Nations and members of the League in efforts to restore general prosperity, attention being drawn to the importance of international public works, the coming Lausanne conference on reparations and debts, and joint action on currency and credit problems. Other questions dealt with by the conference included long-term labor contracts, housing, workmen's compensation for silicosis, and the effects of opium smoking on the conditions of the workers.

Domestic Service in Philadelphia Homes

THE results of a survey of household employment in Philadelphia and vicinity have just been published by the United States Women's Bureau.[1] The investigation was originated by the women's problem group of the social order committee of the Society of Friends, and the questionnaires were sent out in 1928 by a committee of that group.

Over 950 employers sent in tabulatable data on wages, hours, working conditions, and other matters concerning their employees. Some of the findings are given in brief below:

The number of householders returning satisfactory questionnaires on household employment was 954. Of the 2,833 employees reported upon in these 954 schedules, 1,781 were full-time and 1,052 were day workers; 2,062 were women and 709 were men. Replies were received to only 76 of the questionnaires sent employees. Of that number, 2 were from male domestic workers.

Employers' Questionnaire

NEARLY three-fourths of the 2,771 workers for which the employers reported sex were women. Nearly one-third of the women and slightly over one-eighth of the men were under 30 years of age. The percentage of foreign born among the women was substantially higher than among the men. The proportion of Negroes, however, among both men and women was approximately the same. Only 21.7 per cent of the men were reported single as compared with 51 per cent of the women. Nearly 70 per cent of the women, as compared with 55 per cent of the men, were full-time workers.

Three-fifths of the women and approximately one-fifth of the men lived where they were employed. Approximately four-fifths of the women who lived in had a room alone and practically all of these had access to a bath. Of the women for whom information was given as to whether they had a room in which they might receive friends, almost one-half had only the kitchen; the remainder had other rooms or were permitted to use certain rooms that belonged to the family.

Only about one-tenth of the replying employers lived in apartments, ranging in size from 1 room and bath to 15 rooms and 5 baths. The size of the houses in which the remaining nine-tenths of these

[1] U. S. Department of Labor. Women's Bureau. Bulletin No. 93: Household employment in Philadelphia. Washington, 1932.

employers lived ranged from 5 rooms and a bath to 58 rooms and 11 baths.

The size of the families varied from a single person to 12 persons. Apparently, there was no relationship between the number of workers employed and the number of persons in the family, or between the number of workers and the number of rooms. Though the financial status of the family was a very important factor in connection with the number of domestic workers employed, there were also various other influences, among them the standards of value of the heads of the family.

The woman employees were more frequently found in occupations concerned with food and the male employees in occupations having to do with shelter. Many households were provided with modern conveniences to lessen the expenditure of energy and reduce drudgery.

Hours of labor.—With regard to hours worked, the report states:

> The over-all hours, from the beginning to the end of the day's work, were long; nearly three-fifths of the women had an over-all of at least 12 hours. For one-tenth the day was less than 8 hours; for less than one-third it was 8 and under 12 hours. Of the men for whom the time of beginning and of ending work was reported, less than one-third had an over-all as long as 12 hours; for less than one-twelfth, however, it was under 8 hours, and for three-fifths it was 8 and under 12.
>
> The actual hours of work were tabulated for the women in five of the principal occupations only—chambermaids, children's nurses, cooks, general houseworkers, and waitresses—hour data being reported for about one-half of the women in these occupations. Of these 630 women, nearly three-fifths worked 10 hours or more, about one-twelfth working 12 hours or longer. The majority of the cooks whose hours were given on the questionnaire (58.3 per cent) worked a day of 10 and under 12 hours, and 43.4 per cent of the general houseworkers had hours as long as this.

Slightly over 11 per cent of the 758 employers who reported on time off allowed their domestic workers one-half day, and 42.7 per cent, two half days per week. The remaining 46.1 per cent varied their practices in this regard.

Wages.—The proportions of men and women paid by the month, week, day, and hour were as follows:

DISTRIBUTION OF WORKERS, BY PERIOD OF WAGE PAYMENT

Paid by—	Men	Women
	Per cent	*Per cent*
Month	45.1	12.7
Week	30.1	61.2
Day	8.0	24.7
Hour	16.8	1.4

Approximately one-tenth of the women and also one-tenth of the men, paid by the month and living with their employers, received under $60. Over two-fifths of the men who lived out were reported as being paid under $60; since, with one exception, all were part-time employees, they undoubtedly received pay from other employers.

Of those reported as living in and paid by the month, slightly less than one-third of the women and slightly more than one-third of the men were in the $80 to $109.99 wage group, while 56.6 per cent of the women were in the $60 to $79.99 wage group. The monthly wages of 30 men, 7 of whom lived in, were $140 or more. No woman was paid as much as this.

Employees paid by the week for whom a specified amount was reported included 1,147 women and 154 men. Living conditions of the women and men

in this group are in direct contrast, for while more than four-fifths of the women lived in, about three-fourths of the men lived away from their place of employment. Though nearly three-fourths of the women living in were paid from $14 to $20 a week, slightly less than three-eighths of those living out received amounts within this range. The largest proportion of women living out in any group is found in the $9-and-under-$14 class, while the largest proportion of men living out received $20 and under $45 a week. More than two-fifths of the men living out—all but one of whom were part-time workers—received less than $9.

The day wage paid most women—84.2 per cent of those doing day's work—was $3 and under $4, while the day rate for the largest proportion of men was $5 and under $6.

Training for present job.—No question was asked concerning the worker's special vocational training for her job, but inquiry was made as to her training at home or with a previous employer. Such information was tabulated for 1,078 women, including cooks, general houseworkers, chambermaids, waitresses, and children's nurses. Over seven-tenths of these employees had had training from a previous employer, almost one-eighth and nearly the same proportion had received training both at home and from a previous employer.

Length of service.—More than two-fifths of the 1,103 women for whom a report was made as to length of service with present employer had been with such employers 2 years or more; approximately one-third between 6 months and 2 years; and about one-fourth for less than 6 months.

Employment policies.—Of the 798 employers reporting in regard to their policy as to references, only about 5 per cent required none and approximately the same percentage accepted the recommendation of previous employers, friends, or neighbors. The remainder, 90.1 per cent, stated that they investigated references, by telephone, through the employment bureau, or in person, or by a combination of two of these methods.

Over three-fifths of the 814 employers who answered the inquiry on their dismissal procedure reported that they gave notice only. Of those who replied as to specified time, a very large proportion gave a week's notice. Less than 4 per cent gave only wages in advance and 25 per cent stated that they gave both wages and notice, the great majority reporting one week as the specified time.

Of 785 employers who reported on the subject, 6 per cent granted no vacations. The length of vacations given varied from less than a week to 3 months. Of 728 householders, about five-sixths paid wages to their workers for the entire vacation period, while less than 7 per cent paid no wages at all during such holidays.

Employees' Schedule

THE employees' schedule was returned by 76 workers, 2 of whom were men. The median weekly wage of the 72 women was $14.80, the median for those living out being $12.70 and for those living in, $15.25. The median for the white women was $15.35, and for the colored women, $14.50.

About two-thirds of the women living in who reported the length of their usual day worked as much as 12 hours. One Negro cook had a day 14½ hours in length. Of the women living out, two-fifths had a day of 12 hours or more. Two-fifths of all reporting went on duty between 7 and 8 o'clock in the morning. Nearly one-half of those by whom the time of quitting work was given went off duty between 7 and 8 o'clock in the evening.

WOMEN IN INDUSTRY

Wage-Earning Women and the Industrial Conditions of 1930

THE United States Women's Bureau has recently published a report on wage-earning women as affected by the industrial conditions of 1930.[1]

South Bend, Ind., and its close neighbor, Mishawaka, were selected for this community survey, as constituting an important smaller industrial community of the Middle West and a woman-employing district. The combined population of South Bend and Mishawaka was 132,823 in 1930, and the number of gainfully employed women in the two cities combined was 14,155, or about one-fourth of all the females 10 years of age or over. About one-fourth of the working population of these cities consists of wage-earning women. The percentage of gainfully employed women in South Bend alone gained by 1.6 points in the census decade 1920–1930, while the percentage of men gainfully employed decreased by 3.4 points.

With emphasis always upon changes in condition of employment of women workers, the investigation approached the subject from two angles: First, interviews with the employees in their homes; and second, interviews with employers who in many instances furnished pay-roll and other plant records that served as the best possible check upon the findings that resulted from the interviews.

Only those women were interviewed who were at least 18 years old and had had some regular employment during the past 12 months and since reaching their eighteenth birthday. Women in the professions, the self-employed household workers, those with only irregular and intermittent employment during the 12 months, and those who were doing work in their own homes for others were not scheduled.

Only 18 colored women—restaurant workers or charwomen—could be scheduled, but many colored families were living in the area canvassed. Their homes bore marked evidence of poverty, and repeatedly they expressed a desire for work. Many with "house-cleaning places" four or five days a week in former years had been reduced to one or two days now, and this irregularly, work too spasmodic and intermittent to insure a living wage. They were in more straitened circumstances now, some said, because white men and women thrown out of their own jobs in the present emergency were competing for "Negro jobs."

The number of women interviewed in their homes was 3,245. Of the 3,215 reporting their age, 16.6 per cent were under 20 years, 31.9 per cent were 20 and under 25 years, 39 per cent were 25 and under 40 years, and 12.6 per cent were 40 years or over. Of the 3,243 reporting marital status, 46.1 per cent were single, 43.7 per cent were married, and 10.2 were either widowed, separated or divorced. Somewhat less than one-half (44.4 per cent) of the married women had no children, but there were over 200 widows with children to support. Of the 3,235 reporting nationality, only 491 (15.2 per cent) were foreign-born, although a great many were daughters of foreign-born parents.

[1] U. S. Department of Labor. Women's Bureau. Bulletin No. 92: Wage-earning women and the industrial conditions of 1930—a survey of South Bend. Washington, 1932.

The following table shows in what industries the women were employed at time of the survey or at some time during the past 12 months:

INDUSTRY OF PRESENT OR LAST EMPLOYMENT

Industry	Number reporting		
	At work	Unemployed	Total
Manufacturing:			
Automobiles and automobile parts	268	70	338
Wearing apparel	1,132	294	1,426
Machinery and electrical products	87	105	192
Paper products	51	18	69
Miscellaneous manufacturing	39	31	70
Clerical workers (including 23 telephone operators)	558	66	624
Domestic and personal service	280	67	347
Saleswomen	136	43	179

The pay rolls of a number of establishments, largely those manufacturing wearing apparel, for one week in September, 1929, showed 2,746 women employed. Of these, 16.6 per cent worked under 36 hours, while 34.6 per cent worked 48 hours and over for the week. The earnings for this week showed that 9.9 per cent earned under $10, and 36.6 per cent earned $20 and over. The pay rolls for the same establishments for one week in September, 1930, showed 2,483 women employed. Of these, 38.4 per cent worked under 36 hours and 20.2 per cent worked 48 hours and over for the week. The earnings for that week showed 23.9 per cent earned under $10, and 14.4 per cent earned $20 and over.

The bulletin contains tables giving detailed information on such subjects as the number and causes of final separations during the past five years, time out of work between jobs for industrial and personal causes, the number of wage earners in the family earlier in the year and at the time of the interview, by size of family, and the number of wage earners in the family at time of the interview and number employed steadily, by size of the family.

Conditions in Straw-Hat Manufacture in Chekiang, China

THE Chinese Economic Journal of February, 1932, states that in recent years the manufacture of straw hats in occidental styles has become increasingly important in the coastal regions of eastern Chekiang. Native style straw hats, however, have been made there for centuries. Ningpo was the first city to adopt the new industry, which rapidly extended to Yuyao and after 1926 to at least 10 other localities, among them Linhai, Haimen, Tuchen, and Hwangyen. The following reasons are given for the rapid spread of this industry:

Simplicity.—The fact that the art of hat weaving can be learned in a couple of weeks induces a large number of persons to take up this work.

Adaptability.—Being so largely a cottage industry, the manufacture of straw hats is especially suited to female workers, who are able to take to it as a spare-time occupation in addition to their domestic duties.

No capital required.—One of the most attractive features of the industry from the point of view of the hat weavers is that they do not have to buy their raw material, which is supplied by the hat shops. The only equipment needed is a

block or wooden mold (on which the hat is shaped), which is within the purchasing power of everyone.

Good wages.—Practically every person engaged in hat making adds a substantial sum to the family exchequer. An expert worker making use of spare time is able to turn out four or five hats a month, while even an inexperienced hand can make a hat in 10 days.

For many years straw braid has been one of the chief exports of China, but the high-quality braid used for making straw hats is imported, "glass" straws being brought from Germany and Switzerland and "golden silk" and "flax" straws from the Philippines. Pentsao or "local" straw is the only native variety used.

Straw-braid plaiting and hat shaping are done entirely by hand. So numerous are the workers in the industry, however, that more than 5,000,000 hats are made per annum, valued at approximately $16,000,000 (United States currency $3,568,000).[2] "Glass" straw hats are the most expensive and are not always within the purchasing power of the average customer. Consequently, the majority of the hat manufacturers find it more practicable to make cheaper-grade hats. "Glass" straw hats are worth approximately $4.50 (United States currency, $1.00) apiece, and those made of "golden silk" and "flax" straws $4 and $2.50 (United States currency, 89 and 56 cents), respectively. The best-quality hats bring from $9 to $11 (United States currency, $2.01 to $2.45), most of them being exported to Europe and America where, after further treatment, they are sold at higher prices.

In Chekiang the making of straw hats is a household industry, particularly suitable for women, as it calls for dexterity rather than physical strength and can be followed in leisure hours. These home workers are paid piece rates, usually $2.30 (United States currency, 51 cents) per hat, by local merchants who furnish the straw. There are 255,100 families engaged in hat weaving, including 331,590 female weavers.

Woman and Child Labor in Latvia[3]

LATVIAN legislation does not permit employment of children of 14 years or under. The working time of juveniles 15 and 16 years old is fixed at 6 hours per day. Overtime work, night work, and work on Sundays and holidays is not permitted to minors under 18 years of age.

According to Latvian official statistics, in 1930, the latest year for which official statistics are available, there were employed in Latvian industry a total of 1,434 juveniles; these formed from 2 to 3 per cent of the total number of workers.

According to the same statistics, of a total of 62,581 workers employed in Latvian industry, 24,924, or 39.8 per cent, were women. These figures are based on returns of 3,013 industrial enterprises listed in Latvian official statistics, employing not less than 5 workers each. During the last 5 years the number of women employed in industrial enterprises has increased from 6,735, or 33.7 per cent of the total number of workers, in 1926 to 24,924, or 39.8 per cent in 1930.

[2] Original report does not state which dollar is used, but conversions are made on basis of yuan dollar at par=22.3 cents.

[3] Report of A. Loesch, clerk, American consulate at Riga, dated Mar. 17, 1932.

This increase may be explained by the development of those industrial enterprises which employ mainly women as workers.

The following table shows the number of women employed in the various industries and the percentage of the total number of workers employed therein.

NUMBER AND PER CENT OF WOMEN INDUSTRIALLY EMPLOYED IN LATVIA IN 1930, BY INDUSTRY

Industry	Women employed		Industry	Women employed	
	Number	Per cent of total number of workers		Number	Per cent of total number of workers
Ceramic	1,049	25	Foodstuff	4,344	44
Metallurgical	852	8	Clothing and shoemaking	2,536	75
Chemical (including match-making and rubber manufactures)	2,433	55	Construction	28	2
Leather	225	24	Gas, electricity, and water	3	(1)
Textile	6,740	78	Laundries, dyeing	313	97
Lumbering	4,151	34	Quarries	29	14
Paper	1,149	41	Total	24,924	40
Printing	1,072	42			

[1] Less than one-half of 1 per cent.

According to Latvian legislation it is not permitted to employ women for work not adapted to their physical constitution, or which may injure their health in any way, or for a period commencing four weeks before and ending eight weeks after confinement. During this period of 12 weeks it is not permitted to discharge them. With regard to night work of women, it is in fact practiced, although the Russian law prohibiting night work of women, which was issued in 1917 and adopted by the Latvian Republic at the time of its foundation, has not been abolished up to the present time. The decision of the international conference at Geneva with regard to the prohibition of night work for women has not been ratified by the Latvian Government due to the opposition it has met by the organizations of workers. In general, wages paid to women are from 30 to 40 per cent less than those paid to men.

As regards unemployment of women, during January, 1931, about 4,682 unemployed women were registered, that is, about 32.1 per cent of the total number of unemployed of 14,580. Of these, 1,411 women were temporarily engaged in public works organized by the Government and municipal administrations, the remainder being without any occupation. Due to the economic crisis the number of unemployed women increased during 1931 by about 93.5 per cent, while the number of unemployed men during the same period increased by 112 per cent, to 21,042.

On March 1 the number of unemployed women registered with the labor exchanges increased to 11,171, i. e., 29.9 per cent of the total number of registered unemployed, of which 2,224 persons were engaged in public works.

RETIREMENT AND PENSION PLANS

Administration of Old-Age Pension Laws in the United States

CERTAIN interesting points regarding the administration of the old-age pension acts of the various States, revealed in the experience under the law, were brought out at the fifth annual conference on old-age security recently held.[1] At this conference reports on the spread of pension legislation were made by Abraham Epstein, executive secretary of the American Association for Old Age Security, Mrs. Richard W. Hogue, Israel Mufson, and Meigs B. Russell. The experience in their respective States was reported upon by Francis Bardwell, superintendent of old-age assistance, Massachusetts Department of Public Welfare; Olive E. Henderson, director of old-age security, California Department of Social Welfare; Richard W. Wallace, assistant commissioner, New York State Department of Social Welfare; and Dr. Charles L. Candee, president, Delaware Old Age Welfare Commission.

Some of the points brought out by these speakers are summarized below.

Administering Authority under Act

IN STATES where no State aid is given, the county pension board has the final authority, the only provision being generally that the counties must furnish an annual report on operations to some State official; even this provision, however, is sometimes not enforced.

In general, the greater the measure of State aid the greater the authority given to the State agency. In Massachusetts (where the State pays one-third of the cost) the State bureau has only supervisory authority, but with the right to withdraw State assistance if such action is warranted. The same is true in New Jersey, but in that State the State division of old-age relief may reverse the action of the local welfare boards in specific pension cases. In Delaware, where the whole cost is borne by the State, the State commission has entire authority.

"Flexibility" An Essential of Law

EMPHASIZING that flexibility of the system is essential, Miss Henderson stated that the administrators of the California law favor a simplification of that act with this end in view. Removal of the income and property qualifications, especially, is advocated, and possibly the citizenship requirement.

In general, the more minutely detailed the act is, the greater the limitation of its social usefulness.

[1] American Association for Old Age Security. Old-age security in the United States, 1932. A record of the fifth national conference on old-age security, New York City, March 30, 1932; together with a census of old-age security in the United States. New York, 1932.

The Massachusetts act, it was pointed out by Mr. Bardwell, differs from that of the other States in that it is very brief, deals only with fundamentals, and instructs the State department of public welfare to create policies to govern procedures under the law.

Citizenship, Residence, and Age Requirements

ALL but two States (Delaware and Minnesota) require citizenship as a prerequisite for the receipt of aid under the pension act.

Most of the acts require 15 years' citizenship, but the States of Massachusetts, New Jersey, and New York merely require that the applicant be a native-born or naturalized citizen.

As stated, Miss Henderson inclined to favor the removal of the citizenship requirement from the California act, stating that while it is "deceptively simple on the surface," nevertheless it "frequently leads into highly complicated and technical fields."

> The citizenship clause has worked hardship on many women. In the pre-suffrage days foreign-born women seldom sought naturalization, as there was little inducement to do so. Thus, the older foreign-born woman who did not marry or who married a noncitizen finds herself unable to meet this requirement. She may have lived here for half a century, have become entirely one in her interests with the State, but still lack eligibility. There are also men who have inadvertently failed, through ignorance or misinformation, to complete the process of naturalization and are consequently ineligible. The residence clause provides sufficient assurance that recipients of aid are identified with the interests of the State, even though they can not meet the technical requirement of citizenship.

Somewhat the same experience was mentioned by Mr. Bardwell, of Massachusetts. He did not, however, advocate the abolition of the citizenship requirement, taking the position that "there is no rational way that the law could be made over to fit these cases."

The attitude toward this situation in Delaware (where there is no citizenship requirement) was thus stated by Doctor Candee: "The commission which drafted our law felt that the State has a responsibility for any old person who has been living in this country for 15 years or more, regardless of whether or not he has taken out papers."

All of the laws make age and residence requirements. These are, however, not always easy to prove, and difficulties may arise due to lack or loss of records, etc. Mr. Bardwell mentioned one class met with in his experience in Massachusetts—"old people of native stock, whose ancestors were colonial founders," but who can not prove the required 20 years' residence.[2]

Requirements as to Means or Assets

ALL but three of the State laws (those of Delaware, Maryland, and Massachusetts) have certain restrictions as to the amount of property or assets which an applicant may have and still be eligible for the old-age relief. The West Virginia law is the most drastic. As it reads, no person who has any property whatever is eligible for pension.

The Delaware and Massachusetts laws set no fixed amount as barring receipt of pension, but the practice in these States has been to grant the pension if the funds available do not exceed $300. In Massachusetts the applicant may also have an equity in a home not

[2] Reports to the U. S. Bureau of Labor Statistics from several counties in Colorado express the view that the residence requirement of the law of that State—15 years' residence in both State and county—is much too stringent as regards residence in the county.

to exceed $1,500. In New York, where the law specifies only in general terms that pensions may be granted only to persons "wholly unable to support" themselves, the State board recommends a limit of $250, but Mr. Wallace reported that some of the counties have set a lower amount, $200 in some cases; the sum of $250 is permitted to be retained for burial unless other provision has been made.

Mr. Bardwell pointed out that in Massachusetts the matter of insurance as an asset "is more or less in abeyance and has not been absolutely determined by policy. Every case of insurance that presents a problem is passed upon individually."

Concealment of assets is a difficulty met with in a certain proportion of cases, estimated at about 5 per cent in Massachusetts. In that State, in such cases the case is immediately closed and a bill for the money already paid in pensions is sent to the offender. In many instances the investigators have found that the old people have been "misguided by interested relatives. Through their selfish and dishonest advice old people have transferred property, withdrawn money from the bank, or assigned insurance in order to qualify for assistance."

"Moral" Requirements

DIFFERING views are taken by the administrators of the old-age pension laws as to the desirability of provisions restricting the granting of pensions to "worthy" persons or to those not guilty of specified offenses.

The Massachusetts act extends aid only to "deserving citizens," leaving the administering boards to determine what constitutes a deserving citizen. Under this provision pensions have been denied to habitual drunkards, deserters of families, etc.; also, in one case, where the applicant had spent 35 of his 70 years in the State prison. This restriction Mr. Bardwell regards as desirable, "because it puts a badge of honor upon the recipient under this law. * * * It is a superior type of assistance to worthy aged citizens."

On the other hand, the California authorities regard the action of the 1931 legislature, in eliminating the desertion clause from the law, as one of its "most helpful achievements."

> We found it absolutely impossible to administer this provision fairly. Desertion is considered a respectable ground for divorce. Many men with chivalrous intention have permitted their wives to secure divorces on this ground, though the real cause of dissension was entirely different. Yet the court record of desertion could not be ignored. Too frequently the attempt to administer this provision meant that old quarrels and bitter memories were revived to no useful end.

Taking the position that the purpose of the pension act is to relieve need and that "spectacular achievements in rehabilitation" can not be expected in work with old people, the California delegate was of the opinion that such a provision as the desertion clause "will not act as a deterrent of desertion in the future. No one in the heat of a family quarrel is so far sighted as to look forward to his possible relief status 15 years hence and regulate his conduct accordingly."

> No matter what the past has been the needy person must have support, and our year and a half of experience has convinced us that character requirements have no place in a relief measure for aged persons. * * * Careful administration and planning by the local agency can sufficiently safeguard the law from abuse, if aged applicants are unstable or find difficulty in adjusting themselves to the recognized standards of conduct in the community. We affirm that in

administering aid the present need of the applicant is paramount, and that character requirements may act as a clog and hindrance to an effective piece of relief machinery.

Responsibility of Relatives

A GENERAL requirement under the laws is that no pension may be granted if the applicant has relatives able to support him and legally responsible for his support.

In Massachusetts it is a criminal offense to fail to support parents or grandparents. Complaint is brought, not by the person concerned, but by the public authorities. The situation in New York is similar.

In California and Pennsylvania, however, complaint must be brought by the parent himself, and this often results in hard feeling and a trying situation.

In Delaware the State can withhold pensions in cases of refusal or failure of children to give support, and thus "possibly force their hand," but this, as the commission interprets the law, is the limit of its authority in the matter.

Amount of Pension Granted

A MAJORITY of the laws provide that the amount granted in pension or relief must be decided on the basis of the pensioner's need, his means of support, and other circumstances in the case. It follows, therefore, that the amounts granted in individual cases vary widely. In some cases the full amount allowed under the law is granted; in other cases a small sum may be allowed each month to supplement other income or to provide necessaries not otherwise obtainable. Mr. Bardwell mentioned cases in which the amount of aid covers only special medicines ordered by the physician, but which the old person could not otherwise afford.

The investigation made by the authorities reveals what the applicant's needs and circumstances are, and the amount of relief is fixed accordingly. Often a budget is worked out, varying in different cases according to whether the person is living in the city (where the cost of living is fairly high) or in the country, and according to what help can be expected from neighbors, friends, or relatives.

Mr. Wallace, of New York, pointed out that the circumstances and needs of applicants in urban places are quite different from those in rural communities.

> A person 70 years of age in a village or rural community is generally well known to his neighbors. The members of the entire family group are familiar in the community, and even their financial status may be known to a considerable number of persons in the neighborhood. The city applicant, however, has not as a rule remained in one place throughout any large portion of his lifetime. He has moved from place to place, and his neighbors know little about his family or his personal affairs. The investigation of his circumstances is therefore in general much more difficult than in a rural community.
>
> In a country district the aged person may cling to the homestead, even if it is of little money value. Though other resources may be exhausted the home will provide him shelter, and the item of rent does not enter into his budget. In the city the cost of rent is high, and with the cramped apartments of to-day there is little or no room for the aged parent in the home of sons or daughters. The number of recipients in the cities who live with their children is relatively small, and the item of rent which must be included in most budgets increases the allowances made for old-age relief.

125620°—32——4

Data contained in the proceedings of the congress showed that the average pension per month ranged from $9 in Utah and $9.54 in Delaware to $30.00 in Maryland. Doctor Candee pointed out that in Delaware the pensions awarded are limited by the fact that the commission has a limited appropriation for pension purposes and can not go beyond it. He stated, however, that while the average pension seemed "ridiculously low," a great many of the pensioners were in the southern parts of the State, where they can live very cheaply. "Many of them have little farms with gardens. Quite a number of them are Negroes out in the rural districts."

Special Services for Old People

Mr. Epstein emphasized that the ultimate aim in the pension States is "to abolish the old poorhouse, which is the gathering place for a miscellany of all kinds and types. We aim by old-age security laws to take out from the almshouses all those who can just as well take care of themselves in their own homes." There is, however, a certain percentage of cases which need institutional care, and for these provision must be made. In most States, he pointed out, there is no provision, even in the institutions existing, for those who really need institutional care.

> It is certain that at the 28 institutions in Iowa with less than 10 inmates each a doctor does not call more than once in three months, except in an emergency. Many of the inmates need nursing care and many need medical care, but they are not getting it in those institutions. Our ultimate aim is, instead of having 28 institutions in Iowa with less than 10 inmates each, to have a few centralized hospitals or infirmaries with proper medical and nursing care. Well-managed institutions with from 200 to 500 persons offer us the cheapest way to provide for those who can not care for themselves on old-age pensions.

In Massachusetts a system of infirmaries has been developed during the past 25 years to serve as hospitals for chronic and incurable cases. In Delaware plans are being made for the construction of a State welfare home, where medical and nursing care can be given. On its completion the old county almshouses will be abandoned and their inmates transferred to the new home.

Miss Henderson added that there are, among the persons not being cared for in institutions, some who will need a certain amount of nursing service that can not be given by relatives or friends. Some provision must be made to meet this need also.

Another service that would be desirable is that of mental hygiene. This "holds promise of increased happiness for many individuals who have had difficulty in adjusting themselves to social and economic changes accompanying old age." Many, also, "would be far happier if provided with suitable and interesting occupation, not necessarily highly remunerative."

The need of trained social workers and visitors was emphasized. This is necessary not only in the preliminary investigative work and in the periodic revisions of pension required under the acts, but also in dealing with particular family problems and budgets. Thus, in Massachusetts, consideration is given to "health and housing and the provision of proper eyeglasses, dental work, belts, trusses, etc., all necessary to the comfort of the client." In that State it is planned that pensioners shall be visited every three months.

There must also be a special attitude for this type of social service work. This has been recognized in Massachusetts.

> When we administer ordinary relief we tend to hold our client at arm's length and try to make him feel his own independence. This law is different from that. If an aged person is eligible and the proof of his eligibility is missing, I feel it is the duty of my department and of the local board to assist him to remove the obstacles so that he can receive old-age assistance. Our office has had to write all over the United States and foreign countries for birth certificates, marriage certificates, and other data. Because of their age and general helplessness we must go through this long and tedious process for many applicants, who, left to their own initiative, would never undertake the task.

Effect of Pension System on Other Forms of Assistance

THE going into operation of old-age pensions has had its effect on other means of relief. In some cases, as in some counties of Montana (and as will be the eventual outcome in Delaware), the poorhouses have been abolished.

In California, where a 1931 amendment to the law permits inmates of State institutions (including almshouses) to make application for a pension if they would prefer that to continued residence at the poor farm, 41 counties reported that 301 persons had taken advantage of this provision. Although this was only about 15 per cent of the almshouse population 70 years of age and over, it is pointed out that "most of the almshouse inmates have lost contact with the outside world and have no domicile to which to go, and so are reluctant to leave a place which, however bad, they have nevertheless become accustomed to."

In New York, according to a statement made by David W. Schneider, of the New York Division of Old Age Security, at the 1931 meeting of the American Statistical Association, inmates of institutions were allowed to apply for pension with the understanding that they would leave the institution as soon as their application was approved. He estimated that this resulted in about 250 persons leaving the almshouses, a much smaller number than had been anticipated. No data were available as to the number leaving private homes for the aged, but from his personal contact with the different agencies he estimated that the number of old people leaving such homes was very small.

The pension laws are undoubtedly preventing thousands of persons from having to enter the almshouses. They are also having an effect on the private homes for aged. In Massachusetts, it is stated, one large home reported a material decrease in applications, and it is predicted that others will experience a large reduction in their waiting lists. "Old people do not want to go to an infirmary or home for the aged, because what they want is independence. And that is what they get under this law."

In Massachusetts and California, also, a new type of agency is developing under the new system. This is the licensed boarding home for old people. In Massachusetts some 200 such homes have already been licensed. They are not charitable organizations, but give board and nursing care under regular State inspection.

Results of Study of Retirement Systems for Public Employees in New Jersey

THE Pension Survey Commission appointed under a joint resolution of the New Jersey Legislature to study the retirement systems for public employees in that State has recently issued two reports on its findings.[1] The first of these analyzes the existing plans and the second presents recommended measures to place these plans on a sound financial basis.

The commission's study disclosed 152 joint contributory plans in operation, covering 48,101 public employees; in addition, there were 22,373 public servants under noncontributory plans or not covered by any plan. There were 3,783 pensioners of the first group and 143 pensioners of the second; these were drawing pensions aggregating $3,729,900 and $160,759, respectively.

Of the 152 contributory plans, only 2—those of the teachers and State employees—were found to be actuarily sound; the others were in a "most unsatisfactory condition." The reason for this was that "they have failed to take into consideration that their revenues must equal the benefits promised. Because this has not been done, these unsound funds are amassing millions of dollars a year in liabilities for which no current provision is being made."

The two sound systems include about two-thirds of the 48,000 employees covered by contributory plans. In these two systems about half of the total cost is borne by the employees, and the public contribution is so arranged that, after the liability covering the period prior to the establishment of the system has been met, the public contribution will not exceed 3 per cent of the pay roll of the active members in the fund.

Commission's Recommendations

THE commission submits certain recommendations which it considers "sound, conservative, and reasonable," the more important of these being as follows:

(1) A minimum service retirement age of 60 years.

(2) Retirement for disability incurred in performance of duty at any age; and disability from other cause after 10 years' service.

(3) Public contributions at rates ranging for the different classes of employees from 9.19 per cent of pay roll (for municipal employee systems) to 14.97 per cent (for police and firemen's systems). Employee contributions ranging from 4.09 per cent for police and firemen to 4.44 per cent for municipal and county employees.

(4) Payment by the public of the entire cost of cases of death or disability incurred in performance of duty.

(5) Service retirement at approximately half pay.

(6) Return of employee's contributions, with interest, upon leaving the service, discharge, or death.

(7) New retirement plans to be allowed to be formed only on a sound actuarial basis.

---

[1] New Jersey. Pension Survey Commission. Report No. 3: Analysis of existing pension systems for public employees in New Jersey. Report No. 4: Recommendations for the sound financing of public employee pension systems in New Jersey. Newark, 1060 Broad Street, 1932.

(8) Counties and municipalities to be allowed to insure their employees in the State employees' fund.

(9) Existing local funds urged to determine their financial position periodically and to submit to supervision by the State Department of Banking and Insurance.

(10) Passage of legislation enabling the reorganization of local funds on an actuarial basis, with the consent of the members.

(11) Public contributions to be limited to 15 per cent of the active pay roll.

(12) Establishment of a new State fund for policemen and firemen which all new employees would be required to join, and which employees already in the service may join at their option.

Besides the advantages resulting from placing the systems on a safe and sound financial basis, the commission estimates that the adoption of its suggestions will result in a financial saving to the taxpayers of New Jersey amounting to $8,565,074 per year.

Old-Age Pension Law of California

A BULLETIN recently issued by the Bureau of Labor Statistics (Bul. No. 561) entitled "Public Old-Age Pensions and Insurance in the United States and in Foreign Countries," contained the complete text of the old-age pension laws of the various States of the United States, up to the end of 1931, except that in the case of California certain amendments passed by the legislature in 1931 were not included. Therefore in order to make the complete California old-age pension law, with amendments to date, readily available to the users of Bulletin No. 561, this law is given below in full.

ACTS OF 1929

CHAPTER 530

SECTION 1. *Persons entitled to aid.*—Subject to the provisions of this act, every person residing in the State of California, if in need, shall be entitled to aid in old age from the State.

SEC. 2 (as amended by Acts of 1931, ch. 608). *Conditions.*—Aid may be granted under this act to any person who:

(a) Has attained the age of 70 years;

(b) Has been a citizen of the United States for at least 15 years before making application for aid;

(c) Resides in the State of California and has so resided continuously for at least 15 years immediately preceding the date of application, but continuous residence in the State shall not be deemed to have been interrupted by period of absence therefrom if the total of such periods does not exceed 3 years; or has so resided 40 years at least 5 of which have immediately preceded this application;

(d) Resides in the county or city and county in which the application is made and has so resided continuously for at least 1 year immediately preceding the date of application;

(e) Is not at the time of receiving such aid an inmate of any public or private home for the aged, or any public home, or any public or private institution of a custodial, correctional, or curative character, except in the case of temporary medical or surgical care in a hospital;

(f) Has no relative of the following degree of kindred: Husband, wife, parent, or child, able and responsible under the law of this State for his support;

(g) Has not made any voluntary assignment or transfer of property for the purpose of qualifying for such aid.

SEC. 2½ (added by Acts of 1931, ch. 608). *Proofs of age.*—For the purpose of determining the age of an applicant for aid under this act consideration should be given to any of the following documents:

(a) Certificate of birth;

(b) Certificate of baptism;

(c) Statement of age as recorded on marriage license or certificate;

(d) Statement of age of the applicant as recorded by the registrar of voters of this State or any subdivision thereof at least 5 years prior to the date of such application as shown by the records of the department of elections of this State or any subdivision thereof;

(e) Entries in a family bible or other genealogical record or memorandum of the family of such applicant;

(f) The returns of the United States census taken at least 5 years before the date of such application;

(g) The affidavit of a reputable citizen not related to the applicant if it is based on personal knowledge of facts which would determine probable age, and is not merely a statement of belief based on applicant's personal appearance.

Such affidavit shall contain statements of the circumstances upon which said affiant's knowledge is based and shall be submitted to the department of social welfare, and where such affidavit does not present satisfactory evidence the State department may require a second affidavit of more conclusive proof. Such affidavit shall not be accepted to establish proof of age until all reasonable efforts to produce documentary evidence have failed;

(*h*) Such other evidence as the State department of social welfare may approve.

SEC. 3. *Amount.*—The amount of aid to which any such person shall be entitled shall be fixed with due regard to the conditions existing in each case, but in no case shall it be an amount which, when added to the income of the applicant from all other sources, including income from property as computed under the terms of this act, shall exceed a total of $1 per day.

SEC. 4 (as amended by Acts of 1931, ch. 608). *Persons not entitled to aid.*—Aid under this act shall not be granted or paid to any person the value of whose real property, or, if married, the value of the combined real property of husband and wife, at the time of such application exceeds $3,000.

SEC. 5 (as amended by Acts of 1931, ch. 608). *Other sources of income.*—The annual income of any property of an applicant for aid which does not produce a reasonable income shall be computed at 5 per cent of the value of such property.

SEC. 6. *Agency created.*—(*a*) There is hereby created in the State department of social welfare a division to be known as the division of State aid to the aged. The duties of this division shall be to supervise and pass upon the measures taken by county or city and county boards of supervisors for the care of needy aged citizens, to the end that they may receive suitable care in their old age and that there may be, throughout the State, a uniform standard of record and method of treatment of aged persons based upon their individual needs and circumstances.

The State department, through the division of State aid to the aged, and the board of supervisors of each and every county and city and county in the State shall follow the policy of giving the aid provided for under this act to each and every applicant in his own or in some other suitable home, in preference to placing him in an institution.

(*b*) The board of supervisors of each and every county and city and county in the State, in addition to their other powers and duties in relation to the care and support of the poor, as provided by law, are hereby authorized and empowered, and it shall be their duty, to receive and act upon applications for aid under and in accordance with this act, and to provide funds in their respective county or city and county treasury, and to do all other acts and things necessary in connection with the same, for the purpose of carrying out the provisions of this act in so far as such provisions relate to such county or city and county.

SEC. 7. *Organization of same.*—The division of State aid to the needy aged shall be administered by a chief. The director of social welfare with the approval of the governor and the members of the social welfare board of the State department of social welfare, shall appoint and fix the compensation of the chief of the division of State aid to the aged, who shall be a person with training and experience in relief work and familiar with the social and economic conditions in California. The chief of the division shall be responsible for the investigation, determination, and supervision of State aid given under this act and for the performance of such other duties as may be assigned to the division by the director of social welfare.

SEC. 8. *Advisory boards.*—The chief of the division, with the approval of the director of social welfare, may appoint in each county and city and county an advisory board of citizens whose duty it shall be to cooperate with the proper State and county authorities in the investigation and supervision of aid given to the aged under this act and to make report upon the same with recommendations to the board of supervisors and to the department of social welfare. In counties or in any city and county where there is an existing county or city and county department of public welfare or board with similar functions in public relief, this body shall be appointed as the advisory board.

SEC. 9. *Property transfer.*—If the board of supervisors shall deem it necessary, it may, with the consent of the State department, require as a condition to the grant or continuance of aid in any case, that all or any part of the property of a person applying for aid be transferred to said board of supervisors. Such property shall be managed by said board of supervisors which shall pay the net income thereof to such person; said board of supervisors shall have power to sell, lease, or transfer such property or defend and prosecute all suits concerning it and to pay all just claims against it and to do all things necessary for the protection, preservation, and management thereof. If, in the event such aid is discontinued

during the life time of such person, the property thus transferred to the board of supervisors exceeds the total amount paid as aid under this act, the remainder of such property shall be returned to such person; and in the event of his death such remainder shall be considered as the property of the deceased for proper administration proceedings. The board shall execute and deliver all instruments necessary to give effect to this section.

SEC. 10. *Subsequent increase of income.*—(*a*) If at any time during the continuance of aid, the recipient thereof or the husband or wife of the recipient, become possessed of any property or income in excess of the amount allowed by law in respect to the amount of aid granted, it shall be the duty of the recipient immediately to notify the board of supervisors of the receipt and possession of such property or income and the board may, on inquiry and with the approval of the State department, either cancel the aid or vary the amount thereof in accordance with circumstances, and any excess aid theretofore paid shall be returned to the State of California and be recoverable as a debt due the State of California.

(*b*) If, on the death of recipient of aid under this act, it is found that he was possessed of property or income in excess of the amount allowed by law in respect to the amount of aid, double the amount of the aid paid in excess of that to which the recipient was legally entitled may be recovered by the department of social welfare as a preferred claim from his estate and upon recovery shall be paid into the treasury of the State of California.

SEC. 11. *Relief inalienable.*—All aid given under this act shall be absolutely inalienable by any assignment, sale, attachment, execution, or otherwise and in case of bankruptcy the aid shall not pass through any trustee or other person acting on behalf of creditors.

SEC. 12. *Effect of subsequent legislation.*—Any and all aid granted under the provisions of this act shall be deemed to be granted and held subject to the provisions of any law that may hereafter be enacted amending or repealing in whole or in part the provisions of this act, and no recipient under this act shall have any claim for compensation or otherwise by reason of his aid being affected in any way by any such amending or repealing act.

SEC. 13 (as amended by Acts of 1931, ch. 608). *Applications.*—Every applicant for aid shall file such application in writing with the board of supervisors of the county or city and county in which he resides, in the manner and form prescribed by the State department. An inmate of a public or private home for the aged, or of any public home, or of any public or private institution of a correctional, custodial, or curative character, may make an application for aid while in such a home or institution, but the aid, if granted, shall not begin until after such applicant ceases to be such an inmate. All statements in the application shall be verified, under oath, by the applicant.

SEC. 14 (as amended by Acts of 1931, ch. 608). *Investigations, etc.*—The board of supervisors, directly or through the advisory board or other authorized investigator, shall upon the receipt of an application for aid, promptly, without any unnecessary delay, and with all diligence, make the necessary investigation.

The board shall, upon receipt of the report of the investigation, decide upon the amount of aid, if any: *Provided, however,* That in any case where such application is denied by the board of supervisors, the applicant upon filing a petition with the department of social welfare setting forth the facts in full as to the necessity of such aid, verified by five reputable citizens of the county, shall have the right of appeal direct to said department of social welfare, and if the appeal is sustained by said department the payments of aid in the amounts determined by said department must be paid by the county or city and county as herein provided.

An applicant whose application for aid under this act has been rejected may not again apply for such aid until the expiration of one year from the date of the previous application, except with the consent of the county or city and county.

If the application for aid be granted, the clerk of the board of supervisors shall report the fact to the auditor of the county or city and county. All payments of aid under this act shall be made monthly by the treasurer of the county or city and county in the manner provided by law for payment of claims against the county or city and county. All aid under this act shall be renewed annually on verified applications and after such further investigations as the board may deem necessary, and the amount of aid may be changed if the board finds that the recipient's circumstances have been changed.

It shall be within the power of the board of supervisors to cancel and revoke aid for cause and it may for cause suspend payments for aid for such periods as it may deem proper.

SEC. 15. *Reports.*—The clerk of the board of supervisors of each county and city and county shall report monthly to the said State department in such manner and form as the latter may prescribe, the number of applications granted, and the grants of aid changed, revoked or suspended under this act by the board during the preceding calendar month, together with copies of all applications received and a statement of the action of the board thereon, and shall report the amount of aid to aged paid out under this act by said county or city and county during said period. Claims for State aid granted under this act shall be presented by the respective counties and city and county semiannually in January and July of each year. Such claims shall be audited by the State department of social welfare and the State controller and, when approved, the State controller shall draw the necessary warrants and the State treasurer shall pay to the treasurer of said county or city and county a sum equal to one-half of the total amount of payments made by said county or city and county to aged citizens as aid under the provisions of this act during the period for which said claim is made.

SEC. 16 (as amended by Acts of 1931, ch. 608). *Powers of State agency.*—The State department of social welfare shall have power to and shall prescribe the form of application, the manner and form of all reports and such additional rules and regulations as are necessary for the carrying out of the provisions of this act, and not inconsistent therewith.

SEC. 17. *Payment of expenses.*—All necessary expense incurred by county or city and county boards of supervisors and advisory boards, in carrying out the provisions of this act, shall be paid by the county or city and county in the same manner as other expenses of such county or city and county are paid.

SEC. 18. *Improperly granted relief.*—If at any time the State department has reason to believe that aid to the aged has been obtained improperly, it shall cause special inquiry to be made and may suspend payment of any installment pending the inquiry. It shall notify the board of supervisors and advisory board of such suspension. If it appears upon inquiry that the aid was obtained improperly it shall be cancelled by the State department, but if it appears that aid was obtained properly, the suspended payments shall be payable.

SEC. 18½ (added by Acts of 1931, ch. 608). *Removal to another county.*—Any person qualified for and receiving aid hereunder in any county or city and county in this State, who removes to another county or city and county in the State shall be entitled to aid under the provisions of this act after a one-year residence in the county or city and county to which such person has removed; *Provided*, An agreement in writing has been entered into by and between the two counties concerned approving such transfer or removal, and thereupon the county of first residence of such person shall continue his aid for one year and until the aforesaid residence has been established by him in the second county or city and county.

SEC. 19. *Fraudulent acts.*—Any person who by means of a false statement or representation or by impersonation or other fraudulent device obtains or attempts to obtain or aids or abets any person to obtain under this act:

(*a*) Old-age aid to which he is not entitled;

(*b*) A larger amount of aid than that to which he is justly entitled;

(*c*) Payment of any forfeited installment grant;

(*d*) Or knowingly aids or abets in buying or in any way disposing of the property of an applicant without the consent of the board of supervisors, shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than $500 or by imprisonment for not more than six months or both such fine and imprisonment.

SEC. 20. *Violations.*—Any person who knowingly violates any provision of this act for which no penalty is specifically provided shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than $500 or imprisoned for not more than six months or by both such fine and imprisonment.

SEC. 21. *Appropriation to the county.*—There is hereby appropriated out of any moneys in the State treasury not otherwise appropriated to each and every county and city and county maintaining or supporting aged persons who come within the provisions of this act, aid not in excess of $180 per annum for each such aged person maintained or supported by such county or city and county. Payments of such aid shall be made in the manner provided in section 15 of this act.

SEC. 22 (as amended by Acts of 1931, ch. 608). *Construction of act.*—Nothing in this act shall be construed as repealing any other act or part of an act providing for the support of the poor except in so far as inconsistent therewith, and provisions of this act shall be construed as an additional method of supporting and providing for the aged poor. This act shall be liberally construed. If any por-

tion of this act shall for any reason be adjudged by any court of competent jurisdiction to be invalid or unconstitutional, such judgment shall not affect, impair, or invalidate the remainder of this act.

SEC. 23 (as amended by Acts of 1931, ch. 608). *Title of act.*—This act may be cited as the old-age security act of the State of California.

(Approved May 28, 1929.)

Municipal Housing for the Aged in England

ACCORDING to a report of March 21, 1931, from William F. Doty, American consul at Newcastle-on-Tyne, England, the city council of that place has undertaken the erection of homes for aged people. Contract has been let for the erection of nearly one hundred 2-room bungalows, which are to be built around a small park away from traffic.

It is expected that the rents of these dwellings will be about 5s. 11d. ($1.44) per week.

Another municipal settlement for the same class of people will, it is reported, be undertaken in another part of Newcastle as soon as a suitable site can be found.

INSURANCE AND BENEFIT PLANS

Group Insurance

AN ARTICLE on group insurance in the May issue of The Annals of the American Academy of Political and Social Science, by William J. Graham, vice president of the Equitable Assurance Society of the United States, shows the tendencies in group-insurance coverage which have developed during the past five years.

Group insurance as first planned and sold was exclusively life insurance and it was not until fairly recently that companies were ready to issue other kinds of insurance on the group plan. To-day group insurance covers group life, group accident and health, group accidental death and dismemberment insurance, and group annuities. The eight leading group-writing companies in the United States reported that the premium income for all forms of group insurance was slightly over $150,000,000 in 1931, of which one-third was received for coverages other than group life, while five years earlier less than 1 per cent of the premiums paid was for such coverages.

Although, theoretically, group insurance is directly influenced by conditions relating to employment, it is a matter of fact that in 1931, when the numbers employed and the wages were greatly reduced from the peak period reached during the preceding few years, every form of group insurance had maintained and increased its premium income. This is in part due to the popularity of this kind of insurance and the reluctance of both employer and employee to give it up; but in view of the fact that workmen's compensation premiums based directly on the size of the pay rolls have shown an estimated shrinkage of 25 per cent, it is necessary to seek a further explanation. It is said that probably the chief factor in the favorable showing of group insurance as compared with workmen's compensation is the present system of staggering employment in order to furnish a maximum amount of employment at shorter hours instead of laying off large numbers and furnishing nearer full-time employment to a smaller number. Because of the fact that under this system of staggered employment a large number are retained on the pay roll, even at reduced wages, it is possible to continue the group insurance at the full face amount. The insurance is often continued under these circumstances in cases in which the entire premium is paid by the employer or in which there is a temporary shutdown of the plant. This serves to protect the employees and helps to keep the organization together during the period of the shutdown. If, as is more common in the plans, the employees contribute, it appears that the insurance is so valued by them that they manage to maintain their payments. There has been a tendency also, where reductions have been made in the wage or salary classifications, to continue the insurance at the maximum figure.

The growth in the amount of group life insurance written during the last five years has been remarkable. The amount in force in 1926 was $5,425,987,646. In 1931 this had increased to approximately $10,000,000,000, or about 84 per cent while the increase in the number of employers taking this means of protecting their employees in the same period amounted to 171 per cent, the number of master policies in effect in 1926 and 1931 numbering approximately 14,000 and 38,000, respectively. The number of employees protected by the insurance in 1931 was more than 6,500,000, an increase of about 2,000,000 over the number covered in 1926. The insurance per employee averaged $1,200 in the earlier year and about $1,540 in 1931. This increase in the average amount is due to three factors: (1) The provision in many plans that the amount of insurance per employee shall increase with years of service; (2) the increase in the number of contributory plans, which allow larger amounts of insurance than the employer alone was able to afford; and (3) an increase from $10,000 to $20,000 in the maximum amount allowed any one employee by the insurance companies.

There have been quite decided changes in the mortality and morbidity experience in group insurance. Reports available for six of the leading companies which carry 75 per cent of this type of insurance show that the ratio of actual to expected deaths increased in the period 1926 to 1930 from 92 to 96 per cent. A much greater increase occurred, however, in the claims for total and permanent disability. During the same period the ratio of actual to expected total and permanent disability claims under group life contracts increased from 94 to 158 per cent. A comparison of the relationship between the amounts paid in death claims and in total and permanent disability claims and the premium income shows that the ratio of death claims as reported by the eight leading insurance companies ranged from 64 to 70 per cent in the 5-year period 1926 to 1930, with the 1930 ratio of 68 about the 5-year average, while there was a disproportionate increase in the total and permanent disability claims ranging from 7 per cent in 1926 to 12 per cent in 1930. This increase is said to be the effect of the liberal interpretations of the disability clause by insurance companies, the greater attention paid by employers and employees to these provisions under group insurance, and the increasing difficulty insurance companies find in contesting claims which they do not regard as just. As a result of the steady increase in such claims, serious consideration is being given by the companies to restricting the payment of these benefits.

Coverages other than Group Life

Under the group accident and health provisions, weekly benefits are paid in cases of temporary or permanent total disability due to accident and disease. Such insurance may be issued on the noncontributory plan, in which the employer pays the entire cost; on the contributory plan, in which the employer and employee share the cost; or, departing from group life rules, with the employee paying the entire cost. In the contributory plans at least 75 per cent must participate if there are 50 or more eligible employees. If there are less than 50 eligible employees, this percentage fluctuates between 75 and 85 per cent, depending upon the number of employees, with a minimum

of eligible employees fixed at 25. No medical examination is required if the employee accepts the plan within 31 days after becoming eligible. In general the premium rate is not affected by the age distribution of the employees, but is subject to increase if the proportion of female lives exceeds 10 per cent of the whole. This type of insurance usually covers nonoccupational accidents only, industrial accidents being ordinarily covered by the workmen's compensation laws, although it may be extended to supplement the payments under workmen's compensation. The amount of the benefit is generally based on the employee's salary and the employees, are, therefore, classified according to salary groups. The benefits in any class are limited to 66⅔ per cent of the maximum salary, or 75 per cent of the minimum salary in each class, whichever is the smaller, and the maximum benefit period is ordinarily limited to 13, 26, or 52 weeks. The maximum benefit is fixed at $40 per week. The high morbidity rate found among the older employees has so increased the cost of this insurance that the leading group-writing companies have decided that beginning June 1, 1932, no employees will be insured for these risks after reaching the age of 70 and that insurance will automatically be terminated upon reaching that age.

Accidental death and dismemberment insurance is written only in connection with group life or group accident and health insurance. The benefits are fixed in accordance with a schedule of rates for different bodily injuries incurred through external, violent, and accidental means. In general, there is a maximum benefit of $5,000. This type of insurance corresponds to the double indemnity of ordinary life insurance.

Group annuities have been developed as a result of the realization by employers of the necessity of providing some form of pension for the superannuated worker. Pension plans have not been general in industry and those which have been adopted have not generally been on a financially sound basis nor have they been in the nature of a contract on which the employee could depend. As a result, group annuity plans based on a joint contribution by the employer and the employee, with the insurance company as a guarantor of the promises and funds, are meeting with increasing favor in industry. Under these plans employees are guaranteed the return of their money at a specified minimum interest rate, and they benefit both through their own savings and the employer's contributions for their old-age security. The life insurance companies are taking up the writing of group annuities in increasing number. It is estimated that there were only about 20 group annuity contracts in force in 1926 whereas at the present time there are more than 200, most of which were written within the past two years. Many of these contractual plans cover only part of the liability since it is not often practicable to finance a system which covers not only future responsibilities but also payments for past service and for the pensions already in force. In such cases the aim is to meet the situation as far as possible with ultimate complete coverage the goal to be attained.

In the past, pensions have practically always been paid for by the employer alone, but practically all of the newer contractual plans are on a contributory basis. The group annuity contracts fix a normal retirement age, usually at 65 for men and 60 for women, but permit optional retirement at earlier ages with correspondingly reduced incomes. The retirement income is usually fixed at a certain

percentage of the salary multiplied by the number of years of service and is payable monthly during the lifetime of the retired employee. Employees usually are permitted to take an adjusted retirement income which pays a smaller amount but is continued after death to a chosen beneficiary.

Canadian Trade-Union Benefits, 1931

AMONG the 25 Canadian central labor bodies, the 11 listed in the accompanying table reported the payment in 1931 of $75,440 in various benefits—an increase of $8,504 as compared with the amounts reported by 10 organizations for the preceding year:[1]

BENEFITS PAID BY CANADIAN CENTRAL LABOR ORGANIZATIONS IN 1931

Name of organizations	Amounts disbursed for benefit			
	Death benefits	Strike benefits	Sick and accident benefits	Other benefits
Amalgamated Carpenters of Canada	$500			
Canadian Brotherhood of Railway Employees	10,057		[1] $5,437	$350
Canadian Carpet Weavers' Beneficial Association	145			
Canadian Electrical Trades Union	1,760	$2,290		
Dominion Railway Mail Clerks' Federation	[2] 32,300			
Industrial Union of Needle Trades Workers of Canada		2,800		
Mine Workers' Union of Canada		5,713		
Provincial Federation of Ontario Fire Fighters	10,815			
Saskatchewan Brotherhood of Steam and Operating Engineers				50
United Postal Employees of Canada	500			
Vancouver and District Waterfront Workers' Association	2,040			683
Total	58,117	10,803	5,437	1,083

[1] Includes disability benefits of $446.
[2] Includes total disability benefits of $3,250.

During 1931 the sum of $543,191 was reported disbursed by 943 local branch unions in the Dominion for the different classes of benefits indicated below:

Death benefits	$112,151
Unemployed benefits	167,432
Strike benefits	10,235
Sick and accident benefits	176,059
Other benefits	77,314
Total	[2] 543,191

The above total exceeded by $64,030 the sum reported paid out for benefits by 828 local unions in 1930.

The international labor organizations operating in Canada reported an expenditure of $26,856,874 for benefits in 1931. The major portion of this sum, however, was not disbursed in the Dominion.

[1] Canada. Department of Labor. Twenty-first annual report on labor organization in Canada (for the calendar year 1931). Ottawa, 1932, pp. 244, 247.
[2] In addition to disbursements for benefits by central organizations.

HEALTH AND INDUSTRIAL HYGIENE

Nitrocellulose Lacquers and Their Hazards

AN ARTICLE [1] in a recent issue of The Industrial Bulletin, published by the New York Department of Labor, describes the composition of nitrocellulose lacquers and shows the relative hazards of the different constituents.

The term lacquer was first applied to oriental varnishes containing resin from the lac tree, found in the East Indies, but the term is at present generally applied to coating materials containing a nitrocellulose base, while the earlier types are given such names as "Chinese" lacquer, or "Pekin" lacquer. The general use of nitrocellulose or pyroxylin lacquers for spray painting and dipping has revolutionized the painting industry and has resulted in a change in working conditions with new health hazards and possible fire hazards from the volatile ingredients.

The ordinary lacquer contains five basic parts, having the following uses in the production of the lacquer: (*a*) Nitrocellulose, forming about 10 per cent of the lacquer, gives a waterproof quality, hardness, and durability; (*b*) solvents and diluents, 77 per cent, dissolve the nitrocellulose and gums and give quick drying properties; (*c*) gums or resins, 5 per cent, thicken the lacquer and increase its adhesive properties; (*d*) softeners or "plasticisers," 5 per cent, prevent brittleness; (*e*) pigments or coloring materials, 3 per cent, give color and add to the durability of the coating. It is seen from the percentages given for the different materials that the volatile ingredients form about 77 per cent, by weight, of the material and the amount of volatile matter is still further increased before use by the addition of other solvents or diluents of the same nature, called "thinners," in the proportion of 1, 2, or 3 parts of thinner to 1 part of lacquer.

Nitrocellulose, prepared by treating cotton or some other form of cellulose with nitric acid, is made up in different types of compounds which vary as to solubility, viscosity, and nitrogen contents. These different types of nitrocellulose are used for coating different kinds of materials. They are highly flammable, are unstable, and if subjected to high temperatures, as by being placed on hot steam pipes, are liable to spontaneous ignition. The danger of fire forms the principal hazard from the nitrocellulose.

The pigments in most lacquers do not form a special hazard as they are free of lead, with the possible exception of the yellow, green, and orange lacquers, and some metal primers and surfacers. Some of the more common pigments in use are zinc oxide, titanium oxide, whiting, barium sulphate, aniline lake colors, aluminum or bronze powders, and Prussian blue.

[1] New York. Department of Labor. The Industrial Bulletin, April, 1932, pp. 223-225: "Lacquers and Their Hazards," by William J. Burke.

The gums and resins most used are rosin, elemi, dammar, copal, kauri, and ester resins. These products offer no industrial hazard. "Plasticizers" or softeners such as the nondrying castor, or rapeseed oils, or high boiling phosphate, phthalate or tartrate esters are practically nonvolatile and are also considered free from health hazards.

The solvents and diluents in lacquers present the chief hazards to be found in the use of these coating products. The principal solvents used are: Acetone, amyl acetate, butyl acetate, ethyl acetate, ethylene glycol mono-ethyl ether, ethylene glycol mono-methyl ether, ethylene glycol mono-ethyl ether acetate, iso amyl acetate, iso propyl acetate, methyl acetate, methyl oxybutrate, pentacetate, secondary butyl acetate. The diluents used include amyl alcohol, wood alcohol, denatured ethyl alcohol, benzol, butyl alcohol, petroleum naphtha, secondary butyl alcohol, toluol, and xylol.

The solvents are mainly esters produced by the combination of the various alcohols with acetic acid. In general these liquids are lighter than water, colorless, volatile, varying in boiling point from about 134° F. to 338° F. and the majority of them have a choking effect when breathed. The hydrocarbons and alcohols are diluents and in general are like the solvents, readily volatile liquids, which are colorless, lighter than water, and vary in boiling point. The diluents are considered the most harmful of the different constituents of the lacquers. Until a few years ago benzol was the principal diluent, but with an understanding of its extreme toxicity it has been largely replaced by others, the principal one in use now being petroleum naphtha. However, all lacquer vapors are toxic, or at least narcotic, if inhaled in a sufficiently concentrated state for a long enough period of time.

Cadmium Poisoning

A STUDY of cadmium poisoning, involving considerable animal experimentation, made by Dr. Leon Prodan at the Harvard School of Public Health, covers the history and uses of cadmium and its pathologic effects as determined by the experiments carried out by the writer. The results of the study were published in the April and May issues of The Journal of Industrial Hygiene.

Although cases of cadmium poisoning were reported more than 70 years ago, extensive industrial use of cadmium did not develop until after the World War when cadmium plating was introduced. Cadmium occurs usually with zinc and until 1817, at which time the element cadmium was discovered, no distinction was made between the two metals. It was not until 1867 that the first work of importance on cadmium poisoning appeared. Up to the time of the present study, attempts by investigators to produce cadmium poisoning in animals have been made generally by oral administration of cadmium or by subcutaneous or intravenous injections, although all the cases of cadmium poisoning reported in the literature on industrial poisoning have occurred through absorption through the respiratory system.

Cadmium is a white metal, having a bluish tinge and a bright luster, which is capable of taking a high polish. It is harder than tin but softer than zinc and is insoluble in water but soluble in acids. Upon being heated in the air it burns readily and gives off a brown fume of

cadmium oxide. The principal compounds of cadmium are the oxide, sulphate, sulphide, chloride, iodide, and bromide. Cadmium does not occur in nature in an uncombined condition and is present in only one mineral in any considerable quantity. It is nearly always found in relatively small quantities in zinc ores, however, and is a by-product in the reduction of these ores. Cadmium is used very little as a metal but is used as a constitutent in many alloys with low melting point for the preparation of amalgams and the preparation of its salts. Cadmium plating is in several respects superior to nickel and other metal plating. In addition to the use of cadmium for plating, it is used in the manufacture of alkaline storage batteries, standard cells (as mercury-cadmium alloy), high temperature resistors, and cadmium vapor lamps. It is also used in certain pigments called lithopones.

The principal health hazards are found in the manufacture of cadmium and the handling of the compounds; these hazards arise in the processes which produce exposure to dust and fumes. It is not known yet how great a hazard is presented by plating after the cadmium is in solution. So far, no effect of the solution has been observed except that upon coming in contact with the skin it causes the skin to turn black.

Prior to the present study the published results regarding experimental cadmium poisoning showed that relatively small doses were fatal to various experimental animals, and that the metal had a direct paralyzing effect on the central nervous system and on the vasomotor system, induced vomiting, and had a general toxic effect when given orally or introduced into the general circulation. When cadmium is taken into the body, the experiments also showed, it has a tendency to be stored in the liver and kidneys, and its elimination by way of the kidneys and gastro-intestinal tract is very slow. When absorbed through the respiratory system, cadmium was found to cause pneumonia and sometimes pleural effusion. The blood showed a decrease in hemoglobin content in the feeding experiments and an increase when the cadmium was absorbed through the respiratory system, while in both cases there was an increase in the polymorphonuclear leukocytes.

As has been stated, cadmium used industrially is absorbed principally through the respiratory system and to a certain extent through the gastrointestinal tract. The most common form of poisoning is the acute respiratory form arising from exposure in manufacturing and handling cadmium compounds. Due to the emetic effect of cadmium, serious gastro-intestinal poisoning probably does not occur in man. Direct contact with cadmium does not cause poisoning, since it is not absorbed through the unbroken skin.

In the present experimental study the observations were made on cats which had been poisoned with cadmium oxide fumes, cadmium oxide dust, and cadmium sulphide dust. These compounds were chosen because of their frequent use and cadmium sulphide also because in some industries it is considered to be harmless. The cats were submitted to exposure of various quantities and for various lengths of time. They were killed at the conclusion of the experiments and the organs subjected to microscopic examination and chemical analysis.

125620°—32——5

It was found as a result of the experiments that inhalation of cadmium oxide fume or dust causes abundant salivation and an increase in the rate of respiration, appearing during the exposure or immediately after. Later the respiration becomes more labored and noisy and the animals refuse to eat or drink. As a result of exposure to high concentrations edema of the lungs develops, resulting in death. In exposure to smaller amounts it causes generalized pneumonia and broncho-pneumonia, emphysema, and atelectosis (imperfect expansion or collapse of the air vesicles of the lungs). The emphysema is in part due to the thickening of the alveolar walls, causing permanent damage and evidenced by the increased rate of respiration, and in part it is mechanical, being caused by the obstruction of the small bronchioles and alveolar ducts with cadmium oxide. Exposure to very small amounts of the oxide causes scars in the lungs but without subjective symptoms. The effect of cadmium oxide on the liver varies from a general granulation of the cells, as a minimum lesion, to a marked fatty infiltration of the cells from the central areas of the lobules as a maximum lesion, while there is a fatty infiltration of the cells of the kidneys. Following a short exposure, cadmium is found principally in the lungs, liver, and kidneys and later is stored chiefly in the liver, kidneys, and bones.

Symptoms resulting from exposure to cadmium sulphide dust did not develop until from 24 to 36 hours following exposure. These symptoms were vomiting, diarrhea, occasional salivation, and increased rate of respiration which was difficult and noisy. The lungs are usually the only organs affected by the cadmium sulphide, which causes generalized pneumonia and broncho-pneumonia accompanied by edema and the other lung symptoms caused by cadmium oxide. Owing to its greater insolubility, cadmium sulphide is found in smaller quantities in the liver and kidneys but in the case of both the oxide and the sulphide excretion takes place very slowly through the kidneys and the gastrointestinal tract. There are no definite blood changes.

Cadmium carbonate and cadmium phosphate were used in the feeding experiments, no difference being noted in the action of the two salts. When fed in large doses there was vomiting with salivation, and loss of appetite and vomiting also occurred for a short period following medium doses, but was not caused by small doses. The liver and kidneys were affected in much the same way as by poisoning through inhalation, but the cadmium was retained in these organs and the bones in relatively greater quantities.

The prevention of cadmium poisoning is dependent mainly upon efficient exhaust ventilation, but a test of one type of dust mask and one type of respirator carried out in connection with the study showed these particular appliances were efficient for low concentrations of the dust or fumes. However, persons who have developed pulmonary symptoms from exposure to cadmium, even though very mild, should not risk a second exposure.

Effects of Prolonged Exposure to Sulphur Dioxide

THE common use of sulphur dioxide as a refrigerant, with its consequent introduction into the household, together with the continual or frequent exposure of workers to sulphur dioxide in certain trades, notably the refrigerator industry, led to a study [1] designed to show the extent of residual or permanent damage, if any, occurring among persons subject to such exposures. The study was carried out in the factory of one of the large manufacturers of electric refrigerators, the investigation being supported by and receiving the fullest cooperation of the company. Conditions for the study were found to be highly satisfactory since there was a large number of workers who had had long exposure to a known basic concentration of the gas as well as frequent exposures to high concentrations for short periods. A control group of men whose ages and general conditions of work and life were similar to those selected for study was available from other departments of the plant in which there was no exposure to the sulphur dioxide.

One hundred subjects were chosen for examination on the basis of severity and duration of exposure, 47 of whom had had from 4 to 12 years of exposure. The majority of these workers came from the sulphur storage and distributing department, the refrigerating unit charging department, and the repair department. The control group, consisting of 100 men, was chosen from the assembling departments, tool and punch-press rooms, carpenter shop, and shipping department, there being no exposure in these departments to sulphur dioxide or to other harmful materials such as paints, lacquers, and metallic dusts. The ages of the men in the two groups were approximately the same.

The charging department, from which a large proportion of the exposed subjects were taken, had had an effective ventilating system and a system of air analysis since 1927, and since that time the concentration of gas in the atmosphere had been lower and subject to smaller fluctuations. An analysis of the air of this room during August, 1929, showed a range of about 8 to 45 parts per million parts of air, while in the winter months when the windows are closed the concentrations, under present conditions, are somewhat higher. The average concentration is also increased during periods of rush production and when inexperienced workers are being trained. The concentrations are generally higher in the storage and distributing department than in the charging department, with an average of about 30 parts per million. In the charging and discharging departments and particularly in the repair department there is liability, also, to brief but temporarily unendurable exposure to sulphur dioxide from which the operator is obliged to escape.

The two groups of workers were subjected to a careful individual and general study, with especial emphasis upon conditions resulting from the sulphur dioxide exposure. There was little variation between the exposed and control groups as regards the means established for age, height, weight, and years in the plant, showing that the control group could be considered as exceptionally well chosen, the only

[1] The Journal of Industrial Hygiene, May, 1932, pp. 159–173: "On the Effects of Prolonged Exposure to Sulphur Dioxide," by Robert A. Kehoe, Willard F. Machle, Karl Kitzmiller, and T. J. LeBlanc.

significant difference between the two groups being that the control group had been employed in the industry on the average a considerably longer time.

Exposure to sulphur dioxide results generally in acclimatization, that is, the acquirement of the ability to endure the customary basic exposure without great increase in the initial symptoms. The time necessary for acclimatization varied considerably but in the exposed group it was found that about 80 per cent had become acclimatized. The symptoms among the exposed group were divided into three classes: Initial symptoms which developed before acclimatization, symptoms arising from the minimum or usual exposure either with or without acclimatization, and the symptoms arising from heavy exposure.

The initial symptoms are confined to the respiratory tract, the most frequent symptoms being irritation of the upper respiratory tract, followed by coughing, hemorrhage from the nose, constriction in the chest, and spitting of blood, the clinical importance of the symptoms being almost the exact reverse of the order in which the symptoms appear. A comparison of the general symptoms among the two groups showed that many symptoms had no significance but there was a significant increase among the exposed group of shortness of breath upon exertion, increased fatigability, altered sense of taste or smell, and increased sensitivity to other irritants.

It was found that exposure to the sulphur dioxide under the conditions prevailing in the plant produced two separate sets of symptoms, first, irritation of the upper respiratory tract, which is first acute, becoming subacute or chronic, and second, systemic symptoms of a mild type such as are associated with any type of increased acid absorption or production in the tissues. In this connection it is stated that "the high degree of correlation shown between the systemic symptoms and the frequency of severe exposures indicates that the human organism has a high degree of adaptability to a regular moderate exposure, and that it suffers no apparent injury from such an exposure. In the case of intense exposures, even though they occur frequently, there is no evidence of damage of a serious or a permanent type."

There was no evidence that the persistent chronic rhinitis and pharyngitis which was present in many of the exposed group caused the development of chronic disease of the lungs and bronchi and it was considered, from the absence of such results, that the irritation of the upper respiratory tract was not regularly associated with infectious processes but that the persistent "colds" reported by many of the subjects were not colds in the ordinary sense but a chronic catarrh due to chemical irritation.

The roentgenograms showed that there was no appreciable residual injury to the lungs and bronchi resulting from inhalation of the sulphur dioxide although there can be no doubt that there is injury to the pulmonary epithelium when high concentrations are inhaled. On the basis of the numbers examined and the variety of exposure to which they were subjected it was concluded that there is no appreciable health hazard in frequent or more or less continuous exposure to endurable concentrations of sulphur dioxide and that the effects of exposure to unendurable concentrations under conditions which allow of quick escape are negligible.

Effect of Sickness Insurance Upon Mortality Rates in Alsace-Lorraine

THE results of a study by Dr. Mosser of Mulhouse, published in the April issue of the Revue Philanthropique and noted in The Lancet (London), May 14 (pp. 1063, 1064), shows the favorable effects of the sickness insurance which has been in effect for about half a century in the Departments of Alsace and Lorraine. An earlier study by Dr. Mosser shows that in the period 1911–1921 the death rate for the two Departments was 156 per 10,000 inhabitants while for the whole of France it was 187. In the recent study, covering the period 1920 to 1929, the mortality rate for the three Departments recovered from Germany was 143 per 10,000 as compared with 173 for the whole of France. Since the latter figure includes the three Departments it is apparent that the difference between the mortality rates in the recovered Departments and the rest of France must be even greater than the figures suggest. A comparison of the infant mortality for the four-year period 1923–1926 shows practically the same differences, as the rate per 10,000 live births in the Department of the Upper Rhine, only, was 720 and the rate for the whole of France was 919. During this same period and in the same areas the death rates for persons over the age of 1 year were 125 and 157, respectively.

In considering the reasons for the lower rates in the two areas, various factors such as climate and rural and industrial distribution of the population have been taken into account and the conclusion has been reached that the more favorable rates in the sections having had sickness insurance for a long time are the result of the better curative and preventive measures provided under the sickness-insurance system. It is estimated that if the death rate of all of France could be reduced to that of the Upper Rhine there would be a saving of 130,000 lives a year, and Dr. Mosser points out that with the health conscience France is so vigorously cultivating at the present time there is every prospect of this goal being attained.

INDUSTRIAL ACCIDENTS

Regulation of Employment of Minors in Hazardous Trades

FOLLOWING a recommendation of the White House Conference on Child Health and Protection, a proposal was made that a committee of specially qualified persons be appointed to assist and cooperate with the Children's Bureau, United States Department of Labor, in assembling information to be used as a basis for the setting up of standards for the protection of children in occupational hazards.

This recommendation was based upon the realization by the conference of the fragmentary and incomplete information on the hazards of industries in which minors are employed.

Because State legislation on the subject has been to a large extent formulated with little reference to modern industrial conditions and with little consideration of even so much knowledge of occupational hazards as has been available the protection from industrial hazards afforded young workers is uneven and inadequate.

The revision of such legislation on a careful, scientific, and comprehensive basis was therefore recommended.

The committee appointed met in Washington, D. C., on May 24 to 26, inclusive, and tentatively approved certain standards. This committee included the following members: Cyril Ainsworth, safety engineer, American Standards Association, New York; Emma M. Appel, M. D., chief medical examiner, Vocational Guidance Bureau, Chicago Board of Education, Chicago, Ill.; Clara M. Beyer, director Industrial Division, U. S. Children's Bureau, Washington, D. C.; David Beyer, vice president, Liberty Mutual Insurance Co., Boston, Mass.; Alice Hamilton, M. D., Harvard University School of Public Health; John P. Meade, director Division of Industrial Safety, Department of Labor and Industries, Boston, Mass.; Courtenay Dinwiddie, general secretary National Child Labor Committee, New York; Martha Eliot, M. D., U. S. Children's Bureau, New Haven, Conn.; W. M. Graff, director, safety engineering division, National Bureau of Casualty and Surety Underwriters, New York; Emery R. Hayhurst, M. D., consulting hygienist, Columbus, Ohio; J. P. Leake, M. D., senior surgeon, in charge of Office of Industrial Hygiene, U. S. Public Health Service, Washington, D. C.; E. N. Matthews, consultant in industrial problems, U. S. Children's Bureau, Washington, D. C.; Beatrice McConnell, director, Bureau of Women and Children, Department of Labor and Industry, Harrisburg, Pa.; O. F. McShane, Industrial Commission of Utah, Salt Lake City, Utah; Frieda S. Miller, director, Bureau of Women in Industry, State Department of Labor, New York; Walter S. Paine, manager, engineering and inspection division, Aetna Life Insurance Co., Hartford, Conn.; Charles F. Sharkey, chief of law division, Bureau of Labor Statistics, U. S. Department of Labor, Washington, D. C.; Maude Swett, field director, Woman and Child Labor Department, State Industrial Commission, Milwaukee, Wis.; and Max Trumper, M. D., industrial toxicologist, Cynwyd, Pa.

Pennsylvania Safety Conference

MORE than 500 delegates registered at the annual Pennsylvania Safety Conference held at Harrisburg, Pa., on May 12 and 13, 1932, under the auspices of the State Department of Labor and Industry.

The meetings discussed the subject of safety through the prevention of accidents and industrial diseases. Among the papers at the accident-prevention session was one on The Visiting Inspector's Responsibility as Seen by the Plant Executive, prepared by Henry A. Reninger, of the Lehigh Portland Cement Co. Mr. Reninger stressed the point that industry has a right to demand competency in State inspectors and urged that the selection of such inspectors be made primarily on the basis of qualification and not upon political expediency or consideration. What Accident Analyses Show was the subject delivered by E. J. Kreh, manager of accident prevention, Philadelphia Co., of Pittsburgh. Other speakers at the opening session included J. M. Flynn, president of the Pennsylvania Manufacturers' Association, whose subject was The Manufacturers' Contribution to Statewide Safety; C. B. Auel, manager of the employees' service department, Westinghouse Electric & Manufacturing Co., on the subject, Is There an Accident-prone Employee?; and Frank Morrison, secretary of the American Federation of Labor, on The Worker's Interest in Safety Problems.

The afternoon session, presided over by Charlotte E. Carr, deputy secretary of labor and industry of Pennsylvania, considered the subject of safety through the prevention of industrial diseases. The principal speakers included Dr. Alice Hamilton, assistant professor of industrial medicine at Harvard Medical School, whose discourse treated the Industrial Poisonings in Pennsylvania, followed by Reuel C. Stratton, supervising chemical engineer, Travelers' Insurance Co., Industrial Health from the Standpoint of Plant Equipment; and John B. Andrews, Legislation for the Prevention of Occupational Disease.

The Secretary of Labor and Industry of Pennsylvania, A. M. Northrup, was in charge of the evening session, at which Governor Pinchot was the principal speaker. The governor announced a plan to name a commission of experts to study occupational diseases in the State. He said that "A careful, impartial, and scientific study should be made of the entire question before any legislation is drawn." The award of the Pennsylvania Manufacturers' Association safety plaque was made by the president of the association to the J. E. Baker Co., York, Pa., for the best record in reducing accidents.

The closing session of the conference consisted of open forums, at which the subject of safety from the viewpoint of accidents and health was considered. The discussions were led by Harry D. Immel, director of the State Bureau of Inspection, and John Campbell, director of the State Bureau of Industrial Standards, respectively.

LABOR LAWS

Anti-Injunction Laws in Labor Disputes

A FEDERAL anti-injunction law (Public Act No. 65) was approved on March 23, 1932. The purpose of this law, which is commonly referred to as the Norris-LaGuardia Act, is "to define and limit the jurisdiction of courts sitting in equity."

The subject has held the attention of the courts and the public generally for more than a quarter of a century. This interest has centered, in the Congress of the United States, for the past several years in the so-called Shipstead bill (S. 1482, 70th Cong.).[1] Prior to the introduction of this bill attempts had been made, at various sessions of the Congress, to curtail or restrict the use of court injunctions in labor disputes. The enacted law deals principally with the granting by the Federal courts of injunctions in labor disputes and the declaration that antiunion contracts are void and against public policy.

Before the President signed the bill he sought the advice and counsel of the Attorney General, as to whether there was any objection to its approval. While the Attorney General recommended its approval, he cited various objections based upon the alleged unconstitutionality of some of the provisions, among which he cited "those relating to contracts between employers and employees by which the latter agree not to be members of labor organizations and which are commonly called 'yellow-dog contracts'." While there were other aspects of the proposed law which have been considered unconstitutional, the Attorney General thought that it was of no avail to discuss these questions now as "they are of such a controversial nature that they are not susceptible of final decision by the executive branch of the Government, and no executive or administrative ruling for or against the validity of any provisions of this measure could be accepted as final. These questions are of such a nature that they can only be set at rest by judicial decision."[2]

The Federal anti-injunction law has no application to State courts, for the term "court of the United States," as defined, means "any court of the United States whose jurisdiction has been or may be conferred or defined or limited by act of Congress, including the courts of the District of Columbia." There are at the present time 12 States [3] which have already adopted somewhat similar anti-injunction laws in labor disputes.

The Federal law in brief provides as follows: Section 1 forbids any Federal court to issue an injunction except in accordance with the act.

---

[1] Copy of bill and substitute bill printed in the Labor Review, November, 1928, pp. 85–89.
[2] United States Daily, Mar. 24, 1932, p. 1.
[3] Arizona, Illinois, Kansas, Minnesota, Montana, New Jersey, North Dakota, Oregon, Pennsylvania, Utah, Washington, and Wisconsin.

Section 2 declares the public policy of the United States in labor disputes, and assures the employee's right to collective bargaining. Antiunion contracts are outlawed by section 3, and such contracts are made unenforceable in any Federal court. Sections 4 and 5 relate to the restrictions on the issuance of injunctions from doing certain acts either singly or in concert. Officers of associations are no longer held responsible for the unlawful acts of individuals, by section 6, while section 7 prescribes the procedure, namely, that no injunction shall be issued, except after a hearing of the testimony of witnesses in open court, with an opportunity for cross-examination, and only after the findings of fact by the court. By the provisions of section 8, an effort to settle disputes must be made before injunctive relief will be granted. Section 9 provides that when an injunction has been issued it shall include only a prohibition of such specific acts as have been expressly complained of and are expressly included in the findings of fact made by the court. Sections 10 and 11 provide for the right of appeal, and trial by jury. A demand for the retirement of a judge may be made by section 12, whenever an attack has been made upon his character or conduct, or if made elsewhere than in the presence of the court. Various definitions are set forth in section 13, while sections 14 and 15 contain the usual provision relating to the constitutionality of the act and the repeal of all conflicting acts.

History

A BRIEF chronological history may be of value in understanding the present status of this type of legislation. It is generally reported that the first injunction in the United States was issued in about 1883. It was not, however, until 1895, when the case of In re Debs was decided by the United States Supreme Court (158 U. S. 564) that the principle was firmly established that the power to issue injunctions and punish their violation, as for contempt, was inherent in the courts. A case of much importance to labor was the so-called Danbury Hatters' Case (Loewe *v.* Lawlor, 208 U. S. 274), decided in 1908. This case was brought under the Sherman Antitrust Act of July 2, 1890. The act provides among other things that "any person who shall be injured in his business or property by any other person or corporation by reason of anything forbidden or declared to be unlawful by this act may sue * * * and shall recover threefold the damages by him sustained * * *." Accordingly, a hat manufacturer of Danbury, Conn., recovered triple damages for losses due to a boycott of his goods in an interstate shipment.

While the Sherman Antitrust Act was held applicable to labor disputes shortly after its passage, it was not until the Danbury Hatters' Case that a damaging situation for labor loomed and agitation was then made to remedy the effects of the court decision. Finally, in 1914, the so-called Clayton Act was passed by the Congress of the United States. By the provisions of this act the labor of a human being was declared "not a commodity or article of commerce." Labor organizations were especially exempted from the antitrust laws by the Clayton Act in the following language (38 U. S. Stat. L. 731):

SECTION 6. * * * Nothing contained in the antitrust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations, instituted for the purposes of mutual help, and not having capital stock or conducted for profit, or to forbid or restrain individual members of such

organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations, or the members thereof be held or construed to be illegal combinations or conspiracies in restraint of trade, under the antitrust laws.

The Clayton Act, which sought to regulate the issue of injunctions, has been construed in several cases which showed the line that was drawn between the powers of the courts and the intent of Congress as expressed in the act. (Duplex Printing Press Co. *v.* Deering (254 U. S. 443); American Steel Foundry Co. *v.* Tri-City Trades Council (257 U. S. 184).) Other points passed upon by the courts are as follows:

(1) Legality of labor unions. (United Mine Workers *v.* Coronado Co. (259 U. S. 344, 386; 268 U. S. 295).)

(2) Legality of right to strike provided strike is lawful in purpose and method. (Truax *v.* Corrigan (257 U. S. 312, 327).)

(3) Interference with interstate commerce and the movement of the mails. (In re Debs (158 U. S. 564); United Leather Workers *v.* Herkert (265 U. S. 457); Industrial Association *v.* United States (268 U. S. 64); Anderson *v.* Shipowners' Association (272 U. S. 359).) (See also 259 U. S. 344 and 268 U. S. 295, above.)

(4) Injunctions in boycott cases. (Duplex Co. *v.* Deering (254 U. S. 443); Truax *v.* Corrigan (257 U. S. 312); and Bedford Co. *v.* Stone Cutters' Association (274 U. S. 37).) (See also Loewe *v.* Lawlor (208 U. S. 274 and 235 U. S. 522).)

(5) Injunctions in persuasive cases. (Hitchman Coal & Coke Co. *v.* Mitchell (245 U. S. 229).) (See also Adair *v.* United States (208 U. S. 161) and Coppage *v.* Kansas (236 U. S. 1).)

(6) Injunctions in picketing cases. (American Foundries *v.* Tri-City Council (257 U. S. 184); Truax *v.* Corrigan (257 U. S. 312).)

(7) Right of court to punish for contempt anyone who violates an injunction. (Gompers *v.* Bucks Stove & Range Co. (221 U. S. 418); Michaelson *v.* United States (266 U. S. 42).)

(8) Right of collective bargaining. (Texas & New Orleans Railroad Co. *v.* Brotherhood of Railway and Steamship Clerks (281 U. S. 548).)[4]

For additional information, reference is also made to a bibliography on injunctions in labor disputes published in the Monthly Labor Review for September, 1928 (pp. 201 to 220).

Constitutional Status of Anti-Injunction Laws

In 1903 California passed an act (ch. 235) to limit the meaning of the word "conspiracy" and also the use of "restraining orders" and "injunctions" as applied to disputes between employers and employees in the State of California. The statute provided that—

No agreement, combination, or contract by or between two or more persons to do or procure to be done, or not to do or procure not to be done, any act in contemplation or furtherance of any trade dispute between employers and employees in the State of California shall be deemed criminal, nor shall those engaged therein be indictable or otherwise punishable for the crime of conspiracy, if such act committed by one person would not be punishable as a crime, nor shall such agreement, combination, or contract be considered as in restraint of trade or commerce, nor shall any restraining order or injunction be issued with relation thereto.

The question of the constitutionality of this statute came before the Supreme Court of California in a labor case in which boycotting

[4] See Labor Review, October, 1929, p. 78.

and picketing were charged and in which it was maintained that an injunction was specifically forbidden by the California act. The court held that the law could not be construed as undertaking to prohibit a court from enjoining wrongful acts, and if such were the intent of the law it would be to that extent void because violative of the constitutional rights of liberty and protection. (Goldberg *v.* Stablemen's Union (1906) (149 Calif. 429, 86 Pac. 324).)

In a later case before the same court a decision was rendered in which it was said that—

> Not only would it be void as violative of one's constitutional right to acquire, possess, enjoy, and protect property, but as well would it be obnoxious to the Constitution in creating arbitrarily and without reason a class above and beyond the law, which is applicable to all other individuals and classes. * * * It would exempt trades-unions from the operation of the general laws of the land under circumstances where the same laws would operate against all other individuals, combinations, or associations. It is thus not only special legislation, obnoxious to the Constitution, but it still further violates the Constitution in attempting to grant privileges and immunities to certain citizens or classes of citizens, which, upon the same terms, have not been granted to all citizens. (Pierce *v.* Stablemen's Union (1909) (156 Calif. 70, 103 Pac. 324).)

In 1914 the Legislature of Massachusetts (ch. 778) enacted an anti-injunction law. This act came before the Supreme Court of Massachusetts in a case involving the relative rights of two labor unions. It was contended that the interference of one union with the employment of members of another union could not be enjoined. The supreme court denied this and held the act unconstitutional on the ground that, if the contention was correct, workmen would be excluded from the legal protection to which they are entitled, since if no injunction could be issued in their behalf workmen would be without protection of their right to labor while the property of the capitalist could be safeguarded by such proceedings. (Bogni *v.* Perotti (1916) (224 Mass. 152, 112 N. E. 853).) The act was later repealed.

Section 20 of the Clayton Act was before the Supreme Court in a case involving the secondary boycott in which an injunction had been granted restraining certain labor unions from maintaining a secondary boycott in New York to compel a Michigan manufacturer of printing presses to unionize his factory. The Supreme Court held that the secondary boycott was illegal and that the injunction had been properly granted. In its opinion the court said that "the emphasis placed on the words 'lawful' and 'lawfully,' 'peaceful' and 'peacefully,' and the references to the dispute and the parties to it, strongly rebut a legislative intent to confer a general immunity for conduct violative of the antitrust laws, or otherwise unlawful." (Duplex Co. *v.* Deering (1921) (254 U. S. 443, 473).)

In the same year, but in the following term of court, Mr. Chief Justice Taft delivered an opinion in a case involving section 20 of the Clayton Act in which an injunction had been granted enjoining, among other things, picketing of a plant in which a strike existed and said:

> It is clear that Congress wished to forbid the use by the Federal courts of their equity arm to prevent peaceable persuasion by employees, discharged or expectant, in promotion of their side of the dispute, and to secure them against judicial restraint in obtaining or communicating information in any place where they might lawfully be. This introduces no new principle into the equity jurisprudence of those courts. It is merely declaratory of what was the best practice

always. Congress thought it wise to stabilize this rule of action and render it uniform. (American Foundries *v.* Tri-City Council (1921) (257 U. S. 184, 203).)

The construction placed upon section 20 of the Clayton Act by the United States Supreme Court saved the constitutionality of the law. One week after the decision of the court in the Tri-City Council case, Mr. Chief Justice Taft delivered an opinion holding substantially the same provision, found in the Arizona statute unconstitutional and void, because of the construction placed upon it by the Arizona Supreme Court. The Supreme Court, speaking through the Chief Justice, said that the construction placed upon the words by the Arizona Supreme Court was as far from the meaning of section 20 of the Clayton Act as if they were in wholly different languages. The Supreme Court said that the effect of the ruling of the Arizona court under paragraph 1464 of the Arizona Code (Rev. Stat., 1913) was that "loss may be inflicted upon the plaintiffs' property and business by 'picketing' in any form if violence be not used, and that, because no violence was shown or claimed, the campaign carried on, as described in the complaint and exhibits, did not unlawfully invade complainants' rights," and that "a law which operates to make lawful such a wrong as is described in plaintiffs' complaint deprives the owner of the business and the premises of his property without due process, and can not be held valid under the fourteenth amendment." (Truax *v.* Corrigan (1921) (257 U. S. 312, 324, 328).)

The agitation for a Federal anti-injunction law arose from the belief that the provisions of the Clayton Act of 1914 (38 U. S. Stat. L. 730) had not been construed by the courts broadly enough to cover the general situation arising out of labor disputes. A complete text of the Federal anti-injunction law follows:

Federal Anti-Injunction Law

PUBLIC ACT NO. 65 (MARCH 23, 1932)

SECTION 1. *Jurisdiction of court.*—No court of the United States, as herein defined, shall have jurisdiction to issue any restraining order or temporary or permanent injunction in a case involving or growing out of a labor dispute, except in a strict conformity with the provisions of this act; nor shall any such restraining order or temporary or permanent injunction be issued contrary to the public policy declared in this act.

SEC. 2. *Declaration of policy.*—In the interpretation of this act and in determining the jurisdiction and authority of the courts of the United States, as such jurisdiction and authority are herein defined and limited, the public policy of the United States is hereby declared as follows:

Whereas under prevailing economic conditions, developed with the aid of governmental authority for owners of property to organize in the corporate and other forms of ownership association, the individual unorganized worker is commonly helpless to exercise actual liberty of contract and to protect his freedom of labor, and thereby to obtain acceptable terms and conditions of employment, wherefore, though he should be free to decline to associate with his fellows, it is necessary that he have full freedom of association, self-organization, and designation of representatives of his own choosing, to negotiate the terms and conditions of his employment, and that he shall be free from the interference, restraint, or coercion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection; therefore, the following definitions of, and limitations upon, the jurisdiction and authority of the courts of the United States are hereby enacted.

SEC. 3. *Antiunion contracts.*—Any undertaking or promise, such as is described in this section, or any other undertaking or promise in conflict with the public policy declared in section 2 of this act, is hereby declared to be contrary to the

public policy of the United States, shall not be enforceable in any court of the United States, and shall not afford any basis for the granting of legal or equitable relief by any such court, including specifically the following:

Every undertaking or promise hereafter made, whether written or oral, express or implied, constituting or contained in any contract or agreement of hiring or employment between any individual, firm, company, association, or corporation, and any employee or prospective employee of the same, whereby

(*a*) Either party to such contract or agreement undertakes or promises not to join, become, or remain a member of any labor organization or of any employer organization; or

(*b*) Either party to such contract or agreement undertakes or promises that he will withdraw from an employment relation in the event that he joins, becomes, or remains a member of any labor organization or of any employer organization.

SEC. 4. *Restriction on injunctions.*—No court of the United States shall have jurisdiction to issue any restraining order or temporary or permanent injunction in any case involving or growing out of any labor dispute to prohibit any person or persons participating or interested in such dispute (as these terms are herein defined) from doing, whether singly or in concert, any of the following acts:

(*a*) Ceasing or refusing to perform any work or to remain in any relation of employment;

(*b*) Becoming or remaining a member of any labor organization or of any employer organization, regardless of any such undertaking or promise as is described in section 3 of this act;

(*c*) Paying or giving to, or withholding from, any person participating or interested in such labor dispute, any strike or unemployment benefits or insurance, or other moneys or things of value;

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

(*e*) Giving publicity to the existence of, or the facts involved in, any labor dispute, whether by advertising, speaking, patrolling, or by any other method not involving fraud or violence;

(*f*) Assembling peaceably to act or to organize to act in promotion of their interests in a labor dispute;

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

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

(*i*) Advising, urging, or otherwise causing or inducing without fraud or violence the acts heretofore specified, regardless of any such undertaking or promise as is described in section 3 of this act.

SEC. 5. *Same; concerted action.*—No court of the United States shall have jurisdiction to issue a restraining order or temporary or permanent injunction upon the ground that any of the persons participating or interested in a labor dispute constitute or are engaged in an unlawful combination or conspiracy because of the doing in concert of the acts enumerated in section 4 of this act.

SEC. 6. *Responsibility for acts.*—No officer or member of any association or organization, and no association or organization participating or interested in a labor dispute, shall be held responsible or liable in any court of the United States for the unlawful acts of individual officers, members, or agents, except upon clear proof of actual participation in, or actual authorization of, such acts, or of ratification of such acts after actual knowledge thereof.

SEC. 7. *Notice and hearing.*—No court of the United States shall have jurisdiction to issue a temporary or permanent injunction in any case involving or growing out of a labor dispute, as herein defined, except after hearing the testimony of witnesses in open court (with opportunity for cross-examination) in support of the allegations of a complaint made under oath, and testimony in opposition thereto, if offered, and except after findings of fact by the court, to the effect—

(*a*) That unlawful acts have been threatened and will be committed unless restrained or have been committed and will be continued unless restrained, but no injunction or temporary restraining order shall be issued on account of any threat or unlawful act excepting against the person or persons, association, or organization making the threat or committing the unlawful act or actually authorizing or ratifying the same after actual knowledge thereof;

(*b*) That substantial and irreparable injury to complainant's property will follow;

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

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

(*e*) That the public officers charged with the duty to protect complainant's property are unable or unwilling to furnish adequate protection.

Such hearing shall be held after due and personal notice thereof has been given, in such manner as the court shall direct, to all known persons against whom relief is sought, and also to the chief of those public officials of the county and city within which the unlawful acts have been threatened or committed charged with the duty to protect complainant's property: *Provided, however,* That if a complainant shall also allege that, unless a temporary restraining order shall be issued without notice, a substantial and irreparable injury to complainant's property will be unavoidable, such a temporary restraining order may be issued upon testimony under oath, sufficient, if sustained, to justify the court in issuing a temporary injunction upon a hearing after notice. Such a temporary restraining order shall be effective for no longer than five days and shall become void at the expiration of said five days. No temporary restraining order or temporary injunction shall be issued except on condition that complainant shall first file an undertaking with adequate security in an amount to be fixed by the court sufficient to recompense those enjoined for any loss, expense, or damage caused by the improvident or erroneous issuance of such order or injunction, including all reasonable costs (together with a reasonable attorney's fee) and expense of defense against the order or against the granting of any injunctive relief sought in the same proceeding and subsequently denied by the court.

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

SEC. 8. *Effort to settle disputes.*—No restraining order or injunctive relief shall be granted to any complainant who has failed to comply with any obligation imposed by law which is involved in the labor dispute in question, or who has failed to make every reasonable effort to settle such dispute either by negotiation or with the aid of any available governmental machinery of mediation or voluntary arbitration.

SEC. 9. *Issuance based on facts.*—No restraining order or temporary or permanent injunction shall be granted in a case involving or growing out of a labor dispute, except on the basis of findings of fact made and filed by the court in the record of the case prior to the issuance of such restraining order or injunction; and every restraining order or injunction granted in a case involving or growing out of a labor dispute shall include only a prohibition of such specific act or acts as may be expressly complained of in the bill of complaint or petition filed in such case and as shall be expressly included in said findings of fact made and filed by the court as provided herein.

SEC. 10. *Appeals, security for costs.*—Whenever any court of the United States shall issue or deny any temporary injunction in a case involving or growing out of a labor dispute, the court shall, upon the request of any party to the proceedings and on his filing the usual bond for costs, forthwith certify as in ordinary cases the record of the case to the circuit court of appeals for its review. Upon the filing of such record in the circuit court of appeals, the appeal shall be heard and the temporary injunctive order affirmed, modified, or set aside with the greatest possible expedition, giving the proceedings precedence over all other matters except older matters of the same character.

SEC. 11. *Jury trial.*—In all cases arising under this act in which a person shall be charged with contempt in a court of the United States (as herein defined), the accused shall enjoy the right to a speedy and public trial by an impartial jury of the State and district wherein the contempt shall have been committed: *Provided,* That this right shall not apply to contempts committed in the presence of the court or so near thereto as to interfere directly with the administration of justice or to apply to the misbehavior, misconduct, or disobedience of any officer of the court in respect to the writs, orders, or process of the court.

SEC. 12. *Removal of judge.*—The defendant in any proceeding for contempt of court may file with the court a demand for the retirement of the judge sitting in the proceeding, if the contempt arises from an attack upon the character or conduct of such judge and if the attack occurred elsewhere than in the presence of the court or so near thereto as to interfere directly with the administration of justice. Upon the filing of any such demand the judge shall thereupon proceed no further, but another judge shall be designated in the same manner as is provided by law. The demand shall be filed prior to the hearing in the contempt proceeding.

SEC. 13. *Definitions.*—When used in this act, and for the purposes of this act—(*a*) A case shall be held to involve or to grow out of a labor dispute when the case involves persons who are engaged in the same industry, trade, craft, or occupation; or have direct or indirect interests therein; or who are employees of the same employer; or who are members of the same or an affiliated organization of employers or employees; whether such dispute is (1) between one or more employers or associations of employers and one or more employees or associations of employees; (2) between one or more employers or associations of employers and one or more employers or associations of employers or (3) between one or more employees or associations of employees and one or more employees or associations of employees; or when the case involves any conflicting or competing interests in a "labor dispute" (as hereinafter defined) of "persons participating or interested" therein (as hereinafter defined).

(*b*) A person or association shall be held to be a person participating or interested in a labor dispute if relief is sought against him or it, and if he or it is engaged in the same industry, trade, craft, or occupation in which such dispute occurs, or has a direct or indirect interest therein, or is a member, officer, or agent of any association composed in whole or in part of employers or employees engaged in such industry, trade, craft, or occupation.

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

(*d*) The term "court of the United States" means any court of the United States whose jurisdiction has been or may be conferred or defined or limited by act of Congress, including the courts of the District of Columbia.

SEC. 14. *Constitutionality.*—If any provision of this act or the application thereof to any person or circumstance is held unconstitutional or otherwise invalid, the remaining provisions of the act and the application of such provisions to other persons or circumstances shall not be affected thereby.

SEC. 15. *Repeal.*—All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

Laws Regulating Injunctions in Labor Disputes

IN THE following 12 States so-called "anti-injunction laws" have been enacted: Arizona, Illinois, Kansas, Minnesota, Montana, New Jersey, North Dakota, Oregon, Pennsylvania, Utah, Washington, and Wisconsin.

In four of the States (Kansas, Minnesota, Pennsylvania, and Wisconsin) the law specifically provides that no injunction shall be issued without previous notice and an opportunity to be heard in open court. The Wisconsin law (Acts of 1931, ch. 376) defines the public policy of the State relative to collective bargaining, and creates a new section relating to litigation growing out of the labor disputes and limiting the jurisdiction of courts sitting in equity. Section 268.23 concerns the conditions of issuance of injunctions and restraining orders. This section provides that no court shall have jurisdiction to issue an injunction in any case involving a labor dispute except after the testimony of witnesses in open court and with an opportunity for cross-examination.

Six States (Arizona, North Dakota, Oregon, Utah, Washington, and Wisconsin) have laws containing provisions similar to those con-

tained in section 20 of the Clayton Act already mentioned, and three other States (Illinois, Montana, and New Jersey) have laws which, although similar in many respects to the Clayton Act, differ in the exact wording of the law.

ARIZONA

CODE, 1928

SECTION 4286. *Injunctions, issuance of; exceptions.*—No restraining order or injunction shall be granted in any case between employer and employee, or between employees, or between persons employed and persons seeking employment, involving or growing out of a dispute concerning terms or conditions of employment, unless necessary to prevent irreparable injury to property or to a property right of the party making the application, for which injury there is no adequate remedy at law, and such property or property right must be described with particularity in the application, and no such restraining order or injunction shall prohibit any person or persons from terminating any relation of employment, or from ceasing to perform any work or labor, or from recommending, advising, or persuading others by peaceful means so to do; or from attending at or near a house or place where any person resides or works, or carries on business, or happens to be for the purpose of peacefully obtaining or communicating information, or of peacefully persuading any person to work or to abstain from working; or from ceasing to patronize or to employ any party to such dispute; or from recommending, advising, or persuading others by peaceful means so to do; or from paying or giving to or withholding from any person engaged in such dispute any strike benefits or other moneys or things of value; or from peaceably assembling at any place in a lawful manner and for lawful purposes; or from doing any act or thing which might lawfully be done in the absence of such dispute by any party thereto.

ILLINOIS

SMITH-HURD REVISED STATUTES, 1931 (CHAPTER 48)

SECTION 2a. No restraining order or injunction shall be granted by any court of this State, or by a judge or the judges thereof in any case involving or growing out of a dispute concerning terms or conditions of employment, enjoining or restraining any person or persons, either singly or in concert, from terminating any relation of employment or from ceasing to perform any work or labor, or from peaceably and without threats or intimidation recommending, advising, or persuading others so to do; or from peaceably and without threats or intimidation being upon any public street, or thoroughfare or highway for the purpose of obtaining or communicating information, or to peaceably and without threats or intimidation persuade any person or persons to work or to abstain from working, or to employ or to peaceably and without threats or intimidation cease to employ any party to a labor dispute, or to recommend, advise, or persuade others so to do.

KANSAS

GENERAL STATUTES, 1923

SECTION 60–1104. No injunction whether interlocutory or permanent in any case between any employer and employee, or between employers and employees, or between employees, or between persons employed and persons seeking employment, involving or growing out of a dispute concerning terms, or conditions of employment shall be issued without previous notice and an opportunity to be heard on behalf of the parties to be enjoined, which notice, together with a copy of the motion, petition, or other pleading upon which the application for such injunction will be based, shall be served upon the parties sought to be enjoined a reasonable time in advance of such application. * * *

MINNESOTA

ACTS OF 1929 (CHAPTER 260)

[This act amends section 4256, General Statutes, 1923, so as to read as follows:]

SECTION 4256. No restraining order or injunction shall be granted by any court of this State, or any judge or judges thereof in any case between an employer and employees [employee] or between employer and employees, or between

employees or between persons employed and persons seeking employment, involving or growing out of a dispute concerning terms or conditions of employment, except after notice and a hearing in court and shown to be necessary to prevent irreparable injury to property, or to a property right of the party making the application, for which injury there is no adequate remedy at law, and such property or property right must be described with particularity in the application, which must be in writing and sworn to by the applicant or by his agent or attorney: *Provided*, That a temporary restraining order may be issued without notice and hearing upon a proper showing that violence is actually being caused or is imminently probable on the part of the person or persons sought to be restrained: *And provided*, That in such restraining order all parties to the action shall be similarly restrained.

MONTANA

Revised Code, 1921

Section 9242. An injunction can not be granted * * *

8. In labor disputes under any other or different circumstances or conditions than if the controversy were of another or different character, or between parties neither or none of whom were laborers or interested in labor questions.

NEW JERSEY

Acts of 1926 (Chapter 207)

Section 1. No restraining order or writ of injunction shall be granted or issued out of any court of this State in any case involving or growing out of a dispute concerning terms or conditions of employment, enjoining or restraining any person or persons, either singly or in concert, from terminating any relation of employment, or from ceasing to perform any work or labor, or from peaceably and without threats or intimidation recommending, advising or persuading others so to do; or from peaceably and without threats or intimidation being upon any public street or highway or thoroughfare for the purpose of obtaining or communicating information, or to peaceably and without threats or intimidation persuade any person or persons to work or abstain from working, or to employ or to cease to employ any party to a labor dispute, or to peaceably and without threats or intimidation recommend, advise or persuade others so to do, provided said persons remain separated one from the other at intervals of ten paces or more.

NORTH DAKOTA

Compiled Laws, Supplement, 1913–1925

Section 7214a1. *Injunctions restricted.*—No restraining order or injunction shall be granted by any court of this State, any judge or judges thereof in any case involving or growing out of a dispute concerning terms or conditions of employment, unless necessary to prevent irreparable injury to property or to a property right of the party making the application, for which injury there is no adequate remedy at law, and such property or property right must be described with particularity in the application, which must be in writing and sworn to by the applicant or by his agent or attorney.

Sec. 7214a2. *Strikes.*—No restraining order or injunction shall prohibit any person or persons whether singly or in concert from terminating any relation of employment or from ceasing to perform any work or labor or from recommending, advising, or persuading others so to do; or from attending at any place where any person or persons may lawfully be, for the purpose of obtaining or communicating information, or from persuading any such person to work or to abstain from working; or from ceasing to patronize any party to such dispute; or from recommending, advising, or persuading others so to do; or from paying or giving to, or withholding from any person engaged in such dispute, any strike benefits or other moneys or things of value; or from assembling in a lawful manner, and for lawful purposes; or from doing any act or thing which might lawfully be done in the absence of such dispute by a single person; nor shall any of the acts specified in this section be considered or held to be illegal or unlawful in any court in this State.

SEC. 7214a3. *Suits at law.*—In all cases involving the violation of the contract of employment, either by the employer or the employee where no irreparable damage is about to be committed upon the property or property rights of either, no injunction shall be granted, but the parties shall be left to their remedy at law.

OREGON

CODE, 1930

SECTION 49–902. *Injunctions, limitation.*—No restraining order or injunction shall be granted by any court of this State, or any judge or judges thereof in any case between an employer and employee or between employer and employee [employees] or between employees or between persons employed and persons seeking employment, involving or growing out of a dispute concerning terms or conditions of employment, unless necessary to prevent irreparable injury to property, or to a property right of the party making the application, for which injury there is no adequate remedy at law, and such property or property rights must be described with particularity in the application, which must be in writing and sworn to by the applicant or his agent or attorney.

SEC. 49–903. *Injunctions, exceptions.*—No restraining order or injunction shall prohibit any person or persons, whether singly or in concert, from terminating any relation of employment or from ceasing to perform any work or labor; or from recommending, advising or persuading others by peaceful means so to do; or from attending at any place where any person or persons may lawfully be, for the purpose of peacefully obtaining or communicating information, or from peacefully persuading any such person to abstain from working; or from ceasing to patronize any party to such dispute; or from recommending, advising or persuading others by peaceful or lawful means so to do; or from paying or giving to, or withholding from, any person engaged in such dispute, any strike benefits or other moneys or things of value; or from peaceably assembling in a lawful manner, and for lawful purposes; or from doing any act or thing which might lawfully be done in the absence of such dispute by a single individual; or [nor] shall any of the acts specified in this section be considered or held to be illegal or unlawful in any court of the State.

PENNSYLVANIA

ACTS OF 1931 (ACT NO. 311, p. 926)

SECTION 2. *Injunctions, limitation.*—No court nor any judge or judges thereof shall have jurisdiction to issue a temporary or permanent injunction in any case involving or growing out of a labor dispute, as herein defined, except after hearing the testimony of witnesses in open court (with opportunity for cross-examination) in support of the allegations of a complaint made under oath and testimony in opposition thereto, if offered, and except after findings of all the following facts by the court or judge or judges thereof: * * *.

UTAH

COMPILED LAWS, 1917

SECTION 3651. *Organizations unlawful.*—It shall not be unlawful for working men and women to organize themselves into, or carry on, labor unions for the purpose of lessening the hours of labor, increasing the wages, bettering the conditions of the members of such organization, or carrying out their legitimate purposes as freely as they could do if acting singly.

SEC. 3652. *Injunctions limited.*—No restraining order or injunction shall be granted by any court of the State of Utah, or a judge or the judges thereof, in any case between an employer and employees, or between employers and employees or between employers, or between persons employed and persons seeking employment, involving, or growing out of, a dispute concerning terms or conditions of employment, unless necessary to prevent irreparable injury to property, or to a property right of the party making the application, for which injury there is no adequate remedy at law, and such property or property rights must be described with particularity in the application, which must be in writing and sworn to by the applicant, or by his agent or attorney.

SEC. 3653. *What may not be prohibited.*—And no such restraining order or injunction shall prohibit any person or persons, whether singly or in concert, from terminating any relation of employment, or from ceasing to perform any

work or labor, or from recommending, advising, or persuading others by peaceful means so to do; or from attending at any place where such person or persons may lawfully be, for the purpose of peacefully obtaining or communicating information, or from peacefully persuading any person to work or to abstain from working; or from ceasing to patronize or to employ any party to such dispute, or from recommending, advising, or persuading others by peaceful means and lawful means so to do; or from paying or giving to or withholding from any person engaged in such dispute any strike benefits or other moneys or things of value; or from peaceably assembling in a lawful manner, and for lawful purposes; or from doing any act or thing which might lawfully be done in the absence of such dispute by any party thereto; nor shall any of the acts specified in this paragraph be considered or held to be violations of the law of the State of Utah.

SEC. 3654. *Contempts.*—Whenever it shall be made to appear to any district court or judge thereof, or to any judge therein sitting, by the return of a proper officer on lawful process, or upon the affidavit of some creditable person, or by information filed by any district attorney, that there is reasonable ground to believe that any person has been guilty of such contempt, the court or judge thereof, or any judge therein sitting, may issue a rule requiring the said person so charged to show cause upon a day certain why he should not be punished therefor, which rule, together with a copy of the affidavit or information, shall be served upon the person charged, with sufficient promptness to enable him to prepare for and make return to the order at the time fixed therein. If upon or by such return, in the judgment of the court the alleged contempt be not sufficiently purged, a trial shall be directed at a time and place fixed by the court: *Provided, however*, That if the accused, being a natural person, fail or refuse to make return to the rule to show cause, an attachment may issue against his person to compel an answer, and in case of his continued failure or refusal, or if for any reason it be impracticable to dispose of the matter on the return day, he may be required to give reasonable bail for his attendance at the trial and his submission to the final judgment of the court. Where the accused is a body corporate, an attachment for the sequestration of its property may be issued upon like refusal or failure to answer.

SEC. 3655. *Trial.*—In all cases within the purview of this chapter, such trial may be by the court, or, upon demand of the accused, by a jury; in which latter event the court may impanel a jury from the jurors then in attendance, or the court or the judge thereof in chambers may cause a sufficient number of jurors to be selected and summoned, as provided by law, to attend at the time and place of trial, at which time a jury shall be selected and impaneled as upon a trial for misdemeanor; and such trial shall conform, as near as may be, to the practice in criminal cases prosecuted by indictment or upon information.

SEC. 3656. *Judgment.*—If the accused be found guilty, judgment shall be entered accordingly, prescribing the punishment, either by fine or imprisonment, or both, in the discretion of the court. Such fine shall be paid to the State of Utah, or to the complainant, or other party injured by the act constituting the contempt, or may, where more than one is so damaged, be divided or apportioned among them as the court may direct, but in no case shall the fine to be paid to the State of Utah exceed, in case the accused is a natural person, the sum of $1,000, nor shall such imprisonment exceed the term of six months: *Provided*, That in any case the court or a judge thereof may, for good cause shown, by affidavit, or proof taken in open court or before such judge and filed with the papers in the case, dispense with the rule to show cause, and may issue an attachment for the arrest of the person charged with contempt; in which event such person, when arrested, shall be brought before such court or a judge thereof without unnecessary delay, and shall be admitted to bail in reasonable penalty for his appearance to answer to the charge or for trial for the contempt; and thereafter the proceedings shall be the same as provided herein in case the rule had issued in the first instance.

SEC. 3657. *Labor not a commodity.*—The labor of a human being is not a commodity or article of commerce. Nothing contained in the antitrust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations, instituted for the purpose of mutual help, and not having capital stock or conducted for profit, or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the antitrust laws.

SEC. 3658. *Jury trial.*—In all cases where persons are charged with contempt of court for the violation of writs of injunction, issued within the purview of this

chapter, unless such contempt be committed in the immediate presence of the court, the accused shall have the right to a jury trial upon demand, and, in case a jury trial be demanded, such jury shall be selected and impaneled as in criminal cases, and the trial shall conform as nearly as may be to the district court practice in criminal cases.

WASHINGTON

Acts of 1919 (Chapter 185)

Section 1. *Unions lawful.*—It shall be lawful for working men and women to organize themselves into, or carry on labor unions for the purpose of lessening the hours of labor or increasing the wages or bettering the conditions of the members of such organizations; or carry out their legitimate purposes by any lawful means.

Sec. 2. *Injunctions restricted.*—No restraining order or injunction shall be granted by any court of this State, or any judge or judges thereof in any case between an employer and employee or between employer and employees or between employees or between persons employed and persons seeking employment involving or growing out of a dispute concerning terms or conditions of employment, unless necessary to prevent irreparable damage to property or to a personal right or to a property right of the party making the application, for which injury there is no adequate remedy at law, and such petition must be in writing describing such damage or injury feared by the applicant, and sworn to by the applicant or his agent or attorney. No such restraining order or injunction shall prohibit any such person or persons, whether singly or in concert, from terminating any relation of employment or from ceasing to perform any work or labor; or from paying or giving to, or withholding from any person engaged in such dispute, any strike benefits or other moneys or things of value; or from doing any act or thing which might lawfully be done in the absence of such dispute by any party thereto; nor shall any of the acts specified in this section be considered or held to be illegal or unlawful in any court of the State.

Sec. 3. *Status of labor.*—The labor of a human being is not a commodity or article of commerce, and the right to enter into the relation of employer and employee or to change that relation except in violation of contract is a legal right. In all cases involving the violation of the contract of employment, either by the employee or employer where no irreparable damage is about to be done to the property, personal rights or property rights of either, no injunction shall be granted, but the parties shall be left to their remedy at law.

Sec. 4. *Indictments forbidden.*—No person shall be indicted, prosecuted, or tried in any court of this State for entering into or carrying on any lawful arrangement, agreement, or combination between themselves made with a view of lessening the number of hours of labor or increasing wages or bettering the conditions of working men and women, or for any lawful act done in pursuance thereof.

WISCONSIN

Statutes, 1931

Section 133.05. *Exemptions.*—Nothing contained in the antitrust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations, instituted for the purpose of mutual help, and not having capital stock or conducted for profit or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the antitrust laws. The labor of a human being is not a commodity or article of commerce.

Sec. 133.06. [Procedure at inquisition.]

Sec. 133.07. *Organization permitted; injunctions.*—(1) Working people may organize themselves into or carry on labor unions and other associations or organizations for the purpose of aiding their members to become more skillful and efficient workers, the promotion of their general intelligence, the elevation of their character; the regulation of their wages and their hours and conditions of labor, the protection of their individual rights in the prosecution of their trade or trades, the raising of funds for the benefit of sick, disabled, or unemployed members, or the families of deceased members, or for such other object or objects

for which working people may lawfully combine, having in view their mutual protection or benefit.

(2) No restraining order or injunction shall be granted by any court of this State, in any case between an employer and employees, or between employers and employees, or between employees, or between persons employed and persons seeking employment, involving or growing out of any dispute whatsoever concerning employment, unless necessary to prevent irreparable injury to property or to a property right of the party making the application, for which injury there is no adequate remedy at law, and such property or property right must be described with particularity in the application, which must be in writing and sworn to by the applicant, or by his agent or attorney. No such restraining order or injunction shall be granted except by the circuit court or by a court of concurrent jurisdiction in equity, and then only upon such reasonable notice of application therefor as a presiding judge of such court may direct by order to show cause, but in no case less than 48 hours, which shall be served upon such party or parties sought to be restrained or enjoined as shall be specified in such order to show cause.

(3) No such restraining order or injunction shall prohibit any person or persons, whether singly or in concert, from terminating any relation of employment, or from ceasing to perform any work or labor, or from recommending, advising, or persuading others by peaceful means so to do; or from attending at any place where any such person or persons may lawfully be, for the purpose of peacefully obtaining or communicating information, or from peacefully persuading any person to work or to abstain from working; or from ceasing to patronize or to employ any party to such dispute, or from recommending, advising, or persuading others by peaceful and lawful means so to do; or from paying or giving to, or withholding from, any person engaged in such dispute, any strike benefits or other moneys or things of value; or from peaceably assembling in a lawful manner, and for lawful purposes; or from doing any act or thing which might lawfully be done in the absence of such dispute by any party thereto; nor shall any of the acts specified in this paragraph be considered or held to be violations of any laws of this State.

(4) Whenever in any matter relating to the violation of any such restraining order or injunction an issue of fact shall arise, such issue * * * shall be tried by a jury, in the same manner as provided for the trial of other cases. * * *

SEC. 133.08. *Collective bargaining.*—Sections 133.01, 133.04, 133.21, and 226.07 [relating to combinations, trusts, etc.] shall be so construed as to permit collective bargaining by associations of producers of agricultural products and by associations of employees when such bargaining is actually and expressly done for the individual benefit of the separate members of each such association making such collective bargain. * * *

* * * * *

SECTION 268.18. *Public policy as to collective bargaining.*—In the interpretation and application of sections 268.18 to 268.30 the public policy of this State is declared as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEC. 268.21. *Responsibility for unlawful acts.*—No officer or member of any association or organization, and no association or organization participating or interested in a labor dispute (as these terms are defined in section 268.29) shall be held responsible or liable in any civil action at law or suit in equity, or in any criminal prosecution, for the unlawful acts of individual officers, members, or agents, except upon proof by a preponderance of the evidence and without the aid of any presumptions of law or fact, both of (*a*) the doing of such acts by persons who are officers, members, or agents of any such association or organization, and (*b*) actual participation in, or actual authorization of, such acts, or ratification of such acts after actual knowledge thereof by such association or organization.

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

Equity procedure that permits a complaining party to obtain sweeping injunctive relief that is not preceded by or conditioned upon notice to and hearing

of the responding party or parties, or that issues after hearing based upon written affidavits alone and not wholly or in part upon examination, confrontation, and cross-examination of witnesses in open court, is peculiarly subject to abuse in labor litigation for the reasons that—

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

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

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

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

SEC. 268.23. *Injunctions: Conditions of issuance; restraining orders.*—

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SEC. 268.29. *Definitions.*—When used in sections 268.18 to 268.30, and for the purposes of these sections:

(1) A case shall be held to involve or to grow out of a labor dispute when the case involves persons who are engaged in a single industry, trade, craft, or occupation; or who are employees of one employer; or who are members of the same or an affiliated organization of employers or employees; whether such dispute is (1) between one or more employers or associations of employers and one or more employees or associations of employees; (2) between one or more employers

or associations of employers, and one or more employers or associations of employers; or (3) between one or more employees or associations of employees and one or more employees or associations of employees; or when the case involves any conflicting or competing interests in a "labor dispute" (as defined in subsection (3)) of "persons participating or interested" therein (as defined in subsection (2)).

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

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

SEC. 268.30. *Severability of provisions.*—If any provision of sections 268.18 to 268.30 or the application thereof to any person or circumstance is held invalid, the remainder of these sections and the application of such provisions to other persons or circumstances shall not be affected thereby.

UNITED STATES

CLAYTON ACT (38 U. S. STAT. L. 738)

SECTION 20. *Restrictions on issue.*—That no restraining order or injunction shall be granted by any court of the United States, or a judge or the judges thereof, in any case between an employer and employees, or between employers and employees, or between employees, or between persons employed and persons seeking employment, involving or growing out of, a dispute concerning terms or conditions of employment, unless necessary to prevent irreparable injury to property, or to a property right, of the party making the application, for which injury there is no adequate remedy at law, and such property or property right must be described with particularity in the application, which must be in writing and sworn to by the applicant or by his agent or attorney.

And no such restraining order or injunction shall prohibit any person or persons, whether singly or in concert, from terminating any relation of employment, or from ceasing to perform any work or labor, or from recommending, advising, or persuading others by peaceful means so to do; or from attending at any place where any such person or persons may lawfully be, for the purpose of peacefully obtaining or communicating information, or from peacefully persuading any person to work or to abstain from working; or from ceasing to patronize or to employ any party to such dispute or from recommending, advising, or persuading others by peaceful and lawful means so to do; or from paying or giving to, or withholding from, any person engaged in such dispute, any strike benefits or other moneys or things of value; or from peaceably assembling in a lawful manner, and for lawful purposes; or from doing any act or thing which might lawfully be done in the absence of such dispute by any party thereto; nor shall any of the acts specified in this paragraph be considered or held to be violations of any law of the United States.

Laws Relating to Antiunion Contracts

SECTION 3 of the Federal anti-injunction law outlaws antiunion contracts. Prior to the enactment of the Federal law, the State of Wisconsin in 1929 passed a law with a similar provision; this was the first law of its kind to be enacted in any American State. In general, the acts on this subject declare that an employment contract containing an agreement whereby either party undertakes not to join, become or remain a member of any labor organization or of any employer organization is contrary to public policy and therefore void.

Three cases have been decided by the United States Supreme Court directly involving the antiunion contract. (Adair *v.* United States (1908), 208 U. S. 161; Coppage *v.* Kansas (1915), 236 U. S. 1; and Hitchman Coal & Coke Co. *v.* Mitchell (1917), 245 U. S. 229.)

The Adair case involved the criminal prosecution of a railway foreman for discharging a railway employee because of his being a member of a labor organization. This was in violation of section 10 of the Erdman Act, which provides as follows:

SECTION 10. That any employer subject to the provisions of this act and any officer, agent, or receiver of such employer who shall require any employee, or any person seeking employment, as a condition of such employment, to enter into an agreement, either written or verbal, not to become or remain a member of any labor corporation, association, or organization; or shall threaten any employee with loss of employment, or shall unjustly discriminate against any employee because of his membership in such a labor corporation, association, or organization; or who shall require any employee or any person seeking employment, as a condition of such employment, to enter into a contract whereby such employee or applicant for employment shall agree to contribute to any fund for charitable, social, or beneficial purposes; to release such employer from legal liability for any personal injury by reason of any benefit received from such fund beyond the proportion of the benefit arising from the employer's contribution to such fund; or who shall, after having discharged an employee, attempt or conspire to prevent such employee from obtaining employment, or who shall, after the quitting of an employee, attempt or conspire to prevent such employee from obtaining employment, is hereby declared to be guilty of a misdemeanor, and, upon conviction thereof in any court of the United States of competent jurisdiction in the district in which such offense was committed, shall be punished for each offense by a fine of not less than $100 and not more than $1,000. (30 U.S. Stat. L. 424, 428, June 1, 1898.)

The question presented to the court was "May Congress make it a criminal offense against the United States—as by the tenth section of the act of 1898 it does—for an agent or officer of an interstate carrier, having full authority in the premises from the carrier, to discharge an employee from service simply because of his membership in a labor organization?" (208 U. S. 171.) The court held that "as the relations and the conduct of the parties towards each other was not controlled by any contract other than a general agreement on one side to accept the services of the employee and a general agreement on the other side to render services to the employer—no term being fixed for the continuance of the employment—Congress could not, consistently with the fifth amendment, make it a crime against the United States to discharge the employee because of his being a member of a labor organization." (208 U. S. 176.) In concluding its opinion the court said that "this decision is therefore restricted to the question of the validity of the particular provision in the act of Congress making it a crime against the United States for an agent or officer of an interstate carrier to discharge an employee from its service because of his being a member of a labor organization." (208 U. S. 180.)

The Coppage case involved a law of the State of Kansas providing a penalty for coercing or influencing or making demands upon or requirements of employees, servants, laborers, and persons seeking employment. This act (Kansas Acts of 1903, ch. 222) provided as follows:

SECTION 1. That it shall be unlawful for any individual or member of any firm, or any agent, officer, or employee of any company or corporation to coerce, require, demand, or influence any person or persons to enter into any agreement either written or verbal, not to join or become or remain a member of any labor organization or association, as a condition of such person or persons securing employment, or continuing in the employment of such individual, firm, or corporation.

SEC. 2. Any individual or member of any firm or any agent, officer, or employee of any company or corporation violating the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in a sum not less than $50 or imprisoned in the county jail not less than 30 days.

Coppage, superintendent of a railway company, requested an employee to sign an agreement to withdraw from a labor union while

in the employ of the railway, and, on the refusal of the employee, discharged him from the service of the company. Coppage was charged with the violation of the statute above quoted and was found guilty. The Supreme Court of the United States pointed out the distinction between the Adair and the Coppage cases in its statement that "while the statute that was dealt with in the Adair case contained a clause substantially identical with the Kansas act now under consideration—a clause making it a misdemeanor for an employer to require an employee or applicant for employment, as a condition of such employment, to agree not to become or remain a member of a labor organization—the conviction was based upon another clause, which related to discharging an employee because of his membership in such an organization; and the decision, naturally, was confined to the case actually presented for decision." (236 U. S. 11.) The penalty imposed in the Adair case was on the ground of the discharge of an employee because of his being a member of a labor organization. The Coppage case involved a penalty imposed "not for the discharge but for the attempt to coerce an unwilling employee to agree to forego the exercise of the legal right involved as a condition of employment." (236 U. S. 40.) The court held the Kansas act "as construed and applied so as to punish with fine or imprisonment an employer or his agent for merely prescribing, as a condition upon which one may secure employment under or remain in the service of such employer, that the employee shall enter into an agreement not to become or remain a member of any labor organization while so employed, is repugnant to the 'due process' clause of the fourteenth amendment, and therefore void." (236 U. S. 26.) Reviewing the effect of the Adair and Coppage decisions, it must be noted that both the Federal and the State acts held unconstitutional provided criminal punishment for the violation of the statute. Though an attempt was made to distinguish between a statute imposing a penalty for membership in a labor union and punishment for discharging an employee because of failure to agree to an antiunion contract, the cases are similar in that they both involve criminal punishment.

The Hitchman case affirmed a decree granting an injunction against attempts to organize employees who had agreed that they would not, while in the service of their employer, become members of a union and if they joined the union would withdraw from their employment. The case involved the application of the common law of West Virginia. No statute was involved in the decision of the case. The court held that, upon all the facts involved in the particular case before it, the purpose to be attained and the methods resorted to by the organizers were unlawful. Apparently the conclusion as to the purpose and methods was largely influenced by the agreement of the employees that they would not, while in the service of the employer, become a member of a union and if they joined the union would withdraw from their employment. (245 U. S. 229, 263.)

The Legislature of the State of Massachusetts in 1930[5] requested the opinion of the Supreme Judicial Court of the State, as to the constitutionality of the enactment of an antiunion contract law in that State, and the court held that such would be violative of both the State and Federal constitutions.

[5] Labor Review, July, 1930, p. 107.

However, at the present time there are five States (Arizona, Colorado, Ohio, Oregon, and Wisconsin) which have legislated upon the subject. The Legislature of New Jersey enacted a similar law, chapter 244, on June 14, 1932, but text of law was not received in time for inclusion in this article.

In the State antiunion contract laws as well as in the Federal law it is provided that the agreement of an employee not to join a labor organization is contrary to public policy, and the Wisconsin, Oregon, and Federal laws provide in addition that the agreement shall not afford any basis for the granting of legal or equitable relief by any court. Another constitutional question is presented as the next step in the enlargement of this subject. Heretofore the United States Supreme Court has decided that legislation providing penalties for discharging a union employee, or for an employee's refusal to agree not to become a member of a labor union was unconstitutional.

The highest court in the land, however, has not directly passed upon the legality of a law which merely declares antiunion contracts contrary to public policy.

ARIZONA

Acts of 1931 (Chapter 19)

[Act amends sec. 1360, Revised Code, 1928, by adding a new paragraph (1360a):]

Section 1360a. *Coercive contracts void.*—Every undertaking or promise hereafter made, whether written or oral, express or implied, constituting or contained in either: (1) A contract or agreement of hiring or employment between any employer and any employee or prospective employee, whereby (*a*) either party to such contract or agreement undertakes or promises not to join, become or remain, a member of any labor organization or of any organization of employers, or (*b*) either party to such contract or agreement undertakes or promises that he will withdraw from the employment relation in the event that he joins, becomes or remains, a member of any labor organization or of any organization of employers; or (2) in a contract or agreement for the sale of agricultural, horticultural, or dairy products between a producer of such products and a distributor or purchaser thereof, whereby either party to such contract or agreement undertakes or promises not to join, become, or remain a member of any cooperative association organized under chapter 13, Revised Code, 1928, or of any trade association of the producers, distributors, or purchasers of such products, is hereby declared to be contrary to public policy and wholly void and shall not afford any basis for the granting of legal or equitable relief by any court.

COLORADO

Acts of 1931 (Chapter 112)

Section 1. *Agreements void.*—Every undertaking or promise hereafter made, whether written or oral, express or implied, constituting, or contained in, any contract or agreement of hiring or employment between any individual, firm, company, association, or corporation, and any employee, or prospective employee of the same, whereby (*a*) either party to such contract or agreement undertakes or promises not to join, become, or remain, a member of any labor organization or of any organization of employers, or (*b*) either party to such contract or agreement undertakes or promises that he will withdraw from the employment relation in the event that he joins, becomes, remains, a member of any labor organization or of any organization of employers, is hereby declared to be contrary to public policy and wholly void.

OHIO

Acts of 1931 (p. 562)

Section (1)–6241–1. *Agreements void.*—Every undertaking or promise hereafter made, whether written or oral, express or implied, constituting, or contained in, any contract or agreement of hiring or employment between any individual, firm, company, association, or corporation, and any employee or prospective

employee of the same, whereby (*a*) either party to such contract or agreement undertakes or promises not to join, become, or remain, a member of any labor organization or of any organization of employers, or (*b*) either party to such contract or agreement undertakes or promises that he will withdraw from the employment relation in the event that he joins, becomes, remains, a member of any labor organization or of any organization of employers, is hereby declared to be contrary to public policy and wholly void.

OREGON

ACTS OF 1931 (CHAPTER 247)

SECTION 1. *Contracts void.*—Every undertaking or promise hereafter made, whether written or oral, express or implied, constituting or contained in any contract or agreement of hiring or employment between any individual, firm, company, association or corporation, and any employee or prospective employee, of the same whereby (*a*) either party to such contract or agreement undertakes or promises not to join, become, or remain a member of any labor organization or of any employer organization; or (*b*) either party to such contract or agreement undertakes or promises that he will withdraw from an employment relation in the event that he joins, becomes, or remains a member of any labor organization or of any employer organization, hereby is declared to be contrary to public policy and wholly void and shall not afford any basis for the granting of legal or equitable relief by any court.

WISCONSIN

STATUTES, 1931

[This act creates a new section (103.46 Wis. Stats.) to read as follows:]

SECTION 103.46. *Restrictive right of employees, etc.*—Every undertaking or promise hereafter made, whether written or oral, express or implied, constituting or contained in either: (1) A contract or agreement of hiring or employment between any employer and any employee or prospective employee, whereby (*a*) either party to such contract or agreement undertakes or promises not to join, become or remain, a member of any labor organization or of any organization of employers, or (*b*) either party to such contract or agreement undertakes or promises that he will withdraw from the employment relation in the event that he joins, becomes, or remains, a member of any labor organization or of any organization of employers; or (2) in a contract or agreement for the sale of agricultural, horticultural, or dairy products between a producer of such products and a distributor or purchaser thereof, whereby either party to such contract or agreement undertakes or promises not to join, become, or remain a member of any cooperative association organized under chapter 185 or of any trade association of the producers, distributors, or purchasers of such products, is hereby declared to be contrary to public policy and wholly void and shall not afford any basis for the granting of legal or equitable relief by any court. * * *

* * * * *

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

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

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

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

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

Michigan Law Prohibiting Employment of Certain Aliens

AT THE 1931 session of the Legislature of Michigan a law was enacted (No. 241) which declared that any person of foreign birth who illegally obtained admission to the United States, or any "undesirable alien," was disqualified from becoming a legal resident of the State and therefore prohibited from engaging in business in the State. Legal residents, on the other hand, are probibited from employing or engaging in business with such persons.

The law specifically defines a legal resident in contradistinction to a citizen. An illegal entrant is termed "any person of foreign birth who, since the adoption of measures limiting or restricting immigration, entered the United States of America in any manner except as described in section 1 hereof, is declared to have entered the United States illegally and is hereby disqualified from establishing or maintaining legal residence in this State." An "undesirable alien" is "any person of foreign birth who comes within the classification 'undesirable alien' as defined by the laws of the United States." Sections 6, 7, and 8 of the act relate to the employment, etc., of such persons. By the provisions of these sections such persons are prohibited from having employment or engaging in business within the State. The law in addition prohibits any firm, etc., from having such persons in its employ or associating in business as a partner with any of them.

The commissioner of public safety is empowered to administer and enforce the law. In addition a duty is placed upon all law-enforcing officers of arresting any person of foreign birth who is not a naturalized citizen and who does not possess a certificate of legal residence in the State issued by the commissioner of public safety. It is incumbent upon every person of foreign birth now residing in the State of Michigan or who seeks to establish a residence in the State, and is not a naturalized citizen, to apply (within 60 days of the effective date of the act or within 30 days after entering the State) to the commissioner of public safety for a certificate of legal residence. As a condition precedent to employment the law requires:

Every person, firm, corporation, or association, legally resident or qualified to do business in this State, employing directly or indirectly through the instrumentality of one or more contractors or other second or third parties, persons of foreign birth, who are not naturalized citizens shall require that such persons as a condition precedent to securing or continuing employment shall produce a certificate of legal residence as herein required and authorized, and such enployers shall, whenever application for employment is made by any person of foreign birth, who is not in possession of such certificate of legal residence or who is in possession of a certificate that describes a person other than the applicant or bears a signature with which the signature of the applicant does not correspond, promptly report the circumstances to the commissioner of public safety, giving the name used and the address furnished by said applicant.

For violations of the act penalties are provided by a fine of $50 to $100 or imprisonment for not more than 90 days, or both.

WORKMEN'S COMPENSATION

Injury Constitutes "Sickness" Within Hospitalization Contract, Although Not Compensable

AN INJURY to an employee's knee received when he was struck by an automobile while en route to work was held, by the Montana Supreme Court, to constitute "sickness" and come within the provisions of the hospitalization contract. (Murray Hospital *v.* Angrove, 10 Pac. (2d) 577.)

William Angrove was employed as a hoisting engineer by the Anaconda Copper Mining Co. On December 24, 1928, while en route to work, he was struck by an automobile and sustained an injury to his knee. He worked as usual for several days, but was later taken to the Murray Hospital, where he remained until he was completely cured. Thereafter the hospital filed suit against him in the District Court of Silver Bow County, and recovered a judgment of $25 as the reasonable value of the services rendered. Angrove thereupon appealed the case to the Montana Supreme Court, contending that the cost of hospitalization should be paid by the employer under a mutual contract entered into by the employer and employee with the hospital.

It appears that the employer was operating under "Plan No. 1" (self-insurer) of the workmen's compensation act (Rev. Codes 1921, sec. 2970, et seq.), which requires the employer to furnish an injured employee, in addition to compensation, "all necessary and reasonable medical, hospital, and surgical services for a period not to exceed six months and of a value up to $500, with additional and like services if found by the board to be necessary." Regarding this provision the supreme court said:

> This provision is for the restoration of the injured employee, and is comparable to repairs of machinery or restoration of the plant after injury by fire; it applies, however, only in case the injury received is such as would entitle the injured person to compensation, as it refers back to "the injury" theretofore discussed in the act and for which provision is made for compensation. It is a part of the compensation for the injury.

To recover compensation or hospitalization under the workmen's compensation act, the court pointed out, the injury must arise out of and in the course of the employment. In the present case the court held that the injury was not within the act. It said:

> Here the defendant was merely traveling a city street where he was subjected only to the hazards common to all pedestrians, and, although he was on his way to work, under all of the authorities his injury did not arise out of and in the course of his employment, and by reason thereof he was neither entitled to compensation nor to hospitalization under the general provisions last quoted.

Section 2907 (Montana Revised Codes, 1921, as amended by Acts of 1929, ch. 177), however, allows the employer and employees to

waive the provisions of the section referred to above and enter into a mutual contract with a hospital for hospitalization; this was done by the parties in this case. The contract between the employer and the Murray Hospital provided for hospital treatment for employees under two circumstances as was provided by the statute: "(1) For injuries received in, arising out of, and in the course of, the employment; (2) for sickness contracted during the time when the man is employed by the contracting employer, save and except for venereal diseases and sickness which has resulted from intoxication." It was under the second provision of this contract that Angrove claimed the employer was bound to pay the hospital bill.

The question involved was the meaning of the term "sickness" as used in the contract. Many definitions were cited and court decisions which defined it in its narrow technical sense and also cases which defined it in more general and inclusive terms. The court however said the definitions were immaterial, for the term "must be considered in its common acceptation and understanding, in the light of the object and purposes of the act under which the contract was made, and the intention of the parties in interest and in a liberal construction of the act and the contract."

In concluding the opinion reversing the judgment of the district court, the Montana Supreme Court said:

> It seems clear from the wording of section 2907 above, considered in the light of the purposes of the act, that, having in so far as possible provided for the shifting of all loss and expense which might be incurred in those cases for which provision was theretofore made in like acts, from the employee to the industry, when our lawmakers determined to go a step further and cast the burden of restoration of a unit of the industry, incapacitated otherwise than by the industry, upon the industry, they intended the effect of the further provision to be the same as that of the provision already covered.
>
> We conclude that the legislature used the term "sickness" in its "popular significance," and intended that each employee specified should receive hospitalization for "any affection of the body which deprives it temporarily of its power to fulfill its usual functions," save and except those which develop because of his own vice.

Double Compensation Awarded for Illegally Employed Minor Notwithstanding Recovery of Judgment

THE Supreme Court of New Jersey recently held that a minor illegally employed could recover double compensation for injury notwithstanding the fact that a prior recovery of judgment was received in a common-law action. (Damato *v.* De Lucia, 159 Atl. 526.)

It appeared that Anthony Damato was employed by one De Lucia, who operated a bakery in the town of Raritan, N. J. The employee was under 16 years of age and was, under the child-labor law of New Jersey (Laws of 1923, ch. 80), illegally employed. While employed at the bakery he was caught in a mixing machine and his arm and hand were injured.

Under the compensation law of New Jersey a petition was filed claiming compensation. While this petition was pending an action was instituted in the Supreme Court of New Jersey seeking damages under the common law.

Upon trial of the case, a judgment was rendered for the employee of $4,500 and for his parents of $1,313.25. Upon the judgment being satisfied, the employee then proceeded under the petition to

the Workmen's Compensation Bureau of New Jersey and was awarded double compensation for 175 weeks. The employer objected and contended that the employee had no right of recovery other than the one at common law which he had successfully pursued. The court in rendering its opinion held that the contention of the employer ran counter to the course of the court's decisions and to the intention of the workmen's compensation law as construed from time to time by the courts.

Prior to the act upon which the employee relied, the court had served notice that "where a minor under 16 years of age was employed to operate a laundry machine in violation of [the] factory act, * * * the common-law liability of employer was not affected by the workmen's compensation act, for that act applies only where the contract of hiring is a valid one."

The court in the present case stated that it was conceded by the parties that the employment was prohibited by the statute, and repeated the statement contained in the employer's brief as follows:

> Essentially this review involves a question of the construction and possibly the constitutionality of chapter 159 of the Laws of 1924 which amends section 2, paragraph 9, of the act commonly known as the workmen's compensation act. This statute provides, among other things, that if the minor is between 14 and 16 years of age and is employed in violation of the labor law the compensation award shall be double the amount allowed in the schedule set forth in the workmen's compensation act and that the employer and not the insurance carrier shall be liable for the extra compensation. * * * Nothing in this act contained shall deprive an infant under the age of 16 of the right or rights now existing to recover damages in a common-law or other appropriate action or proceeding for injuries received by reason of the negligence of his or her master.

The full bench of the Supreme Court of New Jersey cited several cases in which the proviso under consideration had already been construed by the courts. One was the case of Mauthe *v.* B. & G. Service Station (139 Atl. 245), in which a minor of the age of 15½ years was illegally employed and subsequently injured; it was held in this case that the common-law remedies were not affected by the workmen's compensation act. In the case of Terlingo *v.* Belz-Parr (Inc.) (147 Atl. 480) a recovery was had by the father of a child illegally employed. In this case it was argued that the compensation act as amended took away the right of recovery for death and provided for recovery only under the statute. This contention, however, was held to be unsound by the court, which reasoned that by an express legislative enactment the child was not deprived of any rights which existed either at common law or by virtue of any other appropriate action. The court in this case further held that the words of legislative purpose could not be construed so as to deprive the representative of the deceased child of existing rights.

Another contention was raised by the employer in which he averred that the provision by which a minor was allowed to recover double compensation against the employer in addition to his recovery at common law was in violation of the constitution of the State of New Jersey. The court, however, dismissed this contention and held that the act was not unconstitutional in the respect claimed by the employer.

The judgment of the New Jersey Workmen's Compensation Bureau was therefore affirmed.

125620°—32——7

Medical and Hospital Problems of Workmen's Compensation in New York

CONSTRUCTIVE legislation and changes in administrative procedure of the workmen's compensation act were advocated in a preliminary report of the committee appointed last year by the Governor of New York to review medical and hospital problems in connection with compensation insurance.[1]

On February 29, 1932, the governor transmitted the report to the legislature, with recommendations for immediate study and consideration. He called particular attention to the proposed coverage of all occupational diseases under the workmen's compensation act, pointed out that this measure has been before the legislature for several years, and stated that, in his opinion, it is time to extend medical care and cash compensation to the worker incapacitated by occupational disease as well as to the worker disabled by accident.

In connection with hospital problems the committee found that the sums paid to charitable hospitals are in general less than the actual cost to the institutions, and it consequently recommended an amendment to the law providing that charitable or municipal hospitals be entitled to charge the reasonable cost of the services rendered without regard to ward-charity rates established by them.

The committee also recommended a change in the law on authorization of treatment, so that lack of authorization by employers or carriers in cases treated by municipal or charitable hospitals shall not prevent collection of payment for services; the enactment of a lien law in third-party suits similar to that in force in New Jersey; and provisions to insure payment for hospital services in other cases.

In regard to medical problems, the committee recommended the passage of the bill presented to the legislature by the department of labor, extending the scope of the compensation act to cover all occupational diseases. It is contended that the specific schedule, like that existing in New York, does not solve the problem, and as the average cost of covering all diseases in 10 other States is only about 1 per cent of the total compensation cost, the additional cost of the all-inclusive coverage should only be a small fraction of 1 per cent in New York, where 27 occupational diseases are already covered.

The committee suggested that insurance-company doctors be excluded from the room when the claimant is being examined by a State physician, to avoid any suspicion of bias or influence. It also recommended that "lifting" of cases (i. e., transfer of patient to other medical or hospital services by means of threat, suggestion or consideration from an insurance carrier) be prohibited under penalty.

The committee found unsatisfactory the practice of having the medical records supplied by agents of insurance companies, and recommended that these records be supplied by a disinterested party. It also suggested a fundamental change in the law, establishing a series of clinics under the supervision and direction of the State.

While present methods are not wholly satisfactory, the committee did not favor the free choice of physicians by patients, but suggested that some method be devised for rating physicians desirous of doing

[1] United Hospital Fund of New York. Hospital Information and Service Bureau. Preliminary report of the committee to review medical and hospital problems in connection with workmen's compensation insurance. Published for the information of hospitals, without comment. New York, 122 East Twenty-second Street, 1932.

compensation work. It recommended that the subject be referred to the State board of regents.

Increases were recommended in both the professional personnel and the clerical staff of the department, as well as higher salaries for certain members of the latter.

Total disability, in the opinion of the committee, should be interpreted to mean that a man is unable to return to the occupation in which he was engaged when he was injured and should be compensated until he can resume that work. If he earns something at light work in the meantime, that amount should be deducted from the compensation due.

The committee was of the opinion that certain baffling and highly specialized medical problems can best be solved by a group of unbiased experts, and suggested the creation of a supreme court of review on medical questions, drawn from a panel of 75 men and to be used by either party for decisions on a purely medical matter; questions would be submitted to three or five of this body, both sides being bound by the decision.

As to departmental procedure the committee recommended an amendment to the act, relating to appeals; the establishment of a bureau for medical examination of claimants; provision of suitable examination rooms in the different cities or communities, or the use of automotive equipment with adequate facilities; and some change in the law whereby a man injured while working for an uninsured employer will not become a burden to society because of the failure of his employer to comply with the law.

Bills appended to the committee's report cover the presence of insurance company doctors at examinations, authorization for medical or hospital treatment, reasonable charges by hospitals, and definition of charitable and municipal hospitals.

A special memorandum, endorsed by the majority of the committee, but not by the committee of the whole, expresses disapproval of the practice of insurance companies maintaining and operating clinics.

Mule Spinners' Cancer Made Compensable in Great Britain

AN ORDER [1] issued by the British Secretary of State, dated April 30, 1932, provides that the workmen's compensation act of 1925 shall be extended to include cases of new skin growths, papillomatous or keratotic, due to mineral oil. The order applies only to workmen employed as minders or piecers in connection with the process of cotton spinning by means of self-acting mules. Compensation will not be paid unless the workman has notified the employer that he has applied for a certificate of disablement, and it is limited to 14 days unless the judge, committee, or arbitrator is satisfied of the continuance of disability beyond that time. The employer is entitled to require a medical examination of such employees by a qualified medical practitioner, but the costs of the examination must be paid by the employer.

[1] Great Britain. Statutory rules and orders, 1932, No. 314.

Recent Workmen's Compensation Reports

Maryland

THE report of the State Industrial Accident Commission of Maryland for the fiscal year ending October 31, 1931, shows that the 14,858 employers insured under the compensation law filed reports of 31,474 industrial injuries during the year. This was a decrease of 10,287 from the number of injuries reported during the previous year. A total of 11,275 claims for compensation, including 138 fatal claims, was filed with the commission.

Compensation payments made in the 11,341 claims disposed of during the year, which included 180 fatal cases, amounted to $926,095.97, and payments for medical attention in cases where no compensation was claimed amounted to $379,883.31. As there was $383,689.19 outstanding for future payments on specific awards made in permanent cases during the year, the total benefits paid and outstanding for the year amounted to $1,689,668.47, not including future payments in temporary disability cases continued beyond the year.

Administrative expenses of the commission, which are collected from the insurance carriers, including the State accident fund and the self-insurers, amounted to $92,110.42 for the year ending September 30, 1931, while the expense of conducting the State accident fund for the same period was $38,556.02.

Table 1 shows a summary of the 10,401 claims allowed during the fiscal year, by industrial groups and extent of disability.

TABLE 1.—NUMBER OF INDUSTRIAL INJURIES COMPENSATED IN MARYLAND, NOVEMBER 1, 1930, TO OCTOBER 31, 1931, BY INDUSTRY AND EXTENT OF DISABILITY

Industrial group	Extent of disability			
	Fatal	Permanent total	Permanent partial	Temporary total
Agriculture	0	0	5	86
Mining, metallurgy, and quarrying	6	1	22	526
Other extractive industries	1	0	5	87
Manufacturing	33	1	314	4,255
Construction	16	0	74	2,068
Transportation	8	0	24	1,188
Public utilities	3	1	13	112
Trade	2	0	17	580
Clerical and professional services	2	0	6	254
Miscellaneous industries	2	0	11	326
Department of State, cities and counties	4	0	13	330
Private employment	0	0	0	5
Total	77	3	504	9,817

The financial report of the State accident fund for the year ending October 31, 1931, shows a surplus of $542,602.36, protected by reinsurance, and a reserve for unpaid claims of $418,000. Total assets amounted to $1,045,537.16. The net premiums during the year aggregated $325,105.36, a decided reduction from the amount for the preceding year due to the serious business conditions and the prevailing unemployment. Payments for losses on injuries occurring during the current year amounted to $114,951.18, and for losses on injuries occurring before November 1, 1930, to $202,010.52. The expense of administering the fund was $3,025.94 less than for the previous year.

Under the experience-rating plan of the fund the maximum credit during the year was 18 per cent and the maximum debit 48 per cent. These limits have been extended, effective March, 1932, to 21 per cent maximum credit and 60 per cent maximum debit, in the belief that it will assist in reducing accidents.

The report of the department of safety, which is included, describes briefly the progress of the safety movement in Maryland. Under the original compensation law the industrial commission had no definite power to enforce safety practices or regulations. Feeling that an attempt should be made to reduce accidents, the commission secured a number of safety codes which had been prepared jointly by safety engineers and representatives of employers and labor and approved by the American Standards Association. In 1927, 18 of these were issued as a guide to the industries of Maryland and 3 others were added later.

An amendment to the workmen's compensation law, giving the commission power to enforce safety regulations, was submitted to the general assembly. It was approved in 1929, resulting in the establishment of a department of safety and the official adoption of 22 safety codes as legal codes of the State. The department inspects establishments and makes recommendations, where needed, to eliminate unsafe working conditions or practices. Educational safety work is also being done.

New York

According to the April issue of The Industrial Bulletin, published by the industrial commissioner of New York State, the compensation awards made by the State department of labor for injuries to industrial workers in cases closed during 1931 amounted to nearly $34,000,000, an average of $342 per case. The cost of medical and hospital service, which is not included in the compensation awards, is estimated by the department at between $8,000,000 and $10,000,000.

The total number of injuries reported during the year was 419,072. While the total number of cases closed was 188,887, awards of compensation were made in only 98,424 of them, because in many of the cases the period of disability did not exceed the waiting period of seven days and others did not come under the provisions of the workmen's compensation law. Although disabilities of seven days' duration or less are not compensable, medical or hospital treatment is given in a large part of them, so that the number of cases receiving medical aid is far larger than the number receiving compensation.

Table 2 shows the number of compensated cases closed in 1931, the number of weeks' compensation awarded, and the amount of compensation awarded, by extent of disability.

Table 2.—NUMBER OF COMPENSATED CASES CLOSED IN NEW YORK AND COMPENSATION AWARDED, BY EXTENT OF DISABILITY, 1931

Extent of disability	Number of cases	Number of weeks' compensation awarded	Amount of compensation
Death	1,177		[1] $7,232,761
Permanent total	68		[1] 970,804
Permanent partial	19,805	857,148	15,515,293
Temporary	77,374	561,945	9,983,667
Total	98,424	1,419,093	33,702,525

[1] Estimated present values.

It is stated that present employment conditions are reducing the number of compensated industrial injuries, as would be expected, so that the 1931 total of 98,424 is about 2,500 below the average for the past 6 years. All of the industries, however, did not show a reduction in accidents. A large increase occurred in the service industries, attributed partly to the classification of much of the emergency employment with this group, making the exposure for it greater than in the past, and a slight increase was experienced in trade. The largest decrease occurred in manufacturing, which showed nearly 7,000 injuries less in 1931 than the average for the past 6 years, and a noticeable reduction took place in transportation. No material change occurred in construction work, although operations in this industry were reduced.

There was considerable variation in the average cost per compensated injury for the different industries during 1931. Injuries in the construction industry averaged nearly $100 more per case than injuries in the transportation and public utility group, the second highest, and almost double the average cost of injuries in the trade group.

Table 3 shows the number of compensated cases closed in 1931, the amount of compensation awarded, and the average compensation per case, by industry.

TABLE 3.—NUMBER OF COMPENSATED CASES CLOSED IN NEW YORK, COMPENSATION AWARDED, AND AVERAGE COST PER CASE, BY INDUSTRY, 1931

Industry	Number of cases	Amount of compensation awarded	Average compensation per case
Manufacturing	30,099	$8,466,655	$281
Construction	23,002	10,900,818	474
Transportation and public utilities	15,184	5,734,688	378
Service	16,230	4,960,227	306
Trade	11,804	2,854,048	242
Other	2,105	786,089	373
Total	98,424	33,702,525	342

West Virginia

THE report of the State Compensation Commissioner of West Virginia on the workmen's compensation fund for the year ending June 30, 1931, shows assets at the close of the year of $19,104,465.99, a reserve for determined and estimated outstanding claims of $18,151,745.99, and other liabilities amounting to $830,981.49, leaving a surplus of $121,738.51.

Compensation, medical, and funeral benefits paid during the year aggregated $4,722,362.16, and $574,156.97 were transferred to the reserve for outstanding claims. The administrative expense was $262,921.16, making the total compensation cost for the year $5,559,439.29.

Reports from 3,900 employers insured with the fund show 200,396 employees earning $244,637,003, on which the average premium rate was $1.75 per $100, while 26 self-insuring employers reported 15,099 employees earning $21,671,039. These were decreases, as compared with figures reported the previous year, of 9.9 per cent in employees and 17.5 per cent in their earnings for employers paying premiums,

and 16.1 per cent in employees and 18.7 per cent in their earnings for self-insurers.

Employers paying premiums reported 548 fatal and 33,596 nonfatal injuries, while self-insurers reported 23 fatal and 2,154 nonfatal injuries, a total of 36,321 injuries for the year, or a decrease of 13.33 per cent as compared with the number reported in the previous year.

Table 4 shows the number of fatal and nonfatal injuries reported during the year by the two employing groups and by industrial groups.

TABLE 4.—INDUSTRIAL INJURIES REPORTED IN WEST VIRGINIA, YEAR ENDING JUNE 30, 1931, BY INDUSTRIAL GROUPS

Industrial group	Employers paying premiums		Self-insurers		All injuries	Per cent of total
	Fatal	Nonfatal	Fatal	Nonfatal		
Coal mining	413	14,827	19	1,385	16,644	45.82
Lumber	9	1,120			1,129	3.11
Mining other than coal	4	277	0	73	354	.97
Sand and clay products	4	2,514	0	163	2,681	7.38
Iron and steel	17	5,834	0	9	5,860	16.13
Municipalities	3	48			51	.14
Public utilities	7	1,359	0	153	1,519	4.18
Chemical plants	5	645	0	17	667	1.84
Textile manufacturing	0	298	1	13	312	.86
Warehouses and stores	4	728	0	6	738	2.03
Contractors	75	5,082	3	291	5,451	15.01
Explosives	0	6			6	.02
Printing and paper manufacturing	0	253	0	44	297	.82
Food products	7	474			481	1.33
Miscellaneous	0	92			92	.25
Not covered	0	39			39	.11
Total	548	33,596	23	2,154	36,321	100.00

Wisconsin

BULLETIN No. 39 of Wisconsin Labor Statistics, published by the Industrial Commission of Wisconsin, presents an analysis of compensation costs and medical costs in the 16,943 compensable injury cases settled during 1931, and comparisons with previous years.

The average amount of compensation paid per case in 1931 was $206, and the average amount of medical aid paid in 15,777 medical fee cases was $65 per case. The remaining 1,166 cases were contract medical aid cases, and the cost of this service is not reported to the commission.

Under the Wisconsin compensation act the normal amount of compensation is reduced or increased for violations of specified provisions by employees or employers. In 4 of the 1931 cases the amount of compensation was reduced 15 per cent, due to violations of safety orders by the employee; in 51 cases it was increased 10 per cent, due to inexcusable delay in payment of compensation; and in 246 cases it was increased 15 per cent, due to violations of safety orders by employers.

The act also provides for adjustment of compensation benefits in lesser permanent disability cases because of advanced age of employees, with reductions ranging from 5 per cent for over 55 years to 25 per cent for over 75 years. This condition applied during 1931 in 79 cases, making an average reduction in compensation for these of 5.16 per cent.

Table 5 shows the number of compensable cases settled, by extent of disability, the weighted amount of lost time involved, and the amounts of compensation and medical aid paid, by years, 1920 to 1931.

TABLE 5.—COMPENSABLE CASES SETTLED IN WISCONSIN, TIME LOSS, AND COMPENSATION AND MEDICAL AID BENEFITS, BY YEARS, 1920 TO 1931

Year	Number of cases					Weighted number of days lost [1]	Benefits paid	
	Fatal	Permanent total disability	Permanent partial disability	Temporary disability	Total		Compensation	Medical aid [2]
1920	171	15	1,620	14,440	16,246	2,600,750	$1,970,513	$569,571
1921	157	11	1,602	14,128	15,898	2,518,539	2,257,255	661,562
1922	180	1	1,602	14,922	16,705	2,642,422	2,410,529	746,429
1923	191	4	1,831	18,915	20,941	2,842,765	2,794,998	924,032
1924	155	2	1,887	20,722	22,766	2,783,156	3,047,147	1,153,332
1925	244	9	1,769	19,117	21,137	3,233,332	3,490,021	1,100,852
1926	213	2	1,948	20,014	22,177	3,146,254	3,725,860	1,122,624
1927	206	5	1,848	18,414	20,473	3,035,654	3,662,406	1,114,056
1928	229	3	1,947	19,639	21,818	3,204,956	3,885,850	1,250,216
1929	241	3	2,237	20,149	22,630	3,433,726	4,308,571	1,433,552
1930	231	13	2,264	17,562	20,070	3,457,569	4,447,141	1,398,338
1931	177	9	1,697	15,078	16,943	2,566,782	3,486,195	1,101,978

[1] Schedule charges for fatal and permanent disability cases; actual time loss for temporary disability cases.
[2] Contract medical aid estimated at average cost of fee cases.

Ontario

ACCORDING to the report of the Workmen's Compensation Board of Ontario for 1931,[1] the decrease shown in 1930 in the number of accidents reported to the board continued throughout 1931; this, it is stated, presumably indicates a continued reduction in industrial employment in the Province.

Reports of 52,894 injuries were received during the year as against 69,267 reported in 1930, a decrease of nearly 24 per cent. The number reported in 1929 was 87,103. Injuries reported in Ontario include some which do not involve payment of either compensation or medical aid and for which no claim is made and others for which claims are subsequently disallowed.

The provisional pay rolls reported to the board from the industries covered under the collective liability system (schedule 1) also showed a substantial reduction—from $485,262,000 for 1930 to $409,260,000 for 1931—and the number of employers in schedule 1 industries decreased from 23,912 in 1930 to 23,138 in 1931. Data on pay rolls and employers are not available for schedule 2 industries, which consist of the public service and municipal corporations and are covered under the individual liability system but under regulations of the board, nor for Dominion and provincial Crown cases, also under the act, as neither of these groups is required to report such items. The board estimates that the pay roll for the two groups is about one-third of the pay roll for schedule 1 industries.

The total amount of benefits awarded in 1931 was $6,021,392.10, including $1,060,763.01 for medical aid in schedule 1 cases, as com-

[1] Ontario (Canada). Workmen's Compensation Board. Report for 1931. Toronto, 1932. (Sessional paper No. 28, 1932.)

pared with $7,423,018.82 in 1930, including $1,336,046.05 for medical aid in schedule 1 cases. In schedule 2 and Crown cases medical aid is provided directly by the employer, and the cost is not reported to the board.

The average rate of assessment for 1931 in all classes of Schedule 1 industries, based on the estimated wage expenditure, is calculated at $1.22 per $100 of pay roll as compared with $1.40 for 1930. The total administrative expense, which is paid by the employers under the act without any governmental assistance and is distributed according to the work done in each of the classes, was 5.07 per cent of all benefits awarded.

The report reviews the work handled during 1931 and the experience of the various funds handled by the board. It also gives financial and statistical information for 1930, which was not available when the report for that year was made, and a short summary of the operations from the commencement of the act to the end of 1931.

Reference is made in the report to the provincial investigation of the advisability of amending the workmen's compensation act of Ontario. Since the publication of the report, the findings of Justice W. E. Middleton, who was appointed as a commissioner to inquire into that subject, have been submitted to the lieutenant governor.[2]

The commissioner points out that the adoption of workmen's compensation in 1914 has proved of great advantage to both employers and workers, and that no suggestions have been received to abandon the compensation scheme for a return to the unsatisfactory legal liability based upon negligence.

The commissioner concludes that the requests of organized labor for increased benefits should not be granted, as such increases would impose too heavy a burden on the industries. He also rejects as impractical the proposal to bring all employees without exception under the act, but suggests consideration of including workers in lumbering operations, engineers in heating plants, cooks and waiters, and employees in cheese factories, dairies, and garages.

He recommends that the waiting period before compensation payments are made be changed from a 7-day conditional to a 3-day absolute period, as suggested by the employers; that the list of compensable industrial diseases be extended to include infected blisters, cancer arising from the manufacture of pitch and tar, dermatitis, and bursitis; that dental treatment, when necessary as the result of an accident, be considered as medical treatment; that the board be empowered to reduce premium rates for employers with consistently good records; and that severe penalties be exacted in connection with accidents to minors illegally employed.

Other suggestions were rejected as impractical or covered sufficiently in the existing law.

---

[2] Ontario (Canada). [Workmen's Compensation Board?] Report of the commissioner in the matter of the workmen's compensation act. Toronto, 1932. (Sessional paper No. 37, 1932.)

LABOR AGREEMENTS, AWARDS, AND DECISIONS

Decision of Arbitrator in Newspaper Industry, Syracuse, N. Y.

UNDER an award in arbitration between Syracuse newspaper publishers and Local No. 55 of the Typographical Union, the compositors received a cut of $3 in the weekly scale. The award of the arbitrator, Samuel Cahan, department of journalism, Syracuse University, was made on April 15, 1932. The arbitration proceedings were held under section 2 of the existing contract between the publishers and the union, which is as follows:

It is further agreed by both parties that the scale as stipulated in this contract shall be paid until and unless changed by the following method: Either party may, at any time during the period from October 1, 1931, to August 30, 1932, on 30 days' written notice to the other, ask that the scale only be taken up for revision, the publishers on their part agreeing that they will only ask for a revision in said scale should business conditions, in their opinion, make that necessary. It is further agreed if the scale is opened as provided in this section, and a settlement by conciliation is found impossible, arbitration shall be resorted to as provided in section 3 of this contract.

The publishers claimed that the present volume of business does not warrant the wages paid their printers, and asked a reduction of $5 in the weekly scale. The publishers' counsel asked that the award be made retroactive to December 28, 1931, on the ground that the union caused undue delay in bringing the matter to a settlement. The union contended that the wage scale is comparatively low and should not be reduced.

The opinion of the arbitrator is, in part, as follows:

The evidence submitted by publishers' counsel, showing a serious decline in the volume of their business, leaves no reasonable doubt that it is imperative that the publishers have relief from the present production costs in the operation of their newspapers. * * * Yet under the conditions of this arbitration, with wages established as the only arbitrable point, precluding your arbitrator from making adjustments in other sections of the contract which have a close bearing on production costs, I am unable to grant the publishers relief equivalent to their request. It is my opinion that when the entire contract is opened for revision, greater opportunities will then exist for adjustments which will be advantageous to both parties. But under the present circumstances I could not, in fairness to the union, reduce their present scale by $5. * * * A decrease of $5 in the present scale would, in my opinion, lay the groundwork for a speedy resumption of the dispute, as is possible under section 2, and make an amicable settlement vastly more difficult.

It is not unnatural for an organized body of workmen to resist any move that would sweep away gains which they have made over a period of years. But they must also recognize that a time comes when there must be compromise with stern realities. Neither the publishers nor the printers can escape the consequences of an economic storm that has engulfed the world. An attitude that it must remain immune from the present business crisis would leave the side making such a contention in a grotesque position. The evidence of the publishers' counsel

is conclusive that had business remained normal the present proceedings would not be taking place. * * *

Publishers' counsel asks that the award be made retroactive to December 28, 1931, on the ground that the union caused undue delay in bringing this matter to a settlement. I find that the delay occurred between December 28, 1931, when the publishers notified the union of their proposition, and March 1, when a technical point raised by the union with regard to the right of two of the three publishers to open the scale, was cleared up. After careful study of the facts, I find that whatever delay there occurred, the union was within legal bounds of sections 4, 5, and 6 of the code of procedure of the arbitration agreement. I am therefore compelled to deny the request for retroactive pay.

The decision of the arbitrator reduced the weekly pay of men on day work from $49 to $46 and of those on night work from $52 to $49, the award to become effective Sunday, April 17, 1932, and terminate with the life of the contract (September 30, 1932) or as provided in section 3, unless changed in accordance with the provisions of section 2.

Recent Decisions of the Industrial Commission of Colorado

Coal Miners—Northern Colorado Coal Field

PRACTICALLY all of the large coal companies operating in the northern Colorado coal field, with the exception of the Rocky Mountain Fuel Co., filed notice with the Industrial Commission of Colorado of their intention to make a reduction in the wages of their employees.

Protests against the proposed wage reductions, bearing the signatures of 634 employees of the companies, were filed with the commission. Several petitions, signed by business men, professional men, and other citizens, were received from Boulder, Longmont, Louisville, and Fort Lupton, protesting against the proposed wage reductions.

At the hearing held before the commission, April 28, 1932, the employers contended that it was necessary to reduce wages in order to meet the competition from other parts of the State; that it was impossible to ship coal into Iowa and Nebraska unless the cost of production could be reduced; they also informed the commission that a contract for 35,000 tons of slack had recently been let by a consumer in the city of Denver to coal operators in El Paso County, a competing section.

The employees contended that the present wage is not sufficient to produce a decent living, when the number of days' employment during the year is taken into consideration. Some of the employees testified that a number of the mines required their employees to work over eight hours a day underground, which is a violation of the eight-hour law of the State. Several of the men testified that they were not being treated fairly as to weights, and that there were times when the coal companies did not weigh the loaded cars but simply guessed at the weights. Many of the employees claimed that at some of the mines no checkweighman was employed; that when the men proposed to elect a checkweighman it was necessary for them to select some one by petition and this petition was presented to the employer.

Several of the coal operators testified that the Rocky Mountain Fuel Co. was the first coal company in the northern Colorado field to cut the price of coal, which made it necessary for the rest of the companies operating to do the same thing. Many of the operators claimed that

slack coal was a by-product and was usually sold for any price that could be obtained.

Merl D. Vincent, executive vice president of the Rocky Mountain Fuel Co., appeared before the commission and testified as follows:

The Rocky Mountain Fuel Co. was not the first company in the northern Colorado coal field to reduce the price of coal; that slack coal was not a by-product; that the first step in the price war in northern Colorado was the cut of 20 cents per ton in the price of slack coal and this seemed to be one of the chief difficulties in stabilizing conditions in the northern coal field; that the basis upon which a price for all grades of coal should be fixed is the cost of production, and that it is wrong for any producer to sell to any consumer any grade of coal for less than it costs to produce it; that during the last five years there has not been a time when the industrial consumers of slack coal have not had requirements to exceed the annual production in the normal course of mining; that there were seasons when there was a surplus, but there were also seasons when there was a shortage, with the result that some five or six operators, including the Rocky Mountain Fuel Co., in the northern field have had crushers installed in order to take care of the demand when the normal supply of slack coal was not sufficient to meet the market demands; that many consumers of steam coal pulverize their coal because they will not use the larger sizes of coal and would crush their coal in case of shortage of slack; that 50 per cent of the coal produced in northern Colorado is slack coal, and is insufficient for the normal annual needs of industrial consumers, and that the only sound economic basis upon which to make prices for this class, or any other class of coal, is to start with the cost of production.

Mr. Vincent also said:

What we are trying to do is not to maintain a battle with other operators, but to maintain peace under circumstances that will permit everybody connected with the industry to live; to create living conditions for operators, for investors, and for the men working in the mines. It is perfectly possible to do so if the operators in this district were put on the same voluntary contractual basis, upon the same negotiated wage scales arising out of a conference in which both sides were represented through their own chosen representatives and sit there with coequal rights until a voluntary agreement was arrived at, you would stabilize costs. That would be the first step. Nobody then would have any cost advantage over another. Next, if then a trade practice were adopted and put into effect that inasmuch as all classes of coal produced in this mine are essentially either for domestic trade or industrial consumption and the cost of production shall be the basis from which all prices proceed, and that no class or grade of coal should be sold below the cost of production; if these two things were done, this field alone, regardless of the economic conditions prevailing in other parts of the United States, in one season can be put on a stable, economic basis which will yield an income to permit men to live under a proper standard of living and operators to make a reasonable margin of profit. In my judgment, the barrier that stands between the present demoralized condition and such a stabilized condition as I have described is simply an ancient hang-over prejudice or closed mind and an unwillingness to concede that if a man is necessary to mining coal he is just as indispensable as the money that provides the property and machinery, and that the laborer that does the work and the technician that manages the property, the investor in the property, all are entitled to the security of an annual income, and no one of them to a prior security over another.

The findings and recommendations of the commission are in part, as follows:

The evidence before this commission from both the employers and employees showed that the employees were not consulted regarding the proposed reduction in wages. It seems to the commission that this is absolutely unfair to the wage earner and that the men should have something to say as to the conditions under which they will labor and as to what wages they shall receive for that labor.

The operators testified that the reduction proposed by them would make a difference of only 30 to 35 cents per ton in the cost of production. When we take into consideration the difference between the freight rates from Colorado Springs to Denver and the rates between the northern Colorado coal fields and this city, there seems to be very little danger of competition from El Paso County.

The operators gave no assurance that the price of coal would be reduced to the consumer if the proposed wage reduction is adopted.

The evidence shows that only about 10 per cent of the coal produced in the northern Colorado field is shipped outside this State. This is the same percentage that the operators claimed at a hearing before this commission some three years ago. Therefore there seems to be no change in that part of the business. It would seem to us that the small percentage shipped outside of this State is in a very large measure due to freight rates and not to wages paid to the employees at this time.

It would seem to the commission that it might be well if the coal operators would stop price cutting and not sell any kind of coal at a price less than the cost of production; get into closer touch with their employees; talk over matters of common interest with them; give them the same rights they claim for themselves; remember that labor should be the first charge against industry; that men are entitled to a living wage. These are a few things that should not be forgotten by the employers of labor.

The pay rolls of many of the employers showed that a majority of the miners under the present wage scale are working for less than a living wage. When the number of days they work per annum and the amount they earn is taken into consideration, the commission can not understand how they can live on a less wage.

The commission wishes to recommend the suggestions of Mr. Vincent to the favorable consideration of the other operators in the northern field.

We would recommend to the employers that they urge their employees to have some kind of an organization of their own for collective bargaining.

The right of the miners to bargain collectively should not be denied or abridged by any employer. It is one of their rights and the one principle that will settle many industrial controversies. There should be no opposition on the part of the employers to this principle. It seems to us it is one of the very best and safest instruments for the attainment of industrial peace and justice.

We would recommend that the men elect a checkweighman by secret ballot and that the officials of the company take no part in such election; that both nomination and election should be by secret ballot under conditions that insure freedom of choice and an impartial count.

Under the conditions prevailing in this country to-day it is the opinion of the commission that it is a mistake to reduce the wages of any man who is not earning a living wage.

The award of the commission under date of May 7, 1932, is as follows:

The commission finds that there is no justification for the reduction in the wage scale as proposed by the above-named employers, and it is the decision of the commission that the reduction be not approved.

Carpenters—Denver

On April 19, 1932, the Hallack & Howard Lumber Co. notified the Industrial Commission of Colorado of its intention to reduce the wage scale of its employees, members of Carpenters' Locals Nos. 55 and 1583.

At the hearing held on May 16, 1932, the employer contended that the wage cut was necessary because of the present competitive conditions. The employees stated, however, that there were a great many smaller concerns engaged in the same business which are paying the scale and have made no application for a reduction, and that the Hallack & Howard Lumber Co. could do the same.

The decision of the commission, May 17, 1932, was that wages should not be reduced.

LABOR ORGANIZATIONS

Membership of Labor Organizations in Canada, 1931

A DECLINE of 11,905 in trade-union membership in Canada in the calendar year 1931 is shown in the report on labor organizations in the Dominion for that year.[1] This first decrease since 1924 is attributed to the industrial depression. It is at the same time pointed out that the loss of members would undoubtedly have been heavier if a number of organizations had not paid the per capita tax of out-of-work members from surplus funds.

The following statistics are also taken from the previously-mentioned source:

TABLE 1.—NUMBER AND MEMBERSHIP OF LABOR ORGANIZATIONS IN CANADA, 1931

Kind of organization	Units or branches		Members	
	Number	Increase or decrease compared with 1930	Number	Increase or decrease compared with 1930
International craft unions	1,884	−62	[1] 188,219	−15,259
One Big Union	46	+1	24,260	+536
Industrial Workers of the World	5	−1	3,466	−275
Canadian central labor organizations	606	+6	[2] 48,509	+181
Directly chartered local unions	73		[3] 8,840	
Independent units	37	+6	12,099	+2,761
National Catholic unions	121	+13	25,151	+151
Total	2,772	−37	310,544	−11,905

[1] Number affiliated with the Trades and Labor Congress of Canada, 153,362.
[2] Number affiliated with Trades and Labor Congress of Canada, 3,330; with All-Canadian Congress of Labor, 25,221.
[3] Number affiliated with Trades and Labor Congress of Canada, 5,739; with All-Canadian Congress of Labor, 3,101.

The figures for the membership of the Trades and Labor Congress of Canada are 21,294 greater than that claimed by that organization, the explanation being that the respective affiliated bodies in reporting to the department included all members who were in good standing, while the congress only reported the number of members for whom per capita tax had been received. Besides the affiliated membership of central organizations the Trades and Labor Congress has 42 directly chartered local unions with a combined membership of 5,739. The figures for the All-Canadian Congress indicate an affiliated membership of central bodies of 25,221, which with the membership of 3,101 comprised in the 31 directly chartered local unions, gives, * * * , a total of 28,322 members.

The number and percentage distribution of 310,544 members of labor organizations in Canada in 1931, by trade groups, is as follows:

TABLE 2.—NUMBER AND PERCENTAGE DISTRIBUTION OF MEMBERS IN CANADIAN LABOR ORGANIZATIONS, 1931

Trade group	Number of members	Per cent
Railroad employment	90,356	29.10
Building trades	36,744	11.83
Public employment personal service and amusement trades	33,550	10.80
Mining and quarrying	23,111	7.44
Other transportation and navigation	22,873	7.37
Metal trades	17,802	5.73
Clothing, boot and shoe trades	15,680	5.05
Printing and paper-making trades	14,965	4.82
All other trades and general labor	55,483	17.87
Total	310,544	100.00

[1] Canada. Department of Labor. Twenty-first annual report on labor organization in Canada (for the calendar year 1931). Ottawa, 1932, pp. 244, 247.

There are 82 international craft organizations with branches or members in the Dominion, the following 12 having 5,000 or more members in that country in 1931:

	Membership in Canada
Brotherhood of Maintenance of Way Employees	17, 440
United Mine Workers of America	17, 100
Brotherhood of Railway Carmen of America	13, 316
Brotherhood of Railroad Trainmen	13, 278
United Brotherhood of Carpenters and Joiners	11, 553
International Association of Machinists	8, 648
Amalgamated Association of Street and Electric Railway, Bus, and Coach Employees of America	8, 549
Order of Railroad Telegraphers	8, 138
Brotherhood of Locomotive Firemen and Enginemen	6, 020
Brotherhood of Locomotive Engineers	5, 671
American Federation of Musicians	5, 411
Amalgamated Clothing Workers of America	5, 000

Among the Canadian organizations there are two with more than 5,000 members—the Canadian Brotherhood of Railway Employees, reporting a membership of 17,350 in 1931, and the Trades and Labor Congress of Canada with 5,739 members of directly chartered unions.

Annual Congress of Federation of Japanese Labor

THE General Federation of Japanese Labor held its twentieth annual convention at Tokyo, November 15–17, 1931. Approximately 300 delegates were in attendance. [1]

The congress decided that vigorous action should be taken to bring about the enactment of trade-union legislation for the purpose of halting the continued increase in the number of industrial disputes and of placing industrial relations on a rational foundation. The convention also favored the establishment of the 8-hour day and the abolition of overtime in order to aid in reducing unemployment. In addition it was decided that public works should be developed and legislation passed providing unemployment insurance and retirement allowances.

At the time the report was made only 8 per cent of the workers were organized and the congress resolved to carry on an energetic campaign to increase trade-union membership to 100,000. (In August, 1931, the General Federation had 44,219 members.) It was proposed that the federation should endeavor to amalgamate all labor organizations opposed to extremist measures, in cooperation with the Japan Labor Club and the Commission for the Promotion of Labor Legislation, in which the General Federation has membership. The congress emphasized the need for haste in ratifying the international labor convention.

Mr. K. Matsuoka will again serve as principal secretary and Mr. B. Suzuki as adviser. Members of the central executive committee were elected or reelected. The office of president, however, was not filled.

[1] International Labor Office. Industrial and Labor Information, Geneva, Jan. 25, 1932, pp. 89, 90.

FAMILY ALLOWANCES

London Conference on Family Allowances

ON April 29–30, 1932, a conference on family allowances was held at the London School of Economics. Delegates were in attendance from trade-unions, the political parties, teachers' organizations, cooperative guilds, women's citizens' associations, townswomen's guilds, societies for equal citizenship, workers' educational associations, civil service associations, the Federation of Professional Workers, the British Social Hygiene Council, the Birth Control International Information Center, the National Council of Social Service, the British Commonwealth League, the Women Public Health Officers' Association, the Ethical Union, the National Association for the Prevention of Infant Mortality, the Institute of Labor Management, and the Eugenics Society.

The Family Endowment Chronicle (London) of May, 1932, from which the above information was taken, states that no vote was taken at these sessions but that "It was clear that the need for some more adequate provision for children was strongly felt, and although there was the usual divergence of opinion on the method, there seemed more readiness than in the past to overstep political barriers and not to consider any scheme by which the principle of family allowances might be applied."

A résumé of various papers presented at this conference is given below:[1]

Sir William Beveridge, speaking on "Some Economic Aspects of the Family," stated that he was led to support family allowances because they seemed to him a right and essential part of the redistribution of the national dividend—an opening up of another channel through which the nation's wealth can flow. He referred to the channel of wages, the channel of management, the channel of interest on money loaned, and the channel of taxation. The speaker explained that in regard to wages, "We say: 'Part of the national dividend shall be spent to pay for labor.'" In regard to the children we take the position that the individual can spend his money on having and supporting children if he so desires. This advocate for family allowances, however, contends "that part of the national dividend must be spent on the rearing and upbringing of children. We must make certain that part of the good things we produce should be mortgaged to the bringing up of the next generation."

The speaker also cited the following two reasons for family allowances, which he considered very practical:

1. Considering the state of our production and structural needs in this country, there is no other means of diminishing poverty so rapidly. Poverty arises, essentially, when people have children to bring up.

[1] Except where otherwise noted, data are from Family Endowment Chronicle, London, May, 1932.

2. It is a practical means of dealing with the difficult modern problem of equality of payment for men and women. If you say to a man or a woman, "We pay so much for doing this work and then add so much for a family," you get right around it. Here at the school of economics we have equal pay accompanied by a system of family allowances, and members of the staff who have children get very substantial additions to their salaries while the children are being brought up.

He was of the opinion also that family allowances could be helpful in the future in solving the problem of the economic dependence of the married woman and the population problem. Western countries are confronted with a decrease or disappearance of population. Family allowances should remove the economic motive which tends toward the excessive limitation of families.

Family Allowances in Practice

New South Wales.—An account of the introduction and operation of the family-allowance system in New South Wales was given by A. C. Willis. During 1928–29, he reported, there were 48,720 claims, and endowment was payable to approximately 42,000 families at June 30, 1929, the fortnightly liability being £56,808 [2] ($276,456). Mr. Willis said he understood that the New South Wales Government is considering the introduction of a legislative proposal to raise the tax rate on wages to 2 per cent. In conclusion, this speaker declared that wherever a family allowance system has been in operation "it is one of the greatest blessings ever bestowed upon children."

New Zealand.—A report on the New Zealand family allowance act of 1926 was made by C. Burdekin, who said that the actual expenditure under the law in that country was much less than the original estimate—£260,000 ($1,265,290) for 50,000 children. In 1927–28, £37,652 ($183,233) was disbursed in respect of 10,000 children living in 3,000 families. In 1930–31 the number of families benefiting increased to 4,617 and the cost to £63,608 ($309,548). The estimated cost for 1931–32 is £121,000 ($588,847), the great increase being due to the cut in incomes resulting from the industrial depression.

The National Expenditure Commission set up by the Government to report as to what economies could be effected to meet the present difficult situation, recommended, among other measures, the cessation of the allowances. But it is by no means certain that the Government will adopt this part of the report, even as an emergency measure.

Belgium.—The progress of the family-allowance movement in Belgium was traced by M. Forthomme, who toward the close of his paper gave a brief analysis of the act of August 4, 1930, which made general the system of family allowances in that country. This law, he explained, was put into effect gradually and did not become operative in its entirety until January 1, 1932. The estimated annual cost to employers is 400,000,000 francs [3] ($11,120,000).

This legislation affects 400,000 employers and 2,200,000 wage earners. The total population of Belgium is approximately 9,000,000.

According to M. Forthomme, it was not possible to determine the effect of family allowances on population. The birth rate has been going down and, in his opinion, it would probably have been lower still if there had been no foreign emigration into Belgium. In his

[2] Conversions into United States currency on basis of pound at par=$4.8665.
[3] Conversions into United States currency on basis of franc at par=2.78 cents.

opinion "family allowances have probably acted on the quality rather than the quantity of the population. Belgium has already the largest proportional population in the world, and there is a difference of opinion on the desirablilty of increasing it."

The Future of Family Allowances

EVEN in the face of Great Britain's present national stringent economic policy in regard to social services, Mrs. Mary Stocks maintained that "there are some hopes for family allowances." She suggested that some well-organized and self-contained industry might be obliged to adopt on its own initiative a family-allowance system "as a counsel of despair rather than a counsel of perfection." Referring to the argument sometimes advanced by trade-unionists, that the putting into operation of a sectional scheme might prejudice the establishment of a large national system, Mrs. Stocks reasoned that the tendency would be rather to develop the sectional scheme on a national scale, many nationalized social services, for example, social insurance, having been initiated as volunteer sectional schemes. At the same time, this speaker conceded, the prospect for family allowances for wage earners is not very bright. The possibilities of such grants for professional people seem more encouraging.

> Take, for example, the teachers. They have suffered a disproportionately large dose of "equality of sacrifice." Therefore the question of family allowances has become a practical one. The Burnham Committee will be considering it. Discussion of it is permeating the profession. Lord Burnham himself has said that it is a possible solution that deserves consideration. * * *
>
> Any scheme for teachers could be applied to civil servants.
>
> *University teaching.*—There are two hopeful features in the situation: (1) The existing superannuation scheme of the A. U. T. would provide the necessary machinery; (2) the fact that there is already a scheme in operation among the teachers at the School of Economics.
>
> *The church.*—The Wesleyans have had a scheme for 150 years. The Church of England has the machinery for a scheme in the central pool which it administers for bringing up salaries of the lower-paid clergy to a standard minimum; this might be the basis for a family-allowance scheme. A most peculiarly ripe field for a large experiment in family allowances.

As to lawyers, doctors, business executives, all persons who live on fees, royalties, etc., Mrs. Stocks said that it would be no easy task to devise any machinery for the establishment of family allowances other than a universal system. Voluntary insurance would be of assistance to a substantial number of such professional people, she stated, and something further might be done in the matter of tax allowances. After pointing out what, in her judgment, the future offers, she proceeded to outline what she considered the needs of the future. In this connection she advocated the raising of £100,000,000 ($486,650,000) per annum for expending on family allowances. Such allowances should be paid to mothers, regardless of the fathers' occupations or wages, for all children of school age wherever the income is under the income-tax standard. In this way, the speaker claimed, one of the most flagrant results of maldistribution would be met, and purchasing power would be put into the hands of the mothers of the working class who have shown in the past that they can use such power well. The Nation "would get a very good dividend from this investment—in human material, in the well-being and happiness of the mothers and children."

Joseph L. Cohen asserted that the most effective and cheapest way of providing family allowances was on an insurance basis. "Nobody" he reported, "says that we can not have such a scheme, that it is impracticable or financially heavy." It could, he maintained, be operated by weekly contributions of from 9d. to 1s. 6d. (18 cents to 37 cents) from the worker, the employer, and the Government respectively. This would make it possible to grant from 3s. to approximately 6s. ($0.73 to $1.46) per week for each child.

Mr. Cohen also pointed out that quick changes are being effected in the actual wage level of the working class. The cost-of-living index, he said, had declined 20 per cent in the last three years, and it might now be possible to have a rise of 20 or 30 per cent in the cost of living as a result of the abandonment of the gold standard. He was of the opinion that it would be much easier to adopt a family-allowance scheme when conditions are so fluid. He declared that "Family allowances are the only proposal at the moment for dealing with the problem of poverty—for an immediate substantial improvement in working-class conditions."

> We have been forced back to this idea of the family as the social group. That is, the State says: "You, as a family, must keep together and support one another." How can the State go so far, forcing people in this way to support one another, yet say at the same time: "We don't really care as to the conditions of the family, whether the father or mother are earning enough, or what housing conditions, etc., they are forced into"?

The biological aspects of family allowances were discussed by R. A. Fisher,[4] whose conclusion is that two wholly different lines of scientific investigation have combined to focus attention upon "a single anomalous feature in our economic system—the great differences in standard of living between persons performing the same economic services, but having different family responsibilities."

From the economic viewpoint, he holds, we may regard this anomaly as wasteful—one of the principal causes of economic waste as, according to Sir William Beveridge, the institution of family allowances constitutes the greatest single possible step towards abolishing poverty; as unjust in that the differential rewards are not bestowed because of social services rendered while the necessary social service of reproduction, and particularly the service of mothers, is given no recognition; and as demoralizing because any widespread injustice is bound to be.

From the biological angle the same social anomaly is found to have, Doctor Fisher suggests, "the peculiarly pernicious effect of segregating the heritable factors which make for a low rate of reproduction, and of uniting them with all such socially valuable qualities as enables the citizen successfully to play his part in social cooperation."

The fact that the same remedial measures should be suggested by the two different lines of investigation is the more striking, Doctor Fisher holds, as the grounds on which such inquiries are based are wholly independent and undoubtedly are not a resultant of any sympathetic approach of ideas between economists and biologists.

---

[4] In the May, 1932, issue of the Family Endowment Chronicle, in which various papers presented at the family allowance conference are published, it is stated that Doctor Fisher's contribution is not included as his views on the biological case for family allowances had appeared so recently in that journal. The above résumé of his views is based on a reprint of an article from the November, 1931, number of the Chronicle.

WORKERS' EDUCATION, TRAINING, AND PLACEMENT

Scientific Placement of the Handicapped

THE hope of employment for the great majority of handicapped people lies in specialized jobs—not in occupations and trades, Dr. Charles A. Prosser, director of the Dunwoody Industrial Institute, Minneapolis, suggests in the February, 1932, number of the Rehabilitation Review. The following techniques for the placement of persons with disabilities are taken from his article:

Job Analysis

MOTION study is necessary to determine what motions are called for on different jobs, and handicaps must be studied to ascertain whether an individual with a particular disability can perform the motions of a particular job. In considering the placement of a handicapped worker the first question to be answered is, "What has he left in the way of physical ability to do things—what motions can he still perform as well as an unhandicapped worker?" The second inquiry to be made is, "What job or jobs require only the motions that he can still perform?"

The records of an employment office which undertakes the placing of handicapped persons should include immediate information regarding job possibilities for particular handicaps and the employers who have these jobs. If the applicant has had experience in a special line or occupation prior to injury, earnest efforts should, of course, be made to utilize his previous experience by securing him another job that he can do with success in that line. The files should provide information on cases of this kind.

Such a record should also show readily the kind of jobs that he can not perform successfully with his handicap. This will avoid wasting his time and effort in school training for a job which he can never fill satisfactorily; or the discouragement of failure in a job in which he should never have been placed; or the loss of confidence by the employer in the placement service and in further proposals that he take on a handicapped man. Those responsible for placing the handicapped not only need to be familiar with the files. Obviously they need also to be familiar, as the result of visitation, with the jobs themselves.

Case Study

IN ADDITION to the physical requirements of jobs, there are other demands which vary with the job as much as the handicapped workers themselves vary in the nature and extent of their disability, and in their personal characteristics and assets. A personal interview with the individual to be placed is, therefore, highly important for determining the kind and degree of his native ability, education, health, strength, appearance, former employment, record, and personality.

Fundamental Policy

THE policy of placing the handicapped through charitable or quasi-charitable appeal is doomed to failure, according to Doctor Prosser. If such a course is once established, all hope of developing a scientific

system of placing the handicapped in suitable permanent jobs must be abandoned. The only efficient procedure is to say to employers:

> We recognize that business is operated on an economic, competitive basis. We propose to place handicapped persons only on those jobs which they can do satisfactorily in spite of the handicap. As a result of our study of the job and the man, we believe that he can do this job successfully. If on trial he can not, drop him and we will find you another who can. We will make some mistakes but we are trying to reduce them to a minimum. In many ways a handicapped worker who has been placed on a job that he can do, will constitute a specially valuable employee for you. Help us and let us help you find and adjust such men.

Placement offices which follow the above method will discover that not only foremen but higher officials become more and more interested in assisting handicapped workers to learn jobs they can do with efficiency. Consequently, a special market is developed for the products of such employment agencies. It should be emphasized, however, the author states, that this policy is based on a recognition of the fact that certain handicapped people are unemployable and that such group requires defining so that its members may be provided for through other means than pay-roll jobs.

Facing Essential Facts

THE scientific placement of the handicapped also requires clear recognition of a number of facts concerning the problem in the mass. In the judgment of the author, over four-fifths of the handicapped people who are employable must be placed, if at all, on ordinary jobs and not in skilled occupations, trades, or professions in agriculture, commerce, industry, or transportation. Nearly all the jobs for which they are fitted are of a type for which no school can or does give training, but jobs for which these handicapped persons must be instructed by the foreman. The foreman is likely to be the only vocational teacher for the great mass of handicapped persons. For this large majority placement on specialized jobs must be made for the most part without school training, as most of these disabled persons are obliged to have immediate employment. They have no money to tide them over while being trained. Assuming they are fit for the employment for which it is proposed to give them school training, thorough training is required if they are to hold their own with normal competitors. "Fly-by-night" courses for handicapped people are, the writer of the article states, a waste of both money and time.

However, for handicapped persons who obviously have aptitude and capacity, school training should be given whenever possible, for those occupations for which they are adapted and for the securing of which school training is a requisite, preparation, or an advantage which warrants the effort and money expenditure.

In the opinion of the author, the present tendency is toward schooling too many persons of inferior or mediocre ability in trades or occupations in which they will not be able to attain success and in which they would not be successful even if they were not handicapped. In so far as this is the trend, these disabled people would be aided much more by immediate placement on specialized jobs which they could successfully fill. "Just why so many handicapped people have been put in schools to learn trades, no one has yet explained. A trade requires a physically capable man, and a successful mechanic requires about as much brains as a schoolmaster!"

"The handicapped man must be made worth more above the neck" is a sound slogan theoretically, but practically the theory fails when the effort is made to educate the handicapped for positions for which they have neither the requisite mental ability nor physical capacity. The author has known of cases in which the outcome was perilously close to being an exploitation of the disabled victim.

The Challenge

IN CONTRAST with the typical normal worker in need of employment, the typical handicapped man has a number of definite characteristics which placement officials must know and consider as necessary facts in the case. On the average, the disabled candidate has been out of work for a longer period, his financial resources are more limited, and he is less vigorous physically, has a greater inferiority complex and a lower industrial and social morale.

For the normal unemployed, a perfunctory placement service is bad enough; for the handicapped jobless the writer regards it as "deplorable." The placement of the latter will become scientific only as it is founded on facts concerning the requirements of jobs and as its procedures are adjusted to the characteristics and needs of those who want work but also require special service to find and retain work.

The problem challenges the best thinking, planning, and effort of all those engaged in the rehabilitation of disabled persons. The issues at stake, the improvement that needs to be made, and the difficulties involved, provide a field of service large enough for all interests and all agencies, public and private. Above all else, we need a recognition of the situation, free and constructive experimentation, and tireless effort.

The progress made in the movement for the rehabilitation of civilians the author regards as gratifying. In reference to the whole problem of the handicapped, he believes that the least satisfactory progress has been in the matter of their placement. He counsels that at present there should be no formalizing of procedure nor crystallizing of routine policies and methods. It is a time for taking stock, checking results, and improving policies and programs. It will finally be found that the scientific placement of the handicapped "is not a perfunctory, swivel-chair, time-clock or even a card-index task, but a personal, intimate, discriminating, individualized service which is based on facts."

Rehabilitation of the Unemployed in a Small City

THE part that education or lack of education has played in the existing depression can not be measured statistically, but those in close touch with placement problems realize that the rehabilitation of the unemployed is at least to some degree an educational responsibility. This fact is brought out in a brief account of how the workers in adult education in Williamsport, Pa., successfully cooperated with the local chamber of commerce employment committee, published in the Journal of Adult Education, April, 1932.

The committee undertook a thorough investigation of unemployment, and suggested an educational cure. As there was already an adequate adult-education program included in the school system, the committee had recourse to the schools for aid, thus laying the foundation for the expansion of a valuable community service. It was

found that approximately 85 per cent of the unemployed men had sufficient intelligence and native skill to perform semiskilled or skilled work if they could be given the requisite training. Fortunately, the employment prospects for such workers, provided they could qualify, were reasonably good. The survey also showed that, as in certain other communities, unemployment among older men was not so serious as is ordinarily supposed. In Williamsport, which has a population of 47,000, technological unemployment was not so striking. A very considerable majority of those continuously out of work were in the common labor class, and almost every one of them had no specific job training.

There were not many high school or college graduates who were having unemployment difficulties, although recent graduates who had not been firmly established in desirable jobs before the severe industrial slump were not finding it altogether easy to get work. One of the outstanding problems was that constituted by youthful workers who had left school as soon as they could and who had no special job training and were competing with family men in the field of common labor.

With these facts as a basis, the committee concentrated its initial efforts on the retraining of those whose possibilities for employment could be appreciably increased by specific job training. A little more than six months prior to the preparation of the report under review the rehabilitation program was inaugurated. Since the emergency demanded immediate action, there was no time for devising a complete educational scheme. The work was started with the men and means at hand, with the understanding, however, that changes in procedure would be made in accordance with the dictates of experience. This has proved an excellent method, as it is probable that no adequate grasp of the requirements of the men could have been obtained without experimental classes. The scheme includes the following four steps: (1) Individual diagnosis to disclose the failure characteristics which nearly always exist in cases of protracted unemployment; (2) retraining to eliminate these failure characteristics; (3) placement as a final objective of the program; and (4) follow-up in order to insure a reasonable permanence after placement and to ascertain the results of the instruction given.

Diagnosis is reported as relatively simple, consisting chiefly of a series of interviews, some inquiry into the previous record of the applicant, and occasional trade tests of the performance type. Diagnosis, however, continues even after the trainee is on a paying job. As the individual advances through a school various personal data are recorded, such information being appreciated by employers when they are considering the trainee for a position.

In retraining, the usual technique of adult education is closely followed except that sufficient allowance must be made for the learning handicaps of men, the majority of whom have done little studying of any kind for years. At first instruction was given in the evening but later on was shifted to Saturday morning. Classes are again being held at night, mainly because of the restricted day-school facilities but also because the men were reluctant to give up their daily search for odd jobs. (Classes as a rule are confined to jobless men.) The greater part of the work is individual and aims to eliminate as quickly as possible the failure characteristics found

by the diagnosis. Insufficient job training is the common obstacle to employment but personal defects frequently create difficult problems in the matter of placement. The instructors for this task of rehabilitation are experienced teachers of adults with ability to lead and cheer, in addition to their skills and technical information. The inspiration of the right kind of a teacher is of inestimable value when students do not have enough will power to persevere in any direction without a great deal of encouragement.

For the purpose of school organization, trainees are grouped in classes for study and practice in machine-tool operation, electrical construction, blue-print reading, heavy-truck driving, business practice, printing, mathematics, English, show-card writing. Also, groups are organized for particular industries. For example, a group of unemployed recent high-school graduates was organized into a rubber footwear training group to meet the request of a local manufacturer for employees of a higher educational level.

Placement is probably the most important step in the whole undertaking. The school employs a full-time coordinator, and there is very close contact with the industries of Williamsport. At the time of the preparation of the report, the school had placed approximately 30 per cent of the total of 300 enrolled men. Practically all of those registered in October, 1931, had been permanently placed when the present data were compiled, and at that time many of the newer students were scheduled for employment as soon as they attained the degree of skill required by the school. An important function of the coordinator is to help trainees to change attitudes or conditions which have resulted in their having unfavorable personal records in plants in which they were previously employed.

In order to facilitate a student's securing interviews with prospective employers, he carries a little identification card. Where definite jobs are available the director or coordinator selects a desirable man and sends him to the establishment with "a request for interview" blank, which is always effective. Instructions as to the manner of applying for a job are included in the training process in individual cases. A weekly report on each student's cumulative attendance is furnished to local employers.

The final follow-up is done chiefly by the coordinator, who sees each man on the job at least once after he is placed. As a result of this follow-up there is often a modification or complete reorganization of some of the training work.

The word "retraining" has been used freely, but as a matter of fact it does not accurately describe the work of the school. The program is one of upgrading and reinstatement rather than of actual retraining for new jobs. Unless the old occupation has disappeared entirely, men are usually fitted for better jobs in it, or better fitted for their old jobs. In no case are men accepted for training in occupations where there is normally a surplus of properly trained workers. The placement step serves as an excellent check against retraining for nonexistent jobs.

The Williamsport adult education workers feel that the scheme of rehabilitating the unemployed in their city is "a going thing." Apart from the actual service to the community, the work gives promise of exerting a wide influence upon the local educational system. Gradually the man on the street is beginning to realize the relation between the schoolhouse and his earnings. Leaders in the community are growing interested in an improved school program and have indicated their intention of providing the requisite financial backing.

COOPERATION

Sales of Consumers' Cooperative Societies in 1931

THE Bureau of Labor Statistics has reports from 21 retail distributive, 2 wholesale, and 35 cooperative oil societies in the United States—58 societies in all. These did a combined business in 1931 of $10,284,332, on which a net saving of $476,833 was made.

Of the retail distributive societies, reports for both 1930 and 1931 are available as to business for 18 and as to net saving for 16. For this group average sales per society declined from $332,843 to $277,692 or 16.6 per cent. Inasmuch as retail prices of food (handled by most of these societies) declined 16.2 per cent from 1930 to 1931, this decline in average sales per society is practically all accounted for by the decline in prices. Despite economic conditions two societies in this group reported increased sales. Average net gain per society fell from $11,238 to $6,975; in 5 cases, however, greater net profits were realized on the 1931 than on the 1930 business.

As regards the gasoline and oil associations, average sales for the 12 societies that reported for both years fell from $83,856 to $82,275; exactly half of the societies, however, had a larger amount of business in 1931 than in 1930. Average net gain fell from $14,223 to $10,739, with only one society reporting a greater profit in 1931 than in 1930.

The following table shows, by type of society and State, the membership, sales, and net gain in 1931.

MEMBERSHIP, SALES, AND NET SAVINGS OF CONSUMERS' COOPERATIVE SOCIETIES, 1931

Type of society, and State	Number of societies reporting	Members	Amount of sales	Net gain
Retail distributive societies:				
Illinois	2	[1] 2,037	$835,024	$31,592
Michigan	2	[1] 619	530,811	[2] 30,811
Minnesota	12	[3] 4,284	3,515,190	[4] 73,907
Wisconsin	5	([5])	285,422	9,538
Total	21	[6] 6,940	5,166,447	[7] 145,848
Wholesale societies	2	[8] 264	3,080,780	[9] 51,271
Gasoline and oil associations:				
Colorado	1	412	74,659	([5])
Kansas	1	([5])	38,937	([5])
Minnesota	18	[10] 2,415	[11] 1,171,432	169,504
Nebraska	5	([5])	293,761	49,939
Wisconsin	10	[12] 872	458,316	60,271
Total	35	[13] 3,699	2,037,105	279,714
Grand total	58	10,903	10,284,332	476,833

[1] 1 society only.
[2] In 1 society includes only trade rebates, and interest on capital.
[3] 2 societies only.
[4] 10 societies only.
[5] No data.
[6] 4 societies only.
[7] 19 societies.
[8] Member societies.
[9] In 1 society includes only amount rebated on purchases.
[10] 4 societies.
[11] 17 societies.
[12] 3 societies.
[13] 8 societies.

Development of International Cooperative Alliance, 1929 and 1930 [1]

AT THE end of 1931 the cooperative movements in 41 countries were affiliated to the International Cooperative Alliance. The 77,500 cooperative societies in these countries had a combined membership of more than 70,000,000 persons.

No details are given as to the various types of societies in this world-wide movement for 1931, but they are now available for 1929 and 1930 and summary data for those two years are given below.

Table 1 shows the number of societies of each type, with their membership and business in 1930.

TABLE 1.—MEMBERSHIP AND BUSINESS OF COOPERATIVE SOCIETIES, 1930

Type of society	Number of societies	Members	Business
Retail consumers'	21,051	64,519,390	$8,032,730,088
Cooperative wholesale	37		6,889,728,707
Workers' productive	1,095	132,990	118,793,401
Agricultural	24,323	1,879,614	457,053,310
Miscellaneous	835	171,408	10,878,632
Credit	28,351	7,107,369	[a] 020,313,255
Banks	19		
Insurance	28	[b] 14,229,938	
Total	75,739		

[a] Loans granted.
[b] Policyholders.

Table 2 gives comparative data for the two years, 1929 and 1930, for the various types of societies.

TABLE 2.—DEVELOPMENT OF COOPERATIVE SOCIETIES, 1929 AND 1930

Item	Retail consumers' societies	Wholesale societies	Productive societies	
			Workers' productive societies	Productive societies of consumers' organizations
Number of societies:				
1929	38,526	[a]	1,220	25
1930	21,051	37	1,071	24
Number of members:				
1929	48,655,918	[a]	136,221	
1930	64,519,390	[a]	132,990	
Paid-in share capital:				
1929	$740,092,707	$124,459,599	$12,019,574	$17,434,888
1930	$914,917,899	$188,323,447	$10,980,741	$18,428,706
Reserves:				
1929	$276,902,273	$205,741,858	$5,783,446	$5,578,849
1930	$314,849,410	$277,056,317	$6,225,446	$7,859,208
Business done:				
1929	$6,733,472,230	$6,205,364,477	$62,962,680	$74,558,790
1930	$8,032,730,088	$6,889,728,707	$47,145,654	$71,647,747
Value of goods manufactured:				
1929	$279,689,712	$870,536,339		
1930	$283,145,998	$747,209,063		

[a] No data.

[1] Data are from Review of International Cooperation (London), issues of March, April, and May, 1932.

TABLE 2.—DEVELOPMENT OF COOPERATIVE SOCIETIES, 1929 AND 1930—Continued

Item	Agricultural societies	Miscellaneous societies	Credit societies	Insurance societies	Banks
Number of societies:					
1929	[1]	[1]	[1]	[1]	24
1930	[2] 24,323	835	28,351	28	19
Number of members:					
1929	[3] 1,953,687	[1]	6,220,133	[4] 13,151,845	
1930	[3] 1,879,614	171,408	7,107,369	[4] 14,229,938	
Paid-in share capital:					
1929	$4,260,519	[1]	$114,765,385		
1930	$3,229,093	$2,977,602	$140,448,825		
Reserves:					
1929	$18,176,280	[1]	$52,965,132		$14,320,265
1930	$12,716,734	$1,192,959	$14,946,112		$19,207,555
Business done:					
1929	$533,003,325	[1]	[5] $77,427,889		[6] $399,792,426
1930	$457,053,310	$10,878,632	[5] $620,313,255		[6] $521,881,002

[1] No data.
[2] Local and central.
[3] Members of local societies.
[4] Number of policyholders.
[5] Loans granted.
[6] Deposits.

Cooperative Marketing of Agricultural Products in Palestine [1]

THE cooperative movement of Palestine dates from the passage of the cooperative law of October, 1920. Since that time 249 societies have been formed under the act, of which 49 are agricultural associations, 82 are land-purchase and building societies, and 55 are credit societies. There are also 14 cooperative dairies not registered under the act.

The table following shows for 20 of the agricultural cooperative associations the membership and share capital on May 31, 1930. Of these 20 associations, 9 market all sorts of crops, while 6 limit themselves to one commodity only, as for instance grapes, or oranges, or poultry, etc.

TABLE 1.—MEMBERSHIP AND SHARE CAPITAL OF COOPERATIVE AGRICULTURAL SOCIETIES IN PALESTINE, MAY 31, 1930

Type of society	Number of societies	Number of members	Share capital
Marketing societies handling—			
All agricultural products	9	597	$66,895
Single commodities only	6	509	[1] 54,865
Water-supply societies	3	182	63,480
Cattle-insurance societies	2	1,395	17,050
Total	20	2,683	202,290

[1] 5 societies.

It is stated that practically all of the almond and wine-grape crop, about 80 per cent of the milk, eggs, poultry, and vegetables, and 40 per cent of all the oranges raised in Palestine are marketed through cooperative channels. The annual value of the Jewish agricultural products so marketed is over $2,175,000; of this approximately $1,500,000 worth is exported.

[1] Data are from report of H. Gordon Minnigerode, American vice consul at Jerusalem, Nov. 6, 1931.

Table 2 shows the value of the various crops handled cooperatively in specified seasons.

TABLE 2.—VALUE OF CROPS MARKETED COOPERATIVELY IN PALESTINE

Commodity	Period	Value of crop marketed
Almonds	1929–30	$175,000
Grapes (in form of wine)	1929–30	350,000
Oranges	1929–30	875,000
Milk, dairy products, vegetables, eggs, poultry, honey, grapes, and bananas	1929–30	750,000
Grain and fodder	1928–29	50,000
Tobacco	1928–29	25,000
Total		2,225,000

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in May, 1932

DATA regarding industrial disputes in the United States for May, 1932, with comparable data for preceding months are presented below. Disputes involving fewer than six workers and lasting less than one day have been omitted.

Table 1 shows the number of disputes beginning in 1927, 1928, 1929, 1930, and 1931, the number of workers involved and man days lost for these years and for each of the months, January, 1930, to May, 1932, inclusive, as well as the number of disputes in effect at the end of each month and the number of workers involved. The number of man days lost as given in the last column of the table, refers to the estimated number of working-days lost by workers involved in disputes which were in progress during the month or year specified.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY, 1930, TO MAY, 1932, AND TOTAL NUMBER OF DISPUTES, WORKERS, AND MAN-DAYS LOST IN THE YEARS 1927 TO 1931

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost in disputes existing in month or year
	Beginning in month or year	In effect at end of month	Beginning in month or year	In effect at end of month	
1927: Total	734		349,434		37,799,394
1928: Total	629		357,145		31,556,947
1929: Total	903		230,463		9,975,213
1930: Total	653		158,114		2,730,368
1931: Total	894		279,299		6,386,183
1930					
January	45	21	9,240	5,316	184,730
February	52	40	37,480	6,683	438,570
March	49	38	15,017	5,957	291,127
April	64	41	6,379	5,840	189,828
May	66	29	9,329	4,386	185,448
June	59	34	14,011	8,311	144,117
July	78	30	14,308	4,815	141,647
August	51	33	15,902	7,131	142,738
September	72	44	16,337	13,778	208,184
October	47	36	10,858	16,007	335,916
November	44	29	4,390	7,759	273,608
December	26	7	4,863	5,144	194,455
1931					
January	57	19	10,150	2,905	181,169
February	52	29	20,473	10,677	223,660
March	49	26	26,453	28,012	476,904
April	73	39	27,135	22,687	770,512
May	115	46	28,000	15,603	400,509
June	90	47	18,795	15,223	511,926
July	73	51	49,434	56,683	612,864
August	79	36	11,019	14,759	1,157,013
September	117	65	36,092	37,427	493,649
October	77	45	34,384	29,380	1,052,095
November	62	39	13,219	13,690	355,818
December	50	21	4,145	1,318	150,064
1932					
January	79	37	11,105	4,648	117,298
February	50	30	31,140	28,691	417,966
March	51	28	31,966	11,660	685,949
April [1]	71	40	18,226	21,228	587,326
May [1]	62	58	42,406	53,280	1,242,409

[1] Preliminary figures subject to change.

Occurrence of Industrial Disputes, by Industries

TABLE 2 gives, by industry, the number of strikes beginning in March, April, and May, 1932 and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN MARCH, APRIL, AND MAY, 1932

Industrial group	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	March	April	May	March	April	May
Bakers		2	10		24	1,125
Barbers		1	1		1,000	2,500
Building trades	22	19	16	2,212	3,330	31,051
Chauffeurs and teamsters		4	7		529	427
Clothing	4	6	9	10,800	825	3,026
Farm labor		1	3		47	1,350
Fire fighters and policemen			1			50
Food workers	1	2	1	39	90	20
Furniture		2			47	
Glass workers	1			57		
Hospital workers		1			41	
Hotel and restaurant workers	1			6		
Iron and steel			1			350
Light, heat, power, and water			1			100
Longshoremen and freight handlers	1	3		10	1,612	
Lumber, timber, and mill work		2			23	
Metal trades	2	1		294	70	
Miners	5	10	2	17,112	7,775	650
Motion-picture operators, actors, and theatrical workers	1	2		38	116	
Paper and paper-goods workers	1		2	18		725
Printing and publishing	1			14		
Shipbuilding			1			300
Stone	1	2		89	80	
Municipal workers		1			75	
Textiles	7	6	3	838	1,113	212
Tobacco	1	1		14	22	
Other occupations	2	5	4	425	1,407	520
Total	51	71	62	31,966	18,226	42,406

Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in May, 1932, classified by number of workers and by industries.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN MAY, 1932, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIAL GROUPS

Industrial group	Number of disputes beginning in May, 1932, involving—					
	6 and under 20 workers	20 and under 100 workers	100 and under 500 workers	500 and under 1,000 workers	1,000 and under 5,000 workers	5,000 workers and over
Bakers	5	2	2	1		
Barbers					1	
Building trades	1	10	4			1
Chauffeurs and teamsters	2	4	1			
Clothing	1		6	2		
Farm labor			2		1	
Fire fighters and policemen		1				
Food workers		1				
Iron and steel			1			
Light, heat, power, and water			1			
Miners			2			
Paper and paper-goods workers			1	1		
Shipbuilding			1			
Textiles	1	1	1			
Other occupations		2	2			
Total	10	21	24	4	2	1

In Table 4 are shown the number of industrial disputes ending in May, 1932, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN MAY, 1932, BY INDUSTRIAL GROUPS AND CLASSIFIED DURATION

Industrial group	Classified duration of strikes ending in May, 1932			
	One-half month or less	Over one-half and less than 1 month	1 month and less than 2 months	4 and less than 5 months
Bakers	7			
Building trades	8	1	2	
Chauffeurs and teamsters	2		1	
Clothing	5	1	1	
Farm labor	2			
Food workers			1	
Furniture		1		
Light, heat, power, and water	1			
Motion-picture operators, actors, and theatrical workers				1
Paper and paper-goods workers	1			
Textiles	1		4	
Other occupations	4			
Total	31	3	9	1

Conciliation Work of the Department of Labor in May, 1932

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 62 labor disputes during May, 1932. These disputes affected a known total of 17,038 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

There were 19 cases involving the prevailing-rate-of-wages law. In these cases it is not always possible to show the number involved, due to lack of information as to total number required before completion of construction.

On June 1, 1932, there were 38 strikes before the department for settlement and, in addition, 44 controversies which had not reached the strike stage. The total number of cases pending were 82.

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF MAY, 1932

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workmen involved	
					Beginning	Ending	Directly	Indirectly
					1932	1932		
Elco Co., Brooklyn, N. Y.	Strike	Shoe workers	Discharge of 5 workers	Adjusted. Reinstated 3 of those discharged.	Apr. 29	May 17		
I. Miller & Sons (Inc.), Long Island City, N. Y.	do	do	Recognition of workers	Pending	do		285	715
Post-office building, St. Paul, Minn.	Controversy	Building mechanics	Proposed to pay wages below prevailing rates.	do	do		(1)	
Orpheum Amusement Co., New Bedford, Mass.	do	Operators, stage hands, etc.	Wages and reduction of force	do	Apr. 28		(1)	
Post-office building, Boston, Mass.	do	Plumbers	Prevailing-wage discussion	Adjusted. Prevailing rate for plumbers fixed and accepted.	May 2	May 3	16	560
Truck drivers, Connecticut and New York.	Strike	Truck drivers	Wages cut 20 to 25 per cent	Adjusted. Accepted 10 per cent cut, to 65 cents per hour.	do	May 4	250	
Claire Knitting Mills, Austin Place, New York, N. Y.	do	Knitters	Wages cut 10 per cent	Adjusted. Cut withdrawn. Equal division of work.	do	May 6	12	28
Container Corporation, Manayunk, Pa.	do	Employees	Wages cut 33½ per cent	Adjusted. Accepted 15 per cent cut.	May 5	May 13	550	50
Veterans' hospital, Chillicothe, Ohio.	Controversy	Bricklayers	Prevailing-wage discussion	Adjusted. Complied with wage decision—$1.35 per hour.	Apr. 1	May 2	26	
Becker Freedman Shoe Co., Brooklyn, N. Y.	Threatened strike.	Shoe workers	Recognition of union	Pending	May 1		125	
Andrew Gellar Shoe Co., Brooklyn, N. Y.	Strike	do	do	do	do		138	312
Paris Shoe Co., Brooklyn, N. Y.	do	do	do	do	do		75	
Courthouse, Portland, Me.	Controversy	Plasterers, roofers, and metal workers.	Employment of local labor	Adjusted. Local men employed at union scale.	do	May 10	29	
Laborers, Des Moines, Iowa	Strike	Laborers	Wage cut and working conditions	Adjusted. Accepted 18 per cent cut; laborers 50 cents, mortar mixers 75 cents, hod carriers 75 cents per hour.	May 5	June 3	225	1,200
Post-office building, Texarkana, Tex.	Controversy	Bricklayers	Prevailing-wage discussion	Adjusted. Bricklayers allowed $1.25 per hour.	May 2	May 14	15	
Post-office building, New Kensington, Pa.	do	Building workers	Paying 30 cents per hour; prevailing rate alleged to be 56 cents.	Pending	May 4		5	
Post-office building, High Point, N. C.	do	do	Prevailing-wage discussion	do	May 9		(1)	
Marine hospital, Seattle, Wash.	do	do	do	Adjusted. Mechanics cut 15, laborers 10 per cent.	do	May 17	95	
Federal buildings, Seattle, Wash.	do	do	do	Adjusted. Plumbers and hod-carriers cut 15 per cent.	do	May 14	50	200

O. C. Putney & Woodstock Quarry, Granite, Md.	do	Granite workers	Wages cut from $9 to $5 per day	Unclassified. No work in progress	May 2	May 6	20	
Cleaners, dyers, and drivers, New York City.	Strike	Cleaners, dyers, and drivers.	Wages and union recognition	Adjusted. Wages cut 10 per cent subject to further negotiation by arbitration.	May 9	May 23	950	600
Post-office building, Hartford, Conn.	Controversy	Building workers	Prevailing-wage discussion	Pending	May 11		(1)	
Fisher Body Co., Tarrytown, N. Y.	Strike	Auto-body workers	Wage cuts on piecework	Adjusted. Part of wages restored	May 9	May 11	250	1,125
Crown Upholstery Co., Jamaica, L. I., N. Y.	do	Upholstery workers	Wage cuts and union recognition	Pending	May 10		(1)	
Hyman Forin Furniture Shop, Brooklyn, N. Y.	do	do	do	do	May 12		(1)	
Powell Manufacturing Co., Brooklyn, N. Y.	do	Knit-goods workers	Working conditions and union recognition.	Adjusted. Reinstalled piecework on some classes, week work on others.	May 10	May 26	36	10
Plumbers, Montclair and Verona, N. J.	Lockout	Plumbers	Wages cut from $12 to $10	Adjusted. Accepted $10.50 per day, 5-day week. Foreman $11 per day.	May 1	May 16	126	
Plumbers, Orange and vicinity, N. J.	do	do	Wages cut from $13.30 to $10 per day.	Adjusted. Accepted $11.20 per day.	do	May 17	126	
Post-office building, Wellsville, N. Y.	Controversy	Bricklayers	Prevailing-wage discussion	Adjusted. Allowed $1.25 per hour	May 3	May 16	15	
Federal building, Beaumont, Tex	do	Building workers	do	Pending	May 13		(1)	
Federal building, Sabine, Tex	do	do	do	do	do		(1)	
Post-office building, Fort Worth, Tex.	do	Bricklayers	do	Adjusted. Rates fixed and accepted.	May 12		(1)	
Mishawaka Rubber Co., Mishawaka, Ind.	Threatened strike.	Rubber workers	Wages and working conditions	Pending	May 14		2,600	
Post-office building, Memphis, Tex.	Controversy	Building workers	Prevailing-wage discussion	Adjusted. Rates fixed and accepted.	May 12	May 17	(1)	
New York, Westchester & Boston R. R. Co.	do	Railway workers	Rates of pay	Pending	May 1		(1)	
Lueddeke's Transportation, Newark, N. J.	do	Drivers	Wage cuts	do	May 14		250	30
Nurses' home, Perryville, Md	do	Building workers	Prevailing-wage discussion	do	May 17		(1)	
Post-office building, South Bend, Ind.	do	Iron workers	do	Adjusted. Union labor at union scale agreed upon.	May 13	May 18	10	65
Marine hospital, Evansville, Ind	do	Bricklayers	do	Adjusted. Prevailing scale fixed and accepted.	Apr. 26	May 12	15	20
Berger Service (Inc.), Brooklyn and New York City.	Strike	Cleaners, dyers, and drivers.	Asked restoration of wage cut and union recognition.	Pending	May 14		120	180
G. Schimer (Inc.), Woodside, Long Island, N. Y.	do	Compositors and pressmen.	Wage cut 10 per cent. Part of employees accepted cut.	do	Apr. 8		12	
Kaiden-Kazanjian Studios, New York City.	do	Photography workers.	Additional wage cuts	Adjusted. No further cuts. Wages to be restored when practicable.	May 18	May 23	75	15
George F. Lee Collieries, Plymouth, Pa.	do	Miners	Wages	Pending	do		275	
Veterans' hospital, Aspinwall, Pa	do	Carpenters	Working conditions	Adjusted	May 19	May 23	21	40
American Art Mosaic & Tile Co., Indianapolis, Ind.	do	Terrazzo workers	Wage dispute	Adjusted. New wage scale adopted.	May 15	May 20	15	35

[1] Not reported.

125620°—32——9

LABOR DISPUTES HANDLED BY THE CONCILIATION SERVICE DURING THE MONTH OF MAY, 1932—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workmen involved	
					Beginning	Ending	Directly	Indirectly
					1932	1932		
Barracks, Bolling Field, Anacostia, D. C.	Controversy	Reinforced-concrete rod workers.	Prevailing-wage discussion	Adjusted. Rod workers to be paid $1.25 per hour.	May 1	June 9	10	90
Bethlehem Shipbuilding Corporation, East Boston, Mass.	Strike	Shipbuilding workmen.	Wages and conditions	Adjusted. Agreement concluded. Men returned without discrimination.	May 13	May 27	300	
Parcel-post building, Cincinnati, Ohio.	Controversy	Building workers	Wage dispute	Adjusted. Agreed pay 45 cents per hour on June 2.	May 23	May 28	20	
Bronne Shirt Co., Hudson Falls, N. Y.	Lockout	Shirt cutters	Piecework rates cut from 20 to 30 per cent.	Pending	May 25		10	100
Yorke Shirt Co., Glens Falls, N. Y.	do	do	do	do	do		15	250
Post-office building, Bridgeport, Conn.	Controversy	Bricklayers	Wage cut	do	do		(1)	
Printers, Pittsburgh, Pa	do	Printers	Proposed wage cut of 10 per cent	Adjusted. Accepted $3.50 per week cut.	May 5	May 16	425	
Immigration Station, Detroit, Mich.	do	Iron workers	Prevailing-wage discussion	Adjusted. Accepted 50 cents per hour.	May 18	June 6	(1)	
Post-office building, Tamaqua, Pa	do	Building workers	do	Pending	May 25		(1)	
Consolidated Beef Co., Philadelphia, Pa.	Srrike	Meat cutters and workers.	Proposed wage cut	Unclassified. Negotiations in progress among parties at interest.	May 24	May 27	20	
Brooks Bros. Co., Philadelphia, Pa.	do	Upholstery workers	Proposed 10 per cent wage cut	Unable to adjust. Mediation not accepted. Open shop effective.	Apr. 6	May 24	25	
Building, Philadelphia, Pa	Controversy	Bridge, structural, and ornamental iron workers.	Wage cuts	Adjusted. Resumed work at $11 per day.	May 20	May 23	30	
Post-office building, Troy, N. Y.	do	Iron workers	Prevailing-wage discussion	Pending	May 10		(1)	
Fruit and vegetable packers, Imperial Valley, Calif.	Strike	Pickers and packers	Proposed wage cut of from 9 to 7 cents per crate.	do	May 1		700	2,70
Coca Cola Building, Scranton, Pa	do	Employees	Alleged violation of agreement, wages, and back pay.	do	May 15		10	
Butler and Capitol Theaters, Butler, Pa.	do	Employees	Proposed wage cut	do	May 20		(1)	
Post-office building, Boston, Mass.	Threatened strike.	Plumbers	Proposed cut by subcontractor	Adjusted. Agreed to pay prevailing scale.	May 1	May 2	16	320
Total							8,393	8,645

[1] Not reported.

HOUSING

Building Permits in Principal Cities, May, 1932

THE Bureau of Labor Statistics of the United States Department of Labor has received building permit reports from 352 identical cities of the United States having a population of 25,000 or over for the months of April and May, 1932, and from 346 identical cities having a population of 25,000 or over for the months of May, 1931, and May, 1932.

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

Table 1 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations for 352 identical cities of the United States by geographic divisions.

TABLE 1.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 352 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN APRIL AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	April, 1932	May, 1932	Per cent of change	April, 1932	May, 1932	Per cent of change
New England	$1,411,099	$1,111,223	−21.3	$1,200,991	$1,278,979	+6.5
Middle Atlantic	3,421,189	2,534,167	−25.9	11,829,408	9,366,909	−20.8
East North Central	2,178,313	1,484,042	−31.9	4,183,252	3,879,727	−7.3
West North Central	1,079,198	1,081,855	+0.2	1,074,241	2,494,668	+132.2
South Atlantic	1,193,120	1,238,690	+3.8	6,662,779	23,867,760	+258.2
South Central	886,545	695,911	−21.5	2,933,421	3,685,609	+25.6
Mountain and Pacific	2,414,373	2,094,580	−13.2	2,110,394	2,553,484	+21.0
Total	12,583,837	10,240,468	−18.6	29,994,486	47,127,136	+57.1

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	April, 1932	May, 1932	Per cent of change	April, 1932	May, 1932	Per cent of change	
New England	$1,943,311	$1,351,558	−30.5	$4,555,401	$3,741,760	−17.9	54
Middle Atlantic	3,918,942	3,263,149	−16.7	19,169,539	15,164,225	−20.9	71
East North Central	1,920,093	1,744,282	−9.2	8,281,658	7,108,051	−14.2	92
West North Central	685,698	542,943	−20.8	2,839,137	4,119,466	+45.1	25
South Atlantic	1,358,433	1,240,774	−8.7	9,214,332	26,347,224	+185.9	38
South Central	690,261	632,840	−8.3	4,510,227	5,014,360	+11.2	35
Mountain and Pacific	1,359,875	1,357,875	+0.1	5,884,642	6,005,939	+2.1	37
Total	11,876,613	10,133,421	−14.7	54,454,936	67,501,025	+24.0	352

Indicated expenditures for total building operations for May, 1932, in these 352 cities, was $67,501,025. This is 24 per cent greater than the indicated expenditures for total building operations in these cities during April, 1932. Four of the seven geographic divisions registered increases in total building operations. The increases ranged from 2.1 per cent in the Mountain and Pacific States to 185.9 per cent in the Middle Atlantic States. Decreases were shown in three geographic divisions; the largest decrease, 20.9 per cent, occurring in the Middle Atlantic States.

Residential buildings decreased 18.6 per cent in indicated expenditures, comparing May permits issued with April permits in these 352 cities. Five of the seven geographic divisions registered decreases in residential building. Increases were shown in the West North Central States and the South Atlantic States.

The estimated cost of new nonresidential building increased 57.1 per cent in May as compared with April. Five of the seven geographic divisions showed increases in this class of structure. The West North Central division showed an increase of over 100 per cent in expenditure for nonresidential buildings and the South Atlantic States showed an increase of over 200 per cent for this class of building.

Indicated expenditures for additions, alterations, and repairs decreased 14.7 per cent in May as compared with April. Six of the seven geographic divisions showed decreases in expenditures for additions, alterations, and repairs to existing buildings; the Mountain and Pacific being the only division to show an increase in this class of work.

Table 2 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 352 identical cities of the United States, by geographic divisions.

TABLE 2.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 352 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN APRIL AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residental buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
New England	253	220	710	774	2,404	2,469	3,367	3,463
Middle Atlantic	502	452	1,693	1,641	5,082	5,244	7,277	7,337
East North Central	372	317	1,854	1,760	3,642	3,380	5,868	5,457
West North Central	285	290	1,092	950	1,708	1,445	3,085	2,685
South Atlantic	267	280	665	596	2,962	2,942	3,894	3,818
South Central	357	288	512	484	2,067	1,894	2,936	2,666
Mountain and Pacific	649	546	1,186	1,168	3,537	3,246	5,372	4,960
Total	2,685	2,393	7,712	7,373	21,402	20,620	31,799	30,386
Per cent of change		−10.9		−4.4		−3.7		−4.4

Comparing permits issued in these 352 cities during May with those issued during April, there was a decrease of 10.9 per cent in the number of new residential buildings for which permits were issued. Increases were shown in the number of residential buildings in the West North Central and in the South Atlantic States. The other five geographic divisions showed decreases in this class of structure.

New nonresidential buildings decreased 4.4 per cent in number, comparing May with April. The New England was the only geographic division registering an increase in the number of nonresidential buildings.

The number of additions, alterations, and repairs for which permits were issued during May was 3.7 per cent less than during April. In the New England and the Middle Atlantic States, however, more permits were issued for repairs during May than during April.

The total number of buildings for which permits were issued during May was 30,386. This is 4.4 per cent less than the number for which permits were issued during April. The New England and the Middle Atlantic were the only divisions showing a larger number of buildings during May than during April.

Table 3 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the estimated cost of such dwellings, for which permits were issued in 352 identical cities during April and May, 1932, by geographic divisions.

TABLE 3.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 352 IDENTICAL CITIES IN APRIL AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
New England	$1,128,499	$880,823	221	187	$200,800	$183,900	59	59
Middle Atlantic	2,251,818	1,908,217	432	376	425,871	554,450	101	140
East North Central	1,560,329	1,315,242	351	295	100,200	153,800	31	38
West North Central	976,048	952,655	273	271	73,150	79,400	22	24
South Atlantic	1,051,370	1,164,590	246	271	48,100	16,900	22	8
South Central	750,229	553,994	333	259	68,975	82,175	39	44
Mountain and Pacific	2,046,347	1,842,655	595	505	212,376	152,525	80	58
Total	9,764,640	8,618,176	2,451	2,164	1,129,472	1,223,150	354	371
Per cent of change		−11.7		−11.7		+8.3		+4.8

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
New England	$81,800	$18,000	44	6	$1,411,099	$1,082,723	324	252
Middle Atlantic	637,500	71,500	197	18	3,315,189	2,534,167	730	534
East North Central	22,000	15,000	14	4	1,682,529	1,484,042	396	337
West North Central	30,000	46,800	7	19	1,079,198	1,078,855	302	314
South Atlantic	77,000	57,200	39	35	1,176,470	1,238,690	307	314
South Central	35,100	59,742	14	41	854,304	695,911	386	344
Mountain and Pacific	155,650	93,400	89	38	2,414,373	2,088,580	764	601
Total	1,039,050	361,642	404	161	11,933,162	10,202,968	3,209	2,696
Per cent of change		−65.2		−60.1		−14.5		−16.0

During May, 2,696 family dwelling units were provided in new buildings for which permits were issued. This is 16 per cent less than the number of dwelling units provided by permits issued during April. The West North Central States and the South Atlantic States both provided for more families during May than during April. Estimated expenditures for all kinds of housekeeping dwellings decreased 14.5 per cent, comparing the two months under discussion. Expenditures for all housekeeping dwellings, however, were greater in the West North Central and South Atlantic States during May than during the preceding month.

One-family dwellings decreased 11.7 per cent in estimated cost and in families provided for comparing May with April. The South Atlantic was the only geographic division in which May permits showed a greater estimated cost for 1-family dwellings than April permits showed.

The estimated cost of 2-family dwellings increased 8.3 per cent in May as compared with April, and the number of family dwelling units provided in this class of dwelling increased 4.8 per cent, comparing May with April. Four of the geographic divisions showed greater indicated expenditures for 2-family dwellings in May than in April, and four provided for more families in this class of structure.

Indicated expenditures for multifamily dwellings decreased 65.2 per cent in May as compared with April, and the number of families provided for in apartment houses decreased 60.1 per cent. In only two divisions, the West North Central and the South Atlantic, were more families provided for in apartment houses during May than during April.

Table 4 shows the index number of families provided for and the index numbers of indicated expenditures for new residential building, for new nonresidential buildings, for additions, alterations, and repairs, and for total building operations.

TABLE 4.—INDEX NUMBERS OF FAMILIES PROVIDED FOR AND OF THE ESTIMATED COST OF BUILDING OPERATIONS AS SHOWN BY PERMITS ISSUED IN PRINCIPAL CITIES OF THE UNITED STATES

[Monthly average, 1929=100]

Month	Families provided for	Estimated cost of—			
		New residential buildings	New nonresidential buildings	Additions, alterations, and repairs	Total building operations
1930					
May	59.6	48.5	90.7	84.5	69.3
1931					
May	51.7	39.8	58.5	53.0	48.8
1932					
January	14.4	10.2	25.0	25.8	18.2
February	13.0	9.1	16.5	26.7	14.3
March	15.4	10.7	18.1	27.0	15.7
April	13.4	9.7	25.0	32.0	18.8
May	11.3	7.9	39.3	27.3	23.3

The index number of total building operations for May, 1932, was 23.3. This is higher than for any month of 1932, but much lower than for May, 1931. The May index number for new residential

buildings is lower than for any month during the current year. The index number for new nonresidential buildings, however, is considerably higher than for any month in 1932, and more than twice as high as February, the low point of the year.

The index number for additions, alterations, and repairs is lower than for April, but is higher than for any other month of 1932.

The charts on pages 132 and 133 show in graphic form the information contained in Table 4.

Table 5 shows the number and value of contracts awarded for public buildings by the different agencies of the United States Government during the months of May, 1931, and April and May, 1932.

TABLE 5.—CONTRACTS LET FOR PUBLIC BUILDINGS BY DIFFERENT AGENCIES OF THE UNITED STATES GOVERNMENT DURING MAY, 1931, AND APRIL AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	May, 1931		April, 1932		May, 1932 [1]	
	Number	Cost	Number	Cost	Number	Cost
New England	7	$254,712	14	$545,711	8	$141,908
Middle Atlantic	19	2,360,803	20	416,660	22	2,429,209
East North Central	12	778,422	26	1,640,395	11	533,473
West North Central	10	3,074,500	5	209,050	6	821,268
South Atlantic	18	766,017	41	6,294,785	25	22,755,293
South Central	14	529,973	19	1,096,578	19	2,280,051
Mountain and Pacific	19	2,403,626	22	1,535,156	17	285,909
Total	99	10,168,053	147	11,738,335	108	29,247,111

[1] Subject to revision.

Contracts were awarded during May, 1932, by various agencies of the Federal Government for 105 buildings to cost $29,241,856. This is more than twice the valuation of buildings for which contracts were awarded in either May, 1931, or April, 1932.

Table 6 shows the value of contracts awarded by the different State governments for public buildings during the months of May, 1931, and April and May, 1932, by geographic divisions.

TABLE 6.—CONTRACTS AWARDED FOR PUBLIC BUILDINGS BY THE DIFFERENT STATE GOVERNMENTS DURING MAY, 1931, AND APRIL AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	May, 1931	April, 1932	May, 1932 [1]
New England	$190,103	$192,037	$99,100
Middle Atlantic	2,386,498	762,943	456,812
East North Central	221,624	587,066	320,398
West North Central	344,560	124,666	613,656
South Atlantic	223,100	121,703	708,765
South Central	7,497	686,580	400,653
Mountain and Pacific	753,114	214,118	131,002
Total	4,126,496	2,689,113	2,730,386

[1] Subject to revision.

During May, 1932, contracts were awarded by the various State governments to cost $2,730,386. This is slightly higher than for April, 1932, and more than 40 per cent lower than for May, 1931.

Table 7 shows the estimated cost of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs,

and of total building construction in 346 identical cities of the United States having a population of 25,000 or over for the months of May, 1931, and May, 1932, by geographic divisions.

TABLE 7.—ESTIMATED COST OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 346 IDENTICAL CITIES AS SHOWN BY PERMITS ISSUED IN MAY, 1921, AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings (estimated cost)			New nonresidential buildings (estimated cost)		
	May, 1931	May, 1932	Per cent of change	May, 1931	May, 1932	Per cent of change
New England	$3,508,150	$959,523	−72.6	$4,942,904	$1,268,644	−74.3
Middle Atlantic	21,909,744	2,493,167	−88.6	25,975,351	9,059,214	−65.1
East North Central	6,546,023	1,482,542	−77.4	13,639,203	3,879,577	−71.6
West North Central	2,651,600	1,081,855	−59.2	6,429,261	2,494,668	−61.2
South Atlantic	6,270,760	1,238,690	−80.2	3,018,270	23,867,760	+690.8
South Central	2,292,690	695,911	−69.6	2,855,587	3,686,589	+29.1
Mountain and Pacific	6,393,867	2,049,305	−67.9	6,954,913	2,546,979	−63.4
Total	49,572,834	10,000,993	−79.8	63,815,489	46,803,431	−26.7

Geographic division	Additions, alterations, and repairs (estimated cost)			Total construction (estimated cost)			Number of cities
	May, 1931	May, 1932	Per cent of change	May, 1931	May, 1932	Per cent of change	
New England	$2,115,143	$1,338,987	−36.7	$10,566,197	$3,567,154	−66.2	51
Middle Atlantic	6,076,704	3,250,780	−46.5	53,961,799	14,803,161	−72.6	70
East North Central	3,076,458	1,744,057	−43.3	23,261,684	7,106,176	−69.5	91
West North Central	1,248,375	542,943	−56.5	10,329,236	4,119,466	−60.1	25
South Atlantic	2,045,738	1,240,774	−39.3	11,334,768	26,347,224	+132.4	38
South Central	913,471	638,165	−30.1	6,061,748	5,020,665	−17.2	36
Mountain and Pacific	2,008,254	1,341,970	−33.2	15,357,034	5,938,254	−61.3	35
Total	17,484,143	10,097,676	−42.2	130,872,466	66,902,100	−48.9	346

New residential buildings decreased 79.8 per cent in estimated expenditures, comparing permits issued in these 346 identical cities during May, 1932, with those issued during May, 1931. All geographic divisions showed decreases in indicated expenditures for new residential building.

The estimated cost of new nonresidential buildings was 26.7 per cent less during May, 1932, than during May, 1931. Two geographic divisions showed increases in expenditures for nonresidential buildings comparing these two periods.

Indicated expenditures for additions, alterations, and repairs were 42.2 per cent less in May, 1932, than in May of the preceding year.

The estimated cost of total construction in May, 1932, in these 346 cities, was 48.9 per cent less than in May, 1931. The South Atlantic States, however, showed a large increase in indicated expenditures for total building operations, comparing these two periods. This increase was caused by contracts awarded for large Federal structures in the city of Washington.

Table 8 shows the number of new residential buildings, of new nonresidential buildings, of additions, alterations, and repairs, and of total building operations in 346 identical cities having a population of 25,000 or over, for May, 1931, and for May, 1932.

TABLE 8.—NUMBER OF NEW BUILDINGS, OF ADDITIONS, ALTERATIONS, AND REPAIRS, AND OF TOTAL BUILDING CONSTRUCTION IN 346 IDENTICAL CITIES, AS SHOWN BY PERMITS ISSUED IN MAY, 1931, AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	New residential buildings		New nonresidential buildings		Additions, alterations, and repairs		Total construction	
	May, 1931	May, 1932	May, 1931	May, 1932	May, 1931	May, 1932	May, 1931	May, 1932
New England	520	199	1,184	743	2,773	2,424	4,477	3,366
Middle Atlantic	1,723	448	3,041	1,629	5,815	5,224	10,579	7,301
East North Central	1,120	315	3,184	1,759	4,834	3,378	9,138	5,452
West North Central	558	290	1,193	950	1,724	1,445	3,475	2,685
South Atlantic	593	280	816	596	3,174	2,942	4,583	3,818
South Central	687	288	703	494	2,189	1,925	3,579	2,707
Mountain and Pacific	1,342	525	1,532	1,152	3,773	3,204	6,647	4,881
Total	6,543	2,345	11,653	7,323	24,282	20,542	42,478	30,210
Per cent of change		−64.2		−37.2		−15.4		−28.9

Decreases were shown in the number of new residential buildings, in the number of new nonresidential buildings, in the number of additions, alterations, and repairs, and in the number of total buildings, when comparing permits issued in May, 1932, with those issued in May, 1931.

Table 9 shows the number of families provided for in the different kinds of housekeeping dwellings, together with the cost of such dwellings for which permits were issued in 346 identical cities during May, 1931, and May, 1932, by geographic divisions.

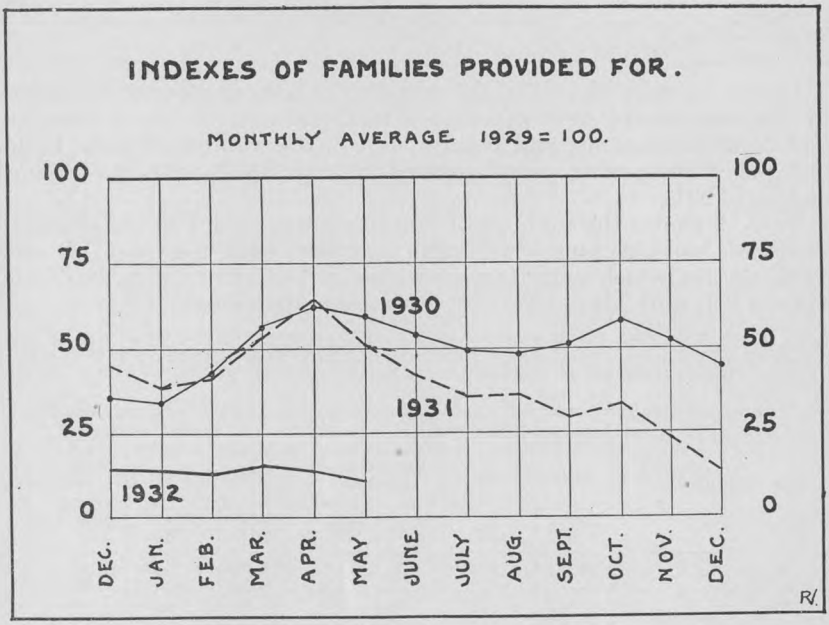
TABLE 9.—ESTIMATED COST AND NUMBER OF FAMILIES PROVIDED FOR IN THE DIFFERENT KINDS OF HOUSEKEEPING DWELLINGS FOR WHICH PERMITS WERE ISSUED IN 346 IDENTICAL CITIES IN MAY, 1931, AND MAY, 1932, BY GEOGRAPHIC DIVISIONS

Geographic division	1-family dwellings				2-family dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	May, 1931	May, 1932	May, 1931	May, 1932	May, 1931	May, 1932	May, 1931	May, 1932
New England	$2,557,050	$735,553	436	167	$578,600	$177,400	145	57
Middle Atlantic	8,237,511	1,867,217	1,367	372	1,865,233	554,450	453	140
East North Central	5,223,323	1,313,742	1,015	293	757,200	153,800	154	38
West North Central	2,134,200	952,655	515	271	205,400	79,400	58	24
South Atlantic	2,708,995	1,164,590	565	271	47,400	16,900	20	8
South Central	1,893,280	553,994	606	259	315,160	82,175	135	44
Mountain and Pacific	4,515,563	1,797,380	1,177	484	563,804	152,525	186	58
Total	27,269,922	8,385,131	5,681	2,117	4,332,797	1,216,650	1,151	369
Per cent of change		−69.3		−62.7		−71.9		−67.9

Geographic division	Multifamily dwellings				Total, all kinds of housekeeping dwellings			
	Estimated cost		Families provided for		Estimated cost		Families provided for	
	May, 1931	May, 1932	May, 1931	May, 1932	May, 1931	May, 1932	May, 1931	May, 1932
New England	$272,500	$18,000	93	6	$3,408,150	$930,953	674	230
Middle Atlantic	11,679,000	71,500	3,072	18	21,781,744	2,493,167	4,892	530
East North Central	535,500	15,000	140	4	6,516,023	1,482,542	1,309	335
West North Central	287,000	46,800	100	19	2,626,600	1,078,855	673	314
South Atlantic	3,364,365	57,200	562	35	6,120,760	1,238,690	1,147	314
South Central	77,250	59,742	48	41	2,285,690	695,911	789	344
Mountain and Pacific	1,197,000	93,400	545	38	6,276,367	2,043,305	1,908	580
Total	17,412,615	361,642	4,560	161	49,015,334	9,963,423	11,392	2,647
Per cent of change		−79.2		−96.5		−79.7		−76.8

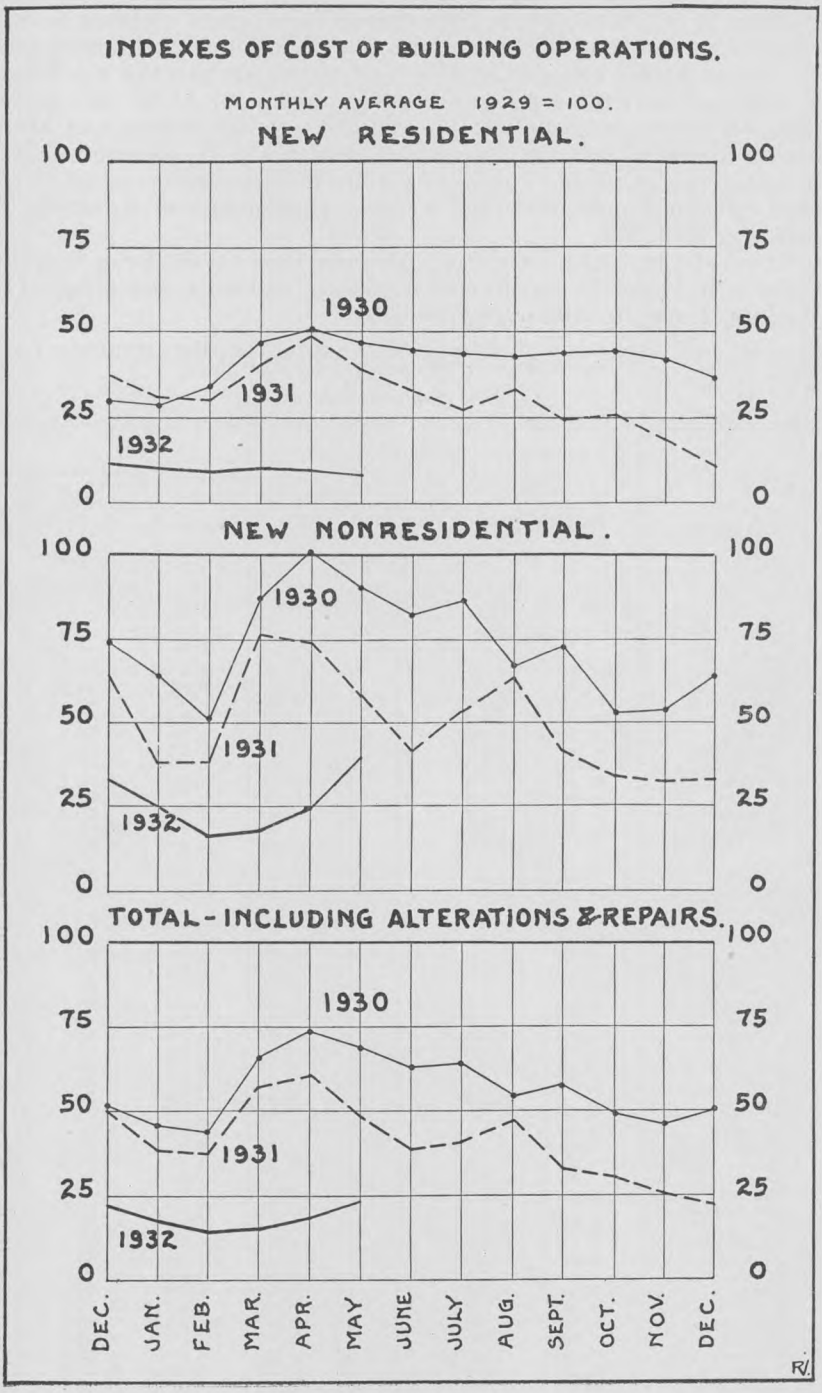
Decreases were shown in the estimated cost and in the number of family dwelling units provided, in each of the different classes of housekeeping dwellings, comparing permits issued in May, 1932, with permits issued in May, 1931. The total number of family dwelling units provided in May, 1932, was 76.8 per cent less than the number provided in May, 1931. Indicated expenditures for all classes of housekeeping dwellings decreased 79.7 per cent, comparing the two periods.

Table 10 shows the estimated cost of new residential buildings, of new nonresidential buildings, of total building operations, together with the number of family dwelling units provided in new buildings for each of the 352 identical cities from which reports were received for April, 1932, and May, 1932.



No reports were received from New London, Conn., Bangor, Me., Anderson, Ind., Port Huron, Mich., Lima and Newark, Ohio, University City, Mo., Pensacola, Fla., Lynchburg, Va., Fort Smith, Ark., Ashland, Ky., Meridian, Miss., Muskogee, Okla., Brownsville, Corpus Christi, and Laredo, Tex., and Riverside and San Bernardino, Calif.

Permits were issued for the following important building projects during the month of May, 1932: In Springfield, Mass., for a bank building to cost $350,000; in Hackensack, N. J., for a store building to cost over $300,000; in Albany for a church to cost $285,000; in the Borough of Queens for a school building to cost $582,000; in the Borough of Richmond for a school building to cost $560,000; in Pittsburgh for two churches to cost $2,480,000; in Indianapolis for a public works building to cost over $600,000; in Battle Creek for a school building to cost $600,000; in Ottumwa, Iowa, for a cold-storage packing plant to cost $350,000; in Minneapolis for a nurses' home at the



University of Minnesota; in Baltimore for a building at the State hospital to cost $860,000; in Sacramento for a school building to cost nearly $300,000; and in Seattle for a school building to cost $350,000.

Contracts were awarded by the Supervising Architect of the Treasury Department for a post office in Paterson, N. J., to cost nearly $400,000; for an addition to the post office in the Borough of Manhattan to cost $1,800,000; for various buildings in Washington, D. C., to cost over $22,000,000; for a post office in Chattanooga to cost over $800,000; for a post office and Federal court house in Knoxville to cost over $900,000.

The Veterans' Administration awarded a contract for a hospital building in Danville, Ill., to cost $265,000, and for a new hospital in Wichita, Kans., to cost over $700,000.

TABLE 10.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, APRIL AND MAY, 1932

New England States

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new buildings					
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
Connecticut:								
Bridgeport	$67,600	$32,140	20	13	$19,569	$8,230	$100,287	$63,390
Bristol	9,500	11,577	2	1	600	10,500	17,494	26,849
Greenwich	67,500	35,900	4	7	17,750	31,585	95,524	78,735
Hartford	20,150	12,100	4	3	12,142	68,028	62,745	109,941
Meriden	3,400	18,300	1	7	1,450	8,185	12,320	39,799
New Britain	37,000	8,000	5	1	635	76,675	50,249	90,090
New Haven	48,500	29,000	9	8	7,850	15,075	114,420	69,165
Norwalk	39,900	11,770	8	4	10,250	1,830	67,195	33,915
Stamford	6,000	16,000	1	5	55,425	570	86,870	34,605
Torrington	12,000	0	4	0	1,315	1,800	17,190	13,125
Waterbury	11,000	8,500	3	3	1,200	4,050	21,435	25,300
West Hartford	67,412	52,400	6	7	3,485	3,235	81,078	62,491
Maine:								
Lewiston	5,300	8,000	2	2	900	10,200	7,200	18,700
Portland	24,800	48,350	7	11	11,400	41,331	48,718	113,273
Massachusetts:								
Arlington	40,100	84,300	7	12	4,730	2,925	48,145	90,365
Beverly	10,500	3,500	2	1	1,125	3,355	22,935	12,200
Boston[1]	231,000	167,600	53	40	304,025	72,650	1,509,574	562,349
Brockton	4,000	3,300	1	1	3,265	54,020	24,907	67,011
Brookline	29,500	45,500	3	4	3,495	1,335	50,090	225,542
Cambridge	80,000	0	42	0	1,250	10,110	272,061	41,900
Chelsea	7,000	0	2	0	173,000	1,000	182,215	7,810
Chicopee	8,800	4,500	3	1	2,510	3,250	19,160	17,475
Everett	7,500	6,000	3	2	490	300	20,890	11,450
Fall River	5,300	33,250	2	1	4,680	5,519	21,169	79,544
Fitchburg	12,000	8,700	2	2	1,128	2,905	27,593	16,515
Haverhill	0	1,500	0	2	2,065	3,720	11,760	7,325
Holyoke	6,500	14,000	1	1	7,600	3,750	34,850	25,550
Lawrence	8,500	0	2	0	2,425	10,600	28,925	14,250
Lowell	9,000	2,700	2	3	1,160	6,005	21,760	19,695
Lynn	9,000	12,000	3	1	11,745	4,970	50,810	33,640
Malden	5,000	11,300	1	3	425	2,200	13,310	40,807
Medford	26,500	22,000	8	6	2,000	2,575	42,825	35,385
New Bedford	0	0	0	0	30,100	11,025	42,175	20,525
Newton	62,300	68,200	10	7	6,965	91,700	83,345	181,315
Pittsfield	19,400	16,000	5	5	7,250	23,525	37,625	53,650
Quincy	24,600	30,186	7	7	10,813	11,795	59,757	69,266
Revere	8,000	0	3	0	1,835	450	57,885	11,900
Salem	14,000	6,200	2	1	13,975	4,850	49,890	30,869
Somerville	9,700	0	3	0	178,902	2,415	212,512	15,268
Springfield	51,750	34,850	12	12	14,350	383,200	75,161	433,350
Taunton	1,750	6,000	2	2	18,700	23,771	25,320	34,798
Waltham	8,400	8,800	3	2	15,925	19,935	30,622	30,903
Watertown	11,500	0	2	0	49,525	3,600	69,225	6,640
Worcester	83,600	65,300	18	15	28,250	5,635	131,785	108,529

[1] Applications filed.

TABLE 10.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, APRIL AND MAY, 1932—Continued

New England States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new buildings					
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
New Hampshire:								
Concord	$16,737	$2,000	5	1	$1,262	$14,300	$22,499	$21,500
Manchester	20,550	21,200	9	10	3,985	2,660	40,842	41,253
Rhode Island:								
Central Falls	0	4,200	0	1	100	450	2,775	5,225
Cranston	24,400	23,800	6	8	7,290	131,990	33,935	158,635
East Providence	14,500	21,000	4	5	6,490	18,330	28,177	55,836
Newport	21,500	12,600	4	3	5,550	3,500	34,177	22,832
Pawtucket	4,350	7,800	2	2	5,100	3,980	14,520	28,060
Providence	92,800	37,300	13	9	109,435	43,650	294,385	177,575
Woonsocket	1,000	18,600	1	7	875	1,560	5,935	123,890
Vermont:								
Burlington	0	15,000	0	3	13,225	4,175	17,150	21,750
Total	1,411,099	1,111,223	324	252	1,200,991	1,278,979	4,555,401	3,741,760
Per cent of change		−21.3		−22.2		+6.5		−17.9

Middle Atlantic States

New Jersey:								
Atlantic City	$5,000	0	1	0	$21.175	$1,400	$148,373	$56,968
Bayonne	0	$5,000	0	2	12,180	0	29,843	13,789
Belleville	3,000	0	1	0	2,600	1,400	10,005	5,075
Bloomfield	0	54,000	0	12	2,500	1,500	5,000	58,500
Camden	0	14,000	0	1	81,345	2,490	81,345	28,457
Clifton	0	28,500	0	7	6,825	61,300	15,155	92,900
East Orange	17,500	0	3	0	15,100	3,550	61,705	10,815
Elizabeth	13,000	16,000	2	3	9,500	9,000	22,500	25,000
Garfield	2,500	10,000	1	5	2,075	2,675	10,175	15,475
Hackensack	11,000	17,000	2	2	14,695	306,230	39,630	336,570
Hoboken	0	0	0	0	200,000	0	210,149	23,355
Irvington	17,800	13,000	5	3	8,090	8,015	36,440	24,675
Jersey City	45,200	14,000	11	3	33,337	94,190	147,112	124,145
Kearny	7,500	0	1	0	3,350	1,250	12,800	5,400
Montclair	7,000	22,000	1	1	4,325	1,195	39,527	34,860
Newark	27,500	11,500	5	2	278,814	34,735	389,489	106,113
New Brunswick	5,000	0	1	0	395	1,160	22,056	10,195
Orange	5,000	0	1	0	177,480	6,625	189,795	18,740
Passaic	4,800	0	1	0	2,930	5,070	27,582	42,660
Paterson	19,575	7,000	6	2	18,844	383,363	107,280	428,116
Perth Amboy	3,600	0	1	0	625	4,175	11,550	10,550
Plainfield	10,000	26,000	2	4	1,400	8,675	17.528	38,423
Trenton	9,000	9,600	2	2	71,515	2,448	80,515	18.273
Union City	0	1,200	0	1	58,450	0	72,600	23,330
West New York	0	0	0	0	0	0	13,575	1,620
West Orange	24,900	24,000	4	2	2,640	1,715	31,080	26,314
New York:								
Albany	139,500	151,380	10	12	13,100	294,600	188,335	480,768
Amsterdam	5,500	12,850	2	3	6,010	7,230	12,210	20,080
Auburn	8,300	10,500	2	3	6,200	7,900	21,400	20,650
Binghamton	26,700	17,050	7	4	7,116	16,276	110,952	95,374
Buffalo	63,540	60,100	10	10	42,505	39,977	176,059	179,829
Elmira	7,000	11,835	2	3	4,120	2,012	45,933	23,877
Jamestown	8,000	14,100	3	4	11,075	384,685	41,375	403,790
Kingston	16,400	27,500	5	2	17,825	4,350	43,520	44,642
Lockport	0	0	0	0	0	0	0	0
Mount Vernon	10,000	25,500	3	3	2,830	4,737	30,566	54,822
Newburgh	0	13,000	0	2	5,300	31,500	20,900	51,150
New Rochelle	68,500	19,900	5	2	61,758	3,250	140,074	39,220
New York City—								
The Bronx [1]	334,500	271,950	72	66	195,450	74,780	769,880	614,695
Brooklyn [1]	232,000	309,500	54	58	736,355	530,360	1,590,075	1,383,631
Manhattan [1]	250,000	0	72	0	4,643,550	2,070,100	5,559,555	2,791,239
Queens [1]	779,800	440,940	164	115	697,643	967,422	1,939,919	1,665,764
Richmond [1]	127,040	39,150	30	18	48,960	624,485	239,638	694,446

[1] Applications filed.

TABLE 10.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, APRIL AND MAY, 1932—Continued

Middle Atlantic States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new buildings					
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
New York—Contd.								
Niagara Falls	$11,900	$21,000	3	2	$32,403	$48,402	$61,733	$104,895
Poughkeepsie	0	24,000	0	2	5,130	4,050	20,118	37,615
Rochester	141,800	31,340	20	7	22,899	32,877	279,817	127,964
Schenectady	21,800	21,600	4	5	4,480	5,670	50,806	72,308
Syracuse	45,000	46,900	9	10	12,650	65,270	73,180	142,940
Troy	67,340	48,550	14	6	36,225	62,475	129,660	116,625
Utica	17,500	42,000	3	8	14,575	3,670	42,375	54,100
Watertown	17,600	8,000	5	1	1,025	2,280	34,592	17,399
White Plains	7,000	7,000	1	1	11,900	15,250	29,243	29,715
Yonkers	163,200	123,500	33	22	22,395	20,301	210,495	223,976
Pennsylvania:								
Allentown	3,200	2,000	1	1	11,100	5,400	20,485	18,775
Altoona	0	13,600	0	2	14,918	3,273	21,774	30,739
Bethlehem	16,300	0	5	0	1,710	500	19,435	8,450
Butler		0		0		[2] 250		[2] 1,820
Chester	0	0	0	0	600	2,575	5,315	4,875
Easton	89,200	0	15	0	760	405	91,695	2,210
Erie	28,050	32,000	6	8	27,560	8,662	79,675	56,017
Harrisburg	66,500	20,000	13	3	5,845	6,175	262,726	39,265
Hazleton	21,609	19,198	5	4	26,819	9,961	58,369	64,072
Johnstown	5,500	800	1	1	3,920	4,735	18,775	8,320
Lancaster	19,000	0	4	0	1,250	3,700	25,730	21,060
McKeesport	5,000	0	1	0	14,345	1,145	30,794	12,119
Nanticoke	19,000	6,480	6	2	0	300	19,000	7,780
New Castle	0	0	0	0	1,990	12,930	8,365	13,240
Norristown	0	19,144	0	2	1,663	46,090	6,912	72,767
Philadelphia	154,435	225,500	47	63	3,621,550	386,025	3,987,040	796,264
Pittsburgh	67,900	89,900	18	18	56,919	2,511,015	241,458	2,692,378
Reading	60,000	0	12	0	8,210	5,480	85,310	23,552
Scranton	16,500	9,500	5	3	309,963	50,923	370,843	83,854
Wilkes-Barre	0	2,600	0	1	4,755	3,760	31,435	27,770
Wilkinsburg	7,000	0	1	0	250	235	10,075	885
Williamsport	0	8,000	0	3	18,376	36,225	35,186	86,006
York	33,200	13,500	6	2	3,236	1,325	43,923	21,985
Total	3,421,189	2,534,167	730	534	11,829,408	9,366,909	19,169,539	15,164,225
Per cent of change		−25.9		−26.8		−20.8		−20.9

East North Central States

Illinois:								
Alton	$10,880	0	3	0	$600	$10,200	$20,380	$17,547
Aurora	16,505	0	6	0	11,798	2,560	32,608	9,458
Belleville	28,600	$15,700	11	5	0	575	31,200	20,275
Berwyn	0	0	0	0	3,339	3,125	6,719	6,275
Bloomington	6,000	3,000	1	1	2,000	2,500	17,000	5,500
Chicago	136,900	95,250	30	23	348,565	993,448	653,031	1,572,785
Cicero	0	0	0	0	1,450	1,150	4,550	4,050
Danville	22,300	0	13	0	1,300	265,600	28,943	277,979
Decatur	7,000	9,000	2	2	8,205	57,050	17,450	71,445
East St. Louis	2,600	15,250	1	5	5,350	14,350	11,760	41,342
Elgin	11,500	19,000	3	4	3,250	10,550	30,221	37,035
Evanston	0	16,000	0	2	6,500	5,000	74,500	51,250
Granite City	0	0	0	0	0	0	0	0
Joliet	0	0	0	0	200	400	14,400	6,200
Maywood	4,800	7,000	1	1	130,350	311	143,572	8,681
Moline	3,150	12,800	2	2	6,665	2,415	19,250	17,226
Oak Park	10,400	0	2	0	11,250	0	26,125	48,425
Peoria	37,000	55,900	9	13	9,143	9,000	61,143	76,500
Quincy	12,500	0	3	0	1,525	1,985	14,660	3,600
Rockford	0	3,000	0	1	22,966	2,625	30,136	7,955
Rock Island	15,350	3,000	6	1	2,105	1,475	26,170	14,054
Springfield	44,500	14,150	15	7	2,725	8,440	208,693	33,422
Waukegan	19,000	4,000	3	1	13,500	8,000	35,750	14,450

[2] Not included in total.

TABLE 10.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, APRIL AND MAY, 1932—Continued

East North Central States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new buildings					
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
Indiana:								
East Chicago	0	0	0	0	$30,150	$13,637	$34,535	$15,387
Elkhart	$9,450	0	4	0	3,025	1,875	14,971	11,171
Evansville	6,500	$7,200	3	2	13,488	98,760	45,678	112,418
Fort Wayne	0	23,800	0	4	21,040	6,760	50,851	43,907
Gary	0	1,000	0	1	525	1,235	2,125	3,635
Hammond	800	0	1	0	7,135	2,500	9,365	5,220
Indianapolis	74,650	28,450	18	6	33,250	675,107	158,401	757,206
Kokomo	0	0	0	0	2,065	400	3,167	11,035
Lafayette	4,450	8,200	2	4	17,000	0	21,450	8,200
Marion	1,750	1,000	2	1	915	5,165	6,732	8,625
Michigan City	25,400	0	5	0	300	2,500	27,085	2,600
Mishawaka	2,650	3,500	1	1	383	500	4,133	4,400
Muncie	0	0	0	0	33,442	1,037	37,125	4,593
Richmond	0	0	0	0	1,800	6,800	6,700	27,100
South Bend	7,000	2,500	1	1	5,795	8,390	25,045	27,635
Terre Haute	9,900	7,500	3	3	443,230	2,912	459,373	23,815
Michigan:								
Ann Arbor	4,000	37,550	1	6	5,545	2,725	75,821	46,655
Battle Creek	0	17,500	0	3	3,975	603,190	10,795	626,945
Bay City	18,000	10,725	5	6	12,665	1,880	38,725	21,613
Dearborn	42,000	18,500	6	6	2,650	20,405	55,185	44,880
Detroit	690,384	99,850	44	23	501,568	307,356	1,406,919	560,432
Flint	1,244	4,792	1	1	7,964	5,632	34,108	20,634
Grand Rapids	25,500	13,100	5	5	975,885	16,345	1,019,755	52,510
Hamtramck	0	0	0	0	0	4,000	3,765	11,760
Highland Park	0	8,000	0	1	535	455	2,970	13,730
Jackson	0	4,300	0	1	1,802	2,408	9,372	10,723
Kalamazoo	4,000	22,000	2	3	1,769	687	15,634	29,575
Lansing	2,700	0	1	0	7,800	3,575	22,295	10,695
Muskegon	2,800	1,000	2	1	0	2,835	2,800	10,255
Pontiac	0	0	0	0	0	0	0	0
Royal Oak	1,000	1,500	1	2	445	150	2,540	1,875
Saginaw	10,100	8,000	4	4	4,104	72,597	27,259	90,045
Wyandotte	12,950	1,800	3	1	970	550	16,655	9,100
Ohio:								
Akron	7,400	37,500	6	5	189,515	9,615	207,485	63,400
Ashtabula	2,500	0	1	0	8,400	1,220	14,740	1,640
Canton	4,800	2,150	2	2	268,985	13,830	278,950	17,623
Cincinnati	233,650	280,850	41	50	185,932	66,935	469,597	446,205
Cleveland	125,100	58,800	23	12	42,275	251,650	512,850	393,300
Cleveland Heights	44,200	36,000	6	6	6,225	425	55,170	42,165
Columbus	41,800	26,500	7	4	68,100	92,950	211,650	227,911
Dayton	14,800	20,000	4	6	47,278	20,104	84,512	58,171
East Cleveland	0	0	0	0	17,520	2,150	18,295	2,480
Elyria	3,100	0	1	0	58,545	865	65,560	3,665
Hamilton	0	3,000	0	1	2,085	7,115	10,230	11,050
Lakewood	16,000	21,300	2	3	48,105	6,125	74,545	31,085
Lorain	0	0	0	0	900	785	1,585	1,050
Mansfield	9,000	16,000	1	2	3,695	3,775	15,271	20,914
Marion	1,500	0	1	0	660	685	2,310	685
Massillon	0	0	0	0	789	590	939	1,470
Middletown	0	0	0	0	1,450	21,750	4,976	24,080
Norwood	5,000	3,500	1	1	7,000	600	12,995	8,625
Portsmouth	0	0	0	0	2,270	1,460	3,820	1,735
Springfield	0	3,800	0	2	1,331	2,976	2,396	9,706
Steubenville	0	3,000	0	1	8,100	650	9,590	4,550
Toledo	28,500	31,050	6	6	11,813	10,352	62,056	50,940
Warren	0	0	0	0	1,380	720	3,780	4,160
Youngstown	11,000	0	2	0	5,585	9,757	26,180	14,147
Wisconsin:								
Appleton	13,100	37,600	3	9	5,190	11,020	25,011	63,695
Eau Claire	13,000	13,800	5	7	2,050	6,100	16,920	28,930
Fond du Lac	7,200	3,500	3	1	1,550	1,115	11,650	5,825
Green Bay	31,900	21,500	12	9	87,685	7,035	124,760	37,785
Kenosha	3,000	0	1	0	1,495	2,330	7,565	8,330
Madison	38,600	99,600	11	16	10,535	4,410	66,335	122,755
Milwaukee	104,750	116,500	22	26	235,749	27,101	484,565	324,858
Oshkosh	3,100	6,800	3	4	2,995	8,370	12,148	29,000
Racine	38,000	13,700	1	2	925	2,170	45,695	19,110

TABLE 10.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, APRIL AND MAY, 1932—Continued

East North Central States—Continued

State and city	New residential buildings: Estimated cost		New residential buildings: Families provided for in new buildings		New nonresidential buildings (estimated cost)		Total construction including alterations and repairs (estimated cost)	
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
Wisconsin—Contd.								
Sheboygan	$28,100	$9,000	4	2	$6,250	$5,395	$50,698	$26,013
Superior	0	7,775	0	5	104,309	765	107,549	14,615
West Allis	3,000	6,000	1	1	2,575	3,705	19,685	12,460
Total	2,178,313	1,484,042	396	337	4,183,252	3,879,727	8,281,658	7,108,051
Per cent of change		−31.9		−14.9		−7.3		−14.2

West North Central States

Iowa:								
Burlington	$2,500	$5,000	2	1	$450	$2,600	$5,450	$9,100
Cedar Rapids	16,850	29,325	7	8	16,008	13,555	72,419	70,639
Council Bluffs	6,000	17,550	2	4	2,600	3,997	21,600	26,617
Davenport	13,600	23,600	5	7	7,823	4,815	44,069	38,969
Des Moines	70,700	37,700	21	11	22,122	20,435	118,672	80,125
Dubuque	14,200	12,750	5	4	3,643	2,200	26,354	27,582
Ottumwa	15,000	17,350	2	6	4,850	351,350	21,850	374,100
Sioux City	26,900	38,600	10	13	7,935	11,420	36,550	77,270
Waterloo	17,100	15,800	11	4	18,390	12,040	45,940	28,765
Kansas:								
Hutchinson	10,000	3,650	4	2	5,225	2,660	18,395	9,667
Kansas City	10,950	2,550	8	4	5,680	21,045	22,705	25,920
Topeka	19,800	22,975	6	11	6,500	5,770	30,550	31,900
Wichita	27,700	42,350	7	14	26,745	737,832	65,168	790,737
Minnesota:								
Duluth	12,000	20,950	5	12	23,485	7,365	63,615	55,393
Minneapolis	189,650	236,900	44	59	98,615	955,318	380,525	1,280,888
St. Paul	119,988	100,680	20	21	138,356	49,696	400,083	250,179
Missouri:								
Joplin	5,000	3,000	4	0	800	26,550	10,750	32,450
Kansas City	60,500	58,500	18	14	339,800	49,500	443,500	127,900
Springfield	12,500	32,800	4	9	3,750	41,675	32,726	83,900
St. Joseph	13,000	3,000	4	1	9,745	76,460	30,867	88,435
St. Louis	252,700	201,900	67	55	53,176	51,370	443,481	349,365
Nebraska:								
Lincoln	8,900	16,000	5	7	3,665	4,790	43,085	26,715
Omaha	111,650	85,000	27	28	178,448	32,470	306,368	155,633
North Dakota:								
Fargo	12,950	15,800	3	4	1,995	5,755	29,795	32,592
South Dakota:								
Sioux Falls	29,060	38,125	11	15	94,435	4,000	124,620	44,625
Total	1,079,198	1,081,855	302	314	1,074,241	2,494,668	2,839,137	4,119,466
Per cent of change		+0.2		+4.0		+132.2		+45.1

South Atlantic States

Delaware:								
Wilmington	$20,000	$70,500	4	19	$6,698	$7,620	$62,249	$90,158
District of Columbia:								
Washington	537,250	552,400	90	88	4,440,875	22,343,270	5,195,747	23,059,800
Florida:								
Jacksonville	40,900	37,950	13	14	3,920	64,529	90,385	143,864
Miami	10,190	4,200	6	4	254,966	19,520	305,357	92,664
Orlando	0	0	0	0	0	500	4,920	6,990
St. Petersburg	3,700	1,000	5	3	6,700	1,000	16,900	21,600
Tampa	16,300	3,050	6	5	11,900	23,003	47,353	41,813
West Palm Beach		[1] 6,363		[1] 1		[1] 12,613		[1] 26,917
Georgia:								
Atlanta	57,800	18,900	23	13	19,505	45,052	154,271	116,040
Augusta	3,600	14,050	3	7	0	2,300	34,064	24,229
Columbus	3,000	7,080	1	2	500	425	13,431	9,196
Macon	16,000	0	1	0	60,150	0	93,200	19,459
Savannah	1,800	0	2	0	2,265	10,545	8,680	13,020
Maryland:								
Baltimore	112,000	189,000	24	44	1,391,700	973,981	2,046,800	1,769,881
Cumberland	1,200	0	2	0	5,655	2,760	7,605	3,555
Hagerstown	4,500	0	1	0	5,010	660	10,785	2,410

[1] Not included in total.

TABLE 10.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, APRIL AND MAY, 1932—Continued

South Atlantic States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new buildings					
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
North Carolina:								
Asheville	0	$1,825	0	2	$1,590	$790	$10,480	$4,970
Charlotte	$14,600	43,300	4	9	588	64,955	26,517	117,195
Durham	19,300	12,000	8	3	6,700	87,225	31,350	109,625
Greensboro	0	5,250	0	3	3,440	1,705	11,237	16,759
High Point	8,700	14,000	3	3	5,943	600	14,643	14,740
Raleigh	10,350	5,710	6	6	190	13,900	21,999	22,610
Wilmington	2,000	1,500	3	1	3,100	1,900	9,450	8,050
Winston-Salem	8,650	44,000	5	5	21,130	10,315	39,125	66,730
South Carolina:								
Charleston	15,350	1,175	3	3	775	3,575	32,167	13,181
Columbia	15,125	19,000	10	16	14,595	21,725	76,847	53,405
Greenville	3,800	9,000	4	2	1,050	3,530	12,660	34,125
Spartanburg	1,600	450	1	1	950	50	6,410	2,470
Virginia:								
Newport News	16,200	2,900	5	2	2,017	2,580	25,889	11,986
Norfolk	94,800	58,400	25	23	229,420	4,800	347,495	102,465
Petersburg	1,000	0	1	0	700	1,895	8,550	2,725
Portsmouth	7,800	13,400	3	4	1,120	323	15,387	24,258
Richmond	51,850	48,550	21	13	9,905	96,212	110,190	174,277
Roanoke	32,130	5,900	4	1	695	370	44,023	9,745
West Virginia:								
Charleston	45,500	43,500	12	14	123,397	3,475	182,639	51,746
Clarksburg	1,200	1,500	1	1	1,320	13,525	6,220	16,035
Huntington	8,275	0	3	0	7,470	1,305	37,928	13,725
Parkersburg	4,000	2,600	1	1	940	1,145	6,805	6,260
Wheeling	2,650	6,600	3	2	15,900	36,695	44,574	55,463
Total	1,193,120	1,238,690	307	314	6,662,779	23,867,760	9,214,332	26,347,224
Per cent of change		+3.8		+2.3		+258.2		+185.9

South Central States

Alabama:								
Birmingham	$3,600	$12,500	5	3	$54,370	$24,104	$85,286	$72,717
Mobile	6,500	6,000	8	6	16,400	51,000	40,733	71,803
Montgomery	21,290	13,800	10	10	26,950	1,975	61,882	25,340
Arkansas:								
Little Rock	2,375	350	3	1	4,004	7,400	20,464	18,499
Kentucky:								
Covington	0	0	0	0	1,000	2,880	7,355	12,552
Lexington	4,750	46,300	2	27	15,600	19,290	30,223	83,737
Louisville	58,000	25,600	12	8	295,986	31,459	390,186	92,044
Newport	4,800	0	1	0	800	6,200	7,200	7,500
Paducah	0	0	0	0	0	15,000	900	16,400
Louisiana:								
Baton Rouge	4,600	9,036	5	7	309,128	10,960	329,183	35,872
Monroe	0	1,600	0	3	22,750	0	27,700	2,700
New Orleans	90,536	29,100	31	25	309,778	9,545	452,864	81,354
Shreveport	17,300	14,475	11	10	5,545	4,133	48,232	38,968
Mississippi:								
Jackson	23,600	1,000	6	1	0	2,300	38,615	13,400
Oklahoma:								
Enid	1,750	0	2	0	235	400	4,900	1,850
Oklahoma City	90,000	34,500	18	11	447,875	1,039,075	566,195	1,099,705
Okmulgee	0	0	0	0	0	700	0	1,150
Tulsa	17,575	24,100	7	5	51,853	6,042	77,866	37,867
Tennessee:								
Chattanooga	3,000	5,500	2	4	5,330	869,100	35,371	889,871
Johnson City	0	10,800	0	5	450	4,700	800	15,600
Knoxville	15,960	8,320	7	2	38,112	948,750	64,062	963,400
Memphis	28,600	4,680	11	5	31,720	25,610	162,240	87,620
Nashville	78,550	36,800	33	15	14,730	258,025	110,823	306,969
Texas:								
Amarillo	8,535	9,150	13	5	18,815	45,485	33,920	63,000
Austin	50,485	57,295	27	29	506,174	128,824	566,474	240,697
Beaumont	0	5,700	0	3	20,735	4,820	37,575	37,984
Dallas	55,694	82,300	35	52	330,060	33,258	465,695	177,163
El Paso	6,650	2,250	2	1	4,585	2,810	24,759	11,863
Fort Worth	47,500	43,500	21	17	33,900	17,900	127,999	84,625

TABLE 10.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, APRIL AND MAY, 1932—Continued

South Central States—Continued

State and city	New residential buildings				New nonresidential buildings (estimated cost)		Total construction including alterations and repairs (estimated cost)	
	Estimated cost		Families provided for in new buildings					
	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932	April, 1932	May, 1932
Texas—Continued.								
Galveston	$41,300	$39,300	16	15	$8,132	$2,415	$60,281	$72,418
Houston	145,730	116,495	61	43	167,350	100,350	333,730	231,455
Port Arthur		0		0		[1] 980		[1] 6,305
San Angelo	0	0	0	0	0	200	19,082	2,755
San Antonio	50,865	41,860	31	24	184,681	10,213	254,147	80,479
Waco	7,000	6,100	6	6	2,533	536	14,985	24,521
Wichita Falls	0	7,500	0	1	3,840	150	8,500	10,482
Total	886,545	695,911	386	344	2,933,421	3,685,609	4,510,227	5,014,360
Per cent of change		−21.5		−10.9		+25.6		+11.2
Mountain and Pacific States								
Arizona:								
Phoenix	$30,150	$7,180	7	5	$27,090	$34,630	$91,750	$60,505
Tucson	24,400	12,650	7	6	4,557	2,105	56,695	21,029
California:								
Alameda	3,850	3,000	1	1	17,640	12,450	29,408	20,777
Alhambra	34,000	21,000	11	8	5,225	5,350	42,725	27,275
Bakersfield	5,700	6,450	1	2	4,550	635	24,820	15,215
Berkeley	28,050	52,350	8	14	50,812	9,525	107,267	78,878
Fresno	16,100	24,150	6	6	17,510	5,948	49,099	58,207
Glendale	50,590	68,500	12	16	34,180	11,645	91,320	91,600
Huntington Park	4,500	19,975	3	13	0	3,000	4,500	25,570
Long Beach	117,885	26,700	46	11	50,330	138,020	213,925	187,470
Los Angeles	692,990	557,157	246	195	527,320	313,506	1,531,814	1,174,039
Oakland	95,826	91,150	28	20	35,075	193,009	193,920	323,018
Pasadena	40,070	35,000	11	9	43,228	42,784	111,427	105,063
Sacramento	99,932	42,150	19	9	11,420	361,071	172,056	438,493
San Diego	89,675	76,750	32	28	113,575	19,030	244,618	135,201
San Francisco	448,000	287,023	114	66	407,005	169,563	1,037,012	865,009
San Jose	9,000	12,300	2	5	2,965	755	23,245	24,255
Santa Ana	8,800	26,150	2	7	24,199	2,000	38,959	37,056
Santa Barbara	16,750	25,300	7	8	1,040	3,505	28,735	42,115
Santa Monica	52,000	21,350	29	7	15,775	1,750	78,820	25,370
Stockton	22,300	36,250	12	10	245,504	357,406	301,129	401,216
Vallejo	5,400	3,950	3	2	13,977	2,190	21,200	11,172
Colorado:								
Colorado Springs	38,950	3,000	8	1	1,945	2,742	47,355	20,307
Denver	167,100	347,250	41	48	40,475	84,305	269,855	502,235
Pueblo	1,800	5,800	1	4	1,795	3,840	11,052	14,170
Montana:								
Butte	0	0	0	0	9,670	970	10,530	4,442
Great Falls	5,100	3,700	4	2	4,795	4,250	19,545	11,135
New Mexico:								
Albuquerque	24,550	5,000	6	3	1,775	8,075	47,376	38,007
Oregon:								
Portland	87,630	96,060	20	20	242,630	297,565	404,395	447,874
Salem	0	5,800	0	4	13,025	4,615	43,735	29,296
Utah:								
Ogden	1,250	7,000	2	3	1,600	8,110	10,600	35,955
Salt Lake City	24,800	33,600	5	10	15,907	20,030	71,222	63,365
Washington:								
Bellingham	4,600	6,300	2	5	0	1,400	28,325	14,372
Everett	0	10,500	0	2	1,495	200	6,818	15,467
Seattle	64,575	55,585	35	34	81,880	419,025	240,645	542,506
Spokane	68,050	34,000	21	11	25,280	4,115	119,980	56,650
Tacoma	30,000	24,500	12	6	15,145	4,365	58,765	41,625
Total	2,414,373	2,094,580	764	601	2,110,394	2,553,484	5,884,642	6,005,939
Per cent of change		−13.2		−21.3		+21.0		+2.1
Hawaii								
Honolulu	$112,619	$128,761	67	77	$61,425	$13,184	$257,850	$168,316
Per cent of change		+14.3		+14.9		−78.5		−34.7

[1] Not included in total.

Steel Dwellings for the Unemployed in Germany [1]

THE problem of settling unemployed workers with their families on unused land at the outskirts of cities has been given consideration by many local governments of Germany, especially in the densely populated western districts. The plans under consideration which will have the financial support of the Federal Government contemplate the construction, on garden plots near the cities, of single-family dwelling houses at minimum cost where the unemployed will be enabled to earn a part of their livelihood by cultivating potatoes and other vegetables for their own consumption. These plans have in view not only the creation of better and more healthful living conditions for the unemployed but also the relief of the heavy financial burden resting on local governments involved in the support of those who are no longer entitled to the unemployment insurance benefits.

The problem of designing a type of steel house that could be constructed by unskilled labor and which would combine a certain degree of comfort at low cost and at the same time be practicable was presented by the German Ministry of Finance to the steel company at Dusseldorf for solution. The company designed such a dwelling with steel walls and recently made trial construction of it at Berlin.

The outside dimensions of the house are 20.86 by 30.17 feet, (including the stable that adjoins it on one side). The ridge of the roof is 15.22 feet from the foundation. The outer walls are constructed of sections of 3-millimeter Thomas coppered steel plate 3.79 by 7.50 feet. The sections are set side by side on the foundation on sheet-iron base strips. These strips are placed on a layer of building paper to prevent rust. The sections are bolted together horizontally and are lapped where they join one another by means of channels three inches deep and have right-angled flanges on the inside at the top and bottom. The sections are secured to the foundation by means of anchor bolts cemented in.

To give stiffness to the walls the corner sections are of material three times as thick as that in the other sections. The window and door frames are also of steel and are furnished separately to be bolted to the wall plates after the sections are erected. The floor, ceiling, doors, sash, and roof framing of the house are of wood.

The houses have only one story, and include a living room-kitchen with a floor space of 10.55 by 15.42 feet, and two bedrooms, one of 6.69 by 9.51 feet, and the other of 5.57 by 6.69 feet. A work room 5.9 by 10.04 feet is also provided. The stable at the side of the house has space for two or three goats, a pigsty, and a poultry coop, as well as a toilet. It is roofed by prolonging the roof of the main house. In order to avoid changing the angle of slope of the roof and to give sufficient headroom, the floor of the stable is placed 2½ feet below the level of the house floor.

The walls of the stable are also of steel sections made by cutting plates 3.79 by 9.8 feet, diagonally. The part cut off may thus be used in the construction of the stable of a second house without waste of material. The walls of the stable are bolted to the walls of the house by means of angle irons. Provision is also made for possible

[1] Report of George C. Minor, American vice consul at Cologne, dated Apr. 22, 1932.

future extension of the house by placing angles of 70/70 millimeter steel on the outside of two of the corner sections.

The steel walls are lined inside the house by a layer of bims bricks made of volcanic ash, cement, and limestone. An air space three centimeters wide is left between the steel and the brick work. The air space is ventilated, to prevent sweating, by means of slots in the foundation and steel sections. Building paper is placed behind the brick work. The partition walls are also of bims brick.

The roof is of galvanized steel sheets lapped by means of flanges and secured by galvanized roofing nails with lead washers to the roof framing. There being no air space over the ceiling of the stable, insulation is secured by spreading over this part a layer of clay or ashes on top of the ceiling and under the galvanized roofing sheets. The space under the gables is boarded up and the entire house may be painted any desired color.

The house has been designed to eliminate the need of skilled labor in its construction with the possible exception of the laying of the chimney. The roof framing is of the simplest kind and is to be delivered to the site already cut and fitted. In erecting the trial house, three unskilled laborers were able to erect the steel walls in eight hours. Seven days in all were required for completing the house after the cement foundation had set.

Costs of Construction

According to the steel company, the material costs of this type of house, based on the construction of a block of 20 houses are as follows:

	Marks [2]	
Steel walls	590	($140.42)
Lumber and framing	500	($119.00)
Windows, doors, and trimming	400	($95.20)
Roofing	220	($52.36)
Foundation and interior walls	500	($119.00)
Total	2,210	($525.98)

To the above costs, the labor costs of the settler must be added, which according to a decree of the Government settlement commissioner may not exceed 500 marks ($119). An additional sum of 300 marks ($71) will also be allowed for planting and the purchase of domestic animals, poultry, etc. The entire cost must, however, not exceed 3,000 marks ($714) exclusive of rail transportation.

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

WAGES AND HOURS OF LABOR

Wages and Hours of Labor in Motor-Vehicle Repair Garages, 1931

EMPLOYEES in motor-vehicle repair garages in the United States earned an average of 57.9 cents per hour and $29.56 in a representative week in 1931. In the week they worked an average of 5.8 days (counting as a day each whole or part day worked) and 51 hours, and their full-time hours per week averaged 53.4. The average (51) of hours actually worked in the week is 95.5 per cent of the average (53.4) full-time hours per week, thus showing 4.5 per cent of short time. With the same average earnings per hour as was earned in the 51 hours, earnings for a full-time week would have averaged $30.92 or $1.36 more than was actually earned. These figures are for males only; in the garages covered in the study only 6 females were employed.

The figures quoted above are summaries of the results of a study by the Bureau of Labor Statistics in 1931 of days, hours, and earnings of 6,059 employees of 344 garages in 43 representative cities in 34 States and the District of Columbia. The study included employees of 8 garages in 2 cities in each of 8 States and in 1 city in each of 26 States and in the District of Columbia. The basic wage figures used in compiling this report were collected by the Bureau of Labor Statistics directly from the pay rolls of the garages covered by the study for a pay period in April, May, June, or July, and consequently the figures in this report are representative of conditions in those months.

The principal business of the garages covered in the study is the general repair of motor vehicles. In a considerable number of garages washing, greasing, and storing of cars, and sale of gasoline, oil, and auto supplies is also carried on, but this is incidental to the main business. Wage figures were collected for representative garages in each of the cities covered in the study.

Average Hours and Earnings, 1931, by Occupations

TABLE 1 shows average days, hours, and earnings for each of the important occupations found in the garages studied and for the group of "other employees." This group includes a number of occupations each too few in number of employees to warrant separate occupational tabulation.

It will be observed that averages are shown for each of two or more occupations separately, and then for a combination of such occupations. Thus, averages are shown for "battery men" and for "radiator men" separately and then for both combined. Six garages employed both batterymen and radiator men, consequently the number of garages for both is 49. Table 1 is the only one in which figures are shown separately for these occupations. In other tables figures are shown for the combination to avoid publishing data for one garage only and possibly revealing its identity.

Janitors, service men, and the group of "other employees" worked an average of 6.1 days in one week, which was higher, and wood body workers worked an average of 5.3 days which was lower than the average for any other occupation in the table.

Average full-time hours per week ranged by occupations from 49.8 for machinists to 58.5 for the group of other employees and average hours actually worked in one week ranged from 43 for wood body workers to 58.8 for other employees. Janitors worked an average of 57.7 hours in the week. The per cent of full time worked ranged, by occupations, from 83.8 for wood body workers to 102.1 for inspectors. Part of the inspectors worked overtime in the week covered in the report.

Average earnings per hour ranged, by occupations, from 34.7 cents for mechanics' helpers to 86.7 cents for blacksmiths; full-time earnings per week from $18.46 for mechanics' helpers to $45.50 for diagnosticians; and average actual earnings in the week ranged from $17.63 for mechanics' helpers to $44.93 for diagnosticians.

TABLE 1.—AVERAGE HOURS AND EARNINGS IN REPAIR GARAGES, 1931, BY OCCUPATION

Occupation	Number of garages	Number of employees	Average number of days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
					Average number	Per cent of full time			
Auto mechanics, general	343	2,668	5.8	52.9	49.2	93.0	$0.638	$33.75	$31.35
Auto mechanics, specialized	47	82	5.8	52.7	48.8	92.6	.685	36.10	33.46
Battery men	46	51	6.0	55.7	55.1	98.9	.531	29.58	29.25
Radiator men	9	11	5.8	53.4	48.2	90.3	.567	30.28	27.29
Battery and radiator men	49	62	6.0	55.3	53.9	97.5	.536	29.64	28.90
Blacksmiths	14	15	5.7	50.6	45.7	90.3	.867	43.87	39.60
Machinists	24	31	5.9	49.8	47.5	95.4	.788	39.24	37.46
Welders	4	5	5.8	52.4	48.9	93.3	.793	41.55	38.77
Blacksmiths, machinists, and welders	33	51	5.9	50.3	47.1	93.6	.811	40.79	38.22
Body workers, metal	80	124	5.7	51.9	48.2	92.9	.763	39.60	36.79
Body workers, wood	29	42	5.3	51.3	43.0	83.8	.789	40.48	33.90
Body workers, metal and wood	35	44	5.7	52.7	48.8	92.6	.665	35.05	32.44
Upholsterers	38	61	5.5	50.8	44.2	87.0	.786	39.93	34.73
Body workers and upholsterers	122	271	5.6	51.7	46.6	90.1	.755	39.03	35.17
Car washers	227	389	5.9	54.8	53.3	97.3	.381	20.88	20.32
Polishers	27	58	5.8	51.6	48.7	94.4	.452	23.32	22.05
Car washers and polishers	230	447	5.9	54.4	52.7	96.9	.390	21.22	20.54
Chasers	61	105	6.0	54.8	55.6	101.5	.373	20.44	20.72
Foremen, working	172	228	6.0	53.2	53.6	100.8	.798	42.45	42.81
Helpers, mechanics'	145	273	5.8	53.2	50.8	95.5	.347	18.46	17.63
Inspectors	78	171	6.0	52.3	53.4	102.1	.737	38.55	39.35
Diagnosticians	40	62	6.0	53.4	52.7	98.7	.852	45.50	44.93
Inspectors and diagnosticians	105	233	6.0	52.6	53.2	101.1	.768	40.40	40.84
Painters	115	217	5.6	[1] 52.1	48.4	[1] 93.3	.682	[1] 35.53	33.05
Pitmen (greasers)	141	200	5.8	53.3	50.9	95.5	.440	23.45	22.41
Porters	128	253	6.0	54.4	53.8	98.9	.363	19.75	19.54
Janitors	68	97	6.1	57.1	57.7	101.1	.390	22.27	22.49
Porters and janitors	180	350	6.0	55.1	54.9	99.6	.371	20.44	20.36
Service men	59	130	6.1	55.4	54.3	98.0	.660	36.56	35.86
Stock clerks	142	292	6.0	52.3	52.6	100.6	.458	23.95	24.13
Stock keepers	199	208	6.0	53.5	53.3	99.6	.658	35.20	35.08
Other employees	115	242	6.1	58.5	58.8	100.5	.434	25.39	25.53
All occupations	344	6,059	5.8	53.4	51.0	95.5	.579	30.92	29.56

[1] Not including 1 employee whose full-time hours were not reported.

Average Hours and Earnings, 1931, by Cities

TABLE 2 shows average hours and earnings in one week for the employees covered in each of the 43 cities. The same number (8) of garages were covered in each city, but the number of employees ranged from 38 in Danville, Ill., to 430 in Boston, Mass.

Average days worked in one week ranged in the various cities from 5.4 to 6.2.

Average full-time hours per week ranged from 49.5 to 61.2 and average hours actually worked in one week ranged from 45.4 to 57.3. The per cent of full time actually worked in one week ranged from 85.8 to 101.0. The percentage of full time worked was 100 or more in each of 4 cities.

Average earnings per hour ranged from 32.7 to 73.2 cents, full-time earnings per week from $19.39 to $38.36, and average actual earnings in one week ranged from $18.72 to $35.35.

TABLE 2.—AVERAGE HOURS AND EARNINGS IN REPAIR GARAGES, 1931, BY CITY

City	Number of garages	Number of employees	Average number of days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
					Average number	Per cent of full time			
Altoona, Pa.	8	76	6.0	53.5	52.9	98.9	$0.552	$29.53	$29.18
Philadelphia, Pa.	8	161	5.9	50.8	50.8	100.0	.618	31.39	31.39
Altoona and Philadelphia	16	237	6.0	51.7	51.4	99.4	.596	30.81	30.65
Atlanta, Ga.	8	136	5.9	51.1	50.2	98.2	.551	28.16	27.65
Austin, Tex.	8	85	5.9	54.0	53.1	98.3	.510	27.54	27.05
Houston, Tex.	8	127	5.9	50.8	49.6	97.6	.552	28.04	27.39
Austin and Houston	16	212	5.9	52.1	51.0	97.9	.534	27.82	27.25
Baltimore, Md.	8	260	5.8	54.0	52.9	98.0	.546	29.48	28.86
Birmingham, Ala.	8	139	5.9	57.2	55.2	96.5	.482	27.57	26.58
Boston, Mass.	8	430	5.6	51.2	48.4	94.5	.607	31.08	29.39
Holyoke, Mass.	8	57	5.9	50.4	49.9	99.0	.581	29.28	29.02
Boston and Holyoke	16	487	5.6	51.1	48.6	95.1	.604	30.86	29.34
Burlington, Vt.	8	81	5.8	54.1	53.1	98.2	.544	29.43	28.87
Charleston, S. C.	8	96	5.9	53.8	53.1	98.7	.465	25.02	24.71
Charlotte, N. C.	8	101	5.9	57.0	55.7	97.7	.485	27.65	27.05
Chicago, Ill.	8	293	5.8	52.4	48.3	92.2	.732	38.36	35.35
Danville, Ill.	8	38	6.1	55.9	52.4	93.7	.540	30.19	28.30
Chicago and Danville	16	331	5.8	52.8	48.8	92.4	.708	37.38	34.54
Cleveland, Ohio	8	203	5.8	52.9	45.4	85.8	.648	34.28	29.43
Hamilton, Ohio	8	86	5.9	56.0	54.0	96.4	.555	31.08	29.98
Cleveland and Hamilton	16	289	5.8	53.8	48.0	89.2	.617	33.19	29.59
Des Moines, Iowa	8	95	6.1	57.7	52.2	90.5	.570	32.89	29.77
Detroit, Mich.	8	104	5.7	54.2	49.9	92.1	.681	36.91	33.94
Hartford, Conn.	8	211	5.9	52.4	51.3	97.9	.646	33.85	33.10
Huntington, W. Va.	8	77	6.1	57.5	56.8	98.8	.482	27.72	27.34
Indianapolis, Ind.	8	160	5.8	53.7	48.5	90.3	.552	29.64	26.79
Jacksonville, Fla.	8	95	5.9	54.2	53.0	97.8	.508	27.53	26.92

[1] Not including one employee whose full-time hours were not reported.

TABLE 2.—AVERAGE HOURS AND EARNINGS IN REPAIR GARAGES, 1931, BY CITY—Continued

City	Number of garages	Number of employees	Average number of days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
					Average number	Per cent of full time			
Joplin, Mo	8	73	6.2	61.2	56.4	92.2	$0428	$26.19	$24.17
St. Louis, Mo	8	168	5.9	[1] 49.9	48.3	[1] 97.2	.659	[1] 32.88	31.85
Joplin and St. Louis	16	241	6.0	[1] 53.4	50.8	[1] 95.3	.582	[1] 31.03	29.53
Kansas City, Kans	8	76	6.1	57.1	55.3	96.8	.493	28.15	27.26
Lincoln, Nebr	8	70	5.9	54.8	53.3	97.3	.507	27.78	27.01
Little Rock, Ark	8	163	5.8	53.9	52.1	96.7	.476	25.66	24.79
Louisville, Ky	8	122	5.8	56.7	52.4	92.4	.483	27.39	25.35
Manchester, N. H	8	76	6.0	53.5	53.6	100.2	.531	28.41	28.48
Memphis, Tenn	8	98	5.4	54.1	46.4	85.8	.520	28.13	24.13
Meridian, Miss	8	58	5.9	59.3	57.3	96.6	.327	19.39	18.72
Milwaukee, Wis	8	104	6.0	54.3	48.7	89.7	.604	32.80	29.41
Superior, Wis	8	58	6.0	56.1	54.4	97.0	.570	31.98	31.03
Milwaukee and Superior	16	162	6.0	54.9	50.7	92.3	.591	32.45	29.99
Minneapolis, Minn	8	173	5.9	55.1	50.5	91.7	.631	34.77	31.85
New Orleans, La	8	112	5.9	49.5	48.0	97.0	.497	24.60	23.85
New York, N. Y	8	358	5.8	49.7	50.2	101.0	.697	34.64	34.97
Rochester, N. Y	8	158	5.8	51.0	49.8	97.6	.663	33.81	33.02
New York and Rochester	16	516	5.8	50.1	50.1	100.0	.687	34.42	34.42
Oklahoma City, Okla	8	116	5.9	54.5	50.4	92.5	.598	32.59	30.19
Portland, Me	8	186	5.9	54.7	52.7	96.3	.535	29.26	28.20
Providence, R. I	8	187	5.8	52.3	51.1	97.7	.599	31.33	30.61
Richmond, Va	8	142	6.0	53.3	53.3	100.0	.575	30.65	30.65
Trenton, N. J	8	100	5.8	53.6	51.9	96.8	.584	31.30	30.33
Washington, D. C	8	350	5.9	54.3	51.1	94.1	.593	32.20	30.32
Grand total	344	6,059	5.8	53.4	51.0	95.5	.579	30.92	29.56

[1] Not including one employee whose full-time hours were not reported.

Average and Classified Earnings Per Hour, 1931

AVERAGE and classified earnings per hour are shown in Table 3 for the employees in each of the important occupations or occupational groups, for the group of "other employees," and for the employees in all occupations in the garages covered in the study.

Average earnings per hour were computed for each employee by dividing the amount earned in one week by the number of hours actually worked in that week.

The average of 37.1 cents per hour for porters and janitors is less and of 81.1 cents for blacksmiths, machinists, and welders is more than the average for any occupation or other occupational group in the table.

Of the porters and janitors, 2 per cent earned, on an average, less than 15 cents per hour, 50 per cent earned less than 35 cents per hour, and only 1 per cent earned as much as 70 and under 80 cents per hour. Only 2 per cent of the group of blacksmiths, machinists, and welders earned an average as low as 45 and under 50 cents per hour, and 36 per cent earned an average of 90 cents or more per hour.

TABLE 3.—AVERAGE AND CLASSIFIED EARNINGS PER HOUR IN REPAIR GARAGES, 1931, BY OCCUPATION

Occupation	Number of garages	Number of employees	Average earnings per hour	Per cent of employees whose average earnings per hour were—					
				Under 15 cents	15 and under 20 cents	20 and under 25 cents	25 and under 30 cents	30 and under 35 cents	35 and under 40 cents
Auto mechanics, general	343	2,668	$0.638	(1)	(1)	(1)	1	1	2
Auto mechanics, specialized	47	82	.685	1	------	------	2	------	1
Battery and radiator men	49	62	.536	------	------	2	2	10	3
Blacksmiths, machinists, and welders	33	51	.811	------	------	------	------	------	------
Body workers and upholsterers	122	271	.755	------	------	------	1	(1)	1
Car washers and polishers	230	447	.390	1	5	8	13	16	12
Chasers	61	105	.373	1	3	11	17	9	10
Foremen, working	172	228	.798	------	------	------	------	------	(1)
Helpers, mechanics'	145	273	.347	3	6	9	15	16	22
Inspectors and diagnosticians	105	233	.768	------	------	------	------	(1)	(1)
Painters	115	217	.682	------	------	------	2	1	3
Pitmen (greasers)	144	200	.440	1	5	6	8	18	13
Porters and janitors	180	350	.371	2	3	7	17	21	10
Service men	59	130	.660	------	2	------	2	4	2
Stock clerks	142	292	.458	1	2	1	10	8	10
Stock keepers	199	208	.658	------	------	1	1	3	4
Other employees	115	242	.434	1	3	10	12	9	15
Total	344	6,059	.579	(1)	1	2	5	6	5

Occupation	Per cent of employees whose average earnings per hour were—									
	40 and under 45 cents	45 and under 50 cents	50 and under 60 cents	60 and under 70 cents	70 and under 80 cents	80 and under 90 cents	90 cents and under $1	$1 and under $1.10	$1.10 and under $1.20	$1.20 and over
Auto mechanics, general	4	7	22	28	19	10	3	2	1	1
Auto mechanics, specialized	4	5	13	21	28	16	2	4	------	2
Battery and radiator men	6	6	31	29	8	3	------	------	------	------
Blacksmiths, machinists, and welders	------	2	4	22	16	22	18	14	------	4
Body workers and upholsterers	2	4	13	13	24	19	9	9	3	2
Car washers and polishers	13	8	15	5	2	1	1	(1)	(1)	(1)
Chasers	24	9	12	4	1	------	------	------	------	------
Foremen, working	(1)	1	5	21	26	21	13	6	3	4
Helpers, mechanics'	10	7	7	4	1	1	------	------	------	------
Inspectors and diagnosticians	1	(1)	7	20	32	21	8	6	2	1
Painters	5	4	16	20	21	12	6	7	2	1
Pitmen (greasers)	12	13	7	4	3	3	5	3	1	1
Porters and janitors	11	12	14	3	1	------	------	------	------	------
Service men	1	1	10	27	29	17	2	2	2	------
Stock clerks	14	14	24	11	2	2	------	------	------	------
Stock keepers	2	6	15	28	21	9	4	3	(1)	2
Other employees	8	7	14	7	5	5	2	1	1	------
Total	6	7	17	19	15	9	3	2	1	1

[1] Less than one-half of 1 per cent.

Table 4 shows the number and per cent of the 6,059 employees covered in this report classified according to individual average earnings per hour.

One employee, or less than 1 per cent of the 6,059 employees covered in the study, earned an average of 5 and under 6 cents per hour, 1 earned an average of $1.80 and under $1.90 and 660 or 11 per cent earned an average of 60 and under 65 cents per hour.

TABLE 4.—NUMBER AND PER CENT OF GARAGE EMPLOYEES IN ALL OCCUPATIONS AT EACH CLASSIFIED GROUP OF EARNINGS PER HOUR, 1931

Classified earnings per hour	Employees in all occupations		Classified earnings per hour	Employees in all occupations	
	Number	Per cent		Number	Per cent
5 and under 6 cents	1	(1)	45 and under 47½ cents	307	5
9 and under 10 cents	2	(1)	47½ and under 50 cents	100	2
10 and under 11 cents	3	(1)	50 and under 55 cents	501	8
11 and under 12 cents	4	(1)	55 and under 60 cents	516	9
12 and under 13 cents	4	(1)	60 and under 65 cents	660	11
13 and under 14 cents	2	(1)	65 and under 70 cents	504	8
14 and under 15 cents	10	(1)	70 and under 75 cents	528	9
15 and under 16 cents	14	(1)	75 and under 80 cents	386	6
16 and under 17 cents	19	(1)	80 and under 85 cents	316	5
17 and under 18 cents	12	(1)	85 and under 90 cents	209	3
18 and under 19 cents	24	(1)	90 and under 95 cents	148	2
19 and under 20 cents	14	(1)	95 cents and under $1	62	1
20 and under 21 cents	17	(1)	$1 and under $1.10	146	2
21 and under 22 cents	22	(1)	$1.10 and under $1.20	51	1
22 and under 23 cents	52	1	$1.20 and under $1.30	32	1
23 and under 24 cents	32	1	$1.30 and under $1.40	5	(1)
24 and under 25 cents	27	(1)	$1.40 and under $1.50	3	(1)
25 and under 27½ cents	97	2	$1.50 and under $1.60	4	(1)
27½ and under 30 cents	186	3	$1.60 and under $1.70	3	(1)
30 and under 32½ cents	163	3	$1.70 and under $1.80	1	(1)
32½ and under 35 cents	179	3	$1.80 and under $1.90	1	(1)
35 and under 37½ cents	208	3			
37½ and under 40 cents	120	2	Total	6,059	100
40 and under 42½ cents	262	4	Average earnings per hour	$0.579	-------
42½ and under 45 cents	102	2			

[1] Less than one-half of 1 per cent.

Average and Classified Full-Time Hours per week, 1931

FULL-TIME hours per week are the employee's prescribed hours on duty each week under normal conditions and take no account of lost time or overtime.

Table 5 shows the average and classified full-time hours per week for the employees in each of the occupations or occupational groups and for all occupations combined in the garages covered in the study.

The average full-time hours per week ranged from a low of 50.3 for blacksmiths, machinists, and welders to 58.5 for the group of "other employees." The hours of 12 per cent of the blacksmiths, machinists, and welders were under 46½ per week, those of 4 per cent were over 60 per week, and those of 32 per cent were 48 or less per week. The hours of service men averaged 55.4 per week, 1 per cent had a full-time week of less than 46½ hours, 6 per cent of over 70 hours, and 14 per cent of 48 hours or less.

This table shows that 40 per cent of these garage employees had a full-time week of 54 hours, 8 per cent of 48 hours, 40 per cent of less than 54 hours, and 20 per cent of over 54 hours. The hours of 2 per cent were over 70 per week.

TABLE 5.—AVERAGE AND CLASSIFIED FULL-TIME HOURS OF GARAGE EMPLOYEES PER WEEK, 1931, BY OCCUPATION

Occupation	Number of garages	Number of employees	Average full-time hours per week	Per cent of employees whose average full-time hours per week were—							
				Under 46½	46½	Over 46½ and under 48	48	Over 48 and under 50	50	Over 50 and under 51	51
Auto mechanics, general	343	2,668	52.9	2	6	2	9	4	9	2	6
Auto mechanics, specialized	47	82	52.7	1	1	2	16	7	22	1	4
Battery and radiator men	49	62	55.3	----	----	5	5	----	3	----	10
Blacksmiths, machinists, and welders	33	51	50.3	12	10	2	8	12	20	----	8
Body workers and upholsterers	122	271	51.7	1	5	4	10	8	20	2	4
Car washers and polishers	230	447	54.4	1	3	2	8	3	10	2	5
Chasers	61	105	54.8	2	2	1	8	7	22	----	5
Foremen, working	172	228	53.2	2	2	2	8	3	11	----	5
Helpers, mechanics'	145	273	53.2	4	1	3	11	2	6	1	8
Inspectors and diagnosticians	105	233	52.6	3	5	4	8	7	9	3	7
Painters	115	216	52.1	3	3	2	8	9	13	2	10
Pitmen (greasers)	144	200	53.3	2	4	2	8	5	10	1	4
Porters and janitors	180	350	55.1	2	(1)	1	5	4	11	1	3
Service men	59	130	55.4	1	5	2	6	7	8	----	11
Stock clerks	142	292	52.3	1	3	5	8	2	14	7	10
Stock keepers	199	208	53.5	(1)	2	3	8	2	5	1	5
Other employees	115	242	58.5	4	5	2	4	3	10	1	3
Total	344	6,058	53.4	2	4	2	8	4	10	2	6

Occupation	Per cent of employees whose average full-time hours per week were—										
	Over 51 and under 54	54	Over 54 and under 57	57	Over 57 and under 60	60	Over 60 and under 63	63	Over 63 and under 70	70	Over 70
Auto mechanics, general	2	42	2	6	1	4	(1)	1	1	(1)	1
Auto mechanics, specialized	4	22	1	2	5	4	----	1	4	----	2
Battery and radiator men	3	40	2	10	----	15	2	----	5	----	2
Blacksmiths, machinists, and welders	2	18	----	6	----	----	4	----	----	----	----
Body workers and upholsterers	3	30	----	9	----	3	----	----	(1)	----	----
Car washers and polishers	1	40	1	8	2	5	1	3	2	1	4
Chasers	----	29	1	4	1	7	1	----	5	----	8
Foremen, working	2	48	(1)	9	2	3	1	(1)	2	----	----
Helpers, mechanics'	1	45	1	8	1	4	1	----	2	----	1
Inspectors and diagnosticians	3	35	(1)	6	2	3	----	1	4	----	(1)
Painters	2	32	----	10	----	4	1	(1)	----	----	----
Pitmen (greasers)	1	44	2	10	2	5	1	1	2	1	1
Porters and janitors	1	44	1	8	(1)	7	2	3	1	2	5
Service men	1	28	3	12	3	3	1	----	1	3	6
Stock clerks	2	36	1	4	1	4	1	1	2	----	----
Stock keepers	2	52	(1)	6	2	6	(1)	(1)	2	----	----
Other employees	1	22	2	8	3	6	(1)	2	4	2	18
Total	2	40	1	7	1	4	1	1	2	(1)	2

[1] Less than one-half of 1 per cent.

Wages and Hours of Labor in Cotton-Goods Manufacturing, 1932

A SUMMARY of the results of a study by the Bureau of Labor Statistics of hours and earnings of wage earners in the cotton-goods manufacturing industry in the United States in 1932 is presented in this article, together with comparative data for each of the years from 1910 to 1914 and for each of the even-numbered years from 1916 to 1930.

The 1932 figures cover 76,630 wage earners of 154 representative cotton mills in 11 States for a pay period in January, February, or March, and, therefore, reflect conditions in those months. The number of wage earners in the 11 States covered in the 1932 study was 90 per cent of the total in the industry in all States and the number included in the study was 16 per cent of the total reported in the 1927 United States Census of Manufactures.

The study showed that in 1932 the full-time hours in the industry averaged 53.4, which was the same as in 1930 and 1928. Earnings per hour averaged 26.6 cents in 1932, a decrease of 5.9 cents per hour or 18.2 per cent since 1930; while full-time earnings per week averaged $14.20 in 1932, as compared with $17.36 in 1930.

Summary data showing average full-time hours, earnings per hour and full-time earnings per week for specified years since 1910 are shown in Table 1, together with index numbers thereof, on the basis of 1913 = 100.

The 1910 to 1913 averages are for certain selected occupations only and are comparable, one year with another, over this period. Two sets of averages are shown for 1914, one for selected occupations only and the other for a combination of all occupations in the industry. The selected occupations shown for the earlier years are still the most important in the industry. The table shows that average hours for these were less and the earnings therein were more than for all occupations combined. The averages for all occupations for the specified years from 1914 to 1932 are comparable, one year with another, over this period, but should not be compared with the averages for selected occupations.

The index numbers, however, afford a comparison over the entire period from 1910 to 1932. The indexes for the years 1910 to 1914 for selected occupations are simple percentages. Those for all occupations for 1916 and each of the specified succeeding years to 1932 were computed by increasing or decreasing the 1914 index for selected occupations in proportion to the increase or decrease in the averages for all occupations as between 1914 and the specified succeeding years.

As the table shows, average full-time hours decreased from an index of 102.1 in 1910 to 100 in 1913 and 89.7 in 1920, then gradually increased to 92.5 in 1928, with no change in 1930 or 1932.

TABLE 1.—AVERAGE HOURS AND EARNINGS IN COTTON-GOODS MANUFACTURING, WITH INDEX NUMBERS, 1910 TO 1932

Item	Number of establishments	Number of wage earners	Average full-time hours per week	Average earnings per hour	Average full-time earnings per week	Index numbers (1913=100.0)		
						Full-time hours per week	Earnings per hour	Full-time earnings per week
Selected occupations:								
1910	59	20,725	58.5	$0.140	$8.16	102.1	87.5	89.5
1911	88	34,397	58.4	.144	8.36	101.9	90.0	91.7
1912	88	35,941	57.4	.158	9.00	100.2	98.8	98.7
1913	88	36,498	57.3	.160	9.12	100.0	100.0	100.0
1914 [1]	90	36,578	56.4	.165	9.24	98.4	103.1	101.3
All occupations:								
1914 [1]	90	78,582	56.8	.153	8.63			
1916	106	85,233	56.9	.179	10.08	98.6	120.6	118.3
1918	106	81,121	56.0	.267	14.95	97.0	179.9	175.5
1920	96	59,548	51.8	.480	24.86	89.7	323.5	291.8
1922	97	62,833	52.8	.330	17.42	91.5	222.4	204.5
1924	114	77,995	53.0	.372	19.72	91.8	250.7	231.5
1926	151	82,982	53.3	.328	17.48	92.3	221.0	205.2
1928	158	88,006	53.4	.324	17.30	92.5	218.3	203.1
1930	162	90,053	53.4	.325	17.36	92.5	219.0	203.8
1932	154	76,630	53.4	.266	14.20	92.5	179.2	166.7

[1] 2 sets of averages are shown for 1914 for the industry; one for selected occupations and the other for all occupations in the industry. The 1910 to 1914 figures for selected occupations only are comparable one year with another, as are those for all occupations one year with another from 1914 to 1932.

Average Hours and Earnings, 1930 and 1932, by Occupation and Sex

TABLE 2 shows average days, hours, and earnings in 1930 and 1932 and the per cent of full time worked in one week for each of the important occupations in the industry and for a group of employees, designated as "other employees," which includes several occupations each too few in number of wage earners to warrant separate occupational tabulation.

Each full day or part day worked in the week was counted as a day in computing the average for each year.

Average earnings per hour for males ranged, in the various occupations, in 1930 from 21.0 cents for spooler tenders to 67.4 cents for mule spinners, and in 1932 from 19.8 cents for filling hands to 60.3 cents for mule spinners. Averages for females ranged, by occupations, in 1930 from 24.8 cents per hour for trimmers or inspectors to 40.8 cents for drawing-in machine tenders, and in 1932 from 19. 2 cents for filling hands to 34.8 cents for beamer tenders. Averages for males and for females were less in 1932 than in 1930 for each of the occupations for which averages are shown for both years.

TABLE 2.—AVERAGE HOURS AND EARNINGS IN COTTON-GOODS MANUFACTURING, 1930 AND 1932, BY OCCUPATION AND SEX

Occupation and sex	Year	Number of establishments	Number of wage earners	Average days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
						Average number	Per cent of full time			
Picker tenders, male	1930	160	1,005	4.6	53.8	43.0	79.9	$0.284	$15.28	$12.20
	1932	153	747	4.7	53.8	44.3	82.3	.233	12.54	10.31
Card tenders and strippers, male	1930	160	1,742	4.4	53.8	42.0	78.1	.314	16.89	13.20
	1932	154	1,567	4.5	53.9	43.2	80.1	.252	13.58	10.87
Card grinders, male	1930	155	542	5.0	53.7	48.1	89.6	.403	21.64	19.38
	1932	143	466	5.0	53.8	47.7	88.7	.336	18.08	16.03
Roving men, male	1932	151	1,213	4.6	53.8	43.7	81.2	.204	10.98	8.89
Drawing-frame tenders, male	1930	140	916	4.3	54.3	40.7	75.0	.280	15.20	11.37
	1932	136	867	4.3	54.3	41.7	76.8	.230	12.49	9.57
Drawing-frame tenders, female	1930	62	595	4.5	52.6	40.1	76.2	.278	14.62	11.16
	1932	51	407	4.6	53.0	42.9	80.9	.222	11.77	9.51
Slubber tenders, male	1930	159	1,106	4.4	54.1	41.0	75.8	.355	19.75	14.97
	1932	153	1,027	4.5	53.9	42.8	79.4	.291	15.68	12.47
Slubber tenders, female	1930	12	25	3.9	50.7	33.1	65.3	.390	19.77	12.91
	1932	6	13	4.0	51.3	33.9	66.1	.308	15.80	10.44
Speeder tenders, male	1930	152	2,939	4.3	54.8	41.1	75.0	.342	18.80	14.11
	1932	150	3,019	4.5	54.2	43.5	80.3	.273	14.80	11.86
Speeder tenders, female	1930	133	2,971	4.7	51.3	40.9	79.7	.349	17.90	14.28
	1932	122	2,000	4.9	51.5	42.3	82.1	.296	15.24	12.52
Spinners, mule, male	1930	8	163	4.3	48.5	38.1	78.6	.674	32.69	25.65
	1932	5	65	4.0	50.9	35.0	68.8	.603	30.69	21.08
Spinners, frame, male	1930	48	623	3.8	55.5	36.5	65.8	.322	17.87	11.77
	1932	85	1,647	4.1	53.6	41.1	76.7	.214	11.47	8.80
Spinners, frame, female	1930	162	10,420	4.3	53.5	38.8	72.5	.266	14.23	10.34
	1932	154	8,325	4.6	53.6	40.0	74.6	.213	11.42	8.50
Doffers, male	1930	158	4,114	4.3	54.1	40.6	75.0	.315	17.04	12.79
	1932	151	3,589	4.5	53.9	41.7	77.4	.253	13.64	10.56
Doffers, female	1930	28	320	4.5	51.5	39.1	75.9	.313	16.12	12.24
	1932	21	272	4.8	52.6	41.2	78.3	.273	14.36	11.24
Spooler tenders, male	1930	8	23	4.4	55.3	43.3	78.3	.210	11.61	9.11
	1932	29	272	4.2	53.3	39.3	73.7	.201	10.71	7.88
Spooler tenders, female	1930	161	4,454	4.4	53.5	39.6	74.0	.251	13.43	9.95
	1932	152	3,670	4.6	53.3	40.6	76.2	.207	11.03	8.42
Creelers, male	1930	39	100	4.4	55.2	43.3	78.4	.279	15.40	12.07
	1932	38	113	4.4	54.2	43.2	79.7	.214	11.60	9.24
Creelers, female	1930	105	541	4.2	53.9	39.0	72.4	.252	13.58	9.84
	1932	102	417	4.5	53.2	40.3	75.8	.207	11.01	8.35
Warper tenders, male	1930	62	203	4.5	55.1	42.6	77.3	.354	19.51	15.08
	1932	71	192	4.9	53.6	45.9	85.6	.273	14.63	12.54
Warper tenders, female	1930	119	563	4.7	52.4	42.0	80.2	.328	17.19	13.78
	1932	108	446	5.0	52.6	43.5	82.7	.264	13.89	11.49
Beamer tenders, male	1930	30	208	4.7	54.6	42.3	77.5	.454	25.33	19.62
	1932	34	215	4.5	53.3	43.1	80.9	.364	19.40	15.68
Beamer tenders, female	1930	5	36	5.1	53.3	44.6	83.7	.373	19.88	16.63
	1932	5	10	3.6	53.8	31.7	58.9	.348	18.72	11.01
Slasher tenders, male	1930	155	827	4.9	53.6	46.3	86.4	.384	20.58	17.78
	1932	145	763	5.0	53.5	48.4	90.5	.324	17.33	15.67
Drawers-in, hand, male	1930	9	17	4.6	53.5	44.0	82.2	.320	17.12	14.07
	1932	9	16	4.6	51.6	39.6	76.7	.300	15.48	11.89
Drawers-in, hand, female	1930	128	917	5.0	52.7	43.7	82.9	.352	18.55	15.35
	1932	119	802	4.9	53.2	42.3	79.5	.269	14.31	11.39
Drawing-in machine tenders, male	1930	59	112	4.8	52.7	43.7	82.9	.444	23.40	19.40
	1932	57	107	5.2	52.5	48.1	91.6	.366	19.22	17.62
Drawing-in machine tenders, female	1930	9	17	4.7	49.8	41.0	82.3	.408	20.32	16.74
	1932	9	24	4.7	52.7	42.7	81.0	.305	16.07	13.03
Warp-tying machine tenders, male	1930	112	350	4.9	53.7	46.5	86.6	.412	22.12	19.15
	1932	114	296	5.2	53.7	49.0	91.2	.336	18.04	16.46
Loom fixers, male	1930	158	3,700	5.0	53.5	46.8	87.5	.483	25.84	22.60
	1932	150	3,083	5.1	53.4	48.1	90.1	.403	21.52	19.43
Filling hands, male	1932	148	1,750	4.5	54.3	44.1	81.2	.198	10.75	8.71
Filling hands, female	1932	92	1,830	4.8	54.0	43.5	80.6	.192	10.37	8.36
Weavers, male	1930	156	8,789	4.8	52.7	44.2	83.9	.400	21.08	17.67
	1932	152	7,267	4.9	53.1	46.1	86.8	.314	16.67	14.48
Weavers, female	1930	155	6,653	5.0	52.0	43.2	83.1	.381	19.81	16.47
	1932	146	4,265	5.1	52.0	45.3	87.1	.307	15.96	13.89
Smash piecers, male	1932	114	470	4.8	53.9	46.1	85.5	.272	14.66	12.56
Smash piecers, female	1932	87	492	5.1	54.2	46.9	86.5	.266	14.42	12.46
Trimmers or inspectors, male	1930	59	248	4.9	54.0	45.2	83.7	.326	17.60	14.74
	1932	60	278	5.1	54.5	46.8	85.9	.250	13.63	11.69

TABLE 2.—AVERAGE HOURS AND EARNINGS IN COTTON-GOODS MANUFACTURING, 1930 AND 1932, BY OCCUPATION AND SEX—Continued

Occupation and sex	Year	Number of establishments	Number of wage earners	Average days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
						Average number	Per cent of full time			
Trimmers or inspectors, female	1930	133	1,995	5.0	52.6	43.7	83.1	$0.248	$13.04	$10.84
	1932	129	1,835	5.2	53.1	44.6	84.0	.202	10.73	9.00
Second hands, male	1932	140	1,138	5.5	53.5	52.5	98.1	.450	24.08	23.65
Section hands, male	1932	149	1,660	5.1	53.7	48.4	90.1	.326	17.51	15.79
Other employees, male	1930	162	25,516	4.8	53.8	44.7	83.1	.312	16.79	13.93
	1932	154	16,341	4.9	53.7	46.3	86.2	.248	13.32	11.49
Other employees, female	1930	161	7,303	4.6	53.3	41.4	77.7	.253	13.48	10.47
	1932	148	3,654	4.8	52.9	42.9	81.1	.203	10.74	8.70
All employees, male	1930	162	53,243	4.7	53.7	43.9	81.8	.346	18.58	15.19
	1932	154	48,168	4.8	53.7	45.5	84.7	.284	15.25	12.91
All employees, female	1930	162	36,810	4.6	52.9	40.9	77.3	.293	15.50	11.98
	1932	154	28,462	4.8	53.0	42.2	79.6	.234	12.40	9.87
All employees, male and female	1930	162	90,053	4.6	53.4	42.7	80.0	.325	17.36	13.88
	1932	154	76,630	4.8	53.4	44.3	83.0	.266	14.20	11.78

Average Hours and Earnings, 1930 and 1932, by Sex and State

TABLE 3 shows, for 1930 and 1932, average days, hours, and earnings, and the per cent of full time worked in one week for the males and the females covered in the studies in each State in those years, and also for both sexes combined, in each State.

Average full-time hours per week of males in 1930 ranged, in the different States, from 48.1 to 56.5, and those of females from 47.7 to 56.5 while for both sexes combined the range was from 47.9 to 56.5. In 1932 the hours of males ranged from 48.1 to 56, and those of females from 48 to 55.9; for all employees the average ranged from 48.1 to 56.

Average earnings per hour of males in 1930 ranged by States from 27.9 to 49.2 cents per hour, those of females from 21.7 to 40 cents, and those of both sexes combined from 25.5 to 45 cents per hour. In 1932, averages of males ranged from 22.9 to 40.1 cents per hour, those of females from 18.1 to 32.4 cents per hour, and those of both males and females from 21.3 to 36.5 cents per hour.

Average full-time earnings per week in 1930 of males ranged by States from $15.43 to $24.38, those of females from $11.98 to $20.12, and those of males and females combined from $14.10 to $22.43. In 1932 full-time weekly earnings of males ranged from $12.46 to $19.29, those of females from $10.01 to $15.55, and those of males and females combined from $11.74 to $17.56.

Between 1930 and 1932 the average full-time earnings per week of both sexes combined decreased in each of the 11 States covered. The decreases by States ranged from $1.15 to $6.06 per week.

TABLE 3.—AVERAGE HOURS AND EARNINGS IN COTTON-GOODS MANUFACTURING, 1930 AND 1932, BY SEX AND STATE

Sex and State	Year	Number of establishments	Number of wage earners	Average days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
						Average number	Per cent of full time			
Males										
Alabama	1930	6	3,611	4.6	55.3	42.4	76.7	$0.279	$15.43	$11.82
	1932	6	2,836	5.0	55.3	50.2	90.8	.231	12.77	11.58
Connecticut	1930	5	1,692	5.2	50.8	46.4	91.3	.417	21.18	19.37
	1932	5	1,359	4.4	53.4	40.3	75.5	.348	18.58	14.05
Georgia	1930	15	7,355	4.4	56.5	44.3	78.4	.286	16.16	12.68
	1932	15	6,524	4.6	56.0	46.6	83.2	.237	13.27	11.05
Maine	1930	4	1,519	5.2	53.7	48.4	90.1	.372	19.98	17.98
	1932	4	1,499	5.2	54.2	48.8	90.0	.328	17.78	15.99
Massachusetts	1930	24	8,443	5.2	49.0	44.1	90.0	.431	21.12	19.00
	1932	20	6,416	5.2	49.5	45.2	91.3	.370	18.32	16.72
New Hampshire	1930	6	2,159	5.1	53.7	46.9	87.3	.454	24.38	21.28
	1932	5	1,523	5.0	54.1	46.1	85.2	.348	18.83	16.02
New York	1930	3	1,184	4.7	48.1	41.1	85.4	.492	23.67	20.21
	1932	3	1,026	4.4	48.1	36.7	76.3	.401	19.29	14.74
North Carolina	1930	55	13,318	4.5	55.0	43.2	78.5	.322	17.71	13.91
	1932	56	14,643	4.8	54.0	45.5	84.3	.285	15.39	12.96
Rhode Island	1930	15	2,786	4.8	51.8	44.3	85.5	.440	22.79	19.48
	1932	11	1,817	5.2	53.1	47.3	89.1	.306	16.25	14.45
South Carolina	1930	26	9,924	4.5	54.8	43.4	79.2	.292	16.00	12.69
	1932	26	9,164	4.6	54.4	43.3	79.6	.229	12.46	9.93
Virginia	1930	3	1,252	4.7	54.7	44.3	81.0	.307	16.79	13.60
	1932	3	1,361	5.0	53.5	50.5	94.4	.291	15.57	14.71
Total	1930	162	53,243	4.7	53.7	43.9	81.8	.346	18.58	15.19
	1932	154	48,168	4.8	53.7	45.5	84.7	.284	15.25	12.91
Females										
Alabama	1930	6	2,433	4.4	55.2	40.1	72.6	.217	11.98	8.70
	1932	6	1,684	4.9	55.3	47.9	86.6	.181	10.01	8.66
Connecticut	1930	5	1,386	5.2	50.7	45.4	89.5	.341	17.29	15.47
	1932	5	986	4.2	53.7	38.1	70.9	.284	15.25	10.83
Georgia	1930	15	4,272	4.1	56.5	40.3	71.3	.232	13.11	9.36
	1932	15	2,885	4.4	55.9	42.6	76.2	.198	11.07	8.46
Maine	1930	4	1,481	5.0	53.8	44.7	83.1	.304	16.36	13.59
	1932	4	1,363	5.1	54.0	46.2	85.6	.253	13.66	11.68
Massachusetts	1930	24	7,724	5.1	48.0	41.0	85.4	.353	16.94	14.47
	1932	20	5,397	5.2	48.0	41.2	85.8	.296	14.21	12.19
New Hampshire	1930	6	1,908	5.0	53.1	44.1	83.1	.379	20.12	16.72
	1932	5	1,361	4.9	53.7	43.9	81.8	.288	15.47	12.62
New York	1930	3	1,159	4.3	47.7	36.0	75.5	.400	19.08	14.40
	1932	3	988	4.3	48.0	34.7	72.3	.324	15.55	11.24
North Carolina	1930	55	6,963	4.2	55.0	40.2	73.1	.257	14.14	10.33
	1932	56	6,832	4.6	54.3	42.5	78.3	.211	11.46	8.97
Rhode Island	1930	15	2,537	4.7	51.3	43.1	84.0	.367	18.83	15.83
	1932	11	1,497	5.1	52.9	45.7	86.4	.249	13.17	11.39
South Carolina	1930	26	6,039	4.3	54.8	39.0	71.2	.240	13.15	9.35
	1932	26	4,637	4.7	55.0	39.6	72.0	.185	10.18	7.33
Virginia	1930	3	908	4.5	54.8	42.1	76.8	.246	13.48	10.33
	1932	3	832	5.0	53.0	47.0	88.7	.229	12.14	10.74
Total	1930	162	36,810	4.6	52.9	40.9	77.3	.293	15.50	11.98
	1932	154	28,462	4.8	53.0	42.2	79.6	.234	12.40	9.87
Males and females										
Alabama	1930	6	6,044	4.5	55.3	41.4	74.9	.255	14.10	10.57
	1932	6	4,520	5.0	55.3	49.3	89.2	.213	11.78	10.49
Connecticut	1930	5	3,078	5.2	50.8	46.0	90.6	.383	19.46	17.61
	1932	5	2,345	4.3	53.5	39.4	73.6	.322	17.23	12.70
Georgia	1930	15	11,627	4.3	56.5	42.8	75.8	.268	15.14	11.46
	1932	15	9,409	4.6	56.0	45.4	81.1	.226	12.66	10.26
Maine	1930	4	3,000	5.1	53.8	46.6	86.6	.340	18.29	15.81
	1932	4	2,862	5.2	54.1	47.5	87.8	.293	15.85	13.94
Massachusetts	1930	24	16,167	5.1	48.5	42.6	87.8	.395	19.16	16.84
	1932	20	11,813	5.2	48.8	43.4	88.9	.338	16.49	14.65
New Hampshire	1930	6	4,067	5.0	53.4	45.6	85.4	.420	22.43	19.14
	1932	5	2,884	5.0	53.9	45.0	83.5	.320	17.25	14.42
New York	1930	3	2,343	4.5	47.9	38.6	80.6	.450	21.56	17.34
	1932	3	2,014	4.4	48.1	35.7	74.2	.365	17.56	13.02
North Carolina	1930	55	20,281	4.4	55.0	42.1	76.5	.301	16.56	12.68
	1932	56	21,475	4.7	54.1	44.5	82.3	.263	14.23	11.69
Rhode Island	1930	15	5,323	4.8	51.6	43.7	84.7	.406	20.95	17.74
	1932	11	3,314	5.2	53.0	46.6	87.9	.281	14.89	13.07
South Carolina	1930	26	15,963	4.4	54.8	41.8	76.3	.274	15.02	11.43
	1932	26	13,801	4.7	54.6	42.1	77.1	.215	11.74	9.06
Virginia	1930	3	2,160	4.6	54.7	43.4	79.3	.282	15.43	12.23
	1932	3	2,193	5.0	53.3	49.2	92.3	.268	14.28	13.20
Total	1930	162	90,053	4.6	53.4	42.7	80.0	.325	17.36	13.88
	1932	154	76,630	4.8	53.4	44.3	83.0	.266	14.20	11.78

Table 4 shows averages by States in four representative occupations. Average full-time hours per week of male speeder tenders, the first occupation in the table, ranged by States from 48.1 to 55.5 and those of females from 48 to 55.3. Average earnings per hour of males ranged from 23.1 to 38.7 cents and those of females from 21.5 to 33.5 cents. Average full-time earnings per week of males ranged from $12.77 to $20.38 and those of females from $11.83 to $17.93. Actual earnings in one week of males ranged, by States, from $9.77 to $16.89, and of females ranged from $9.20 to $15.96.

TABLE 4.—AVERAGE HOURS AND EARNINGS IN 4 OCCUPATIONS IN COTTON-GOODS MANUFACTURING, 1932, BY SEX AND STATE

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
					Average number	Per cent of full time			
Speeder tenders, male:									
Alabama	6	141	4.8	55.3	49.6	89.7	$0.231	$12.77	$11.43
Connecticut	4	32	4.0	52.4	35.1	67.0	.387	20.28	13.59
Georgia	15	410	4.4	55.5	44.0	79.3	.257	14.26	11.31
Maine	4	37	4.6	55.1	43.5	78.9	.296	16.31	12.87
Massachusetts	17	204	4.7	52.2	44.3	84.9	.381	19.89	16.89
New Hampshire	5	42	5.3	54.0	48.3	89.4	.344	18.58	16.64
New York	3	36	3.6	48.1	29.1	60.5	.335	16.11	9.77
North Carolina	56	1,148	4.6	54.1	43.7	80.8	.273	14.77	11.94
Rhode Island	11	68	5.0	53.6	44.3	82.6	.274	14.69	12.15
South Carolina	26	780	4.4	54.4	41.1	75.6	.245	13.33	10.08
Virginia	3	121	4.7	54.1	50.0	92.4	.287	15.53	14.36
Total	150	3,019	4.5	54.2	43.5	80.3	.273	14.80	11.86
Speeder tenders, female:									
Alabama	6	75	4.9	55.0	50.9	92.5	.215	11.83	10.93
Connecticut	5	106	4.6	52.5	40.5	77.1	.329	17.27	13.31
Georgia	13	127	4.5	55.3	43.7	79.0	.254	14.05	11.21
Maine	4	156	5.3	54.0	47.9	88.7	.286	15.44	13.71
Massachusetts	20	694	5.0	48.0	40.9	85.2	.335	16.08	13.70
New Hampshire	5	116	5.3	54.0	48.0	88.9	.332	17.93	15.96
New York	3	152	3.8	48.0	28.5	59.4	.323	15.50	9.20
North Carolina	29	128	4.6	54.3	43.0	79.2	.263	14.28	11.30
Rhode Island	11	195	5.1	52.7	44.5	84.4	.286	15.07	12.70
South Carolina	24	218	4.7	55.0	43.2	78.5	.230	12.65	9.94
Virginia	2	33	5.1	53.3	46.6	87.4	.263	14.02	12.26
Total	122	2,000	4.9	51.5	42.3	82.1	.296	15.24	12.52
Spinners, frame, male:									
Alabama	4	36	4.6	55.1	48.4	87.8	.189	10.41	9.17
Connecticut	3	48	3.8	55.0	35.2	64.0	.348	19.14	12.23
Georgia	9	276	4.3	54.7	46.8	85.6	.179	9.79	8.39
Maine	1	43	4.1	54.8	40.3	73.5	.273	14.96	11.00
Massachusetts	13	242	4.4	54.8	45.1	82.3	.330	18.08	14.87
New Hampshire	2	4	5.5	54.0	49.0	90.7	.305	16.47	14.93
New York	3	14	3.4	48.9	33.0	67.5	.381	18.63	12.58
North Carolina	21	271	4.2	52.7	41.3	78.4	.221	11.65	9.13
Rhode Island	4	14	5.3	54.0	48.1	89.1	.234	12.64	11.25
South Carolina	23	676	3.9	53.0	37.6	70.9	.162	8.59	6.09
Virginia	2	23	3.6	50.4	35.3	70.0	.258	13.00	9.14
Total	85	1,647	4.1	53.6	41.1	76.7	.214	11.47	8.80
Spinners, frame, female:									
Alabama	6	400	4.9	55.3	48.4	87.5	.181	10.01	8.75
Connecticut	5	187	3.7	53.4	32.9	61.6	.284	15.17	9.34
Georgia	15	837	4.2	56.1	40.7	72.5	.195	10.94	7.93
Maine	4	196	4.7	54.0	44.1	81.7	.261	14.09	11.48
Massachusetts	20	1,047	5.0	48.0	39.3	81.9	.289	13.87	11.38
New Hampshire	5	299	4.8	53.0	41.8	78.9	.290	15.37	12.13
New York	3	192	4.5	48.0	37.3	77.7	.339	16.27	12.66
North Carolina	56	2,538	4.4	54.4	40.3	74.1	.194	10.55	7.81
Rhode Island	11	382	5.0	52.7	44.7	84.8	.238	12.54	10.64

TABLE 4.—AVERAGE HOURS AND EARNINGS IN 4 OCCUPATIONS IN COTTON-GOODS MANUFACTURING, 1932, BY SEX AND STATE—Continued

Occupation, sex, and State	Number of establishments	Number of wage earners	Average days worked in 1 week	Average full-time hours per week	Hours actually worked in 1 week		Average earnings per hour	Average full-time earnings per week	Average actual earnings in 1 week
					Average number	Per cent of full time			
Spinners, frame, female—Contd.									
South Carolina	26	2,004	4.6	55.0	36.7	66.7	$0.166	$9.13	$6.10
Virginia	3	243	4.9	53.3	45.1	84.6	.232	12.37	10.48
Total	154	8,325	4.6	53.6	40.0	74.6	.213	11.42	8.50
Loom fixers, male:									
Alabama	6	176	5.2	55.3	53.1	96.0	.336	18.58	17.83
Connecticut	5	105	4.6	54.0	43.5	80.6	.502	27.11	21.84
Georgia	15	380	4.9	56.2	49.0	87.2	.338	19.00	16.57
Maine	4	115	5.7	53.9	51.8	96.1	.463	24.96	23.96
Massachusetts	20	496	5.4	49.2	45.9	93.3	.530	26.08	24.33
New Hampshire	5	122	5.2	54.2	50.2	92.6	.468	25.37	23.51
New York	3	85	4.7	48.1	38.5	80.0	.595	28.62	22.90
North Carolina	55	893	5.0	54.1	48.0	88.7	.377	20.40	18.07
Rhode Island	11	141	5.5	52.6	49.6	94.3	.423	22.25	20.98
South Carolina	23	489	5.1	54.7	48.6	88.8	.327	17.89	15.88
Virginia	3	81	5.3	52.7	50.9	96.6	.402	21.19	20.46
Total	150	3,083	5.1	53.4	48.1	90.1	.403	21.52	19.43
Weavers, male:									
Alabama	6	301	4.9	55.2	49.4	89.5	.275	15.18	13.59
Connecticut	4	330	4.5	52.9	42.0	79.4	.338	17.88	14.18
Georgia	15	735	4.5	56.3	46.2	82.1	.280	15.76	12.92
Maine	4	210	5.6	53.8	50.5	93.9	.353	18.99	17.81
Massachusetts	20	1,491	5.3	49.1	45.6	92.9	.366	17.97	16.67
New Hampshire	5	112	5.1	54.6	51.5	94.3	.371	20.26	19.09
New York	3	172	5.3	48.4	44.7	92.4	.430	20.81	19.22
North Carolina	56	2,246	4.7	53.9	45.7	84.8	.298	16.06	13.62
Rhode Island	11	385	5.3	52.8	47.9	90.7	.313	16.53	15.00
South Carolina	25	1,094	4.8	54.5	45.4	83.3	.272	14.82	12.33
Virginia	3	191	5.2	53.4	48.3	90.4	.328	17.52	15.83
Total	152	7,267	4.9	53.1	46.1	86.8	.314	16.67	14.48
Weavers, female:									
Alabama	6	159	5.0	55.2	48.1	87.1	.263	14.52	12.66
Connecticut	5	225	4.6	53.4	42.5	79.6	.310	16.55	13.17
Georgia	15	325	4.6	56.0	44.6	79.6	.277	15.51	12.36
Maine	4	123	5.5	54.0	49.7	92.0	.321	17.33	15.95
Massachusetts	19	1,345	5.6	48.0	44.4	92.5	.336	16.13	14.92
New Hampshire	5	184	5.2	54.0	47.8	88.5	.354	19.12	16.93
New York	3	152	5.2	48.0	41.7	86.9	.410	19.68	17.09
North Carolina	53	935	4.8	53.9	45.8	85.0	.276	14.88	12.63
Rhode Island	9	287	5.3	52.6	47.2	89.7	.310	16.31	14.64
South Carolina	24	448	5.0	54.8	44.9	81.9	.262	14.36	11.75
Virginia	3	82	5.2	53.2	45.8	86.1	.303	16.12	14.97
Total	146	4,265	5.1	52.0	45.3	87.1	.307	15.96	13.89

Wages and Hours of Labor of Union Barbers in the United States, April, 1932

THE tabulation which follows shows the rates of wages and the hours of labor of union barbers in the United States, as reported to the United States Bureau of Labor Statistics by the officials of their labor organization. In many instances the reports were accompanied by written agreements; others indicated a verbal agreement or understanding with their employers.

The table covers unions having a combined membership of approximately 23,000.

It will be noted that in many instances barbers are paid a guaranteed weekly rate of wages and in addition to this receive a specified

percentage of their receipts over a stated amount; others are paid either a flat weekly rate or a fixed per cent of receipts, and still others a per cent of receipts over a fixed amount.

RATES OF WAGES AND HOURS OF BARBERS IN THE UNITED STATES, APRIL, 1932

City and State	Guaranteed weekly rate	Commission		Hours per week
		Per cent	On weekly receipts of over—	
Abilene, Tex		60	(1)	63
Adams, Mass	$25.00	(2)	(2)	51
Albuquerque, N. Mex		60	(1)	48
Alliance, Ohio		65	(1)	60
Alton, Ill	20.00	60	$30.00	60
Amarillo, Tex		60	(1)	57
Amsterdam, N. Y	20.00	50	26.00	54
Anaconda, Mont	30.00	65	45.00	52
Anderson, Ind		65	(1)	62
Ardmore, Okla		65	(1)	69
Arkansas City, Kans		65	(1)	63
Ashland, Wis	25.00	(2)	(2)	61
Astoria, Oreg	27.00	60	40.00	53½
Augusta, Ga	25.00	65	38.45	62
Augusta, Me	22.00	50	28.00	56
Aurora, Ill	24.00	60	35.00	56
Baltimore, Md	20.00	50	30.00	72
Bartlesville, Okla		65	18.00	54
Baton Rouge, La		65	(1)	62
Bay City, Mich		65	(1)	57
Beardstown, Ill	22.00	(2)	(2)	57
Beaumont, Tex		65	(1)	62½
Bellaire, Ohio		70	(1)	50
Bellefontaine, Ohio		70	(1)	[3] 10½
Belleville, Ill	15.00	70	(1)	55¼
Bellingham, Wash		65	(1)	56
Bend, Oreg	25.00	65	36.00	[3] 9
Benton, Ill		70	(1)	56
Billings, Mont	25.00	70	40.00	55½
Birmingham, Ala		65	(1)	69
Bloomington, Ill	20.00	65	28.00	48
Boise, Idaho	25.00	60	38.00	56½
Boston, Mass.:				
Union A	25.00	50	33.00	55½
Union B	25.00	50	32.00	55½
Bowling Green, Ohio		65	(1)	63
Bradford, Pa	25.00	(2)	(2)	56
Brainerd, Minn	20.00	(2)	(2)	60
Bristol, Conn	25.00	(2)	(2)	64
Bristow, Okla		65	(1)	62
Brockton, Mass	25.00	50	31.00	61
Bryan, Tex		60	(1)	[3] 12
Buffalo, N. Y	30.00	(2)	(2)	56
Burlington, Iowa	12.00	65	18.00	64
Butte, Mont	30.00	60	42.00	52½
Canton, Ohio	20.00	65	31.00	54
Casper, Wyo	26.00	65	(1)	56
Cedar Rapids, Iowa	20.00	(2)	(2)	62
Centerville, Iowa		{70 to 75}	(1)	72
Centralia, Ill	25.00	70	(1)	57
Centralia, Wash	30.00	(2)	(2)	56
Chadron, Nebr		65	(1)	58
Chambersburg, Pa	18.00	(2)	(2)	64
Charleroi, Pa	20.00	(2)	(2)	51
Charleston, Ill		70	(1)	69
Charleston, W. Va		70	(1)	65½
Chehalis, Wash	25.00	65	35.00	56
Chelsea, Mass	25.00	50	32.00	62
Cheyenne, Wyo	25.00	(2)	(2)	56½
Chicago, Ill	30.00	60	40.00	60
Chico, Calif	25.00	(2)	(2)	55½
Chicopee Falls, Mass	25.00	(2)	(2)	58
Christopher, Ill		75	(1)	56
Clarksdale, Miss		65	(1)	64
Cleveland, Ohio	$26.00	60	$37.00	54
Clinton, Ind		70	(1)	56
Clinton, Mass	25.00	(2)	(2)	54
Cohoes, N. Y	25.00	50	35.00	[3] 10
Colorado Springs, Colo	22.00	60	34.00	56
Columbia, Mo		65	(1)	63
Columbus, Ga		65	(1)	66
Columbus, Ohio	25.00	65	35.00	58
Concord, N. H	25.00	50	32.00	53¼
Connellsville, Pa	20.00	(2)	(2)	62
Corning, N. Y	25.00	(2)	(2)	50½
Cortland, N. Y		70	(1)	57
Coshocton, Ohio		75	(1)	60
Council Bluffs, Iowa	18.00	60	25.00	55
Covington, Ky	25.00	(2)	(2)	58½
Creston, Iowa		78	(1)	[3] 9
Danbury, Conn	25.00	(2)	(2)	57
Danville, Ill		70	(1)	63
Dayton, Ohio		65	(1)	65
Decatur, Ind		70	(1)	70
Denison, Tex		65	(1)	60
Denver, Colo	20.00	65	(1)	62½
Des Moines, Iowa	20.00	62½	(1)	63
Detroit, Mich		70	(1)	65
Devils Lake, N. Dak	25.00	60	35.00	60
Douglas, Ariz		65	(1)	54
Dover, N. H	20.00	(2)	(2)	[3] 11
Dubois, Pa	25.00	50	33.00	[4] 60
Dubuque, Iowa	21.00	70	30.00	62
Duluth, Minn	25.00	60	35.00	(2)
Eagle Grove, Iowa	21.00	70	(1)	58
East Grand Forks, Minn	22.75	60	32.75	58
East St. Louis, Ill	20.00	70	(1)	[3] 9
East Stroudsburg, Pa	25.00	50	35.00	57
Edwardsville, Ill	25.00	(2)	(2)	62
Edwardsville, Pa	25.00	(2)	(2)	60
Eldorado, Ill		70	(1)	59½
Elgin, Ill	21.00	60	30.00	52
Ellensburg, Wash	25.00	65	35.00	57
Elwood, Ind		70	(1)	[3] 11
Ely, Nev	30.00	(2)	(2)	56
Ennis, Tex	9.00	60	(1)	78
Erie, Pa	25.00	60	35.00	54
Escanaba, Mich		65	(1)	64
Eureka, Calif		70	(1)	56
Evansville, Ind		70	(1)	62
Everett, Wash		65	(1)	50
Fairfax, Calif	30.00	(2)	(2)	60
Fargo, N. Dak		65	(1)	65
Fitchburg, Mass	25.00	50	32.00	55½
Florence, Ala		65	(1)	64
Fond du Lac, Wis	25.00	(2)	(2)	65
Fort Dodge, Iowa		70	(1)	63
Fort Scott, Kans	18.00	65	(1)	49½
Fort Worth, Tex		60	(1)	63
Framington, Mass	20.00	50	26.00	55
Franklin, Pa		70	(1)	60
Freeport, Ill	18.00	60	24.00	58½
Fulton, Ky		65	(1)	67

[1] On all receipts.
[2] Not reported.
[3] Per day.
[4] Actually working only half time.

RATES OF WAGES AND HOURS OF BARBERS IN THE UNITED STATES, APRIL, 1932—Continued

City and State	Guaranteed weekly rate	Commission		Hours per week
		Per cent	On weekly receipts of over—	
Gallup, N. Mex.		65	(1)	57
Galveston, Tex.		65	(1)	62½
Geneva, N. Y.		70	(5)	50–55
		50	$40.00	
Glendale, Calif.	$25.00	(2)	(2)	59
Glen Ellyn, Ill.	35.00	(2)	(2)	58
Gloucester, Mass.	25.00	50	32.00	56
Gloversville, N. Y.		70	(1)	62
Graham, Tex.		65	(1)	68½
Grand Junction, Colo.	25.00	70	(1)	57
Grand Island, Nebr.		65	(1)	6 75
Granite City, Ill.		70	(1)	(2)
Great Falls, Mont.	25.00	(2)	(2)	60
Green Bay, Wis.	20.00	50	27.00	60
Greenfield, Mass.		68	(1)	52
Greensburg, Pa.	25.00	60	32.00	57
Greenwood, Miss.		65	(1)	64
Hamilton, Ohio		70	(1)	65
Hanford, Calif.	25.00	(2)	(2)	3 10
Harrisburg, Pa.	20.00	60	26.00	61
Hartford, Conn.	25.00	(2)	(2)	60
Hartford City, Ind.		70	(1)	63
Hattiesburg, Miss.		60	(1)	70
Haverhill, Mass.	25.00	50	30.00	58½
Havre, Mont.	25.00	65	35.00	56
Helena, Mont.	24.00	60	34.00	62
Henderson, Ky.	14.00	65	20.00	60
Henryetta, Okla.		60	(7)	62½
		75	25.00	
Herrin, Ill.		75	(1)	60
Hibbing, Minn.	25.00	(2)	(2)	59
Holler, Minn.		70	(1)	57
Holtville, Calif.		65	(1)	68½
Holyoke, Mass.	25.00	50	35.00	52½
Hood River, Oreg.		65	(1)	57
Hornell, N. Y.	20.00	70	27.00	65
Houston, Tex.:				
Union A		65	(1)	75
Union B		60	(1)	54
Huntington, Ind.		65 to 70	(1)	55½
Huntington, W. Va.		65	(1)	54½
Huron, S. Dak.		65	(1)	66
Idaho Falls, Idaho	25.00	65	(1)	56
Independence, Kans.	20.00	(2)	(2)	60
Iron Mountain, Mich.		70	(1)	57
Ironwood, Mich.	25.00	(2)	(2)	58
Ithaca, N. Y.	25.00	65	35.00	47
Jackson, Mich.		65	(1)	57
Jacksonville, Ill.		70	(1)	61
Jacksonville, Fla.		60	(1)	63
Jamestown, N. Dak.		65	(1)	59½
Jamestown, N. Y.	25.00	50	32.00	61½
Janesboro, Ark.		65	(1)	61
Janesville, Wis.		65	(1)	64
Jeannette, Pa.	18.00	60	25.00	65
Joplin, Mo.	20.00	65	30.80	63
Kalamazoo, Mich.		70	(1)	58
Kelso, Wash.		65	(1)	56
Kenosha, Wis.	30.00	60	42.00	54½
Kingston, N. Y.	28.00	50	38.00	3 10½
Kittanning, Pa.	22.00	60	30.00	54
Klamath Falls, Oreg.	26.50	(2)	(2)	55½
Knoxville, Tenn.		65	(1)	61½
La Crosse, Wis.		70	(1)	60
La Grande, Oreg.	$25.00	70	$35.00	57
Lakeland, Fla.		65	(1)	64
Lancaster, Pa.	25.00	50	35.00	50
Laramie, Wyo.	32.00	(2)	(2)	57
Las Vegas, Nev.:				
Union A	30.00	(2)	(2)	52
Union B		65	(1)	57
Laurel, Miss.		65	(1)	75
Lawrence, Mass.	20.00	(2)	(2)	50
Leominster, Mass.	25.00	(2)	(2)	54
Lewiston, Idaho		70	(1)	56
Lewiston, Mont.		70	(1)	3 8 to 9
Lexington, Ky.		60	(1)	64
Lima, Ohio		70	(1)	68
Lincoln, Nebr.		60	(1)	60
Lockport, N. Y.		70	(1)	68
Logan, Ohio		70	(1)	60
Long Beach, Calif.		70	(1)	54
Lorain, Ohio		70	(1)	51
Los Angeles, Calif.	25.00	60	35.00	62
Louisville, Ky.		60	(1)	56½
Lubbock, Tex.		65	(1)	63
Lufkin, Tex.		65	(1)	72½
Lynn, Mass.	25.00	50	31.00	59
Madisonville, Ky.		70	(1)	63
Mahanoy City, Pa.	30.00	(2)	(2)	48
Malone, N. Y.	20.00	50	30.00	54
Manchester, N. H.	20.00	(2)	(2)	60
Manitowoc, Wis.	25.00	50	31.00	70
Mansfield, Ohio	22.00	50	26.00	59
Marietta, Ohio		70	(1)	65
Marion, Ind.	17.00	(2)	(2)	62
Marion, Ohio		70	(1)	75
Marshall, Tex.	22.50	(2)	(2)	3 10
Marshalltown, Iowa	20.00	70	28.00	64
Martins Ferry, Ohio	20.00	60	26.00	62
Marysville, Calif.	30.00	(2)	(2)	57
Mason City, Iowa		65	(1)	71½
McCamey, Tex.		65	(1)	68
Maysville, Ky.		65	(1)	65
Mechanicsville, N. Y.	12.00	60	(1)	60
Memphis, Tex.		60	(1)	63½
Meridian, Miss.		65	(1)	71½
Metropolis, Ill.		70	(1)	62
Mexico, Me.		75	(1)	52
Miami, Ariz.	27.00	60	40.00	56
Miami, Fla.	8 30.00	(2)	(2)	64
Michigan City, Ind.	25.00	(2)	(2)	65
Middletown, N. Y.	35.00	50	40.00	3 9
Middletown, Conn.	25.00	(2)	(2)	62
Midland, Tex.		60	(1)	63
Miles City, Mont.	30.00	(2)	(2)	3 9
Milford, Mass.	20.00	(2)	(2)	52
Minneapolis, Minn.	25.00	60	38.00	59½
Minot, N. Dak.		65	(1)	3 10½
Missoula, Mont.	27.00	(2)	(2)	55
Mitchell, S. Dak.		65	(1)	57
Monmouth, Ill.		70	(1)	63
Moundsville, W. Va.	20.00	(2)	(2)	56
Mt. Vernon, Ill.		70	(1)	3 10
Mt. Vernon, Ohio		70	(1)	56
Mt. Vernon, Wash.		70	(1)	58½
Muncie, Ind.		70	(1)	(2)
Muskegon, Mich.		60	(1)	65

1 On all receipts.
2 Not reported.
3 Per day.
5 On receipts up to $40.
6 Average.
7 On receipts up to $25.
8 $20.00 guaranteed for summer months.

RATES OF WAGES AND HOURS OF BARBERS IN THE UNITED STATES, APRIL, 1932—Continued

City and State	Guaranteed weekly rate	Commission		Hours per week
		Per cent	On weekly receipts of over—	
Muskogee, Okla		65	(1)	60
Nanticoke, Pa	$28.00	60	(1)	55
Nashville, Tenn	20.00	65	$30.00	53
Natchez, Miss		65	(1)	63
Nebraska City, Nebr		65	(1)	69
New Albany, Ind		70	(1)	74
Newburyport, Mass	18.00	50	24.00	49
New Haven, Conn	27.00	50	40.00	53
New Kensington, Pa		70	(1)	61
Newport, Ky	25.00	60	32.00	60½
Newport, R. I	18.00	50	27.00	65
New Rochelle, N. Y	20.00	(2)	(2)	50
Newton, Iowa		70	(1)	75
New York, N. Y.:				
Union A	37.00	50	52.00	51
Union B	35.00	50	50.00	51
Niagara Falls, N. Y	25.00	50	35.00	67
Niles, Ohio		65	(1)	52
Norfolk, Nebr		65 to 70	(1)	63
Norfolk, Va	22.00	(2)	(2)	60
Northampton, Mass	25.00	50	35.00	(2)
North Platte, Nebr	20.00	65	29.00	57½
Norwich, Conn	25.00	(2)	(2)	56
Ogden, Utah		65	(1)	56
Oil City, Pa	25.00	60	33.00	60
Oklahoma City, Okla.:				
Union A		60	(1)	70
Union B		60	(1)	56
Okmulgee, Okla	15.00	(2)	(2)	65½
Olean, N. Y	22.00	60	28.00	56½
Olympia, Wash	22.00	60	34.00	55
Omaha, Nebr		60	(1)	58
Oneida, N. Y		70	(1)	53
Oneonta, N. Y	25.00	50	35.00	57
Orange, Texas		70	(1)	[3] 11
Oshkosh, Wis	20.00	50	27.00	(2)
Oskaloosa, Iowa		70	(1)	63
Ottumwa, Iowa		65	[9]	60
		60	20.00	
Owosso, Mich		60 to 70	(1)	62½
Pacific Grove, Calif	30.00	60	42.00	57
Palo Alto, Calif	25.00	60	35.00	56
Pana, Ill	21.00	70	30.00	57
Pasadena, Calif	20.00	60	28.00	60
Pasco, Wash	25.00	60	35.00	56
Passaic, N. J	30.00	(2)	45.00	59
Pawtucket, R. I	25.00	50	35.00	54
Peekskill, N. Y	30.00	(2)	(2)	65
Pekin, Ill	20.00	65	26.00	62
Pendleton, Oreg		65	(1)	58
Peoria, Ill		65	(1)	57
Perth Amboy, N. J	30.00	(2)	(2)	63
Peru, Ill	24.00	(2)	(2)	[3] 8½
Petaluma, Calif	30.00	60	41.00	65½
Piqua, Ohio		65 to 70	(1)	62
Pittsburg, Calif	30.00	60	42.00	50
Pittsburg, Kans		70	(1)	(2)
Pittsfield, Mass	25.00	(2)	(2)	57¼
Plainview, Tex		60	(1)	72
Plymouth, Pa	25.00	(2)	(2)	60
Pomona, Calif		70	(1)	63
Pontiac, Ill	15.00	65	22.00	56½
Poplar Bluff, Mo		65	(1)	63
Port Arthur, Tex		65	(1)	60½
Port Chester, N. Y	$25.00	(2)	(2)	52½
Portland, Me	20.00	50	$26.00	63
Portland, Oreg	26.00	60	39.00	53½
Portsmouth, N. H		75	(1)	49½
Pottsville, Pa	22.00	50	28.00	62
Poughkeepsie, N. Y	30.00	50	40.00	54
Punxsutawney, Pa		70	(1)	68
Quincy, Ill	21.00	70	30.00	63
Quincy, Mass	25.00	50	32.00	62
Reno, Nev	30.00	(2)	(2)	54
Richmond, Ind		65	(1)	67
Riverside, Calif	20.00	(2)	(2)	47
Roanoke, Va		70	(1)	57
Rochester, N. Y	27.50	(2)	(2)	58¾
Rockford, Ill	25.00	60	35.00	60
Rock Island, Ill	20.00	60	28.00	52
Rock Springs, Wyo	25.00	70	35.00	56
Rome, N. Y		65	(1)	[3] 10
Roseburg, Oreg	25.00	65	35.00	57
Roswell, N. Mex		65	(1)	60
Roundup, Mont	30.00	(2)	(2)	59
Saginaw, Mich		60	(1)	56½
St. Cloud, Minn	25.00	(2)	(2)	57½
St. Joseph, Mo	20.00	60	30.00	64
St. Louis, Mo.:				
Downtown Dist	25.00	65	35.00	54¼
Outlying Dist	25.00	65	35.00	52½
St. Marys, Pa	17.00	(2)	(2)	[3] 10
St. Paul, Minn	25.00	50	35.00	62
St. Petersburg, Fla		65	(1)	60
Salem, Mass	25.00	50	31.00	55
Salem, Ohio		70	(1)	52
Salem, Oreg	25.00	65	35.00	46½
Salina, Kans		65	(1)	57½
Salinas, Calif	25.00	(2)	(2)	55
Salisbury, N. C	15.00	65	20.00	72
Salt Lake City, Utah		66	(1)	55
San Diego, Calif	18.00	65	(1)	[3] 10
Sandusky, Ohio		70	(1)	62
San Fernando, Calif	27.00	60	40.00	58
San Francisco, Calif	30.00	60	42.00	53
San Jose, Calif	25.00	60	35.00	55½
San Luis Obispo, Calif	25.00	(2)	(2)	54
San Pedro, Calif	25.00	(2)	(2)	62
Santa Anna, Calif		70	(1)	62
Santa Monica, Calif	25.00	60	35.00	62
Sault Ste. Marie, Mich	25.00	65	35.00	69
Seattle, Wash	24.00	60	38.00	50
Sedalia, Mo	18.00	65	(1)	73
Selma, Ala		65	(1)	59
Sharpsville, Pa	30.00	70	(1)	55
Sheboygan, Wis		70	(1)	53
Sherman, Tex		65	(1)	64
Sioux City, Iowa		65	(1)	59
Sioux Falls, S. Dak		65	(1)	60
South Bend, Ind		65	(1)	68
South Brownsville, Pa		65	(1)	48
South Norwalk, Conn	25.00	50	35.00	60½
South Omaha, Nebr	20.00	60	30.00	57
Springfield, Ill	25.00	(2)	(2)	63
Springfield, Mass	25.00	50	35.00	54
Springfield, Ohio		66⅔	(1)	[3] 9
Sterling, Colo	25.00	65	40.00	59½
Stockton, Calif	25.00	65	35.00	55½
Superior, Wis	25.00	60	35.00	64

[1] On all receipts.
[2] Not reported.
[3] Per day.
[9] On receipts up to $20.

RATES OF WAGES AND HOURS OF BARBERS IN THE UNITED STATES, APRIL, 1932—Continued

City and State	Guaranteed weekly rate	Commission		Hours per week
		Per cent	On weekly receipts of over—	
Syracuse, N. Y	$30.00	50	$40.00	46½
Tacoma, Wash	25.00	65	38.50	50
Taft, Calif	30.00	60	42.00	56
Taunton, Mass	25.00	50	32.00	57½
Taylorville, Ill	25.00	70	35.00	56
Terra Haute, Ind		67½	(1)	63
Tiffin, Ohio		70	(1)	62
Topeka, Kans	18.00	60	(1)	62
Trenton, N. J	30.00	50	40.00	53½
Tulsa, Okla		60	(1)	53–55
Tuscaloosa, Ala		65	(1)	65
Tyler, Tex		65	(1)	68½
Uniontown, Pa	20.00	60	25.00	61½
Urbana, Ill	20.00	(2)	(2)	60
Utica, N. Y		70	(1)	66
Vallejo, Calif	30.00	60	42.00	56
Van Buren, Ark		65	(1)	68½
Vancouver, Wash		70	(1)	72
Ventura, Calif	25.00	65	36.00	47
Vicksburg, Miss		65	(1)	64½
Visalia, Calif	25.00	(2)	35.00	57
Waco, Tex		65	(1)	72
Walla Walla, Wash	20.00	65	30.00	57
Warren, Pa		75	(1)	56
Washington, D. C	25.00	60	35.00	68
Waterbury, Conn	25.00	(2)	(2)	56
Watertown, N. Y	22.00	60	28.00	60
Watertown, S. Dak		65	(1)	62½
Watertown, Wis	$20.00	60	$28.00	53½
Watervliet, N. Y	22.00	(2)	(2)	60
Watsonville, Calif	30.00	(2)	(2)	56
Webster, Mass	25.00	(2)	(2)	56½
Wellston, Ohio		65	(1)	58
West Lawn, Pa		60	(1)	55
Westfield, Mass	25.00	(2)	(2)	52½
Westville, Ill		70	(1)	63
West Warwick, R. I	25.00	(2)	(2)	68
Wheeling, W. Va		70	(1)	61
Wichita, Kans		60	(1)	63½
Wilkes-Barre, Pa	25.00	60	35.00	62
Willimantic, Conn	25.00	50	50.00	56
Windsor Locks, Conn	25.00	(2)	(2)	59
Winfield, Kans		65	(1)	74
Winona, Minn	21.00	70	(1)	60
Winston-Salem, N.C		65	(1)	64
		70	(1)	
Wisconsin Rapids, Wis	25.00	60	35.00	59
Woonsocket, R. I	25.00	(2)	(2)	56
Worcester, Mass	22.00	(2)	(2)	44
Yakima, Wash	22.00	65	35.00	56
York, Pa	22.00	50	30.00	60
Youngstown, Ohio		60	(1)	(2)
Zanesville, Ohio		65	(1)	72
Zeigler, Ill		75	(1)	60

[1] On all receipts.
[2] Not reported.

Wage-Rate Changes in American Industries

Manufacturing Industries

DATA concerning wage-rate changes occurring between April 15 and May 15 in 89 manufacturing industries included in the monthly trend of employment survey of the Bureau of Labor Statistics are presented in the following table.

Of the 18,420 manufacturing establishments furnishing employment data in May, 17,619 establishments, or 95.7 per cent of the total, reported no change in wage rates during the month ending May 15, 1932. The employees whose wage rates were reported unchanged over the month interval totaled 2,618,705, comprising 96.3 per cent of the total number of employees included in this survey of manufacturing industries.

Decreases in rates of wages were reported by 800 establishments, or 4.3 per cent of the total number of establishments reporting. These decreases, averaging 11 per cent, affected 100,141 employees, or 3.7 per cent of all employees in the establishments reporting. A wage-rate increase of 10 per cent to all employees was reported by one establishment in structural and ornamental ironwork.

TABLE 1.—WAGE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING MAY 15, 1932

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
All manufacturing industries	18,420	2,718,865	17,619	1	800	2,618,705	19	100,141
Per cent of total	100.0	100.0	95.7	(1)	4.3	96.3	(1)	3.7
Slaughtering and meat packing	232	83,412	226		6	82,126		1,286
Confectionery	341	30,081	332		9	29,765		316
Ice cream	392	13,122	355		37	12,022		1,100
Flour	448	16,453	438		10	15,961		492
Baking	940	64,201	916		24	63,337		864
Sugar refining, cane	15	8,044	14		1	7,209		835
Beet sugar	48	2,643	48			2,643		
Beverages	346	10,392	341		5	9,815		577
Butter	313	6,359	293		20	5,682		677
Cotton goods	692	194,038	647		45	185,699		8,339
Hosiery and knit goods	465	97,831	436		29	91,604		6,227
Silk goods	272	35,504	253		19	31,500		4,004
Woolen and worsted goods	264	40,195	256		28	36,094		4,101
Carpets and rugs	34	13,581	30		4	10,454		3,127
Dyeing and finishing textiles	154	33,062	143		11	30,780		2,282
Clothing, men's	376	51,760	368		8	49,147		2,613
Shirts and collars	108	13,532	101		7	12,568		964
Clothing, women's	385	26,156	379		6	25,863		303
Millinery	140	8,352	135		5	7,980		372
Corsets and allied garments	32	5,683	31		1	5,503		180
Cotton small wares	112	9,101	103		9	8,668		433
Hats, fur-felt	40	4,643	40			4,643		
Men's furnishings	76	5,424	72		4	5,287		137
Iron and steel	220	194,136	213		7	191,936		2,200
Cast-iron pipe	41	6,572	39		2	5,907		665
Structural and ornamental ironwork	196	17,582	184	1	11	15,324	19	2,239
Hardware	113	22,614	106		7	22,017		597
Steam fittings and steam and hot-water heating apparatus	112	15,882	108		4	15,437		445
Stoves	164	15,152	159		5	14,960		192
Bolts, nuts, washers, and rivets	68	7,980	67		1	7,966		14
Cutlery (not including silver and plated cutlery) and edge tools	132	10,619	127		5	10,422		197
Forgings, iron and steel	63	6,009	59		4	5,500		509
Plumbers' supplies	65	4,247	62		3	4,078		169
Tin cans and other tinware	57	7,426	53		4	6,959		467
Tools (not including edge tools, machine tools, files, or saws)	133	7,174	129		4	7,110		64
Wirework	70	5,354	65		5	4,947		407
Lumber, sawmills	652	61,409	623		29	57,200		4,209
Lumber, millwork	460	19,715	438		22	18,930		785
Furniture	496	43,178	482		14	42,210		968
Turpentine and rosin	22	1,064	21		1	1,032		32
Leather	165	23,652	150		15	22,376		1,276
Boots and shoes	339	100,624	326		13	99,174		1,450
Paper and pulp	423	79,678	400		23	75,817		3,861
Paper boxes	323	20,728	308		15	19,167		1,561
Printing, book and job	770	54,914	734		36	48,387		6,527
Printing, newspapers and periodicals	450	67,055	435		15	65,633		1,422
Chemicals	118	20,602	114		4	20,381		221
Fertilizers	207	8,181	198		9	7,980		201
Petroleum refining	120	48,166	120			48,166		
Cottonseed oil, cake, and meal	50	1,924	49		1	1,916		8
Druggists' preparations	40	7,506	39		1	7,459		47
Explosives	21	2,873	21			2,873		
Paints and varnishes	363	15,724	350		13	14,987		737
Rayon	22	25,050	22			25,050		
Soap	87	11,933	84		3	11,902		31
Cement	126	13,882	118		8	12,941		941
Brick, tile, and terra cotta	693	20,400	671		22	19,380		1,020
Pottery	124	15,472	120		4	15,317		155
Glass	197	34,691	188		9	33,675		1,016
Marble, granite, slate, and other stone products	225	5,096	210		15	4,427		669
Stamped and enameled ware	94	13,784	92		2	13,297		487
Brass, bronze, and copper products	211	28,793	200		11	27,663		1,130
Aluminum manufactures	28	4,736	27		1	4,611		125
Clocks, time-recording devices, and clock movements	22	4,242	20		2	3,516		726
Gas and electric fixtures, lamps, lanterns, and reflectors	56	5,019	53		3	4,654		365

[1] Less than one-tenth of 1 per cent.

TABLE 1.—WAGE CHANGES IN MANUFACTURING INDUSTRIES DURING MONTH ENDING MAY 15, 1932—Continued

Industry	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
Plated ware	56	7,505	54	-------	2	7,345	-------	160
Smelting and refining—copper, lead, and zinc	27	8,159	27	-------	-------	8,159	-------	-------
Jewelry	157	8,225	149	-------	8	7,576	-------	649
Chewing and smoking tobacco and snuff	37	10,056	37	-------	-------	10,056	-------	-------
Cigars and cigarettes	222	45,402	219	-------	3	45,377	-------	25
Automobiles	236	240,210	227	-------	9	237,616	-------	2,594
Aircraft	35	6,596	32	-------	3	6,168	-------	428
Cars, electric and steam railroad	33	4,777	33	-------	-------	4,777	-------	-------
Locomotives	15	3,460	15	-------	-------	3,460	-------	-------
Shipbuilding	95	31,994	91	-------	4	31,857	-------	137
Rubber tires and inner tubes	42	46,090	41	-------	1	45,840	-------	250
Rubber boots and shoes	10	10,610	10	-------	-------	10,610	-------	-------
Rubber goods, other than boots, shoes, tires, and inner tubes	104	18,299	104	-------	-------	18,299	-------	-------
Agricultural implements	78	6,068	78	-------	-------	6,068	-------	-------
Electrical machinery, apparatus, and supplies	294	132,468	267	-------	27	128,491	-------	3,977
Engines, turbines, tractors, and water wheels	77	14,939	68	-------	9	13,813	-------	1,126
Cash registers, adding machines, and calculating machines	47	15,159	43	-------	4	15,023	-------	136
Foundry and machine-shop products	1,101	111,714	1,043	-------	58	104,049	-------	7,665
Machine tools	157	12,272	151	-------	6	11,790	-------	482
Textile machinery and parts	37	6,313	29	-------	8	5,933	-------	380
Typewriters and supplies	17	8,878	16	-------	1	8,828	-------	50
Radio	45	16,044	43	-------	2	13,178	-------	2,866
Electric-railroad repair shops	412	23,092	398	-------	14	21,240	-------	1,852
Steam-railroad repair shops	523	76,118	523	-------	-------	76,118	-------	-------

Nonmanufacturing Industries

IN THE following table are presented data concerning wage-rate changes occurring between April 15 and May 15, 1932, reported by 14 nonmanufacturing groups included in the bureau's monthly employment survey.

Four establishments in one of these groups reported increases in wage rates over the month interval. Decreases in wage rates were reported by a number of establishments in each of the 14 groups, with the exception of anthracite mining in which no change in wage rates was shown. The lowest average, per cent of decrease in wage rates, 8.2, was reported in the laundries group, while the highest average per cent, 28.2, was reported in the metalliferous mining group. The average per cent of decreases in the remaining groups ranged from 8.8 in power and light to 14.3 in quarrying and nonmetallic mining.

TABLE 2.—WAGE CHANGES IN NONMANUFACTURING INDUSTRIES DURING MONTH ENDING MAY 15, 1932

Industrial groups	Establishments reporting	Total number of employees	Number of establishments reporting—			Number of employees having—		
			No wage changes	Wage increases	Wage decreases	No wage changes	Wage increases	Wage decreases
Anthracite mining	160	91,499	160	-------	-------	91,499	-------	-------
Per cent of total	100.0	100.0	100.0	-------	-------	100.0	-------	-------
Bituminous coal mining	1,177	155,055	1,137	-------	40	149,448	-------	5,607
Per cent of total	100.0	100.0	96.6	-------	3.4	96.4	-------	3.6
Metalliferous mining	256	24,375	249	-------	7	20,912	-------	3,463
Per cent of total	100.0	100.0	97.3	-------	2.7	85.8	-------	14.2
Quarrying and nonmetallic mining	628	23,615	591	-------	37	22,477	-------	1,138
Per cent of total	100.0	100.0	94.1	-------	5.9	95.2	-------	4.8
Crude petroleum producing	279	21,716	272	4	3	21,628	29	59
Per cent of total	100.0	100.0	97.5	1.4	1.1	99.6	0.1	0.3
Telephone and telegraph	8,221	285,854	8,188	-------	33	285,698	-------	156
Per cent of total	100.0	100.0	99.6	-------	0.4	99.9	-------	0.1
Power and light	3,532	224,620	3,478	-------	54	223,540	-------	1,080
Per cent of total	100.0	100.0	98.5	-------	1.5	99.5	-------	0.5
Electric railroad and motor bus operation and maintenance	500	129,934	481	-------	19	124,608	-------	5,326
Per cent of total	100.0	100.0	96.2	-------	3.8	95.9	-------	4.1
Wholesale trade	2,843	73,778	2,784	-------	59	72,593	-------	1,185
Per cent of total	100.0	100.0	97.9	-------	2.1	98.4	-------	1.6
Retail trade	14,031	348,020	13,727	-------	304	344,715	-------	3,305
Per cent of total	100.0	100.0	97.8	-------	2.2	99.1	-------	0.9
Hotels	2,449	140,144	2,411	-------	38	137,901	-------	2,243
Per cent of total	100.0	100.0	98.4	-------	1.6	98.4	-------	1.6
Canning and preserving	837	28,579	828	-------	9	28,140	-------	439
Per cent of total	100.0	100.0	98.9	-------	1.1	98.5	-------	1.5
Laundries	1,016	61,779	1,002	-------	14	61,066	-------	713
Per cent of total	100.0	100.0	98.6	-------	1.4	98.8	-------	1.2
Dyeing and cleaning	401	12,413	398	-------	3	12,224	-------	189
Per cent of total	100.0	100.0	99.3	-------	0.7	98.5	-------	1.5

Wage Changes Reported by Trade-Unions Since March, 1932

CHANGES in wages and hours of labor of trade-unionists and municipal employees, occurring since March, 1932, which have been reported to the bureau during the past month, are shown in the table following. The tabulation covers 84,431 workers, of whom 16,043 were reported to have gone on the 5-day week. No renewals of previous wage scales were reported.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, MARCH TO JUNE, 1932

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Bakers:					
Davenport, Iowa, Moline and Rock Island, Ill.—		*Per week*	*Per week*		
Bakers	May 1	$38.00	$34.20	48	48
Foremen	do	44.00	39.60	48	48
Oven men, dough mixers, and bench foremen	do	38.00	34.20	48	48
Benchmen	do	30.00	27.00	48	48
Milwaukee, Wis.—					
First benchman	Apr. 30	38.00	35.00	54	54
		Per day	*Per day*		
Oven men	do	8.00	7.00	54	54
Bench men	do	7.00	6.00	54	54
		Per week	*Per week*		
Barbers, Warren, Pa	Apr. 14	[1] 25.00	[2]	56	56
Brewery and soft-drink workers:					
Belleville, Ill.—					
Firemen	Apr. 1	34.00	30.60	48	48
Engineers	do	39.00	35.10	48	48
Fort Wayne, Ind.—					
Bottlers and yardmen	do	27.50	24.75	48	48
Brewers and drivers	do	29.00	26.10	48	48
Jefferson, Wis	do	27.00	25.00	54	54
Louisville, Ky.—					
Engineers	do	29.50	28.50	48	48
Firemen	do	26.00	25.00	48	48
Repair men	do	26.00	25.00	48	48
Oilers	do	25.00	24.00	48	48
Helpers	do	24.50	23.50	48	48
Ice pullers	do	24.50	23.50	48	48
Drivers—					
Route chauffeurs	do	28.00	27.00	54	54
Shipping chauffeurs	do	24.50	23.50	54	54
Bottle-beer chauffeurs	do	23.50	22.50	54	54
Bottling department—					
Machine men	do	23.50	22.50	54	54
Head steamers and packers	do	24.50	23.50	54	54
Other bottling workers	do	23.00	22.00	54	54
Building trades:		*Per hour*	*Per hour*		
Asbestos workers, Seattle, Wash	Mar. 1	1.25	1.00	40	40
Bricklayers and masons—					
Boston, Mass., stonemasons	Apr. 29	1.50	1.30	40	40
East St. Louis, Ill., and vicinity—					
Bricklayers	Apr. 22	1.75	1.50	40	40
Stonemasons	do	1.75	1.37½	40	40
Hazleton, Pa	Apr. 1	1.50	1.00	44	44
Kewanee, Ill., and vicinity, bricklayers	May 1	1.37½	1.25	[3] 8	[3] 8
Morristown, N. J	Apr. 1	1.75	1.50	40	40
New London, Conn., bricklayers	do	1.50	1.25	44	40
Philadelphia, Pa.—					
Bricklayers	May 1	1.75	1.50	40	40
Marble masons	June 1	1.50	1.37½	40	40
Rochester, N. Y	Apr. 1	1.58⅓	1.25	40	40
St. Louis, Mo., stonemasons	Apr. 23	1.50	1.25	40	40
San Francisco, Calif., tile setters	May 1	1.25	1.12½	44	40
Sheboygan, Wis., bricklayers	do	1.25	1.00	44	44
Summit, N. J., and vicinity	Apr. 15	1.75	1.50	40	40
Carpenters—					
Albuquerque, N. Mex	Mar. 31	1.25	1.00	40	40
Bergen County, N. J	May 2	1.50	1.25	40	40
Fresno, Calif	Apr. 1	1.12½	.90	40	40
Jackson, Tenn	Mar. 1	1.00	.90	44	44
Jacksonville, Ill	Apr. 1	1.00	.75	44	44
Louisville, Ky., and vicinity	May 16	1.00	.80	40	40
Planing-mill carpenters	do	.60	.50	44	44
Marlboro, Mass	Apr. 1	1.00	.85	44	44
Muskogee, Okla	do	1.12½	.75	[3] 8	[3] 8
Philadelphia, Pa	May 16	1.25	1.05	44	44
St. Louis, Mo	Apr. 15	1.50	1.25	40	40
Salt Lake City, Utah	Mar. 17	1.12½	.90	44	44
San Francisco, Calif., and vicinity	Apr. 11	1.12½	.90	40	40
Seattle, Wash., and vicinity	Mar. 1	1.12½	.90	44	40–44

[1] And 50 per cent of receipts over $35.
[2] 75 per cent of receipts.
[3] Hours per day.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, MARCH TO JUNE, 1932—Continued

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Building trades—Continued.					
Carpenters—Continued.		*Per hour*	*Per hour*		
Sheboygan, Wis	May 1	$0.90	$0.75	44	44
Wilkes-Barre, Pa	May 9	1.12½	1.00	40	40
Cement finishers—					
Hazelton, Pa., and vicinity	May 1	1.37½	1.25	44	44
Philadelphia, Pa	do	1.25	1.05	44	44
Seattle, Wash	Mar. 1	1.12½	.90	40	40
Electrical workers—					
St. Louis, Mo	Apr. 15	2.00	1.67½	[3] 6	[3] 6
San Francisco, Calif	Apr. 20	1.12½	1.00	40	40
Seattle, Wash	Mar. 1	1.37½	1.10	40	40
Engineers, operating, Philadelphia, Pa., and vicinity	May 1	*Per week* 66.00	*Per week* 55.00	40–44	40
Hod carriers and laborers—		*Per hour*	*Per hour*		
Albuquerque, N. Mex	Mar. 31	.75	.60	40	40
Boston, Mass—					
Union A	Apr. 14	.80	.70	44	40
Union B	Apr. 28	.80–.85	.70	44	44
St. Louis, Mo	Apr. 15	.87½	.78¾	40	40
Seattle, Wash.—					
Building laborers	Mar. 1	.70	.59⅜	40	40
Plasterers' hod carriers	do	1.00	.80	40	40
Sheboygan, Wis., mason tenders	May 1	.75	.50	44	44
Lathers—					
Albuquerque, N. Mex	Mar. 31	1.25	1.12½	40	40
St. Louis, Mo	Apr. 15	1.50	1.25	40	40
Sheboygan, Wis	May 1	1.25	1.00	44	44
Painters, decorators, and paperhangers—					
Albuquerque, N. Mex	Mar. 31	1.12½	.90	40	40
Jackson, Tenn	Apr. 6	.87½	.75	44	44
Marlboro, Mass	Apr. 1	.95	.77½	44	40
Philadelphia, Pa., glazers	May 1	1.25	1.07½	44	44
Quincy, Ill	May 17	1.00	.80	44	40
Redwood City, Calif	Mar. 12	1.12½	1.00	40	40
Rochester, N. Y	Apr. 1	1.20	1.00	40	40
Seattle, Wash	Mar. 1	1.12½	.90	40	40
Sheboygan, Wis	May 1	.92½	.70	44	44
Plasterers—					
Albuquerque, N. Mex	Mar. 31	1.37½	1.12½	40	40
Hazleton, Pa., and vicinity	May 1	1.37½	1.25	44	44
Seattle, Wash	Mar. 1	1.50	1.20	40	40
Sheboygan, Wis	May 1	1.25	1.00	44	44
Plumbers—					
Albuquerque, N. Mex	Mar. 31	1.50	1.20	40	40
Boston, Mass., and vicinity	May 1	1.50	1.25	40	40
Marlboro, Mass	Apr. 1	1.15	1.00	44	44
St. Louis, Mo	May 17	1.62½	1.43¾	40	40
Seattle, Wash	Mar. 1	1.37½	1.10	40	40
Sheboygan, Wis	May 1	1.25	.90	44	44
Roofers—					
St. Louis, Mo	Apr. 15	1.50	1.25	40	40
Helpers	do	.80	.75	44	40
Seattle, Wash., and vicinity	Mar. 1	1.12½ 1.25	.90 1.00	40–44	40–44
Sheet-metal workers—					
Boston, Mass., and vicinity	Apr. 25	1.37½	1.17½	44	40
St. Louis, Mo	Apr. 15	1.50	1.25	40	40
Seattle, Wash	do	1.25	1.00	40	40
Sheboygan, Wis	May 1	.95	.80	44	44
Stonecutters—					
St. Louis, Mo., and vicinity	Apr. 1	1.25	1.00	40	40
San Francisco, Calif	May 23	1.12½	.85	44	40
Structural and ornamental-iron workers—					
Philadelphia, Pa	May 18	1.65	1.37½	40	40
St. Louis, Mo	Apr. 15	1.75	1.47	40	40
San Francisco, Calif., and vicinity	May 16	1.37½	1.20	40	40
Seattle, Wash	Mar. 1	1.25	1.10	44	44
Tacoma, Wash	do	1.25	1.10	44	44

[3] Hours per day.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, MARCH TO JUNE, 1932—Continued

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Chauffeurs and teamsters:		*Per day*	*Per day*		
Clinton, Iowa, milk-wagon drivers	Apr. 5	$4.60	$3.80	50	50
Portland, Oreg.—					
Teamsters	Mar. 7	4.75	4.25	48	48
Truck drivers	do	4.75	4.25	48	48
		5.00	4.50	48	48
		5.25	4.75	48	48
Helpers	do	4.75	4.25	48	48
Rochester, N. Y.—		*Per week*	*Per week*		
Ice-wagon drivers	Apr. 6	36.00	33.00	[4]	[4]
Milk-wagon drivers—					
Helpers	Apr. 1	26.00	24.70	[4]	[4]
Wholesale men	do	34.00	32.30	[4]	[4]
Special men	do	33.00	31.35	[4]	[4]
Retail route men, first 3 months	do	29.00	27.55	[4]	[4]
Retail route men, experienced	do	34.00	32.30	[4]	[4]
Route pullers, foremen	do	47.00	44.65	[4]	[4]
San Francisco, Calif., taxi drivers	May 1	[5]	[6]	[5]	[5]
Seattle, Wash., wholesale and retail delivery drivers	do	40.00	[7] 37.00	[4]	[4]
Clothing:					
		Per hour	*Per hour*		
Brockton, Mass., boot and shoe workers	Apr. 28	.70	.63	48	48
Napa, Calif.—		*Per week*	*Per week*		
Shirt workers	Mar. 1	20.59–25.00	15.80–22.00	44	40
Cutters	do	38.50–48.00	29.50–37.50	44	40
Scranton, Pa., tailors	Apr. 1	42.00	37.80	48	48
Coopers, St. Paul, Minn	do	31.86	30.86	48	48
Dairy employees, Chicago, Ill	May 1	33.00–53.00	28.00–48.00	48	48
Masters, mates, and pilots, Point Pleasant, W. Va., and vicinity	Mar. 1	*Per day* 10.00	*Per day* 9.00	84	84
Motion-picture operators, Columbia, S. C	May 23	*Per week* 47.50	*Per week* 40.00–45.00	36	36
Printing and publishing:					
Bookbinders, New York, N. Y.—					
Paper cutters	Mar. 25	50.00	48.00	44	44
Machine operators	do	52.00	50.00	44	44
Continuous trimmer operators	do	53.00	51.00	44	44
Compositors and machine operators—					
Cairo, Ill., newspaper	May 3	38.40	39.60	48	48
Concord, N. H	Apr. 14	40.50	36.45	44	44
Duluth, Minn.—					
Newspaper, day	May 1	48.00	44.00	44	44
Newspaper, night	do	51.00	47.00	44	44
Galveston, Tex.—		*Per hour*			
Hand compositors, day	Mar. 9	97½	44.50	45	45
Hand compositors, night	do	1.02½	47.25	48	45
Machine operators, day	do	[8]	44.50	36	42
Machine operators, night	do	[8]	47.25	33	42
Grand Rapids, Mich.—		*Per week*			
Newspaper, day	Apr. 7	46.00	42.00	48	48
Newspaper, night	do	48.00	44.00	48	48
Nashville, Tenn.—					
Job work	Apr. 1	38.00	35.00	44	44
Newspaper, day	do	42.00	39.00	48	48
Newspaper, night	do	45.00	42.00	48	48
Oneonta, N. Y.—					
Day work	May 1	39.00	39.50	44	44
Night work	do	41.50	42.00	44	44
Pueblo, Colo	Apr. 1	47.00	40.44	45	39
Springfield, Ill	Apr. 24	[5]	[9]	[5]	[5]
Paper handlers and sheet straighteners, New York, N. Y.—					
Paper handlers	Mar. 19	41.00	38.00	44	32
Roll handlers	do	42.00	39.00	44	32
Straighteners	do	45.00	42.00	44	32

[4] Irregular.
[5] Not reported.
[6] 50 cents a day reduction.
[7] Plus commission.
[8] Piece work.
[9] 10 per cent reduction.

RECENT WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY, MARCH TO JUNE, 1932—Continued

Industry or occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Printing and publishing—Continued.		*Per week*	*Per week*		
Pressmen and assistants—					
Concord, N. H.	May 1	$36.00–$50.00	[10]	44	44
New York, N. Y.—					
Printing-press assistants, senior	Mar. 1	48.50	$45.11	44	32
Printing-press assistants, junior	do	35.00	32.55	44	32
Printing pressmen	do	60.00–69.50	$55.80–64.64	44	32
Stereotypers, Des Moines, Iowa—					
Day work	June 1	47.50	48.00	48	48
Night work	do	50.50	51.00	48	48
Street-railway workers, Pittsburgh, Pa.:		*Per hour*	*Per hour*		
Motormen and conductors	May 1	.70 .80	.64 .74	[3] 8½ [3] 8½	[3] 8½ [3] 8½
Municipal:					
Georgetown, S. C.	Mar. 1	[11]	[9]	[5]	[5]
Miami Beach, Fla.—		*Per year*	*Per year*		
City manager	do	9,000	7,500	[5]	[5]
City clerk	do	4,200	3,600	[5]	[5]
Tax assessor	do	3,300	3,000	[5]	[5]
Municipal judge	do	1,800	1,500	[5]	[5]
City engineer	do	4,500	3,600	[5]	[5]
Chief of police	do	4,500	3,600	[5]	[5]
Chief of fire department	do	3,600	3,000	[5]	[5]
Superintendent, water department	do	3,900	3,300	[5]	[5]
Superintendent, recreation	do	3,300	3,000	[5]	[5]
Sanitary inspector	do	2,400	2,160	[5]	[5]
Building inspector	do	3,300	3,000	[5]	[5]
Assistant city engineer	do	2,700	2,400	[5]	[5]
Assistant superintendent, water department	do	2,700	2,400	[5]	[5]
Life guard, captain	do	2,700	2,400	[5]	[5]
Life guard, lieutenant	do	2,100	1,920	[5]	[5]
Policemen (first year)	do	2,100	1,800	[5]	[5]
Policemen (second year)	do	2,220	1,920	[5]	[5]
Policemen (after second year)	do	2,280	1,980	[5]	[5]
Policemen ranking officers	do	2,400	2,100	[5]	[5]
Firemen	do	2,100	1,800	[5]	[5]
Firemen, officers	do	2,400	2,100	[5]	[5]
Chief accountant	do	3,000	2,700	[5]	[5]
Junior accountants	do	1,920	1,800	[5]	[5]
Designing engineer	do	3,000	2,400	[5]	[5]
Draftsmen, surveyors	do	2,100	1,800	[5]	[5]
Clerks, stenographers	do	1,800	1,500	[5]	[5]

[3] Hours per day.
[5] Not reported.
[9] 10 per cent reduction.
[10] 10 per cent reduction on all earnings after 30 hours.
[11] Various.

Salaries in City School Systems, 1930–31

THE results of the National Education Association's survey of salaries in 1930–31 in 1,632 city school systems in the United States are published in the May, 1931, research bulletin of that organization. The investigation included class-room teachers, principals, and certain other school employees—school nurses, clerks, janitors, and attendants—in cities of 2,500 population and over.

The accompanying statistics are taken from the above-mentioned bulletin. Table 1 shows the median salaries of teachers, principals,

and superintendents in city school systems in 1930–31, in 5 groups of cities, classified by population:

TABLE 1.—MEDIAN SALARIES IN CITY SCHOOL SYSTEMS OF VARIOUS CITIES IN THE UNITED STATES, 1930–31

Occupation	Median salaries				
	88 cities of over 100,00 population	204 cities of 30,000 to 100,000 population	449 cities of 10,000 to 30,000 population	451 cities of 5,000 to 10,000 population	440 cities of 2,500 to 5,000 population
Teachers:					
Elementary schools	$2,118	$1,609	$1,428	$1,303	$1,162
Junior high schools	2,348	1,860	1,619	1,494	1,360
Senior high schools	2,731	2,111	1,876	1,692	1,547
Principals:					
Elementary schools (supervising)	3,519	2,646	2,349	2,239	2,175
Junior high schools	4,500	3,353	2,763	2,184	1,775
Senior high schools	5,100	4,281	3,613	2,825	2,403
City superintendents of schools	10,000	6,758	5,149	4,188	3,565

Table 2 gives the number of teachers at specified salaries in 1930–31 in city school systems in 88 cities of over 100,000 population:

TABLE 2.—DISTRIBUTION OF SALARIES OF TEACHERS IN 88 CITIES OF OVER 100,000 POPULATION, 1930–31

Salary	Elementary school			Atypical class teachers	Junior high school			High school				Teachers in part-time schools
	Kindergarten teachers	Teachers	Assistant or vice principals		Teachers	Assistant or vice principals	Deans	Teachers	Department heads	Assistant or vice principals	Deans	
$4,400 and over			569			5				561	2	
$4,200–$4,399			184			3				75	4	
$4,000–$4,199		12	29	3	5	7	1	2,708	763	48	35	214
$3,800–$3,999		2,505	13	629	1,741	17		1,798	51	42		85
$3,600–$3,799		397	13	89	135	57	2	1,177	70	65	3	43
$3,400–$3,599		282	3	65	187	28	16	1,216	317	54	5	26
$3,200–$3,399	588	6,609	29	58	476	19	7	2,167	293	39	6	50
$3,100–$3,199	52	993	14	55	306	12	11	951	90	11	4	42
$3,000–$3,099	5	186	25	26	639	3	6	2,113	105	8	16	42
$2,900–$2,999	77	945	25	72	511	3	1	975	71	5	6	64
$2,800–$2,899	89	1,436	148	179	1,535	12	4	2,032	46	8	13	227
$2,700–$2,799	130	1,996	39	409	769	3	3	2,101	111	14	19	81
$2,600–$2,699	95	2,323	91	573	998	6	3	1,745	87	2	9	88
$2,500–$2,599	500	6,371	11	358	946	20	5	1,311	70	3	5	71
$2,400–$2,499	500	7,941	38	513	1,441	3	1	2,346	71	4	3	104
$2,300–$2,399	269	3,681	36	278	1,326	3	3	1,480	28	2	2	97
$2,200–$2,299	600	7,813	30	388	1,086	4	3	1,814	37	2	9	70
$2,100–$2,199	347	5,490	7	361	1,330	1	1	1,373	22	1	5	82
$2,000–$2,099	529	7,649	13	439	1,455			1,595	16		3	77
$1,900–$1,999	320	4,555	3	364	1,128	1	1	949	5		2	64
$1,800–$1,899	424	6,808	2	317	1,295		2	1,151	9		3	78
$1,700–$1,799	402	6,631	8	225	789		1	600	14		1	26
$1,600–$1,699	367	5,332	3	309	756		1	488	6		1	26
$1,500–$1,599	421	4,599	22	179	594		1	363	4		1	24
$1,400–$1,499	296	3,403	2	152	474		1	263	3			13
$1,300–$1,399	211	2,726	1	67	328			176				13
$1,200–$1,299	238	2,712		47	212			129				12
$1,100–$1,199	105	983		19	121		1	36				10
$1,000–$1,099	106	942		14	98			52				5
Under $1,000	75	683		25	89			69				22
Total	6,746	96,003	1,358	6,213	20,770	207	75	33,178	2,289	944	157	1,756
Median	$2,077	$2,118	$4,280	$2,372	$2,348	$3,496	$3,092	$2,731	$3,436	$5,544	$2,942	$2,695

Table 3 records by States the median salaries of various groups of teachers for the period under review in the cities of over 100,000 population.

TABLE 3.—MEDIAN SALARIES OF TEACHERS IN CITIES OF OVER 100,000 POPULATION, 1930–31

State	Kindergarten teachers	Elementary school		Atypical class teachers	Junior high school			High school				Teachers in part-time schools
		Teachers	Assistant or vice principals		Teachers	Assistant or vice principals	Deans	Teachers	Department heads	Assistant or vice principals	Deans	
United States	$2,077	$2,118	$4,280	$2,372	$2,348	$3,496	$3,092	$2,731	$3,436	$5,544	$2,942	$2,695
Alabama	-------	1,610	-------	1,690	-------	-------	-------	2,073	2,550	-------	-------	(1)
California	1,962	2,287	2,450	2,463	2,685	3,636	3,017	2,684	3,350	3,988	-------	2,802
Colorado	2,220	2,227	-------	2,350	2,576	-------	3,100	2,812	-------	3,367	3,233	2,550
Connecticut	1,725	1,856	-------	2,210	2,168	-------	-------	2,476	3,020	-------	-------	-------
Delaware	1,600	2,010	-------	2,040	2,020	-------	-------	2,221	2,750	-------	-------	-------
District of Columbia	2,226	2,219	-------	2,223	2,424	-------	-------	2,834	3,538	3,490	-------	-------
Florida	1,250	1,208	-------	-------	1,355	-------	-------	1,468	1,763	-------	-------	1,183
Georgia	1,719	1,754	-------	2,014	2,358	-------	-------	2,435	2,915	-------	-------	1,800
Illinois	2,511	2,516	1,550	2,472	2,725	3,833	3,454	3,441	2,300	4,300	4,100	+4,000
Indiana	1,680	1,882	-------	1,917	2,118	-------	-------	2,474	3,068	3,425	2,813	1,893
Iowa	1,895	1,859	-------	1,838	2,032	-------	2,400	2,322	-------	-------	-------	-------
Kansas	1,550	1,746	1,717	1,850	1,975	-------	-------	2,248	2,560	-------	-------	-------
Kentucky	1,536	1,508	-------	1,600	1,643	-------	-------	2,091	2,590	-------	-------	-------
Louisiana	1,340	1,709	-------	1,864	-------	-------	-------	2,475	-------	-------	-------	-------
Maryland	-------	1,660	2,314	2,056	1,965	2,538	-------	2,555	3,250	3,400	-------	1,858
Massachusetts	1,876	1,953	-------	1,999	2,383	2,850	-------	2,649	3,704	3,711	2,675	2,438
Michigan	1,919	2,003	2,842	2,402	2,494	3,733	-------	2,758	3,527	4,400	-------	2,679
Minnesota	1,745	1,797	2,250	1,950	2,200	-------	-------	2,337	2,733	3,425	2,750	-------
Missouri	2,209	2,120	-------	2,232	2,300	-------	-------	2,846	-------	3,900	-------	2,750
Nebraska	2,090	2,110	-------	1,450	-------	-------	-------	2,400	2,448	-------	2,775	-------
New Jersey	2,440	2,230	4,133	2,672	2,545	3,400	-------	3,502	+4,000	4,800	4,200	2,625
New York	2,601	2,652	4,633	3,608	3,446	3,700	-------	3,435	+4,000	5,734	3,050	3,138
Ohio	2,050	2,037	2,913	2,398	2,413	3,225	-------	2,614	3,306	3,715	-------	2,313
Oklahoma	1,517	1,903	-------	1,475	2,141	2,500	-------	2,461	2,789	-------	-------	2,450
Oregon	1,725	2,213	-------	2,058	-------	-------	-------	2,266	2,663	2,750	2,750	-------
Pennsylvania	1,886	2,073	2,738	2,433	2,392	-------	-------	3,236	+4,000	3,700	-------	2,644
Rhode Island	1,850	1,794	-------	2,050	2,150	-------	-------	2,559	3,150	-------	-------	2,183
Tennessee	1,170	1,503	-------	-------	1,649	-------	-------	2,047	2,283	-------	-------	-------
Texas	1,267	1,629	-------	1,550	1,772	2,500	2,050	2,030	2,530	3,050	2,300	1,650
Utah	1,775	1,557	-------	-------	1,842	-------	-------	2,093	-------	-------	-------	1,810
Virginia	1,500	1,507	-------	1,920	1,804	-------	-------	2,050	2,500	2,875	-------	-------
Washington	2,000	1,933	-------	2,140	1,950	-------	-------	2,206	2,903	3,450	2,925	2,088
Wisconsin	2,265	2,390	-------	2,418	2,026	-------	-------	2,619	-------	3,900	-------	-------

[1] Under $1,000.

The numbers of teachers receiving specified salaries in 1930–31 are reported in Table 4 for 204 city school systems in cities of 30,000 to 100,000 population:

TABLE 4.—DISTRIBUTION OF SALARIES OF TEACHERS IN 204 CITIES OF 30,000 TO 100,000 POPULATION, 1930–31

Salary	Elementary school			Junior high school				High school				Teachers of part-time schools
	Kindergarten teachers	Teachers	Assistant or vice principals	Atypical class teachers	Teachers	Assistant or vice principals	Deans	Teachers	Department heads	Assistant or vice principals	Deans	
$4,000 and over	-------	-------	11	-------	3	4	-------	35	42	16	2	-------
$3,800–$3,999	-------	-------	4	-------	5	1	-------	85	37	6	1	1
$3,600–$3,799	-------	-------	6	2	23	4	-------	171	30	9	3	-------
$3,400–$3,599	-------	1	4	-------	30	9	4	158	17	9	4	2
$3,200–$3,399	1	54	14	6	98	9	2	210	46	14	5	7
$3,100–$3,199	-------	13	8	3	36	2	-------	108	14	7	1	6
$3,000–$3,099	15	162	1	10	105	9	-------	190	49	16	5	7
$2,900–$2,999	5	46	8	7	95	2	-------	151	36	4	3	7
$2,800–$2,899	7	161	1	15	147	2	1	302	39	13	3	6
$2,700–$2,799	4	157	8	5	271	7	2	533	32	11	5	29
$2,600–$2,699	34	383	2	9	151	5	3	352	56	7	3	18
$2,500–$2,599	21	350	6	29	266	6	2	617	76	2	13	29
$2,400–$2,499	22	540	3	19	319	6	4	633	72	5	4	23
$2,300–$2,399	32	591	5	45	394	4	3	490	79	5	6	30
$2,200–$2,299	33	1,014	2	63	484	3	1	793	49	6	10	38
$2,100–$2,199	69	775	4	59	554	5	5	831	48	3	5	32
$2,000–$2,099	67	1,148	2	89	733	10	2	1,022	42	1	7	32
$1,900–$1,999	133	2,334	2	109	938	1	2	863	29	3	6	36
$1,800–$1,899	125	3,173	4	135	1,316	-------	3	979	22	-------	2	38
$1,700–$1,799	118	2,518	1	97	914	1	3	682	8	-------	1	22
$1,600–$1,699	185	2,885	8	105	953	1	1	595	6	-------	1	19
$1,500–$1,599	174	3,196	5	113	825	-------	-------	467	3	-------	-------	17
$1,400–$1,499	155	2,707	2	53	641	-------	-------	355	2	-------	-------	9
$1,300–$1,399	151	2,963	1	41	482	1	-------	220	-------	-------	-------	5
$1,200–$1,299	151	2,815	-------	29	321	-------	-------	144	-------	-------	-------	6
$1,100–$1,199	76	1,744	-------	10	126	-------	-------	88	-------	-------	-------	2
$1,000–$1,099	74	1,359	-------	15	64	-------	-------	28	-------	-------	-------	3
Under $1,000	56	1,014	-------	7	57	-------	-------	27	-------	-------	-------	4
Total	1,708	32,103	[1] 103	1,075	10,351	92	38	11,129	834	137	90	428
Median	$1,609	$1,609	$2,756	$1,850	$1,860	$2,743	$2,367	$2,111	$2,575	$3,053	$2,523	$2,166

[1] As given in original table. Actual sum of items, 102.

In Table 5 are presented the median salaries, by States, for 12 groups of teachers for the year covered in the survey in cities in the 30,000 to 100,000 population group:

TABLE 5.—MEDIAN SALARIES OF TEACHERS IN CITIES OF 30,000 TO 100,000 POPULATION, 1930–31

State	Kindergarten teachers	Elementary school		Atypical class teachers	Junior high school			High school				Teachers of part-time schools
		Teachers	Assistant or vice principals		Teachers	Assistant or vice principals	Deans	Teachers	Department heads	Assistant or vice principals	Deans	
United States	$1,609	$1,609	$2,756	$1,850	$1,860	$2,743	$2,367	$2,111	$2,575	$3,053	$2,523	$2,166
Alabama		1,171			1,142			1,561	2,250			
Arizona	1,450	1,795			1,819			2,300				
Arkansas		1,332			1,588			1,890				
California	1,900	1,954	3,006	1,994	2,405	3,220	3,400	2,660	3,000	3,100	3,200	2,556
Colorado	1,750	1,638			1,925			2,095				
Connecticut	1,818	1,840		2,000	2,059			2,343	3,310	3,150		
Florida		Below 1,000						1,325				
Georgia	1,050	1,310			1,426			1,750	2,100			
Illinois	1,461	1,554	1,540	1,690	1,718	2,500		2,126	2,979	3,050	2,517	
Indiana	1,388	1,539		1,679	1,760		1,950	1,926	2,280		2,450	
Iowa	1,459	1,505		1,700	1,785			1,933	1,963		2,125	1,850
Kansas	1,583	1,721		1,767	1,726			2,045				
Kentucky	1,268	1,400		1,450	1,579			1,686				
Louisiana		1,079			1,363			1,325	1,825			
Maine	1,522	1,538		1,450	1,650			1,850	2,515			
Maryland		1,199			1,288			1,521		2,150		
Massachusetts	1,561	1,651	1,650	1,759	1,860			2,090	2,812	3,300	2,450	2,000
Michigan	1,584	1,699		1,897	1,957	2,533		2,185	2,588	3,050		2,025
Mississippi	1,043	1,033			1,173			1,453				
Missouri		1,186		1,300	1,349			1,705	2,150			
Montana		1,807			1,888			2,017	2,200			
Nebraska	1,640	1,602		1,850	1,744			2,000	2,483			
New Hampshire	1,532	1,546		1,555	1,790			2,057	2,600			
New Jersey	1,981	2,180	3,275	2,510	2,615			3,000	3,809	4,300		2,683
New York	1,901	1,910	2,650	2,032	2,158	3,000	2,550	2,301	3,073	3,500	2,800	2,210
North Caroilna		1,343		1,630	1,569			1,640	2,450			
Ohio	1,650	1,603		1,771	1,868	3,300		2,362	2,450	2,700	3,000	2,000
Oklahoma		1,253			1,550			1,658	2,500			
Pennsylvania	1,613	1,719		1,878	1,876	2,450		2,224	2,500	3,050		1,986
Rhode Island	1,615	1,615		1,750	1,722			2,013	2,288			
South Carolina		1,253			1,500			1,711	2,033			
South Dakota	1,530	1,523			1,389			2,033				
Texas	1,383	1,242		1,583	1,458			1,665	2,200			
Utah		1,342			1,709			1,888				
Virginia		1,358		1,525	1,491			1,808	1,950			
Washington		1,541		1,750	1,734			1,923	2,070			
West Virginia	1,279	1,493		1,583	1,714			1,960	2,300			
Wisconsin	1,521	1,681		1,875	1,883			2,114	2,442			2,143

Salaries of Clerical Workers in New York City

EARLY in 1932 the Merchants' Association of New York made a survey of salaries of clerical workers employed by banks, advertising agencies, and insurance companies in New York City. Table 1, taken from a statement prepared by the industrial bureau of the association, shows the range in minimum rates and maximum rates for the different occupations.

125620°—32——12

TABLE 1.—MINIMUM AND MAXIMUM MONTHLY SALARIES PAID CLERICAL WORKERS BY BANKS, ADVERTISING AGENCIES, AND INSURANCE COMPANIES IN NEW YORK CITY, ALL FIRMS COMBINED

Occupation	Companies reporting	Minimum rates			Maximum rates		
		Low	High	Average	Low	High	Average
Accountants	27	$80.00	$433.33	$150.23	$151.66	$708.33	$298.40
Auditors	22	80.00	251.33	148.62	151.66	750.00	297.93
Secretaries	32	83.33	183.33	116.51	125.00	300.00	201.39
Stenographers	30	55.00	121.33	97.00	100.00	300.00	155.32
Typists	32	52.00	130.00	79.03	78.00	173.33	115.17
Dictaphone operators	22	65.00	130.00	91.63	90.56	195.00	130.62
Telephone operators	34	67.99	143.00	97.40	86.66	208.34	135.27
Comptometer operators	15	60.00	125.00	90.96	100.00	153.83	124.43
Clerks—bookkeeping department	30	50.00	125.00	86.45	90.00	325.00	152.02
Ledger clerks	24	60.00	164.66	96.15	95.33	216.66	142.67
File girls	33	50.00	112.66	72.28	65.00	183.33	116.92
Mail clerks	31	50.00	150.00	78.03	65.00	225.00	121.52
Pay-roll clerks	9	80.00	133.33	110.08	140.00	300.00	192.53
Billing-machine operators	15	70.00	117.00	91.21	95.33	150.00	123.64

The salaries paid by banks, advertising agencies, and insurance companies, respectively, are shown in Table 2, together with the number of reporting firms in each class.

TABLE 2.—MINIMUM AND MAXIMUM MONTHLY SALARIES PAID CLERICAL WORKERS BY BANKS, ADVERTISING AGENCIES, AND INSURANCE COMPANIES IN NEW YORK CITY, BY TYPE OF FIRM

Occupation	Banks			Advertising agencies			Insurance companies		
	Number reporting	Average salary		Number reporting	Average salary		Number reporting	Average salary	
		Minimum	Maximum		Minimum	Maximum		Minimum	Maximum
Accountants	11	$131.16	$284.08	5	$249.52	$381.54	11	$139.50	$274.92
Auditors	11	147.63	307.34	2	136.49	187.77	8	153.49	326.04
Secretaries	13	123.74	223.58	7	110.26	193.19	12	112.32	180.45
Stenographers	12	93.19	159.89	6	98.89	139.47	14	85.52	136.01
Typists	11	81.99	121.24	6	95.51	130.94	15	70.26	104.42
Dictaphone operators	8	101.66	137.12	2	85.45	104.86	12	85.97	129.55
Telephone operators	12	94.58	145.60	6	106.52	130.66	15	95.99	129.15
Co nptometer operators	4	100.00	125.58	1	123.50	153.83	10	84.07	121.02
Clerks—bookkeeping department	13	86.62	162.10	4	86.66	194.99	13	78.53	128.71
Ledger clerks	11	102.98	156.69	1	102.91	123.50	12	80.98	131.41
File girls	12	79.74	143.38	6	88.12	111.90	15	59.98	97.76
Mail clerks	12	97.31	159.88	5	72.87	98.29	14	63.34	96.92
Pay-roll clerks	7	112.22	205.70	----	----	----	2	103.64	146.37
Billing-machine operators	6	95.16	131.00	2	101.83	127.83	6	83.72	115.87

Production and Wages in the German Iron and Steel Industry

By FRITZ KUMMER, BERLIN

THE German iron and steel industry has for a number of years been in a state of decline. With each decrease in production the opinion has been that the lowest point of depression had been reached, a worse stage seeming to be impossible. This optimistic point of view has constantly been refuted by the next industrial reports, the depression continuing. Gradually production has decreased to less than half of that of the last pre-war year (1913) and still there is no sign of improvement.

Employers have taken measures to stop the further decline of the industry, and have done what they thought best to get through the hard times with as little damage as possible. Mills have been shut down, pending orders have been transferred to fewer mills or even to a single one, a large part of the personnel has been discharged, extra holidays have been given, and the working hours have been shortened or the personnel employed on a staggered system. Furthermore, wages and working standards have been reduced. Notwithstanding all these measures, no improvement has been reached, and the difficulties of the iron and steel industry are greater than ever.

The decrease in production in the iron and steel industry is illustrated by figures of the monthly production in 1913 and 1929 to 1932 of the Ruhr district, which controls about 81 per cent of the total German iron and steel production.

TABLE 1.—MONTHLY PRODUCTION OF IRON AND STEEL IN THE RUHR DISTRICT, 1913, AND 1929 TO 1932

Year	Monthly production (in tons) of—		
	Pig iron	Raw steel	Rolling-mill products
1913, monthly average	910,000	981,000	914,000
1929, monthly average	1,117,000	1,354,000	940,000
1930, January	1,092,000	1,275,000	896,000
1931, February	480,900	543,100	586,000
1932, January	319,800	342,800	274,400
Per cent of decrease since 1929	71.3	74.6	70.8

The number of workers employed has not decreased so much as production, its reduction since June, 1929, being something like 51 per cent. This is due to technical and other circumstances. The number of iron workers in the Ruhr district has been as follows: June, 1929, 219,789; January, 1930, 200,441; January, 1931, 145,615; January, 1932, 105,646. In 1932 there were 114,143 fewer workers than in 1929. The decrease in the number of workers, however, has been coupled with a reduction of working hours. It is difficult to state exactly the extent of the reduction of working hours in the various occupations and establishments, because the reduction is different from mill to mill and is still going on.

Time-work wages and piece rates have also, during the last couple of years, moved downwards. In this industry piece work prevails, only about 15 per cent of the workers being on time work. Most of the latter are in the mechanical and repair shops.

In Germany the iron and steel industry is not divided into so many branches as in America or England.

The pay varies from group to group. The manner in which the pay is fixed does much to eliminate variety in time or piece rates of wages. Wage agreements are made, not for each group nor by any of them separately, but for the whole industry, by a joint committee consisting of representatives of the trade-unions and of the employers' organizations concerned. Such an agreement covers those groups or trades which are similar or considered equivalent. The iron and steel industry of the Ruhr district is covered by a single wage agreement; it fixes the basic pay of skilled, semiskilled, and unskilled workers in

all occupations. The basic wage rates may, however, be increased by bonuses, overtime pay, family or children's allowances, etc.

The following wage data have been compiled by the trade-unions of the iron and steel workers (German Metal Workers' Federation) with the assistance of the industrial councils. The figures, which are for adult workers only, are average actual earnings of almost all establishments in the Ruhr district. Within the occupations the earnings differ little from mill to mill. Exceptions to this general rule are some occupations in the wire, thin-sheet, and bar-rolling mills. In the thin-sheet mills, for example, the first roller earns in one establishment 96 pfennigs (22.8 cents) per hour and in another 224 pfennigs (53.3 cents). The above averages do not include allowances for family or children, which are, however, so small that they do not influence the total sum.

TABLE 2.—AVERAGE ACTUAL EARNINGS PER HOUR OF IRON AND STEEL WORKERS IN THE RUHR DISTRICT, GERMANY, IN MARCH, 1930, NOVEMBER, 1931, AND JANUARY, 1932

[Conversions into United States currency on basis of pfennig=0.238 cent]

Department and occupation	March, 1930		November, 1931		January, 1932	
	German currency	United States currency	German currency	United States currency	German currency	United States currency
	Pfennigs	*Cents*	*Pfennigs*	*Cents*	*Pfennigs*	*Cents*
Blast furnaces:						
Furnace men, first	115.0	27.4	101.0	24.0	87.6	20.9
Furnace men, second	104.0	24.8	91.9	21.9	78.7	18.7
Charge laborers	110.0	26.2	93.0	22.1	80.6	19.2
Yard laborers	77.0	18.3	69.5	16.5	61.1	14.5
Thomas works:						
Furnace men, first	171.0	40.7	123.2	29.3	104.0	24.8
Ingot mold men	135.0	32.1	107.5	25.6	88.5	21.1
Yard laborers	90.0	21.4	79.0	18.8	68.8	16.4
Martin steel works:						
Furnace men, first	135.0	32.1	118.2	28.1	101.6	24.2
Furnace men, second	116.0	27.6	100.7	24.0	86.0	20.5
Casting-pit men	109.0	25.9	94.9	22.6	80.0	19.0
Cogging mills:						
Rollers, first	151.0	35.9	124.8	29.7	106.7	25.4
Rollers, second	130.0	30.9	108.5	25.8	93.5	22.3
Straightening shops:						
Shearers	102.0	24.3	95.9	22.8	82.7	19.7
Loaders	97.0	23.1	78.5	18.7	74.8	17.8
Wire-rolling mills:						
Foremen	231.0	55.0	203.8	48.5	179.0	42.6
Heaters	203.0	48.3	178.3	42.4	156.3	37.2
Thin-sheet mills: Rollers, first	178.0	42.4	139.7	33.3	123.1	29.3
Bar-rolling mills: Foremen	156.0	37.1	141.4	33.7	125.2	29.8
Hammer shops:						
Smiths	135.0	32.1	116.2	27.7	103.0	24.5
Lever men, first	105.0	25.0	92.7	22.1	82.5	19.6
Helpers	88.0	20.9	72.6	17.3	62.8	15.0
Iron foundries:						
Molders	121.0	28.8	103.5	24.6	92.6	22.0
Core makers	110.0	26.2	97.6	23.2	88.0	20.9
Stove men	88.0	20.9	81.6	19.4	73.2	17.4
Helpers	76.0	18.1	69.6	16.6	62.6	14.9
Mechanical construction:						
Mechanics	107.0	25.5	94.2	22.4	84.8	20.2
Machine workers	91.0	21.7	82.3	19.6	74.5	17.7
Helpers	73.0	17.4	66.9	15.9	59.7	14.2

The above table shows a very great decrease in all earnings in the short period from November, 1931, to January, 1932. This is due chiefly to the emergency decree issued by the German Government on December 8, 1931.[1] That decree imposed a reduction of all agreement wages, from January 1, 1932, to the level of those of January, 1927. This meant a decrease in pay of 10 per cent and in many cases even of 15 per cent. In those industries or agreement districts where wage agreements had expired, the new agreements had to conform to the emergency decree. This was true of the iron and steel industry in the Ruhr district. The above table shows how the reduction of wages imposed by the Government affected the earnings of iron and steel workers.

[1] For summary of principal provisions of that decree see Labor Review, March 1932, pp. 588-593.

General Survey of Wages in Portugal, 1931 [1]

WAGE earners in Portugal have, in general, an 8-hour working-day. In agriculture, however, the working hours are from sunrise to sunset.

In Table 1 daily wages of workers in Portuguese industries are presented. The figures shown therein represent the actual wages paid, but without a knowledge of the social conditions under which the workers live they would convey an erroneous idea of the real facts. As a rule, wage earners in Portugal live in tenement houses shared with relatives or friends and not infrequently with persons entirely unknown to them, the rent being divided among the various tenants. In the country the farm laborers live in very small houses, having an average of two or three rooms, including kitchen, with no conveniences at all.

Early in the morning the husband goes out to his daily task, his breakfast being a very light meal composed of coffee and bread, usually without butter. The wife, having tidied the house, also goes out to work, her daily wages averaging from 5 to 10 escudos.[2] She goes from house to house to help in the rough work or to sew. She receives her meals in the houses where she works and is often given "left-overs," which her husband has for his dinner. A married carpenter, for instance, who earns an average of 20 escudos daily, could not possibly live on this amount were it not for the earnings of his wife and the food given her.

Everyone works in the family of the farm laborer, even very young children. In addition to the wages paid in currency, farm laborers receive supplementary payments in kind and often their food is included.

TABLE 1.—DAILY WAGES OF WORKERS IN SPECIFIED INDUSTRIES IN PORTUGAL, 1931, BY SEX

Industry or occupation	Daily wages of—		Industry or occupation	Daily wages of—	
	Males	Females		Males	Males
	Escudos	*Escudos*		*Escudos*	*Escudos*
Coal mining	8. 50–18. 00	5. 00–12. 00	Painters	14. 00–22. 00	----------
Quarrying	8. 00–18. 00	4. 00– 5. 00	Paper	7. 00–16. 00	----------
Metal	12. 00–20. 00	4. 00– 6. 00	Graphic, etc	10. 00–18. 50	5. 50
Ceramic	7. 00–20. 00	4. 50– 7. 00	Arts and precision instruments	10. 00–21. 65	21. 00
Glass	14. 50–20. 00	5. 50– 8. 00	Tobacco, etc	12. 50–20. 00	----------
Chemical	10. 30–17. 00	6. 00– 8. 00	Electrical	10. 00–30. 00	6. 00
Textile	7. 00–17. 50	4. 00– 8. 00	Carriage and automobile body	12. 33–20. 00	----------
Shoe	9. 50–20. 00	3. 00–10. 00	Farm laborers	[a] 9. 50	[a] 5. 00
Leather	9. 00–20. 00	4. 00– 8. 00			
Masons	10. 00–22. 50	----------			
Wood and furniture	10. 00–25. 00	4. 50– 5. 00			

[a] 8-hour day.

[1] This article was prepared from reports by Carl F. Deichman, American consul general at Lisbon (Sept. 28, 1931), and Leslie A. Davis, American consul at Oporto (Oct. 20, 1931).

[2] Owing to fluctuation in the exchange rate of the escudo no attempt at conversions is deemed advisable. The escudo at par equals 4.42 cents; the exchange rate in September, 1931, was at par and in October, 1931, was 3.93 cents.

Table 2 shows daily wages in the industries of the Oporto district of Portugal. In the woolen mills women receive somewhat less than the wages shown for men. Dyers in cotton mills generally receive a commission from the local aniline suppliers. Coal miners are given free coal, firewood, housing, and schooling for their children, while metal-mine workers are given free housing. Workers in the metallurgical industry are paid double rates for overtime.

TABLE 2.—DAILY WAGES IN SPECIFIED INDUSTRIES IN THE OPORTO DISTRICT, PORTUGAL, 1931, BY SEX

Industry or occupation	Daily wages of—	
	Males	Females
Manufacturing		
Wine industry:	*Escudos*	*Escudos*
Bottlers	12.00–15.00	12.00
Laborers	10.00–12.00	
Labelers		12.00
Coopers	[1] 20.00	
Other workers	15.00	
Cotton mills:		
Weavers	13.00–18.00	8.00–10.00
Spinners	13.00–18.00	6.50–10.00
Bleachers	12.00–18.00	
Helpers	8.00–10.00	
Technicians	40.00–50.00	
Tacklers	16.00–21.00	
Dyers	20.00–30.00	
Woolen mills:		
Weavers	13.00–20.00	[2]
Spinners	13.00–20.00	[2]
Designers	30.00–40.00	[2]
Helpers	6.00–12.00	[2]
Technicians	40.00–60.00	[2]
Dyers	20.00–30.00	[2]
Laborers	10.00–12.00	[2]
Hat industry	19.00–25.00	5.00– 8.00
Sardine packing	10.00–15.00	4.00– 5.00
Biscuit and other food industries	10.00–15.00	5.00– 7.00
Enamelware industry:		
Foundry work	11.00–12.00	
Enameling	11.00–12.00	
Coloring, designing, etc	15.00–17.00	

Industry or occupation	Daily wages of—	
	Males	Females
Coal and metal mining	*Escudos*	*Escudos*
Coal miners	12.00–15.00	8.00–10.00
Metal mines:		
Miners	8.00–10.00	
Waste removers	7.00– 8.00	
Helpers	[3] 3.00– 4.00	4.00
Metallurgy		
Turners	20.00	
Fitters	30.00	
Plumbers	16.00–20.00	
Electricians	19.00–30.00	
Mechanics	33.00	
Laborers	12.00	
Helpers	14.00	
Agriculture		
Farm laborers	7.00– 9.00	3.00– 5.00
Sowing	7.00– 9.50	4.30– 5.60
Planting vines	7.20– 9.20	5.00– 7.00
Planting potatoes	7.40– 8.90	4.10– 4.40
Pruning olive trees	9.30	
Grafting trees	10.00–12.00	
Vintage	8.00	5.00
Vine dressing	7.60– 9.50	
Market gardening	8.10– 8.90	4.50– 5.60
Weeding		4.00– 5.00
Garden ng	10.00–18.00	
General work	7.50– 9.50	3.90– 5.40
Lumbering		
Sawyers	15.00–17.00	
Laborers	10.00–12.00	
Helpers	6.00– 8.00	

[1] Maximum earnings; paid by piecework.
[2] Women receive somewhat less than the wage paid men.
[3] Boys.

General Survey of Wages in Spain, 1931 [1]

FOLLOWING the revolution of April, 1931, a series of strikes took place, resulting in a marked upward trend in wages, and it is believed that at the first favorable opportunity further increases will be sought by labor. The rates shown in the present report, in effect late in 1931, should therefore not be regarded necessarily as permanent, continuing rates.

Attention is also directed to the fact that the decline in exchange value of the peseta makes the dollar value of the present wages less than the value of the lower wages paid several years ago. Conversions

[1] This report was furnished by American consular officers Manuel J. Codoner, Alicante; Claude I. Dawson, Barcelona; Raymond O. Richards, Madrid; Augustin W. Ferrin, Malaga; William B. Douglass, jr., Seville; S. Reid Thompson, Valencia; and Walter H. McKinney, Vigo.

into United States currency have in all cases in this article been made on the basis of the par value of the peseta—19.3 cents.

Deductions from wages.—Previous to the enforcement of a decree dated December 15, 1927, wage earners in Spain had not been required to pay a tax on their wages. That decree provided that a 3½ per cent tax should be levied on all wages of 3,250 pesetas ($627) or over per year. The decree caused a great deal of discontent among the laborers affected, but remained in force until after the revolution of 1931, when the provisional government repealed the law a week after coming into power (April 22).

Salaried workers were not so fortunate, however, and are still obliged to pay taxes on salaries of 1,500 pesetas ($290) and more per year. The table below gives the scale of these taxes.

Income:	Tax (per cent)
Over 1,500 to 2,000 pesetas ($290–$386)	2. 50
Over 2,000 to 3,000 pesetas ($386–$579)	3. 00
Over 3,000 to 4,000 pesetas ($579–$772)	3. 50
Over 4,000 to 5,000 pesetas ($772–$965)	4. 00
Over 5,000 to 6,000 pesetas ($965–$1,158)	4. 50
Over 6,000 to 7,000 pesetas ($1,158–$1,351)	5. 00
Over 7,000 to 8,000 pesetas ($1,351–$1,544)	5. 50
Over 8,000 to 9,000 pesetas ($1,544–$1,737)	6. 00
Over 9,000 to 11,000 pesetas ($1,737–$2,123)	7. 00
Over 11,000 to 13,000 pesetas ($2,123–$2,509)	8. 00
Over 13,000 to 15,000 pesetas ($2,509–$2,895)	9. 00
Over 15,000 to 20,000 pesetas ($2,895–$3,860)	10. 00
Over 20,000 pesetas (over $3,860)	11. 00

Payments supplementary to wages.—Workmen receive old-age pensions of 365 pesetas ($70.45) per year. No contributions for these pensions are required from the workers, the cost being borne by the employers and the State. (The worker may, however, contribute in order to increase the amount of the pension.) The employers' contribution is set at 10 céntimos (1.9 cents) per worker per day.

Employers are also required to protect their workers against industrial accidents, either by insuring with established insurance companies or by self-insurance.

General Level of Wages in the Barcelona District

In Table 1 are shown hourly wages in the important industries and occupations in the Barcelona district.

The wages paid in and around the city of Barcelona, and the consequent standard of living of the population, are probably higher than in any other part of Spain. The workmen are organized into unions, which are strong and alert to advance the interests of their members. The district has been the scene of many recent strikes in all branches of industry, which in some cases have resulted in increased wages or shorter working hours or both. The situation is not yet stable, and it is too early to report definitely the new wage scales effective under the agreements made to bring the strikes to an end. It may be stated, however, that neither the increases in wages granted nor the decrease of working hours have been very great, and for that reason the figures embodied in this report, some of which relate to a period about six months prior to the present date (September, 1931) are still close approximations to the present wage scales. An effort was made to check the official figures against the wages granted by the most recent

agreements, and this has been done in the case of the metallurgical industries. Wages in the textile industry have not been modified as a whole. Each establishment makes a separate agreement with its workers, and the impossibility of procuring data from each factory is obvious.

TABLE 1.—AVERAGE HOURLY RATES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE BARCELONA DISTRICT OF SPAIN, 1931

Males

[Conversions into United States currency on basis of peseta=19.3 cents]

Industry and occupation	Average hourly wages of—									
	Experts, overseers, and foremen		Master workmen		Assistants		Peons		Apprentices	
	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)
Mines, salt works and quarries	1.93	37.2	1.69	32.6	------	-------	1.00	-------	------	-------
Metallurgical industry:										
Aluminum foundries	1.56	30.1	1.25	24.1	1.00	19.3	------	-------	------	-------
Bronze works	1.31	25.3	1.13	21.8	1.00	19.3	------	-------	0.38	7.3
Blast furnaces	2.00	38.6	1.57	30.3	1.13	21.8	1.02	19.7	.79	15.2
Metal works	1.50	29.0	1.25	24.1	1.00	19.3	------	-------	------	-------
Siderurgical works	2.12	40.9	1.38	26.6	1.06	20.5	1.00	19.3	.52	10.0
Iron and other metal industries:										
Adjusters	------	-------	1.56	30.1	1.38	26.6	------	-------	------	-------
Boilermakers, copper	------	-------	1.50	29.0	1.38	26.6	------	-------	.38	7.3
Boilermakers, iron	1.63	31.5	1.38	26.6	------	-------	.75	14.5	.50	9.7
Heaters	------	-------	1.63	31.5	------	-------	------	-------	------	-------
Locksmiths	1.67	32.2	1.45	28.0	1.05	20.3	.90	17.4	.59	11.4
Blacksmiths	------	-------	1.50	29.0	1.17	22.6	------	-------	.46	8.9
Stove makers	------	-------	1.88	36.3	.75	14.5	------	-------	------	-------
Tinsmiths	1.38	26.6	1.13	21.8	.94	18.1	------	-------	.38	7.3
Mechanics	2.12	40.9	1.31	25.3	.94	18.1	.80	15.4	.42	8.1
Machine adjusters	3.00	57.9	1.31	25.3	.94	18.1	------	-------	.42	8.1
Nickel platers	------	-------	1.25	24.1	1.13	21.8	.73	14.1	------	-------
Iron-sheet makers	1.50	29.0	1.25	24.1	------	-------	------	-------	.25	4.8
Silversmiths	------	-------	1.50	29.0	1.25	24.1	------	-------	.44	8.5
Watchmakers	1.75	33.8	1.50	29.0	.80	15.4	------	-------	.44	8.5
Turners	1.75	33.8	1.50	29.0	.88	17.0	------	-------	.40	7.7
Chemical industries:										
Pharmacists' assistants	2.00	38.6	1.25	24.1	.82	15.8	------	-------	------	-------
Organic fertilizer workers	1.25	24.1	1.13	21.8	------	-------	------	-------	------	-------
Factory workers employed in manufacture of—										
Carbonic acid	1.98	38.2	1.25	24.1	------	-------	.69	13.3	------	-------
Briquettes	1.25	24.1	1.00	19.3	------	-------	.50	9.7	.31	6.0
Alcohol	------	-------	1.50	29.0	------	-------	1.00	19.3	------	-------
Starch	1.88	36.3	1.25	24.1	1.17	22.6	1.00	19.3	------	-------
Tar	1.19	23.0	.94	18.1	.88	17.0	.75	14.5	.38	7.3
Varnishes and colors	------	-------	1.37	26.4	------	-------	.84	16.2	------	-------
Shoe polish	------	-------	1.50	29.0	1.25	24.1	.64	12.4	.35	6.8
Celluloid	------	-------	1.38	26.6	1.25	24.1	------	-------	------	-------
Wax	------	-------	1.15	22.2	.94	18.1	.52	10.0	.30	5.8
Coke	------	-------	1.50	29.0	------	-------	.87	16.8	------	-------
Explosives	2.08	40.1	.96	18.5	------	-------	------	-------	------	-------
Gas	1.75	33.8	1.38	26.6	1.17	22.6	1.17	22.6	------	-------
Ice	1.58	30.5	1.25	24.1	1.13	21.8	------	-------	.38	7.3
Soap	1.56	30.1	1.25	24.1	------	-------	.83	16.0	.31	6.0
Oxygen	2.31	54.2	1.33	25.7	1.15	22.2	1.03	19.9	------	-------
Perfumery	2.08	40.1	1.06	20.5	------	-------	.69	13.3	------	-------
Paint	------	-------	------	-------	.87	16.8	------	-------	------	-------
Fireworks	------	-------	1.25	24.1	------	-------	.53	10.2	------	-------
Pharmaceutical products	------	-------	1.25	24.1	1.04	20.1	.63	12.2	------	-------
Chemical products	1.50	29.0	1.38	26.6	1.06	20.5	.94	18.1	.38	7.3
Dyes	1.25	24.1	1.00	19.3	------	-------	.88	17.0	.60	11.6

TABLE 1.—AVERAGE HOURLY RATES IN SPECEFIED INDUSTRIES AND OCCUPATIONS IN THE BARCELONA DISTRICT OF SPAIN, 1931—Continued

Males—Continued

Industry and occupation	Average hourly wages of—									
	Experts, overseers, and foremen		Master workmen		Assistants		Peons		Apprentices	
	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)
Textile industries:										
Bleaching, filling, cloth printing, and finishing	1.98	38.2	1.13	21.8	0.83	16.0			0.59	11.4
Cotton spinners	1.60	30.9	1.25	24.1	1.00	19.3	0.94	18.1	.46	8.9
Cotton weavers	1.88	36.3	1.35	26.1	1.25	24.1	.88	17.0	.44	8.5
Fillers and bleachers of wool and cotton textiles	2.08	40.1	1.30	25.1	1.08	20.8	.94	18.1	.31	6.0
Spinners and weavers of artificial silk	2.60	50.2	1.67	32.2	1.25	24.1				
Blanket-factory workers			1.50	29.0	1.00	19.3			.44	8.5
Corduroy-factory workers			1.56	30.1	1.00	19.3			.50	9.7
Tulle and curtain factory workers			1.50	29.0			1.13	21.8	.42	8.1
Jute spinners and weavers			1.52	29.3					.56	10.8
Silk fillers	1.13	21.8	1.00	19.3			.63	12.2		
Cord makers	1.25	24.1	1.13	21.8	1.00	19.3	.88	17.0	.25	4.8
Cotton-mill operatives	1.88	36.3	1.35	26.1	1.00	19.3	.88	17.0	.44	8.5
Building industry:										
Masons	1.63	31.5	1.50	29.0	1.38	26.6	1.00	19.3	.50	9.7
Asphalt layers	1.50	29.0	1.25	24.1			.88	17.0		
Lime makers	1.25	24.1	.94	18.1			.80	15.4	.44	8.5
Natural-cement workers			1.12	21.6			.95	18.3		
Artificial-cement workers			1.27	24.5			1.10	21.2	.40	7.7
Tile-floor workers			1.50	29.0						
Stucco plasterers	2.00	38.6	1.88	36.3			1.00	19.3	.50	9.7
Hydraulic engineers			1.50	29.0						
Marble setters	1.88	36.3	1.38	26.6	1.13	21.8	1.06	20.5	.44	8.5
Artificial-stone factory workers	1.88	36.3	1.50	29.0	1.04	20.1	1.00	19.3	.52	10.0
Wall painters			1.50	29.0	1.25	24.1			.53	10.2
Plasterers			1.88	36.3			1.25	24.1		
Electrical industries:										
Electricians, factory workers	1.88	36.3	1.30	25.1	.95	18.3	.67	12.9	.25	4.8
Electric-bulb factory workers	1.88	36.3	1.25	24.1	1.04	20.1	.70	13.5		
Electric-meter factory workers (mechanics)			1.35	26.1						
Electricians			1.31	25.3						
Smelters			1.19	23.0						
Tinsmiths			1.37	26.4						
Food industry: Factory workers employed in manufacture of—										
Candy	1.67	32.2	1.04	20.1	.94	18.1			.35	6.8
Beer	2.08	40.1	1.45	28.0	1.00	19.3	.60	11.6	.40	7.7
Confectionery	2.00	38.6	1.25	24.1			.60	11.6	.45	8.7
Preserves			1.31	25.3	1.00	19.3	.63	12.2		
Chocolate	1.56	30.1	1.25	24.1	.88	17.0				
Biscuits	1.56	30.1	1.19	23.0			.53	10.2		
Flour	1.67	32.2	1.25	24.1	1.04	20.1				
Liquors	1.46	28.2	1.35	26.1	1.13	21.8				
Bakery products	1.73	33.4	1.25	24.1	1.13	21.8	.60	11.6	.45	8.7
Soup paste	1.46	28.2	1.31	25.3	1.00	19.3			.45	8.7
Salt	1.38	26.6	1.15	22.2						
Printing industry, book:										
Compositors	1.50	29.0	1.25	24.1						
Proof readers			1.70	32.8						
Stereotypers			1.66	32.0						
Machinists			1.87	36.1						
Linotype operators	3.12	60.2	2.29	44.2	1.98	38.2				
Lithographers	2.12	40.9	1.25	24.1	.98	38.2			.38	7.3
Typographers	2.77	53.5	1.59	30.7	1.15	22.2	.94	18.1	.49	9.5
Bookbinders	1.63	31.5	1.25	24.1	1.00	19.3	.88	17.0	.31	6.0
Photo-engravers			1.43	27.6	1.25	24.1	1.02	19.7		
Lithographers (on metal)	1.69	32.6	1.23	23.7	.88	17.0	.81	15.6	.40	7.7

TABLE 1.—AVERAGE HOURLY RATES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE BARCELONA DISTRICT OF SPAIN, 1931—Continued

Males—Continued

Industry and occupation	Average hourly wages of—									
	Experts, overseers, and foremen		Master workmen		Assistants		Peons		Apprentices	
	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)
Paper industry: Factory employees engaged in manufacture of—										
Calendars (in color)	1.77	34.2	1.35	26.1	1.25	24.1				
Cardboard boxes			1.25	24.1	.63	12.2			0.25	4.8
Posters			1.16	22.4						
Cigarette papers	1.38	36.3	1.38	26.6	1.13	21.8	0.75	14.5	.38	7.3
Stained paper	1.56	30.1					.73	14.1	.44	8.5
Envelopes	1.50	29.0	1.20	23.2	.83	16.0			.48	9.3
Leather industry:										
Factory employees engaged in manufacture of—										
Leather articles	2.12	40.9	1.50	29.0	1.25	24.1			.38	7.3
Leather belting			1.25	24.1	1.04	20.1	.63	12.2		
Harness	1.25	24.1	1.15	22.2						
Fur	1.67	32.2	1.45	28.0			.88	17.0	.52	10.0
Patent leather			1.13	21.8	.69	13.3				
Tanners	1.56	30.1	1.13	21.8	1.00	19.3				
Lumber industry:										
Sawyers, machine	1.56	30.1	1.25	24.1	.94	18.1	.88	17.0	.52	10.0
Packing-box factory employees	1.56	30.1	1.31	25.3	.94	18.1			.51	9.8
Window-blind factory employees	1.50	29.0	1.38	26.6	1.13	21.8			.45	8.7
Carvers	1.80	34.7	1.45	28.0	1.20	23.2				
Coopers	1.79	34.5	1.67	32.2			1.00	19.3	.38	7.3
Transportation:										
Automobile repair shops	1.63	31.5	1.25	24.1	1.00	19.3	.88	17.0	.38	7.3
Workers employed in loading and unloading—										
Cotton			1.88	36.3						
Cereals			1.88	36.3						
Ship cargoes			1.88	36.3						
Minerals			1.88	36.3						
Wagon manufacture	1.58	30.5	1.25	24.1	1.02	19.7			.45	8.7
Wagon drivers	1.30	25.1	1.25	24.1	.74	14.3			.38	7.3
Carriage manufacture	2.23	43.0	1.50	29.0	1.13	21.8				
Taxicab drivers			[1].94	18.1						
Locomotive engineers			2.12	40.9	1.48	28.6				
Workers engaged in—										
Repair of locomotives, cars, etc	2.19	42.3	1.38	26.6	1.25	24.1	1.21	23.4		
Maintenance of locomotives	2.08	40.1	1.54	29.7	1.27	24.5	1.20	23.2		
Maintenance of railroad Cars	2.21	42.7	1.90	36.7	1.25	24.1				
Inspectors			1.38	26.6						
Station masters			1.25	24.1						
Ticket-office employees			.94	18.1						
Baggage-masters			.94	18.1						
Switchmen			.93	17.9						
Night watchmen			.89	17.2						
Train inspectors			1.00	19.3						
Conductors			.91	17.6						
Furniture industry:										
Mattress makers			1.12	21.6					.45	8.7
Cabinetmakers	1.63	31.5	1.38	26.6	.88	17.0			.31	6.0
Chair-factory employees			.94	18.1					.25	4.8
Upholsterers	1.65	31.8	1.38	26.6					.45	8.7
Pottery and ceramics industry:										
Potters	1.13	21.8	1.00	19.3			.45	8.7	.38	7.3
Ceramics workers	1.75	33.8	1.00	19.3	.88	17.0				
Porcelain workers	1.75	33.8	1.06	20.5			.70	13.5		
Glass and crystal industry:										
Window-glass factory workers	1.75	33.8	1.50	29.0	.73	14.1	1.13	21.8	.31	6.0
Engravers			1.44	27.8						
Glass cutters	1.75	33.8	1.56	30.1						

[1] Plus 20 per cent of amount collected.

TABLE 1.—AVERAGE HOURLY RATES IN SPECIFIED INDUSTRIES AND OCCUPATIONS IN THE BARCELONA DISTRICT OF SPAIN, 1931—Continued

Females

Industry and occupation	Average hourly wages of—									
	Experts, overseers, and foremen		Master workmen		Assistants		Peons		Apprentices	
	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)	Spanish currency (pesetas)	U. S. currency (cents)
Iron industry: Factory workers engaged in manufacture of—										
Chains			0.69	13.3	0.44	8.5			0.38	7.3
Metal caps	1.13	21.8	.63	12.2	.57	11.0				
Metal containers			.56	10.8	.41	7.9			.38	7.3
Chemical industry: Factory workers engaged in manufacture of—										
Celluloid			.58	11.2	.31	6.0				
Pharmaceutical products			.75	14.5	.44	8.5			.19	3.7
Chemical products			.63	12.2	.48	9.3				
Perfumery			.64	12.4	.50	9.7			.25	4.8
Textile industries:										
Bleaching, filling, dyeing, cloth printing, etc	.95	18.3	.83	16.0	.75	14.5				
Cotton textiles—spinners	1.53	29.5	.70	13.5	.61	11.8				
Woolen textiles—										
Operators of wide looms			1.20	23.2						
Operators of narrow looms			.89	17.2						
Weavers			.89	17.2						
Warpers			1.04	20.1						
Blanket-factory employees			1.25	24.1	.63	12.2			.44	8.5
Jute weaving and spinning			.69	13.3	.56	10.8			.45	8.7
Silk fillers			.88	17.0	.63	12.2			.35	6.8
Horsehair spinners	1.13	21.8	1.00	19.3						
Food industry: Factory workers engaged in manufacture of—										
Candy					.38	7.3				
Chocolate			.75	14.5						
Confectionery			.50	9.7	.45	8.7			.31	6.0
Biscuits	.88	17.0	.63	12.2	.44	8.5				
Liquors			.69	13.3						
Vermouth			.63	12.2	.44	8.5			.18	3.5
Paper industry: Factory workers engaged in manufacture of—										
Calendars			.83	16.0	.42	8.1			.31	6.0
Cardboard boxes			.75	14.5	.69	13.3			.31	6.0
Cigarette papers	.69	13.3	.63	12.2	.52	10.0			.38	7.3
Stained paper					.52	10.0			.31	6.0
Envelopes	.80	15.4	.60	11.6	.52	10.0			.36	6.9
India-rubber products			1.00	19.3	.69	13.3			.38	7.3
Rubber soles					.56	10.8			.38	7.3
Leather industry: Factory workers engaged in manufacture of—										
Leather articles			.94	18.1	.75	14.5			.44	8.5
Fur	1.38	26.6	1.25	24.1					.31	6.0

Wages in Manufacturing Industries

Chemical Industries

Soap industry.—In the soap industry of the Valencia district soap makers are paid 20 pesetas ($3.86) per day; assistants, 8.50 pesetas ($1.64); helpers, 7.50 pesetas ($1.45); and the women who cut and stamp the soap, 2.25 to 3.50 pesetas (43 to 68 cents) per day.

Perfume and essence industry.—The women employed in the perfume industry in the Valencia district have the following rates: Packers, 2.75 to 3.50 pesetas (53 to 68 cents); other employees from 1.75 to 3.00 pesetas (34 to 58 cents).

Clay, Glass, etc., Industries

Pottery and ornamental tile industry.—In this industry the majority of the plants in the Valencia district are on a piecework basis, but when the work is done on a time-work basis the daily rate is as shown below.

	Pesetas	
Pottery:		
Oven packers and firers	12. 00–14. 00	($2. 32–$2. 70)
Turners	7. 50–15. 00	($1. 45–$2. 90)
Decorators, female	3. 00– 6. 50	($0. 58–$1. 25)
Tiles:		
Oven packers and tenders	12. 00–14. 00	($2. 32–$2. 70)
Press operators	10. 00	($1. 93)
Journeymen	9. 00	($1. 74)
Apprentices	1. 50	($0. 29)
Helpers	5. 50	($1. 06)

Food Industries

Table 2 shows the daily wage rates in the canning and paprika industries in specified districts.

These industries have a normal 8-hour day and 48-hour week.

In the paprika mills, overtime is paid for at the rate of time and a quarter for the first two hours, while in the canneries in the Province of Murcia the men receive time and a quarter for overtime but the women are paid at the rate of time and a half.

The rates shown for the fish canneries of Vigo district are the official scale in effect in all of the fish-canning plants in the district. This scale was put into effect in the fall of 1931, and represents an increase over the rates formerly paid. There is no piecework in this industry.

TABLE 2.—AVERAGE DAILY WAGES IN THE CANNING AND PAPRIKA INDUSTRIES IN SPECIFIED DISTRICTS IN SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Industry, and class of worker	Average daily wages		Industry and class of worker	Average daily wages	
	Spanish currency	United States currency		Spanish currency	United States currency
Paprika mills, Murcia:	*Pesetas*		Fish canneries, Vigo—Con.	*Pesetas*	
Foremen	10. 00–15. 00	$1. 93–$2. 90	Solderers	6. 35	$1. 23
Skilled workers	6. 00– 8. 00	1. 16– 1. 54	Truck loaders and roustabouts	7. 00	1. 35
Semiskilled workers	5. 00– 7. 00	. 97– 1. 35	Apprentice solderers	3. 50	. 68
Fruit and vegetable canneries, Murcia:			Other apprentices	3. 00	. 58
Foremen	15. 00–20. 00	2. 90– 3. 86	Women—		
Skilled workers	8. 00–12. 00	1. 54– 2. 32	Forewomen and packing inspectors	3. 50	. 68
Semiskilled workers	5. 00– 7. 00	. 97– 1. 35	Can inspectors	3. 25	. 63
Apprentices	3. 00– 4. 00	. 58– . 77	Can packers	2. 87– 3. 12	$0. 55– . 60
Women	3. 00– 5. 00	. 58– . 97	Cleaners and case packers	2. 25– 2. 75	. 43– . 53
Boys over 14 years of age	2. 00– 3. 00	. 39– . 58	Helpers	2. 00	. 39
Fish canneries, Vigo:			Canneries, Valencia:		
Chauffeurs and mechanics	10. 60	1. 93	Males	7. 50–10. 00	1. 45– 1. 93
Press operators	7. 50	1. 45	Apprentices, female	. 75– 1. 00	. 14– . 19
Can inspectors and stokers	7. 50	1. 45	Other females	3. 00– 4. 00	. 58– . 77

Green-olive industry, Seville district.—The green-olive industry has been one of the industries of the Seville district most seriously affected by the strikes and labor disturbances that followed the change in the political régime of Spain. Strikes of the field workers and pickers of olives had not yet been settled in some of the olive districts at the time the present report was prepared.[2] The harvest season for green olives commenced about the middle of September and an extraordinary effort was made by the local government to bring about some settlement of the strikes in order that the green-olive crop would not go unharvested and result in a total loss. As a result of this effort agreements were concluded between workers and employers in most of the olive districts of this Province. These agreements are different in the various districts, with the result that there is considerable variance in the wages paid to the workers, as well as in the hours of labor, in the different districts. In general, however, all wages are considerably above those formerly paid and the hours of labor are shorter.

The following figures represent average wages, and are based upon the agreements between employers and workers, but they can not be considered in any way permanent in view of the extremely unsettled labor conditions existing at the present time in this consular district:

Below are shown the daily rates paid to women working on a time-work basis.

	Pesetas
Weighers of stuffed olives, bottlers, and pitters	5. 50 ($1. 06)
Weighers	5. 10 ($0. 98)
Sorters	4. 10 ($0. 79)
Inspectors	4. 60 ($0. 89)
Preparers of pimiento stuffing	5. 50 ($1. 06)
Packers of containers	4. 50 ($0. 87)
Apprentices [3]	4. 10 ($0. 79)

The women who wash bottles and paste on labels are considered helpers and earn the same wage as the sorters.

The male workers and harvesters are paid at the rate of 8.25 to 9.00 pesetas ($1.59 to $1.74) per day. When it is necessary for the pickers to remain outside the town of their residence overnight they are entitled to additional pay of about 75 céntimos (14.5 cents) per day, plus subsistence.

Nearly all of the work done by the men is outside or field work, which is paid for at the above rates. When pitting and stuffing is done by men, it is usually done at piecework rates, given below. Most of the workers who stuff and pit the green olives prefer to be paid on a piecework basis, since a good worker can make more money in this way. The piecework rates for pitting and stuffing vary with the size of the olives, and are as follows:

---

[2] In the late fall of 1931.

[3] The apprentices are for all classes of work except sorters, and may be taken on only if there are no trained workers available. The time of apprenticeship is four months, at the end of which the employee is entitled to earn the full day's pay for her type of work.

TABLE 3.—PIECE RATES PAID FOR PITTING AND STUFFING OLIVES IN THE SEVILLE DISTRICT, SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Type of olives and number per kilogram	Piece rates per kilogram			
	Pitting		Stuffing	
	Spanish currency	United States currency	Spanish currency	United States currency
Queen olives:	*Pesetas*	*Cents*	*Pesetas*	*Cents*
70 to 90	0.12	2.3	0.10	1.9
90 to 110	.13	2.5	.12	2.3
110 to 130	.14	2.7	.13	2.5
130 to 150	.15	2.9	.14	2.7
150 to 180	.16	3.1	.15	2.9
180 to 220	.18	3.5	.16	3.1
Manzanilla olives:				
180 to 200	.17	3.3	.16	3.1
200 to 220	.18	3.5	.16	3.1
240 to 260	.19	3.7	.17	3.3
180 to 300	.21	4.1	.20	3.9
300 to 320	.22	4.2	.21	4.1
340 to 360	.24	4.6	.22	4.2

It is estimated that a skilled worker can earn from 10 to 15 pesetas ($1.93 to $2.90) per day pitting and stuffing on a piecework basis, without overtime. Many workers, however, prefer to work extra hours and earn as much as 20 pesetas ($3.86) per day.

The working week is usually 6 days of 8 hours each, from 8 a. m. until 5 p. m., with an hour off for lunch, but in a few districts the harvesters and field workers have demanded and have been granted a shorter working-day, varying in the different districts from 5 to 7 hours. These hours are exclusive of the time required in going to and from the fields. Payment for overtime is made for each hour of work over the prescribed hours at the rate of time and a half, except that overtime between the hours of midnight and 6 a. m. is at double the regular wage. According to present agreements, however, overtime work is not to be allowed while there are unemployed workers available. Work on Sunday is paid for at double the regular rates. On any day on which work is suspended, because of rain or other reasons not the fault of the workers, except Sundays and holidays, workers will be entitled to full pay.

The only supplementary allowances are those occasionally made in special circumstances for subsistence, which are already shown in the foregoing schedule of wage rates, except that eating utensils, salt, pepper, and oil are usually furnished to the harvesters and field workers.

Olive-oil industry, Seville district.—In a few of the olive-growing districts, where tentative agreements for the harvesting of olives for oil were included in the agreements covering the harvesting of the green olive crop, it was possible to secure statistics of wage rates, and these have been made the basis for the wage rates given below. Wages

paid in connection with the grinding of the olives and the extraction of the oil, that is, what might be considered the actual factory wages, have been furnished by some of the larger olive-oil manufacturers, and represent wage rates now in effect. These rates, however, are apt to undergo considerable revision when the coming olive-grinding season begins.

	Pesetas	
Pickers or harvesters	7. 50–9. 00	($1. 45–$1. 74)
Trimming and pruning of olive trees	5. 50	($1. 06)
Diggers (around the roots of the olive trees)	9. 00	($1. 74)
Workers in grinding and oil extraction:		
Men	9. 00	($1. 74)
Women and children	4. 50–6. 00	($0. 87–$1. 16)

Wages are usually based upon an 8-hour working-day, although efforts are being made in some localities to secure a 5-hour day. Overtime is paid for at the rate of 50 per cent above the regular rates. The only occasions when special allowances are made are those when it is necessary for the workers to remain outside of their towns all night, when the workers are entitled to an additional peseta (19.3 cents) per day, plus meals.

Olive-oil industry, Malaga district.—In the olive-oil mills in the Malaga district the wages range from 8 to 15 pesetas ($1.54 to $2.90) per day of eight hours.

Leather Industries

Tanning industry.—In the tanning industry of the Valencia district the following daily wages are paid:

	Pesetas	
Tanners, journeymen	8. 50–9. 50	($1. 64–$1. 83)
Tanners, subjourneymen	4. 50–5. 50	($0. 87–$1. 06)
Apprentices	1. 50	($0. 29)
Dyers and finishers	9. 50–11. 00	($1. 83–$2. 12)

Shoe industry.—Wages of workers engaged in the manufacture of boots and shoes in the Province of Alicante and in the Valencia district are shown in Table 4. The industry has an 8-hour day and 48-hour week. Time and a third is paid for any overtime worked.

TABLE 4.—AVERAGE WAGES IN THE SHOE INDUSTRY IN PROVINCE OF ALICANTE AND VALENCIA DISTRICT OF SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

District, and class of worker	Average wages per week		District, and class of worker	Average wages per day	
	Spanish currency	United States currency		Spanish currency	United States currency
Province of Alicante:	*Pesetas*		Valencia district:	*Pesetas*	
Foremen	70. 00	$13. 51	Journeymen	8. 00– 9. 50	$1. 54–$1. 83
Skilled workers	60. 00	11. 58	Subjourneymen	4. 50	. 87
Semiskilled workers	48. 00	9. 26	Apprentices	1. 00	. 19
Apprentices	30. 00	5. 79	Cutters	11. 00–14. 00	2. 12– 2. 70
	Per day		Shapers	12. 00–20. 00	2. 32– 3. 86
			Sewers, female	3. 50– 4. 50	. 68– . 87
			Sewers' helpers, female	3. 00– 3. 50	. 58– . 68
Women	3. 00	$0. 58			
	5. 00	. 97			
Boys over 14 years of age	7. 00	1. 35			
	3. 00	. 58			
	5. 00	. 97			

Mining, Metals, etc., Industries

Statistics of wages in several branches of mining and metallurgy in various parts of Spain are shown in Table 5. The regular hours of work are also given. In the lead, iron, etc., mines and also in the metallurgical industry in the Province of Murcia, 25 per cent extra is paid for each of the first two hours of overtime; in the metallurgical industry in the Province of Alicante the rate for overtime is 30 per cent above the regular rate for the first two hours and double rates thereafter.

The coal-mining industry in Spain is closely protected by the Government through import duties, obligatory consumption of domestic coal by certain protected industries, and through much other legislation of a paternal character. The Government likewise maintains a very close control of the social and economic condition of the workers in the industry, and the scale of minimum wages, shown in the table, was only recently put into effect in the Asturian fields by the Government, as a result of certain labor troubles in the coal-mining industry in that part of the country.

TABLE 5.—AVERAGE WAGES IN THE MINING AND METALS INDUSTRIES IN SPECIFIED DISTRICTS IN SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Branch of industry, district, and class of worker	Average daily wages		Hours per day
	Spanish currency	United States currency	
Mining			
	Pesetas		
Iron mines, Valencia district: Miners	4.50– 6.00	$0.87–$1.16	6
Lead, iron, zinc, blend, tin, and sulphur mines, Province of Murcia:			
Foremen	15.00–25.00	2.90– 4.83	8
Skilled miners	10.00–15.00	1.93– 2.90	8
Semiskilled miners	6.00– 8.00	1.16– 1.54	8
Apprentices	3.00– 5.00	.58– .97	8
Women	2.00– 4.00	.39– .77	8
Coal mines, Province of Oviedo: [1]			
Underground work—			
Miners, first class	12.00	2.32	7
Drillers	11.00	2.12	7
Pickers	11.00	2.12	7
Drivers, first class	11.00	2.12	7
Drivers, second class	9.50	1.83	7
Pick and shovel men, assistants	9.50	1.83	7
Drillers, assistants	9.50	1.83	7
Hoist and road men	9.50	1.83	7
Hoist and road men, assistants	8.60	1.66	7
Wagon men and loaders	9.00	1.74	7
Track men, with 2 years' service	8.00	1.54	7
Track men, with less than 2 years' service	7.00	1.35	7
Beginners	5.00	.97	7
Surface work—			
Mechanics, carpenters, etc	10.00	1.93	8
Assistants	7.50	1.45	8
Common laborers	8.50	1.64	8
Women	7.00	1.35	8
Beginners	4.50	.87	8
Tin mines, Province of Corunna:			
Underground work—			
Miners, first class	12.00	2.32	8
Miners, second class	10.00	1.93	8
Assistants	8.50	1.64	8
Common laborers and track men	7.50	1.45	8
Surface work—			
Mill mechanics	10.00	1.93	8
Carpenters, masons, etc	9.00	1.74	8
Sorters and pickers, female	2.00	.39	8
Boys for general work	2.50	.48	8

[1] Rates shown are minimum rates, set by decree.

TABLE 5.—AVERAGE WAGES IN THE MINING AND METALS INDUSTRIES IN SPECIFIED DISTRICTS IN SPAIN, 1931—Continued

Branch of industry, district, and class of worker	Average daily wages		Hours per day
	Spanish currency	United States currency	
Metallurgy			
Metallurgical industry, Province of Alicante:	*Pesetas*		
Foremen	[2] 1.25– 1.75	[2]$0.24–$0.34	8
Skilled workmen	[2] 1.00– 1.35	[2] .19– .26	8
Semiskilled workmen	[2] .75– .90	[2] .14– .17	8
Apprentices	[2] .50	[2] .10	8
Metallurgical industry, Province of Murcia:			
Foremen	12.00–16.00	2.32– 3.09	8
Skilled workmen	8.00–10.00	1.54– 1.93	8
Semiskilled workmen	5.00– 7.00	.97– 1.35	8
Apprentices	3.00– 4.00	.58– .77	8
Boys over 14 years of age	2.00– 3.00	.39– .58	8
Steel industry, Valencia district:			
Puddlers	9.50–10.50	1.83– 2.03	[3]
Rolling-mill men	15.00–20.00	2.90– 3.86	[3]
Journeymen	8.50	1.64	[3]
Helpers	6.50	1.25	[3]
Other employees	7.50– 9.00	1.45– 1.74	[3]

[2] Per hour.
[3] No data.

An agreement signed by the workers and employers in the metallurgical industry in August, 1931, establishes the following minimum scale of wages per day:

	Pesetas	
Helpers	9.00	($1.74)
Specialized helpers	10.00	($1.93)
Master workmen, first class	11.00	($2.12)
Master workmen, second class	12.50	($2.41)
Apprentices:		
First year	3.00	($0.58)
Second year	4.00	($0.77)
Third year	5.00	($0.97)
Fourth year	6.50	($1.25)

Apprentices must have reached 14 years of age before entering upon their apprenticeship. After serving 4 years' apprenticeship, the worker will receive the minimum rate of 8 pesetas ($1.54) per day, which will be increased by 1.50 pesetas (29 cents) each year until he attains the minimum rate set for master workmen of the second class.

The following minimum rates were set for women:

	Pesetas	
Skilled workers	7.00	($1.35)
Semiskilled workers	6.00	($1.16)
First-class workers	6.00	($1.16)
Second-class workers	5.00	($0.97)
Auxiliary workers and assistants:		
Over 20 years of age	4.50	($0.87)
Over 17 to 20 years of age	4.00	($0.77)
Over 15 to 17 years of age	3.50	($0.68)
Apprentices, under 15 years of age	2.50	($0.48)

Paper Industry

The following statement shows the average weekly wage rates of workers in the paper mills in the Province of Alicante:

	Pesetas	
Foremen	100–150	($19.30–$28.95)
Skilled workmen	60– 75	($11.58–$14.48)
Semiskilled workmen	40– 50	($7.72– $9.65)
Apprentices	20– 25	($3.86– $4.83)
Women, and boys over 14 years of age	15– 25	($2.90– $4.83)

Shipbuilding Industry

Table 6 shows the average daily wages in an important shipyard in the Valencia district.

TABLE 6.—WAGES IN THE SHIPBUILDING INDUSTRY IN THE VALENCIA DISTRICT OF SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Class of worker	Average daily wage		Class of worker	Average daily wage	
	Spanish currency	United States currency		Spanish currency	United States currency
Machine shops:	*Pesetas*		Woodworking shops:	*Pesetas*	
Journeymen	9. 50	$1. 83	Journeymen	8. 00–9. 50	$1. 54–$1. 83
Subjourneymen	7. 50	1. 45	Subjourneymen	7. 50	1. 45
Helpers, first class	6. 50	1. 25	Helpers, first class	6. 50	1. 25
Helpers, second class	5. 50	1. 06	Helpers, second class	5. 50	1. 06
Fitters	12. 00	2. 32	Apprentices	1. 50	. 29
Riggers	12. 00	2. 32	Section foremen	10. 00	1. 93
Lathe operators	8. 50–12. 00	$1. 64–2. 32	Calkers, journeymen	12. 00–15. 00	2. 32– 2. 90
Electricians	12. 00	2. 32	Calkers, helpers	8. 00– 9. 50	1. 54– 1. 83

Textile Industries

Table 7 gives the average wages in the textile mills in specified districts in Spain. The textile industry works an 8-hour day and 48-hour week. In the mills in the Province of Alicante overtime is paid for at the rate of time and a half; and in the silkworm-gut and silk mills in the Province of Murcia at the rate of time and a quarter for the first two hours of overtime worked.

TABLE 7.—AVERAGE WAGES IN THE TEXTILE INDUSTRIES IN SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Class of mill and of workers	Average wages per week		Class of mill and of workers	Average wages per day	
	Spanish currency	United States currency		Spanish currency	United States currency
Textile mills, Alicante:	*Pesetas*		Silk mills, Murcia:	*Pesetas*	
Foremen	100. 00	$19. 30	Foremen	12. 00–20. 00	$2. 32–$3. 86
Skilled workmen	60. 00	11. 58	Skilled workmen	8. 00–10. 00	1. 54– 1. 93
Semiskilled workmen	50. 00	9. 65	Semiskilled workmen	4. 00– 6. 00	. 77– 1. 16
Apprentices	35. 00	6. 76	Apprentices	2. 00– 3. 00	. 39– . 58
	Per day		Women, and boys over 14 years of age	2. 00– 3. 00	. 39– . 58
			Gunny-sack factories, Valencia:		
			Male workers	7. 50	1. 45
Silkworm-gut factories, Murcia:			Weavers and sewers, female	3. 00– 3. 75	. 58– . 72
Foremen	10. 00–15. 00	$1. 93– 2. 90	Apprentices (boys)	1. 00– 1. 75	. 19– . 34
Skilled workmen	6. 00– 8. 00	1. 16– 1. 54			
Semiskilled workmen	4. 00– 5. 00	. 77– . 97			
Women	3. 00– 4. 00	. 58– . 77			

Wood Industries

Table 8 shows the wage rates in the various wood industries, specified districts in Spain. The working hours in the lumber, logging, furniture, and cork industries shown are 8 per day and 48 per week; those in the other industries given are not reported. Overtime is paid for in the furniture industry in the Province of Murcia at the rate of time and a quarter and in the cork industry at from time and a half to double time; for the other industries included in the table there are no data on this point.

TABLE 8.—WAGES IN THE WOOD AND WOODWORKING INDUSTRIES IN SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Branch of industry, district, and class of worker	Average daily wage		Branch of industry, district, and class of worker	Average daily wage	
	Spanish currency	United States currency		Spanish currency	United States currency
Logging, Vigo:	*Pesetas*		Barrel factories, Valencia:	*Pesetas*	
Cutters and loggers	[1] 3.00–3.50	[1] $0.58–$0.68	Coopers	12.00	$2.32
Sawmills, Vigo:			Coopers, assistants	6.50–7.50	$1.25–1.45
Mechanics and millwrights	10.00	1.93	Helpers	7.50	1.45
Sawyers	8.00	1.54	Cork works, Seville:		
Assistants	6.50	1.25	Sorters, raw cork	10.00–12.50	1.93–2.41
Laborers	5.00	.97	Operators of machines cutting bottle stoppers—		
Furniture factories, Murcia:			Males	7.50	1.45
Foremen	11.00–14.00	2.12–2.76	Females	4.50	.87
Skilled workmen	8.00–10.00	1.54–1.93	Sorters of bottle stoppers—		
Semiskilled workmen	5.00–6.00	.97–1.16	Women	5.00–5.50	.97–1.06
Apprentices	2.00–3.00	.39–.58	Girls	3.50–4.50	.68–.87
Women	3.00–5.00	.58–.97	Oven men	11.50–12.00	2.22–2.32
Boys over 14 years of age	2.00–3.00	.39–.58	Laborers	7.50	1.45
Furniture and veneer factories, Valencia:			Apprentices	2.75–4.00	.53–.77
Cabinetmakers	8.00–9.50	1.54–1.83			
Lathe operators	10.00–11.00	1.93–2.12			
Wood carvers	11.00–15.00	2.12–2.90			
Subjourneymen	4.75	.92			
Apprentices	1.50	.29			

[1] Rate per cubic meter.

Practically the only lumber produced in the Vigo district is silver pine, which is cut into box shooks for which there is a large market throughout Spain.

Wages in the cork industry have in most instances been fixed by agreement between employers and workers at each factory. As in the case of other industries of this district, wages in the cork industry have been very unstable since the change to the republican form of government. There have been many strikes and the wage rates, as well as hours of labor and other working conditions, will doubtless undergo many changes before conditions may again be considered normal. The wages shown in Table 8 are those paid by the largest American manufacturer of cork products in this district, and are possibly slightly higher than those paid by other manufacturers, as well as higher than the wage rates paid in the smaller towns and villages, but as all wage rates tend at this time toward upward revision, these higher rates may be considered as representative of the industry.

Although the daily wage is the more common method of payment in the cork industry some factories pay their workmen on a piecework basis. The piecework rates are agreed upon in each instance between employers and workers and consequently may vary for each factory; in general, however, the above wage rates may be considered as average earnings in the industry.

Miscellaneous Industries

Table 9 shows the average daily wages in certain miscellaneous manufacturing industries. In the esparto-grass and fishing-tackle industry the employees work an 8-hour day and 48-hour week; for overtime the rate in both these industries is time and a quarter, but is paid only for the first two hours in the manufacture of fishing tackle. Data on these points are not given for the cement industry.

TABLE 9.—WAGES IN MISCELLANEOUS MANUFACTURING INDUSTRIES IN SPAIN, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Industry, district, and class of worker	Average daily wage		Industry, district, and class of worker	Average daily wage	
	Spanish currency	United States currency		Spanish currency	United States currency
Cement works, Valencia:	*Pesetas*		Esparto-grass industry, Murcia—Continued.		
Engineers	9.50–12.00	$1.83–$2.32	Boys over 14 years of age	*Pesetas* 2.00– 4.00	$0.39–$0.77
Helpers	5.50– 6.50	1.06– 1.25	Fishing-tackle industry, Murcia:		
Other employees	6.00– 8.50	1.16– 1.64	Foremen	10.00–15.00	1.93– 2.90
Esparto-grass industry, Murcia:			Skilled workmen	6.00– 9.00	1.16– 1.74
Foremen	9.00–12.00	1.74– 2.32	Semiskilled workmen	6.00– 7.00	.97– 1.35
Skilled workmen	6.00– 8.00	1.16– 1.54	Apprentices	2.00– 3.00	.39– .58
Semiskilled workmen	4.00– 6.00	.77– 1.16	Women	3.50– 5.00	.68– .97
Apprentices	2.00– 3.00	.39– .58			
Women	2.00– 3.00	.39– .58			

Wages in Agriculture

Madrid District

THE present average daily wage rates for agricultural laborers in the Madrid consular district, which includes the 10 Provinces in the central and west central parts of Spain, are as follows:

	Pesetas	
Overseers	5.00	($0.97)
Assistant overseers	4.50	($0.87)
Bosses	4.25	($0.82)
Common laborers	3.00–4.00	($0.58–$0.77)

Laborers over 16 years of age engaged by the year for agricultural work are paid at the rate of 4.50 pesetas (87 cents) per day, and must work 253 days of the year. Wages are not paid for days not worked on account of sickness and other unforeseen reasons for which the employer is not responsible.

The normal full-time hours are 8 per day and 48 per week. Overtime is paid for at the rate of 25 per cent extra for the first two hours and 40 per cent thereafter.

There are no supplementary payments such as family allowances, payments in kind, paid holidays, but workers of all classes are generally given free housing and a patch of land for gardening purposes. It is also customary for the landowner to allow the overseer and assistant,

and in some cases all laborers, to cultivate several acres of land each. Inasmuch as the land and seed for sowing is free, being furnished by the owner, a good crop year often nets the cultivator an income of 2,000 to 3,000 pesetas ($386 to $579) a year.

Seville District

The Seville consular district is principally an agricultural region and workers engaged in agricultural pursuits represent the bulk of the total employed population. The most important of the agricultural products of this district are the olives, both green and those ground for oil, but the gathering and preparation of olives represent a distinct industry, data for which were given on page 184.

In this section are grown various fruit and field crops, such as oranges, grapes, wheat, barley, corn, beans, and canary seed. The wheat, barley, corn, and beans are grown chiefly for local consumption and do not figure in international trade. Oranges and canary seed, however, are important exportable crops of this district, and many tons of each are exported annually, chiefly to Great Britain. Grapes, while not exported from this district, are the basis of the wine industry of Jerez.

As in the case of other industries of this district, wages paid to workers in agricultural pursuits have been the subject of countless disputes and discussions ever since the change of government in Spain. There have been many strikes of agricultural workers, some of which have not yet been settled, and the question of wages for agricultural workers is one still under discussion in most parts of this district. In a few instances, however, agreements have been reached, and while these are in no way permanent, they at least serve as an indication of the rates likely to be paid to agricultural workers. The following wage rates have been taken from agreements made recently between agricultural workers and employers in several agricultural districts of this Province.

TABLE 10.—AVERAGE DAILY WAGES OF AGRICULTURAL WORKERS IN THE SEVILLE DISTRICT, 1931

[Conversions into United States currency on basis of peseta=19.3 cents]

Process and occupation	Average daily wage		Process and occupation	Average daily wage	
	Spanish currency	U. S. currency		Spanish currency	U. S. currency
	Pesetas			*Pesetas*	
Hoeing	6.50	$1.25	Spring sowing work—Continued.		
Grafting work:			Operators of manuring and sowing machines	5.25	$1.01
Grafters	10.00	1.93	Weeders using small hoe—		
Cutters	9.00	1.74	Men	5.00	.97
Workers who place the clay mixture around the grafted parts	8.00	1.54	Women and children	3.50	.68
Ploughing:			Harvesting work:		
Teamsters, driving mules	5.25	1.01	Cotton and tobacco pickers—		
Teamsters, driving oxen	4.75	.92	Men	5.00	.97
Ploughmen	8.25	1.59	Women and children	3.50	.68
Animal caretakers:			Sickle men	9.50	1.83
Inside	5.25	1.01	Scythe men	9.50	1.83
Outside in field	5.75	1.11	Binders of sheaves	5.25	1.01
Spring sowing work:			Digging holes, preparing stakes for fencing	9.50	1.83
Sowers, hand—			Cattlemen: [1]		
Men	9.00	1.74	Chiefs	4.50	.87
Women and children	4.00	.77	Assistants	3.50	.68
Manurers, hand	6.75	1.30	Helpers, boys	2.50	.48

[1] The cattlemen are usually furnished with a cabin in addition to wages.

The working-day for agricultural laborers varies in the different agreements, but in general it may be considered as 8 hours, although at least one of the recent agreements provides for a working-day of only 5 hours. Overtime is usually paid for on the basis of 50 per cent above the regular rates.

The only supplementary payments are those made when it is necessary for the worker to remain away from home overnight, when additional pay varying from 50 céntimos (9.7 cents) to 1 peseta (19 cents) is granted and subsistence furnished.

In the case of rain after the workmen have left for the fields they are entitled to pay for half a day. If it rains in the afternoon after half a day's work, the laborers are entitled to the entire day's pay.

Under a recent decree of the Government, all laborers are exempt from the payment of income taxes.

Province of Murcia

Following are the average daily wage rates paid for agricultural labor in the Province of Murcia, though these wages vary slightly according to season, class of work performed, and availability of farm labor:

	Pesetas
Foremen	7–9 ($1.35–$1.74)
Skilled agriculturists	5–6 ($0.97–$1.16)
Laborers	4–5 ($0.77–$0.97)
Women	3–5 ($0.58–$0.97)
Boys over 14 years of age	2–3 ($0.39–$0.58)

The above rates are for an 8-hour day. The normal full-time working week is 48 hours. Overtime is paid for at the rate of time and a quarter.

Barcelona District

For agricultural work in the Barcelona district men receive from 6 to 10 pesetas ($1.16 to $1.93) per day, women from 4 to 6 pesetas ($0.77 to $1.16), and boys and girls employed on work appropriate to their age and sex from 3 to 5 pesetas (58 to 97 cents).

Working hours per day are not less than 8 and are usually longer than that.

Valencia District

Farm labor, with the exception of rice planters and reapers, is paid at the rate of from 5 to 8 pesetas ($0.97 to $1.54) per day of 9 hours, and employment is usually by the day, with no paid holidays. In some cases free housing and land for gardens is supplied. The majority of the field laborers throughout the district receive 5 pesetas (97 cents) a day.

Rice farmers pay 12 to 13 pesetas ($2.32 to $2.51) per day of 7 hours for transplanting and reaping operations and 14 pesetas ($2.70) for threshing.

In the orange trade (oranges being the leading crop of the district) wages are as follows per day of 8 hours:

	Pesetas
Picking:	
Foremen	6.50 ($1.25)
Other employees	6.00 ($1.16)
Packing houses:	
Wrappers, female	3.50 ($0.68)
Packers, female	4.50 ($0.87)
Box makers—	
Foremen	10.50 ($2.03)
Others	9.00 ($1.74)

In the raisin trade male warehouse workers average 7 pesetas ($1.35) per day of 8 hours and field laborers 5 pesetas (97 cents). Raisin packers (females) receive 3.50 pesetas (68 cents).

In general, female labor is employed in cleaning, grading, wrapping, and packing in boxes oranges, onions, melons, tomatoes, raisins, etc., and wages vary from 3 to 4.50 pesetas (58 to 87 cents) for an 8-hour day.

Overtime, when required, is usually paid for at the rate of one-half additional.

Malaga District

Field workers for plowing, seeding, weeding, etc., in the Malaga district, are paid from 3.50 to 5.50 pesetas ($0.68 to $1.06) per day, besides receiving board and lodging. The agricultural work day is 8 hours. Harvesters, fruit pickers, etc., receive 5 to 6.50 pesetas ($0.97 to $1.25) per day, and board and lodging. Women are paid the same as men for the same labor, but for lighter work receive 3 to 4 pesetas (57 to 77 cents) per 8-hour day, plus their food.

Night work is paid the same as day work, except that 5 hours of night work are considered as equal to 8 of day work.

Fruit selectors and packers working not on a farm but in a warehouse in town receive a small additional wage in lieu of subsistence.

Province of Alicante

The following daily rates are paid for agricultural labor in this Province:

	Pesetas	
Foremen [4]	7. 00–10. 00	($1. 35–$1. 93)
Skilled agriculturists	5. 00	($0. 97)
Laborers	4. 00	($0. 77)
Women	2. 00	($0. 39)
Boys over 14 years of age	3. 00	($0. 58)

The normal working-day is 8 hours. No overtime is known to be paid in this Province.

[4] In the case of large estates, the foremen, who are responsible for the general administration of the hacienda, generally receive no fixed wages but are granted 50 per cent of the net proceeds of the year's crops.

TREND OF EMPLOYMENT

Summary for May, 1932

EMPLOYMENT decreased 3.2 per cent in May, 1932, as compared with April, 1932, and earnings decreased 3.9 per cent.

The industrial groups surveyed, the number of establishments reporting in each group, the number of employees covered, and the earnings for one week, for both April and May, 1932, together with the per cents of change in May are shown in the following summary:

SUMMARY OF EMPLOYMENT AND EARNINGS, APRIL AND MAY, 1932

Industrial group	Establishments	Employment		Per cent of change	Earnings in 1 week		Per cent of change
		April, 1932	May, 1932		April, 1932	May, 1932	
1. Manufacturing	**18,420**	**2,824,629**	**2,718,865**	[1] **−4.0**	**$53,166,651**	**$50,813,581**	[1] **−4.9**
2. Coal mining	**1,337**	**258,281**	**246,554**	**−4.5**	**5,075,862**	**4,312,664**	**−15.0**
Anthracite	160	95,851	91,499	−4.5	2,861,565	2,304,699	−19.5
Bituminous	1,177	162,430	155,055	−4.5	2,214,297	2,007,965	−9.3
3. Metalliferous mining	**256**	**27,532**	**24,375**	**−11.5**	**497,384**	**474,632**	**−4.6**
4. Quarrying and nonmetallic mining	**628**	**22,686**	**23,615**	**+4.1**	**377,454**	**406,365**	**+7.7**
5. Crude petroleum producing	**279**	**21,879**	**21,716**	**−0.7**	**669,747**	**708,376**	**+5.8**
6. Public utilities	**12,253**	**646,448**	**640,408**	**−0.9**	**18,718,298**	**18,834,675**	**+0.6**
Telephone and telegraph	8,221	287,753	285,854	−0.7	7,952,889	7,896,465	−0.7
Power and light	3,532	226,914	224,620	−1.0	6,927,211	7,074,563	+2.1
Electric-railroad and motor-bus operation and maintenance	500	131,781	129,934	−1.4	3,838,198	3,863,647	+0.7
7. Trade	**16,874**	**425,663**	**421,798**	**−0.9**	**9,644,273**	**9,499,837**	**−1.5**
Wholesale	2,843	74,743	73,778	−1.3	2,104,742	2,128,207	+1.1
Retail	14,031	350,920	348,020	−0.8	7,539,531	7,371,630	−2.2
8. Hotels	**2,449**	**144,678**	**140,144**	**−3.1**	[2] **2,119,783**	[2] **2,040,587**	**−3.7**
9. Canning and preserving	**837**	**33,145**	**28,579**	**−13.8**	**460,082**	**436,423**	**−5.1**
10. Laundries	**1,016**	**62,228**	**61,779**	**−0.7**	**1,056,350**	**1,045,073**	**−1.1**
11. Dyeing and cleaning	**401**	**12,226**	**12,413**	**+1.5**	**243,968**	**249,080**	**+2.1**
12. Building construction	**10,094**	**88,394**	**79,260**	**−10.3**	**2,473,273**	**1,993,874**	**−19.4**
Total	**64,844**	**4,567,789**	**4,419,506**	**−3.2**	**94,503,125**	**90,815,167**	**−3.9**

[1] Weighted per cent of change for the combined 89 manufacturing industries, repeated from Table 1, manufacturing industries; the remaining per cents of change, including total, are unweighted.

[2] The amount of pay roll given represents cash payments only; the additional value of board, room, and tips can not be computed.

Data are not yet available concerning railroad employment for May, 1932. Reports of the Interstate Commerce Commission for Class I railroads show that the number of employees (exclusive of executives and officials) decreased from 1,082,276 on March 15, 1932, to 1,072,524 on April 15, 1932, or 0.9 per cent; the amount of pay roll decreased from $133,651,340 in March to $126,468,966 in April, or 5.4 per cent.

Per capita weekly earnings in May, 1932, for each of the 16 industrial groups included in the bureau's monthly trend of employment survey, together with the per cents of change in May, 1932, as compared with April, 1932, and May, 1931, are given in the table following. These are actual per capita weekly earnings and must not be confused with full-time weekly rates of wages, as are computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

PER CAPITA WEEKLY EARNINGS IN MAY, 1932, IN 16 INDUSTRIAL GROUPS AND COMPARISON WITH APRIL, 1932, AND MAY, 1931

Industrial group	Per capita weekly earnings in May, 1932	Per cent of change May, 1932, compared with—	
		April, 1932	May, 1931
1. Manufacturing (89 industries)	$18.69	−1.0	−20.9
2. Coal mining:			
Anthracite	25.19	−15.6	−8.5
Bituminous	12.95	−5.0	−25.8
3. Metalliferous mining	19.47	+7.7	−21.4
4. Quarrying and nonmetallic mining	17.21	+3.4	−23.2
5. Crude petroleum producing	32.62	+6.6	−9.4
6. Public utilities:			
Telephone and telegraph	27.62	−0.1	−4.6
Power and light	31.50	+3.2	−0.9
Electric railroads	29.74	+2.1	−6.6
7. Trade:			
Wholesale	28.85	+2.5	−7.9
Retail	21.18	−1.4	−10.2
8. Hotels (cash payments only)[1]	14.56	−0.6	−11.8
9. Canning and preserving	15.27	+10.0	−11.1
10. Laundries	16.92	−0.4	−9.5
11. Dyeing and cleaning	20.07	+0.6	−11.2
12. Building construction	25.16	−10.1	[2]
Total	[3] 20.46	[3] −0.4	[3] −15.5

[1] The additional value of board, room, and tips can not be computed.
[2] Data not available.
[3] Does not include building construction.

Employment in Selected Manufacturing Industries in May, 1932

Comparison of Employment and Earnings in May, 1932, with April, 1932, and May, 1931

EMPLOYMENT in manufacturing industries decreased 4 per cent in May, 1932, as compared with April, 1932, and earnings decreased 4.9 per cent over the month interval. Comparing May, 1932, with May, 1931, decreases of 20.6 per cent in employment and 37.2 per cent in earnings are shown over the 12-month period.

The per cents of change in employment and earnings in May, 1932, as compared with April, 1932, are based on returns made by 18,420 establishments in 89 of the principal manufacturing industries in the United States, having in May 2,718,865 employees whose earnings in one week were $50,813,581.

The index of employment in May, 1932, was 59.7 as compared with 62.2 in April, 1932, 64.5 in March, 1932, and 75.2 in May, 1931. The pay-roll index in May, 1932, was 42.5 as compared with 44.7 in April, 48.2 in March, 1932, and 67.7 in May, 1931. The 12-month average for 1926 equals 100.

In Table 1, which follows, are shown the number of identical establishments reporting in both April and May, 1932, in the 89 manufacturing industries, together with the total number of employees on the pay rolls of these establishments during the pay period ending nearest May 15, and the amount of their weekly earnings in May, the per cents of change over the month and the year intervals, and the index numbers of employment and earnings in May, 1932.

The monthly per cents of change for each of the 89 separate industries are computed by direct comparison of the total number of employees and of the amount of weekly earnings reported in identical

establishments for the two months considered. The per cents of change over the month interval in the several groups and in the total of the 89 manufacturing industries are computed from the index numbers of these groups, which are obtained by weighting the index numbers of the several industries in the groups by the number of employees or wages paid in the industries. The per cents of change over the year interval in the separate industries, in the groups, and in the totals are computed from the index numbers of employment and earnings.

TABLE 1.—COMPARISON OF EMPLOYMENT AND EARNINGS IN MANUFACTURING ESTABLISHMENTS IN APRIL AND MAY, 1932, AND MAY, 1931

Industry	Establishments reporting in both April and May, 1932	Employment			Earnings			Index numbers, May, 1932 (average, 1926=100)	
		Number on pay roll, May, 1932	Per cent of change		Amount of pay roll (1 week), May, 1932	Per cent of change			
			April to May, 1932	May, 1931, to May, 1932		April to May, 1932	May, 1931, to May, 1932	Employment	Pay-roll totals
Food and kindred products	**3,075**	**234,707**	**+0.9**	**−8.3**	**$5,330,069**	**+0.9**	**−18.3**	**80.5**	**70.9**
Slaughtering and meat packing	232	83,412	+2.5	−4.2	1,886,069	+2.3	−17.0	86.8	76.0
Confectionery	341	30,081	−4.7	−16.8	456,853	−7.1	−28.4	65.4	52.5
Ice cream	392	13,122	+8.0	−8.4	380,214	+4.6	−18.6	76.7	67.2
Flour	448	16,453	−0.2	−2.1	372,514	−0.1	−13.6	84.5	72.7
Baking	940	64,201	−0.1	−9.7	1,501,008	−0.9	−19.3	82.8	72.4
Sugar refining, cane	15	8,044	+2.1	−3.9	211,071	+1.9	−13.6	76.0	68.7
Beet sugar	48	2,643	+15.2	+10.6	77,681	+16.7	−1.1	33.5	34.7
Beverages	346	10,392	+2.3	−12.7	290,753	+6.9	−19.1	77.9	69.6
Butter	313	6,359	+3.5	−6.5	153,906	+4.9	−13.3	100.7	90.1
Textiles and their products	**3,150**	**538,872**	**−7.7**	**−21.9**	**6,657,548**	**−15.4**	**−43.5**	**62.7**	**39.1**
Cotton goods	692	194,038	−8.3	−19.6	1,974,779	−15.8	−43.7	63.6	40.9
Hosiery and knit goods	465	97,831	−4.4	−6.9	1,216,859	−11.7	−32.9	75.8	50.1
Silk goods	272	35,504	−13.0	−40.2	436,942	−16.9	−57.2	46.0	28.6
Woolen and worsted goods	264	40,195	−6.2	−34.5	602,025	−8.4	−52.3	50.7	34.5
Carpets and rugs	34	13,581	−5.5	−29.8	195,559	−17.2	−54.0	54.9	30.1
Dyeing and finishing textiles	154	33,062	−7.2	−17.9	552,308	−17.2	−41.7	74.9	49.4
Clothing, men's	376	51,760	−8.7	−17.9	629,516	−16.7	−40.4	59.8	30.2
Shirts and collars	108	13,532	−2.8	−25.9	135,313	−9.0	−46.6	55.5	33.5
Clothing, women's	385	26,166	−6.1	−23.2	441,390	−17.9	−38.5	71.6	44.5
Millinery	140	8,352	−17.4	−18.2	134,404	−28.9	−31.7	62.6	41.6
Corsets and allied garments	32	5,683	−3.6	−6.3	84,684	−7.7	−22.0	101.4	80.0
Cotton small wares	112	9,101	−8.0	−25.1	132,600	−11.8	−44.8	75.2	52.3
Hats, fur-felt	40	4,643	−8.4	−30.2	60,945	−15.8	−53.9	56.9	24.6
Men's furnishings	76	5,424	−7.8	−26.5	60,224	−14.1	−49.9	56.9	34.8
Iron and steel and their products, not including machinery	**1,434**	**320,747**	**−3.9**	**−22.3**	**5,056,208**	**−4.7**	**−49.2**	**56.8**	**30.5**
Iron and steel	220	194,136	−3.7	−22.4	2,898,719	−3.5	−54.4	57.6	28.3
Cast-iron pipe	41	6,572	−3.7	−44.8	93,870	−13.2	−64.3	33.7	19.9
Structural and ornamental ironwork	196	17,582	−4.9	−31.9	334,467	−6.3	−50.0	49.4	30.4
Hardware	113	22,614	−4.6	−21.6	317,067	−9.9	−47.2	53.3	28.1
Steam fittings and steam and hot-water heating apparatus	112	15,882	−13.7	−39.4	286,312	−13.7	−51.3	33.8	20.4
Stoves	164	15,152	−3.4	−23.0	261,323	−4.3	−44.1	49.9	28.1
Bolts, nuts, washers, and rivets	68	7,980	−9.9	−27.9	127,021	−11.5	−50.2	59.8	34.7
Cutlery (not including silver and plated cutlery) and edge tools	132	10,619	−1.7	−2.0	207,456	−4.1	−18.2	73.9	53.2
Forgings, iron and steel	63	6,009	+2.7	−7.2	97,282	+0.7	−41.8	60.2	32.2
Plumbers' supplies	65	4,247	−1.0	−15.4	69,888	−0.3	−38.3	64.1	37.4
Tin cans and other tinware	57	7,426	−2.4	−19.6	148,127	−4.6	−26.1	71.9	43.8
Tools (not including edge tools, machine tools, files, or saws)	133	7,174	−4.2	−19.4	113,811	−9.1	−38.0	68.8	40.2
Wirework	70	5,354	−0.8	(1)	100,865	+0.4	−18.5	94.4	71.2

TABLE 1.—COMPARISON OF EMPLOYMENT AND EARNINGS IN **MANUFACTURING** ESTABLISHMENTS IN APRIL AND MAY, 1932, AND MAY, 1931—Continued

Industry	Establishments reporting in both April and May, 1932	Employment			Earnings			Index numbers, May, 1932 (average, 1926=100)	
		Number on pay roll, May, 1932	Per cent of change		Amount of pay roll (1 week), May, 1932	Per cent of change			
			April to May, 1932	May, 1931, to May, 1932		April to May, 1932	May, 1931, to May, 1932	Employment	Pay-roll totals
Lumber and allied products	**1,630**	**125,366**	**−2.8**	**−29.7**	**$1,655,675**	**−3.9**	**−51.2**	**38.5**	**22.1**
Lumber, sawmills	652	61,409	−0.7	−30.6	754,388	+0.2	−52.2	35.8	20.0
Lumber, millwork	460	19,715	−1.0	−32.0	306,157	−0.6	−51.1	38.1	24.0
Furniture	496	43,178	−6.9	−26.8	579,748	−12.9	−50.7	45.0	24.0
Turpentine and rosin	22	1,064	−2.0	−27.1	15,382	+6.2	−35.8	43.9	39.5
Leather and its manufactures	**504**	**124,276**	**−7.6**	**−10.0**	**1,807,769**	**−18.0**	**−33.7**	**71.9**	**44.1**
Leather	165	23,652	−4.3	−12.9	435,964	−9.6	−32.9	67.3	49.5
Boots and shoes	339	100,624	−8.3	−9.4	1,371,805	−20.4	−33.9	73.0	42.6
Paper and printing	**1,966**	**222,375**	**−1.8**	**−11.3**	**5,867,540**	**−3.4**	**−22.8**	**81.6**	**71.6**
Paper and pulp	423	79,678	−1.9	−9.2	1,542,627	−4.2	−27.1	75.0	54.8
Paper boxes	323	20,728	−4.7	−15.1	382,039	−7.6	−28.3	69.1	58.6
Printing, book and job	770	54,914	−1.6	−15.4	1,557,548	−3.0	−26.4	77.4	66.9
Printing, newspapers and periodicals	450	67,055	−1.0	−7.7	2,385,326	−2.6	−16.6	99.4	92.0
Chemicals and allied products	**1,028**	**141,959**	**−5.6**	**−13.6**	**3,361,613**	**−4.0**	**−25.1**	**76.1**	**65.5**
Chemicals	118	20,602	−1.8	−9.5	516,703	−3.6	−21.5	86.1	65.6
Fertilizers	207	8,181	−35.2	−20.0	106,797	−29.5	−38.2	58.3	41.1
Petroleum refining	120	48,166	−0.5	−17.0	1,394,875	+1.9	−24.5	64.8	59.8
Cottonseed oil, cake, and meal	50	1,924	−15.4	−8.2	24,019	−15.1	−15.3	34.7	34.3
Druggists' preparations	40	7,506	−1.2	−8.8	154,449	−1.5	−18.6	73.3	73.4
Explosives	21	2,873	−0.6	−23.8	61,169	+5.4	−32.9	75.0	54.3
Paints and varnishes	363	15,724	+0.4	−15.3	385,274	+2.5	−26.7	73.1	64.4
Rayon	22	25,050	−6.4	−14.2	431,626	−12.0	−30.3	129.9	110.6
Soap	87	11,933	−2.4	−8.9	286,701	−5.6	−23.9	94.2	85.4
Stone, clay, and glass products	**1,365**	**89,541**	**−4.4**	**−33.2**	**1,621,195**	**−7.0**	**−49.9**	**46.0**	**30.6**
Cement	126	13,882	−4.5	−37.4	278,719	+0.3	−54.2	41.4	28.0
Brick, tile, and terra cotta	693	20,400	+2.3	−40.0	278,593	+5.7	−60.2	31.6	15.7
Pottery	124	15,472	−5.7	−22.3	245,002	−14.5	−44.1	63.8	38.6
Glass	197	34,691	−6.8	−20.4	698,001	−6.2	−32.0	58.9	46.9
Marble, granite, slate, and other stone products	225	5,096	−8.4	−47.8	120,880	−16.4	−61.3	49.0	34.6
Nonferrous metals and their products	**651**	**80,463**	**−4.5**	**−21.2**	**1,392,139**	**−8.0**	**−42.6**	**55.4**	**36.7**
Stamped and enameled ware	94	13,784	−1.5	−11.1	238,369	−5.9	−31.5	64.3	43.8
Brass, bronze, and copper products	211	28,793	−4.3	−22.4	488,755	−8.2	−45.8	53.9	32.9
Aluminum manufactures	28	4,736	−7.8	−38.0	68,372	−14.9	−60.1	48.6	26.8
Clocks, time recording devices, and clock movements	22	4,242	−6.4	−25.3	56,189	−17.3	−46.8	44.7	26.8
Gas and electric fixtures, lamps and lanterns, and reflectors	56	5,019	−5.7	−24.6	106,541	−6.6	−37.6	68.6	50.1
Plated ware	56	7,505	−2.8	−18.0	140,811	−10.1	−35.9	61.9	39.0
Smelting and refining copper, lead, and zinc	27	8,159	−4.5	−17.2	148,115	−2.7	−46.0	61.8	42.9
Jewelry	157	8,225	−8.7	−26.4	144,987	−13.1	−42.1	37.1	24.2
Tobacco manufactures	**259**	**55,458**	**−1.7**	**−16.2**	**702,413**	**−1.7**	**−28.8**	**69.3**	**51.5**
Chewing and smoking tobacco and snuff	37	10,056	+0.2	+3.0	138,788	−0.8	−9.0	87.1	71.6
Cigars and cigarettes	222	45,402	−2.0	−18.7	563,625	−1.8	−31.3	67.9	49.1
Transportation equipment	**414**	**287,037**	**+0.3**	**−21.7**	**7,127,531**	**+8.7**	**−29.1**	**59.6**	**50.2**
Automobiles	236	240,210	+1.5	−22.8	6,004,002	+13.8	−29.1	61.1	52.1
Aircraft	35	6,596	−2.8	−31.1	206,585	−5.5	−35.4	208.3	206.7
Cars, electric and steam railroad	33	4,777	−6.9	−22.3	87,932	−8.2	−27.0	20.5	13.0
Locomotives	15	3,460	−5.7	−34.8	82,726	−7.7	−40.4	20.2	17.0
Shipbuilding	95	31,994	−4.5	−11.4	746,286	−13.3	−27.8	87.0	69.7
Rubber products	**156**	**74,999**	**−1.2**	**−11.3**	**1,499,312**	**−0.6**	**−31.0**	**66.7**	**46.4**
Rubber tires and inner tubes	42	46,090	−0.4	−10.8	996,685	+1.0	−34.0	64.7	45.8
Rubber boots and shoes	10	10,610	−2.9	−12.4	175,153	+1.5	−14.7	55.6	38.9
Rubber goods, other than boots, shoes, tires, and inner tubes	104	18,299	−1.8	−11.8	4327,47	−4.9	−29.0	79.6	53.3

[1] No change.

TABLE 1.—COMPARISON OF EMPLOYMENT AND EARNINGS IN **MANUFACTURING** ESTABLISHMENTS IN APRIL AND MAY, 1932, AND MAY, 1931—Continued

Industry	Establishments reporting in both April and May, 1932	Employment			Earnings			Index numbers, May, 1932 (average, 1926=100)	
		Number on pay roll, May, 1932	Per cent of change		Amount of pay roll (1 week), May, 1932	Per cent of change		Employment	Pay-roll totals
			April to May, 1932	May, 1931, to May, 1932		April to May, 1932	May, 1931, to May, 1932		
Machinery, not including transportation equipment	**1,853**	**323,855**	**−4.0**	**−28.5**	**$6,260,681**	**−7.6**	**−46.2**	**53.1**	**33.9**
Agricultural implements	78	6,068	−21.8	−42.7	108,046	−19.5	−37.5	28.5	22.7
Electrical machinery, apparatus, and supplies	294	132,468	−3.9	−25.1	2,736,348	−8.9	−43.0	63.1	44.5
Engines, turbines, tractors, and water wheels	77	14,939	−4.1	−32.2	301,304	−8.3	−49.8	46.6	29.5
Cash registers, adding machines, and calculating machines	47	15,159	+0.8	−9.4	342,295	−0.8	−28.6	74.3	51.9
Foundry and machine-shop products	1,101	111,714	−3.2	−30.1	1,967,427	−5.4	−48.8	49.6	29.1
Machine tools	157	12,272	−12.4	−48.3	232,435	−17.2	−59.6	35.5	22.0
Textile machinery and parts	37	6,313	−8.7	−26.8	104,068	−22.8	−49.5	56.0	33.7
Typewriters and supplies	17	8,878	−3.1	−17.5	129,268	−12.2	−43.0	68.4	38.2
Radio	45	16,044	+6.5	−19.1	339,490	+15.7	−32.1	61.0	53.6
Railroad repair shops	**935**	**99,210**	**−2.8**	**−20.1**	**2,473,888**	**−0.2**	**−32.4**	**51.4**	**43.2**
Electric railroad	412	23,092	−1.9	−13.2	641,462	−3.2	−20.5	70.0	62.5
Steam railroad	523	76,118	−2.9	−20.6	1,832,426	+0.3	−33.6	50.0	41.7
Total, 89 industries	**18,420**	**2,718,865**	**−4.0**	**−20.6**	**$50,813,581**	**−4.9**	**−37.2**	**59.7**	**42.5**

Per Capita Earnings in Manufacturing Industries

ACTUAL per capita weekly earnings in May, 1932, for each of the 89 manufacturing industries surveyed by the Bureau of Labor Statistics, together with the per cents of change in May, 1932, as compared with April, 1932, and May, 1931, are shown in Table 2.

These earnings must not be confused with full-time weekly rates of wages. They are actual per capita weekly earnings, computed by dividing the total amount of pay roll for the week by the total number of employees (part-time as well as full-time workers).

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN MAY, 1932, AND COMPARISON WITH APRIL, 1932, AND MAY, 1931

Industry	Per capita weekly earnings in May, 1932	Per cent of change compared with—	
		April, 1932	May, 1931
Food and kindred products:			
Slaughtering and meat packing	$22.61	−0.2	−13.5
Confectionery	15.19	−2.4	−13.9
Ice cream	28.98	−3.1	−11.3
Flour	22.64	+0.1	−11.8
Baking	23.38	−0.8	−10.7
Sugar refining, cane	26.24	−0.2	−9.8
Beet sugar	29.39	+1.3	−10.7
Beverages	27.98	+4.5	−7.5
Butter	24.20	+1.4	−7.2
Textiles and their products:			
Cotton goods	10.18	−8.1	−29.7
Hosiery and knit goods	12.44	−7.6	−27.9
Silk goods	12.31	−4.4	−28.8
Woolen and worsted goods	14.98	−2.4	−27.2
Carpets and rugs	14.40	−12.4	−34.6
Dyeing and finishing textiles	16.71	−10.7	−28.8
Clothing, men's	12.16	−8.8	−27.5
Shirts and collars	10.00	−6.3	−27.7
Clothing, women's	16.87	−12.6	−20.0
Millinery	16.09	−13.9	−16.5
Corsets and allied garments	14.90	−4.2	−16.8
Cotton small wares	14.57	−4.1	−26.3
Hats, fur-felt	13.13	−8.1	−33.9
Men's furnishings	11.10	−6.9	−32.0
Iron and steel and their products, not including machinery:			
Iron and steel	14.93	+0.2	−41.3
Cast iron pipe	14.28	−9.9	−35.5
Structural and ornamental ironwork	19.02	−1.5	−26.7
Hardware	14.02	−5.5	−32.8
Steam fittings and steam and hot-water heating apparatus	18.03	(1)	−19.5
Stoves	17.25	−0.9	−27.5
Bolts, nuts, washers, and rivets	15.92	−1.7	−31.0
Cutlery (not including silver and plated cutlery) and edge tools	19.54	−2.4	−16.2
Forgings, iron and steel	16.19	−1.9	−37.1
Plumbers' supplies	16.46	+0.8	−31.4
Tin cans and other tinware	19.95	−2.3	−7.9
Tools (not including edge tools, machine tools, files, or saws)	15.86	−5.1	−22.9
Wirework	18.84	+1.2	−18.5
Lumber and allied products:			
Lumber, sawmills	12.28	+0.9	−30.6
Lumber, millwork	15.53	+0.4	−28.3
Furniture	13.43	−6.4	−32.6
Turpentine and rosin	14.46	+8.4	−11.8
Leather and its manufactures:			
Leather	18.43	−5.6	−23.0
Boots and shoes	13.63	−13.2	−27.0
Paper and printing:			
Paper and pulp	19.36	−2.3	−19.6
Paper boxes	18.43	−3.0	−15.6
Printing, book and job	28.36	−1.5	−13.1
Printing, newspapers and periodicals	35.57	−1.6	−9.6
Chemicals and allied products:			
Chemicals	25.08	−1.9	−13.3
Fertilizers	13.05	+8.8	−23.1
Petroleum refining	28.96	+2.4	−8.9
Cottonseed oil, cake, and meal	12.48	+0.2	−8.0
Druggists' preparations	20.58	−0.3	−10.8
Explosives	21.29	+6.0	−12.1
Paints and varnishes	24.50	+2.0	−13.5
Rayon	17.23	−6.0	−18.8
Soap	24.03	−3.2	−16.5
Stone, clay, and glass products:			
Cement	20.08	+5.1	−26.9
Brick, tile, and terra cotta	13.66	+3.3	−33.5
Pottery	15.84	−9.3	−27.7
Glass	20.12	+0.6	−14.7
Marble, granite, slate, and other stone products	23.72	−8.7	−26.0
Nonferrous metals and their products:			
Stamped and enameled ware	17.29	−4.5	−22.7
Brass, bronze, and copper products	16.97	−4.1	−30.3
Aluminum manufactures	14.44	−7.7	−35.3
Clocks, time recording devices, and clock movements	13.25	−11.7	−28.9
Gas and electric fixtures, lamps, lanterns, and reflectors	21.23	−0.9	−17.2

[1] No change

TABLE 2.—PER CAPITA WEEKLY EARNINGS IN **MANUFACTURING** INDUSTRIES IN MAY, 1932, AND COMPARISON WITH APRIL, 1932, AND MAY, 1931—Continued

Industry	Per capita weekly earnings in May, 1932	Per cent of change compared with—	
		April, 1932	May, 1931
Nonferrous matals and their products—Continued.			
Plated ware	$18.76	−7.5	−21.6
Smelting and refining—copper, lead, and zinc	18.15	+1.9	−34.8
Jewelry	17.63	−4.8	−21.1
Tobacco manufactures:			
Chewing and smoking tobacco and snuff	13.80	−1.0	−11.5
Cigars and cigarettes	12.41	+0.2	−15.8
Transportation equipment:			
Automobiles	24.99	+12.1	−8.4
Aircraft	31.32	−2.8	−6.0
Cars, electric and steel railroad	18.41	−1.3	−6.3
Locomotives	23.91	−2.2	−8.7
Shipbuilding	23.33	−9.2	−18.8
Rubber products:			
Rubber tires and inner tubes	21.62	+1.4	−26.2
Rubber boots and shoes	16.51	+4.6	−2.7
Rubber goods, other than boots, shoes, tires and inner tubes	17.90	−3.2	−19.6
Machinery, not including transportation equipment:			
Agricultural implements	17.81	+2.9	+9.2
Electrical machinery, apparatus, and supplies	20.66	−5.2	−23.6
Engines, turbines, tractors, and water wheels	20.17	−4.4	−8.9
Cash registers, adding machines, and calculating machines	22.58	−1.6	−21.3
Foundry and machine shop products	17.61	−2.3	−26.4
Machine tools	18.94	−5.4	−21.8
Textile machinery and parts	16.48	−15.4	−30.9
Typewriters and supplies	14.56	−9.5	−31.0
Radio	21.16	+8.7	−16.1
Railroad repair shops:			
Electric-railroad repair shops	27.78	−1.3	−8.5
Steam-railroad repair shops	24.07	+3.3	−16.4

General Index Numbers of Employment and Earnings

GENERAL index numbers of employment and earnings in manufacturing industries, by months, from January, 1926, to May, 1932, are shown in the following table.

Two series of employment and pay-roll indexes for the year 1931 were published by the bureau from January to April, 1932. One series was based on the 54 industries formerly included in the bureau's survey and the other series was based on the bureau's enlarged survey covering 89 manufacturing industries. The publication of two series of indexes covering the same year was undesirable and possibly confusing.

An examination of available information shows a similar trend in employment and earnings in the 54 and the 89 industries from 1926 to 1929, while from 1929 to January, 1931, less shrinkage is shown in the 89 manufacturing industries than in the 54 industries. The difference in the per cent of decrease shown in the 54 industries and the 89 industries from September, 1929, to January, 1931, however, is small. To eliminate this difference, the general indexes of employment and earnings computed on the 54 industries was raised beginning in October, 1929, by the addition of a small increment, which was increased gradually until the indexes for January, 1931, on the series of 54 manufacturing industries equalled the index computed on the 89 industries. The indexes of employment and earnings for the period from January, 1926, to September, 1929, based on the trend shown in 54 manufacturing industries, are presented as formerly published. The indexes from January, 1931, to date, based on the enlarged series of 89 manufacturing industries now surveyed monthly by the bureau, also remain as previously published.

TABLE 3.—GENERAL INDEXES OF EMPLOYMENT AND EARNINGS IN **MANUFACTURING** INDUSTRIES, JANUARY, 1926, TO MAY, 1932

[12-month average, 1926=100]

Month	Employment							Earnings						
	1926	1927	1928	1929	1930	1931	1932	1926	1927	1928	1929	1930	1931	1932
January	100.4	97.3	91.6	95.2	90.7	74.6	64.8	98.0	94.9	89.6	95.5	88.1	63.7	48.6
February	101.5	99.0	93.0	97.4	90.9	75.3	65.6	102.2	100.6	93.9	101.8	91.3	68.1	49.6
March	102.0	99.5	93.7	98.6	90.5	75.9	64.5	103.4	102.0	95.2	103.9	91.6	69.6	48.2
April	101.0	98.6	93.3	99.1	89.9	75.7	62.2	101.5	100.8	93.8	104.6	90.7	68.5	44.7
May	99.8	97.6	93.0	99.2	88.6	75.2	59.7	99.8	99.8	94.1	104.8	88.6	67.7	42.5
June	99.3	97.0	93.1	98.8	86.5	73.4	-----	99.7	97.4	94.2	102.8	85.2	63.8	-----
July	97.7	95.0	92.2	98.2	82.7	71.7	-----	95.2	93.0	91.2	98.2	77.0	60.3	-----
August	98.7	95.1	93.6	98.6	81.0	71.2	-----	98.7	95.0	94.2	102.1	75.0	59.7	-----
September	100.3	95.8	95.0	99.3	80.9	70.9	-----	99.3	94.1	95.4	102.6	75.4	56.7	-----
October	100.7	95.3	95.9	98.4	79.9	68.9	-----	102.9	95.2	99.0	102.4	74.0	55.3	-----
November	99.5	93.5	95.4	95.0	77.9	67.1	-----	99.6	91.6	96.1	95.4	69.6	52.5	-----
December	98.9	92.6	95.5	92.3	76.6	66.7	-----	99.8	93.2	97.7	92.4	68.8	52.2	-----
Average	**100.0**	**96.4**	**93.8**	**97.5**	**84.7**	**72.2**	[1] **63.4**	**100.0**	**96.5**	**94.5**	**100.5**	**81.3**	**61.5**	[1] **46.7**

[1] Average for 5 months.

Time Worked in Manufacturing Industries in May, 1932

REPORTS as to working time in May were received from 13,449 establishments in 89 manufacturing industries. Three per cent of these establishments were idle, 43 per cent operated on a full-time basis, and 54 per cent worked on a part-time schedule.

An average of 84 per cent of full-time operation in May was shown by reports received from all the operating establishments included in Table 4. The establishments working part time in May averaged 71 per cent of full-time operation.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN MAY, 1932

Industry	Establishments reporting		Per cent of establishments in which employees worked—		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
Food and kindred products	2,392	1	74	26	94	78
Slaughtering and meat packing	182	-----	75	25	97	87
Confectionery	259	1	34	64	82	73
Ice cream	316	-----	65	35	95	85
Flour	402	1	75	24	93	71
Baking	646	-----	84	16	96	77
Sugar refining, cane	10	-----	50	50	89	79
Beet sugar	38	-----	89	11	98	81
Beverages	308	1	81	18	96	78
Butter	231	-----	86	14	98	86
Textiles and their products	2,261	6	45	48	85	72
Cotton goods	561	5	36	59	81	69
Hosiery and knit goods	371	3	48	49	87	74
Silk goods	239	16	44	41	85	69
Woolen and worsted goods	203	9	44	46	85	71
Carpets and rugs	25	8	32	60	81	71
Dyeing and finishing textiles	121	1	31	68	81	72
Clothing, men's	220	8	51	41	90	77
Shorts and collars	62	5	56	39	92	79
Clothing, women's	176	11	65	23	94	76
Millinery	94	2	60	38	90	75
Corsets and allied garments	22	-----	55	45	91	81

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN MAY, 1932—Continued

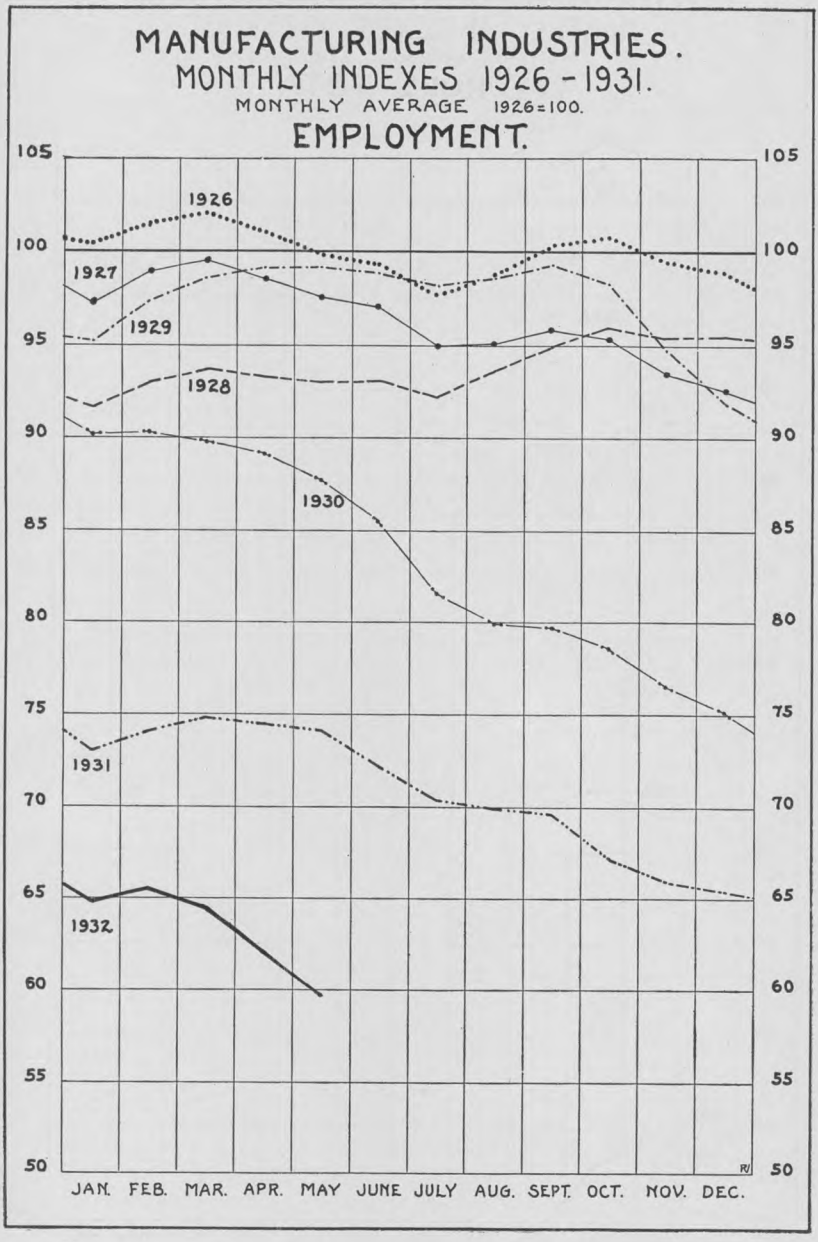
Industry	Establishments reporting		Per cent of establishments in which employees worked—		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
Textiles and their products—Continued.						
Cotton small wares	96	1	47	52	86	73
Hats, fur-felt	21	-------	19	81	60	50
Men's furnishings	50	---------	50	50	85	70
Iron and steel and their products, not including machinery	997	3	19	78	71	64
Iron and steel	142	6	14	80	67	61
Cast-iron pipe	36	11	8	81	58	54
Structural and ornamental iron work	140	1	16	83	76	71
Hardware	54	---------	20	80	71	64
Steam fittings and steam and hot-water heating apparatus	99	3	5	92	60	58
Stoves	105	5	10	85	66	62
Bolts, nuts, washers and rivets	48	2	19	79	71	64
Cutlery (not including silver and plated cutlery) and edge tools	99	1	37	62	78	65
Forgings, iron and steel	34	---------	26	74	68	57
Plumbers' supplies	45	2	20	78	76	70
Tin cans and other tinware	46	2	39	59	86	77
Tools (not including edge tools, machine tools, files, or saws)	101	2	27	71	74	64
Wirework	48	---------	10	90	76	74
Lumber and allied products	1,074	3	25	72	76	68
Lumber, sawmills	456	3	23	74	75	67
Lumber, millwork	270	1	20	80	76	70
Furniture	330	5	30	65	77	67
Turpentine and rosin	18	---------	78	22	96	80
Leather and its manufactures	401	1	25	74	79	71
Leather	126	2	36	63	84	76
Boots and shoes	275	1	20	79	76	70
Paper and printing	1,577	1	44	55	87	77
Paper and pulp	325	2	31	67	81	72
Paper boxes	270	(1)	17	82	79	74
Printing, book and job	605	(1)	35	65	87	80
Printing, newspapers and periodicals	377	---------	89	11	99	90
Chemicals and allied products	800	1	66	32	93	79
Chemicals	90	1	73	26	94	77
Fertilizers	161	2	63	35	92	79
Petroleum refining	67	---------	79	21	98	89
Cottonseed oil, cake, and meal	29	---------	59	41	91	79
Druggists' preparations	24	---------	50	50	94	88
Explosives	17	6	59	35	78	40
Paints and varnishes	331	2	66	32	93	78
Rayon	13	---------	46	54	92	85
Soap	68	---------	66	34	94	82
Stone, clay, and glass products	769	13	42	44	83	66
Cement	78	13	76	12	96	73
Brick, tile, and terra cotta	294	23	19	59	71	62
Pottery	87	3	23	74	74	66
Glass	144	8	72	20	94	74
Marble, granite, slate, and other stone products	166	6	53	41	89	74
Nonferrous metals, and their products	483	1	26	73	76	67
Stamped and enameled ware	77	1	17	82	79	75
Brass, bronze, and copper products	138	1	25	73	76	67
Aluminum manufactures	14	7	7	86	73	71
Clocks, time-recording devices, and clock movements	18	---------	22	78	68	58
Gas and electric fixtures, lamps, lanterns, and reflectors	39	---------	38	62	77	63
Plated ware	45	2	22	76	75	67
Smelting and refining—copper, lead, and zinc	19	---------	63	37	89	70
Jewelry	133	2	26	72	73	63
Tobacco manufactures	205	5	21	74	79	73
Chewing and smoking tobacco and snuff	30	3	17	80	81	77
Cigars and cigarettes	175	6	22	73	79	72

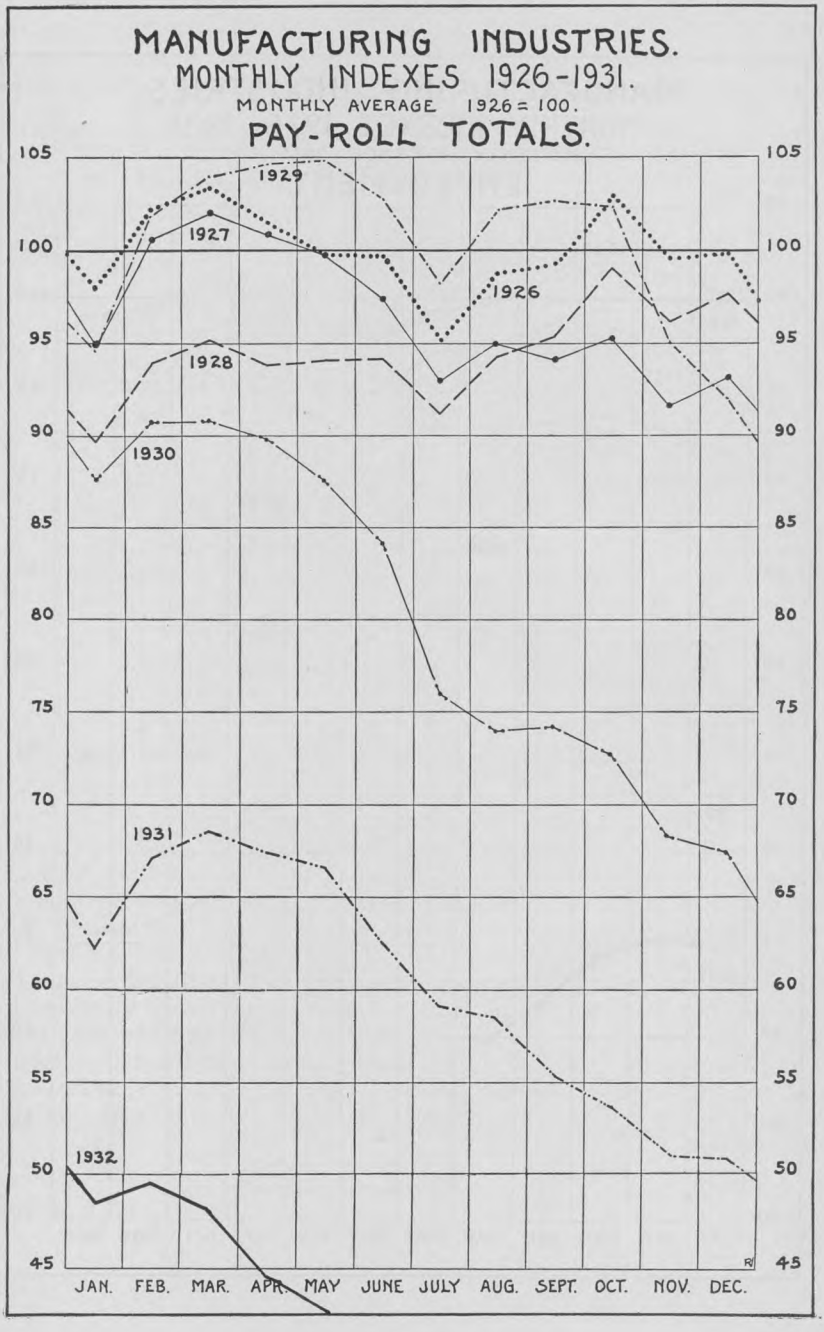
[1] Less than one-half of 1 per cent.

TABLE 4.—PROPORTION OF FULL TIME WORKED IN **MANUFACTURING** INDUSTRIES BY ESTABLISHMENTS REPORTING IN MAY, 1932—Continued

Industry	Establishments reporting		Per cent of establishments in which employees worked—		Average per cent of full time reported by—	
	Total number	Per cent idle	Full time	Part time	All operating establishments	Establishments operating part time
Transportation equipment	290	2	39	59	82	71
Automobiles	147	---	21	79	75	69
Aircraft	32	13	78	9	97	73
Cars, electric and steam railroad	25	---	20	80	71	64
Locomotives	14	---	43	57	84	72
Shipbuilding	72	1	64	35	94	83
Rubber products	129	1	36	64	84	74
Rubber tires and inner tubes	34	---	29	71	82	74
Rubber boots and shoes	9	---	22	78	81	76
Rubber goods, other than boots, shoes, tires, and inner tubes	86	1	40	59	85	74
Machinery, not including transportation equipment	1,278	1	20	79	73	66
Agricultural implements	64	2	25	73	79	72
Electrical machinery, apparatus, and supplies	188	---	20	80	78	73
Engines, turbines, tractors, and water wheels	57	2	21	77	74	67
Cash registers, adding machines, and calculating machines	39	3	46	51	85	71
Foundry and machine-shop products	744	1	19	80	71	64
Machine tools	113	2	10	88	68	65
Textile machinery and parts	32	3	28	69	77	67
Typewriters and supplies	14	---	36	64	73	59
Radio	27	---	48	52	87	75
Railroad repair shops	793	(1)	46	54	90	82
Electric-railroad repair shops	362	---	65	35	95	85
Steam-railroad repair shops	431	1	29	70	87	81
Total, 89 industries	13,449	3	43	54	84	71

[1] Less than one-half of 1 per cent.





Employment in Nonmanufacturing Industries in May, 1932

IN THE following table are presented employment and pay-roll data for 14 groups of nonmanufacturing industries the totals of which also appear in the summary table of employment and earnings.

TABLE 1.—COMPARISON OF EMPLOYMENT AND EARNINGS IN **NONMANUFACTURING** ESTABLISHMENTS IN APRIL AND MAY, 1932, AND MAY, 1931

Industrial group	Establishments reporting in both April and May, 1932	Employment			Earnings			Index numbers May, 1932 (average 1929=100)	
		Number on pay roll, May, 1932	Per cent of change		Amount of pay roll (1 week) May, 1932	Per cent of change			
			April to May, 1932	May, 1931, to May, 1932		April to May, 1932	May, 1931, to May, 1932	Employment	Earnings
Anthracite mining	160	91,499	−4.5	−16.7	$2,304,699	−19.5	−23.8	66.9	58.0
Bituminous coal mining	1,177	155,055	−4.5	−24.0	2,007,965	−9.3	−43.6	62.6	30.7
Metalliferous mining	256	24,375	−11.5	−38.6	474,632	−4.6	−51.7	38.3	23.8
Quarrying and nonmetallic mining	628	23,615	+4.1	−32.5	406,365	+7.7	−48.2	50.6	32.3
Crude petroleum producing	279	21,716	−0.7	−19.6	708,376	+5.8	−27.2	54.5	47.1
Telephone and telegraph	8,221	285,854	−0.7	−7.8	7,896,465	−0.7	−12.0	80.6	82.8
Power and light	3,532	224,620	−1.0	−13.9	7,074,563	+2.1	−14.7	84.0	84.2
Electric-railroad and motor-bus operation and maintenance	500	129,934	−1.4	−10.5	3,863,647	+0.7	−16.3	76.9	71.2
Wholesale trade	2,843	73,778	−1.3	−10.6	2,128,207	+1.1	−17.7	77.9	69.7
Retail trade	14,031	348,020	−0.8	−10.0	7,371,630	−2.2	−19.2	80.9	71.1
Hotels	2,449	140,144	−3.1	−13.4	2,040,587	−3.7	−23.6	80.1	67.0
Canning and preserving	837	28,579	−13.8	−27.7	436,423	−5.1	−35.7	40.5	36.0
Laundries	1,016	61,779	−0.7	−9.9	1,045,073	−1.1	−18.4	81.4	70.6
Dyeing and cleaning	401	12,413	+1.5	−12.6	249,080	+2.1	−22.3	84.5	67.3

Indexes of Employment and Earnings for Nonmanufacturing Industries

INDEX numbers of employment and earnings for 14 nonmanufacturing industries are presented in the following table. These index numbers show the variation in employment and earnings in these groups, by months, from January, 1929, to May, 1932, with the exception of the laundries and the dyeing and cleaning groups for which information over the entire period is not available. The bureau recently secured data concerning employment and earnings for the index base year 1929 from establishments in the laundries and the dyeing and cleaning groups, and has computed index numbers for these two groups, which appear in this tabulation for the first time. The collection of trend of employment statistics in these two groups did not begin until the later months of 1930. Therefore, indexes for the entire period do not appear in these tables due to lack of available information.

TABLE 2.—INDEXES OF EMPLOYMENT AND EARNINGS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER, 1929, 1930, AND 1931, AND JANUARY TO MAY, 1932

[12-month average, 1929=100]

Month	Anthracite mining								Bituminous coal mining							
	Employment				Earnings				Employment				Earnings			
	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932
January	105.7	102.1	90.6	76.2	100.7	105.8	89.3	61.5	106.4	102.5	93.9	80.8	106.1	101.4	73.3	47.0
February	106.0	106.9	89.5	71.2	122.1	121.5	101.9	57.3	107.7	102.4	91.5	77.4	116.6	102.1	68.3	47.0
March	98.0	82.6	82.0	73.7	90.8	78.5	71.3	61.2	106.8	98.6	88.8	75.2	108.6	86.4	65.2	46.8
April	100.7	84.1	85.2	70.1	88.3	75.0	75.2	72.0	100.2	94.4	85.9	65.5	89.2	81.7	58.6	33.9
May	103.7	93.8	80.3	66.9	99.0	98.8	76.1	58.0	96.6	90.4	82.4	62.6	91.9	77.5	54.4	30.7
June	92.9	90.8	76.1	-----	80.7	94.3	66.7	-----	94.7	88.4	78.4	-----	90.0	75.6	52.4	-----
July	83.2	91.6	65.1	-----	64.7	84.0	53.7	-----	94.1	88.0	76.4	-----	85.6	68.9	50.4	-----
August	91.1	80.2	67.3	-----	78.4	78.8	56.4	-----	95.7	89.2	77.0	-----	92.8	71.1	50.6	-----
September	101.9	93.8	80.0	-----	103.8	91.6	64.9	-----	97.2	90.5	80.4	-----	98.6	74.9	53.6	-----
October	106.1	99.0	86.8	-----	133.9	117.2	91.1	-----	98.8	91.8	81.3	-----	106.8	79.4	56.2	-----
November	104.0	97.2	83.5	-----	100.5	98.0	79.5	-----	101.0	92.5	81.1	-----	106.0	79.1	54.6	-----
December	107.1	99.1	79.8	-----	137.2	100.0	78.4	-----	101.4	92.5	81.2	-----	108.2	77.7	52.3	-----
Average	100.0	93.4	80.5	[1] 71.6	100.0	95.3	75.4	[1] 62.0	100.0	93.4	83.2	[1] 72.3	100.0	81.3	57.5	[1] 41.1

Month	Metalliferous mining								Quarrying and nonmetallic mining							
	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932
January	93.1	95.7	68.3	49.3	88.0	92.7	55.0	29.7	91.6	79.6	64.4	48.9	85.9	71.9	50.4	30.2
February	94.6	92.3	65.3	46.9	91.8	92.5	54.6	27.8	91.9	79.8	66.6	47.4	88.9	73.5	54.4	29.6
March	97.0	90.9	63.5	45.0	99.1	90.8	52.8	26.5	96.0	83.0	70.0	46.0	95.0	80.0	58.2	28.7
April	100.6	89.3	63.9	43.3	104.6	88.3	51.4	25.0	99.6	87.4	76.1	48.6	100.5	85.4	62.6	30.0
May	100.8	87.5	62.4	38.3	104.6	85.6	49.3	23.8	104.1	90.8	75.0	50.6	107.1	90.2	62.3	32.3
June	103.8	84.6	60.0	-----	105.6	81.6	46.1	-----	106.6	90.3	72.3	-----	110.5	90.9	60.1	-----
July	101.5	80.5	56.2	-----	99.0	71.9	41.3	-----	104.7	89.9	71.0	-----	104.7	85.5	57.3	-----
August	103.2	79.0	55.8	-----	100.1	71.0	40.2	-----	106.7	89.3	68.9	-----	110.3	85.8	55.1	-----
September	102.1	78.1	55.5	-----	102.0	69.9	40.0	-----	106.6	87.7	66.6	-----	109.8	82.5	51.2	-----
October	101.9	77.2	53.8	-----	103.1	68.6	37.4	-----	103.6	84.7	64.5	-----	105.8	79.3	48.7	-----
November	103.0	72.8	52.8	-----	102.2	63.4	35.1	-----	98.6	78.3	59.3	-----	96.0	66.8	43.3	-----
December	98.5	70.1	51.2	-----	99.7	59.9	34.3	-----	90.1	70.2	53.9	-----	85.4	59.9	36.9	-----
Average	100.0	83.2	59.1	[1] 44.6	100.0	78.0	44.8	[1] 26.6	100.0	84.3	67.4	[1] 48.3	100.0	79.3	53.4	[1] 30.2

Month	Crude petroleum producing								Telephone and telegraph							
	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932
January	90.0	92.7	74.8	54.9	93.1	94.0	71.5	46.5	94.3	101.6	90.5	83.0	94.5	105.1	96.3	89.1
February	90.4	90.8	73.2	54.4	99.0	88.6	70.0	46.9	95.3	100.2	89.2	82.0	93.0	101.9	94.8	89.6
March	89.6	89.3	72.2	51.4	97.4	91.3	73.2	43.2	96.5	99.4	88.6	81.7	98.7	105.8	97.9	88.2
April	97.6	86.8	69.8	54.9	96.7	86.6	66.3	44.5	97.8	98.9	88.1	81.2	98.3	103.4	95.0	83.4
May	93.9	89.8	67.8	54.5	92.4	85.4	64.7	47.1	100.4	99.7	87.4	80.6	99.4	103.2	94.1	82.8
June	104.1	90.2	65.0	-----	99.4	87.1	62.7	-----	101.5	99.8	86.9	-----	100.0	103.4	95.0	-----
July	106.0	89.9	65.3	-----	100.7	88.5	59.2	-----	102.6	100.0	86.6	-----	104.1	106.6	93.3	-----
August	113.2	87.7	62.4	-----	104.7	86.0	56.3	-----	103.7	98.8	85.9	-----	101.8	102.5	92.3	-----
September	108.9	85.0	61.2	-----	110.7	84.0	55.2	-----	102.5	96.8	85.0	-----	100.4	102.2	92.1	-----
October	107.9	85.2	60.4	-----	100.1	82.6	54.4	-----	101.9	94.5	84.1	-----	105.1	100.9	91.6	-----
November	101.1	83.6	57.6	-----	103.8	80.0	52.0	-----	101.9	93.0	83.5	-----	101.2	97.9	89.7	-----
December	97.0	77.4	58.2	-----	102.1	77.2	54.9	-----	101.8	91.6	83.1	-----	103.9	101.3	92.7	-----
Average	100.0	87.4	65.7	[1] 54.0	100.0	85.9	61.7	[1] 45.6	100.0	97.9	86.6	[1] 81.7	100.0	102.9	93.7	[1] 86.6

[1] Average for 5 months.

TABLE 2.—INDEXES OF EMPLOYMENT AND EARNINGS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER, 1929, 1930, AND 1931, AND JANUARY TO MAY, 1932—Continued

[12-month average, 1929=100]

Month	Power and light								Electric-railroad and motor-bus operation and maintenance [2]							
	Employment				Earnings				Employment				Earnings			
	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932
January	92.9	99.6	99.2	89.3	91.7	99.7	98.6	88.4	99.7	97.1	86.9	79.5	98.7	97.8	85.6	74.3
February	92.6	98.8	97.8	87.2	91.8	100.4	99.7	86.0	99.1	95.1	86.6	78.9	97.6	95.7	87.1	73.6
March	92.8	99.7	96.7	85.5	94.5	102.1	102.4	85.4	97.0	94.4	86.4	77.6	98.0	95.4	88.1	72.4
April	95.9	100.7	97.1	84.8	95.5	102.6	97.6	82.4	98.5	95.2	86.8	78.0	99.5	97.1	86.6	70.7
May	98.4	103.4	97.6	84.0	98.1	104.5	98.7	84.2	100.4	95.2	85.9	76.9	101.0	96.0	85.1	71.2
June	100.7	104.6	97.2	-----	100.4	107.8	98.3	-----	101.2	94.8	85.3	-----	101.7	97.0	84.8	-----
July	103.2	105.9	96.7	-----	102.3	106.7	97.4	-----	102.2	95.3	85.6	-----	101.9	95.6	83.3	-----
August	105.4	106.4	95.9	-----	103.8	106.6	96.2	-----	102.2	92.9	84.8	-----	102.0	92.1	81.9	-----
September	105.5	105.2	94.7	-----	106.6	106.1	94.3	-----	101.4	91.8	84.0	-----	101.5	90.5	81.2	-----
October	105.7	104.8	92.7	-----	106.0	105.6	93.2	-----	100.5	91.0	82.7	-----	100.0	88.9	79.0	-----
November	104.7	103.4	91.3	-----	104.1	103.7	93.3	-----	99.4	89.3	81.5	-----	98.4	87.7	79.7	-----
December	102.5	103.2	90.3	-----	105.8	106.3	91.2	-----	98.3	88.8	79.9	-----	99.8	88.6	77.8	-----
Average	100.0	103.0	95.6	[1]86.2	100.0	104.3	96.7	[1]85.3	100.0	93.4	84.7	[1]78.2	100.0	93.5	83.4	[1]72.4
	Wholesale trade								Retail trade							
January	97.7	100.0	89.5	81.8	96.7	100.0	87.5	74.1	99.2	98.9	90.0	84.3	99.0	99.7	89.4	78.0
February	96.9	98.5	88.2	80.9	96.4	98.3	88.4	72.5	94.6	94.4	87.1	80.5	94.5	96.0	86.7	73.7
March	97.3	97.7	87.4	79.8	98.5	99.7	89.1	71.3	96.2	93.9	87.8	81.4	96.1	95.5	87.5	73.4
April	97.9	97.3	87.4	78.9	97.8	97.9	85.2	68.9	95.5	97.3	90.1	81.6	96.0	97.5	88.3	72.7
May	99.0	96.8	87.1	77.9	99.0	97.4	84.7	69.7	97.3	96.7	89.9	80.9	97.1	97.3	88.0	71.1
June	99.2	96.5	87.1	-----	98.6	98.6	84.1	-----	97.4	93.9	89.1	-----	98.6	96.8	87.6	-----
July	100.4	96.0	86.8	-----	100.5	96.0	83.3	-----	93.6	89.0	83.9	-----	95.9	91.7	83.3	-----
August	101.3	95.0	86.5	-----	100.0	93.6	82.1	-----	93.6	85.6	81.8	-----	95.2	87.6	80.3	-----
September	101.9	94.8	86.1	-----	103.3	93.6	81.4	-----	97.6	92.0	86.6	-----	99.2	92.4	83.5	-----
October	102.9	94.2	85.2	-----	102.7	92.9	79.9	-----	101.7	95.5	89.8	-----	102.6	95.1	84.6	-----
November	102.9	92.6	84.1	-----	101.9	91.0	79.7	-----	106.7	98.4	90.9	-----	105.2	96.8	85.4	-----
December	102.6	92.0	83.7	-----	104.7	91.3	77.8	-----	126.2	115.1	106.2	-----	120.6	107.7	94.1	-----
Average	100.0	96.0	86.6	[1]79.9	100.0	95.9	83.6	[1]71.3	100.0	95.9	89.4	[1]81.7	100.0	96.2	86.6	[1]73.8
	Hotels								Canning and preserving							
January	97.1	100.4	95.0	83.2	98.5	100.3	91.0	73.9	50.8	46.1	48.9	35.0	57.3	50.3	46.1	31.8
February	99.8	102.4	96.8	84.3	102.0	103.8	93.7	73.9	48.9	45.7	48.3	37.1	59.2	51.5	48.6	32.7
March	100.9	102.4	96.8	84.0	103.4	104.4	93.4	72.4	49.4	49.7	53.0	36.3	54.9	50.8	50.3	31.9
April	99.7	100.1	95.9	82.7	100.6	100.3	89.9	69.6	90.6	74.8	59.6	47.0	98.9	72.6	57.1	37.9
May	98.1	98.0	92.5	80.1	98.9	98.4	87.7	67.0	62.0	65.7	56.0	40.5	71.2	66.9	56.0	36.0
June	99.3	98.0	91.6	-----	98.7	98.1	85.4	-----	76.6	83.0	70.6	-----	71.9	81.5	58.6	-----
July	101.1	101.3	93.3	-----	99.8	99.8	85.2	-----	126.8	126.3	102.2	-----	109.2	112.7	74.2	-----
August	102.6	101.5	92.8	-----	99.4	98.6	83.8	-----	184.8	185.7	142.9	-----	180.1	172.0	104.7	-----
September	102.8	100.1	90.6	-----	100.2	97.1	81.9	-----	210.1	246.6	180.1	-----	207.9	214.8	129.4	-----
October	100.6	97.5	87.4	-----	100.2	95.5	79.7	-----	143.3	164.7	108.1	-----	134.5	140.0	77.6	-----
November	100.0	95.2	84.9	-----	99.8	93.6	77.1	-----	95.1	96.7	60.8	-----	91.6	82.9	48.1	-----
December	97.7	93.5	83.1	-----	98.9	91.5	75.4	-----	61.3	61.6	40.7	-----	63.4	57.4	36.9	-----
Average	100.0	99.2	91.7	[1]82.9	100.0	98.5	85.4	[1]71.4	100.0	103.9	80.9	[1]39.2	100.0	96.1	65.6	[1]34.1

[1] Average for 5 months.

[2] Not including electric-railroad car building and repairing; see transportation equipment and railroad repair shop group, manufacturing industries, Table 1.

TABLE 2.—INDEXES OF EMPLOYMENT AND EARNINGS FOR **NONMANUFACTURING** INDUSTRIES, JANUARY TO DECEMBER, 1929, 1930, AND 1931, AND JANUARY TO MAY, 1932—Continued

[12-month average, 1929=100]

Month	Laundries								Dyeing and cleaning							
	Employment				Earnings				Employment				Earnings			
	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932	1929	1930	1931	1932
January	-----	-----	90.5	84.7	-----	-----	86.6	76.4	-----	-----	88.9	82.1	-----	-----	77.7	65.8
February	-----	-----	90.0	82.9	-----	-----	85.6	73.3	-----	-----	87.4	80.5	-----	-----	75.1	62.2
March	-----	-----	89.5	82.0	-----	-----	85.6	71.7	-----	-----	88.0	80.6	-----	-----	75.6	61.7
April	-----	-----	90.5	82.0	-----	-----	86.8	71.4	-----	-----	95.7	83.3	-----	-----	86.3	65.9
May	-----	-----	90.3	81.4	-----	-----	86.5	70.6	-----	-----	96.7	84.5	-----	-----	86.6	67.3
June	-----	-----	91.0	-----	-----	-----	87.1	-----	-----	-----	99.0	-----	-----	-----	89.1	-----
July	-----	-----	91.8	-----	-----	-----	87.4	-----	-----	-----	98.6	-----	-----	-----	86.2	-----
August	-----	-----	90.2	-----	-----	-----	84.6	-----	-----	-----	93.5	-----	-----	-----	80.0	-----
September	-----	-----	89.3	-----	-----	-----	84.1	-----	-----	-----	95.3	-----	-----	-----	82.6	-----
October	-----	-----	88.1	-----	-----	-----	81.8	-----	-----	-----	94.2	-----	-----	-----	81.4	-----
November	-----	-----	86.2	-----	-----	-----	78.9	-----	-----	-----	90.1	-----	-----	-----	74.7	-----
December	-----	-----	85.3	-----	-----	-----	77.4	-----	-----	-----	84.9	-----	-----	-----	67.9	-----
Average	100.0	-----	89.4	[1]82.6	100.0	-----	84.4	[1]72.7	100.0	-----	92.7	[1]82.2	100.0	-----	80.3	[1]64.6

[1] Average for 5 months.

Trend of Employment in May, 1932, by States

IN THE following table are shown the fluctuations in employment and earnings in May, as compared with April, 1932, in certain industrial groups by States. These tabulations have been prepared from data secured directly from reporting establishments and from information supplied by cooperating State agencies. The combined total of all groups does not include building construction data, information concerning which is published elsewhere in a separate tabulation by city and State totals. In addition to the combined total of all groups, the trend of employment and earnings in the manufacturing, public utility, hotel, wholesale trade, retail trade, bituminous-coal mining, crude petroleum producing, quarrying and nonmetallic mining, metalliferous mining, laundries, and dyeing and cleaning groups are presented. In publishing data concerning public utilities, the totals of the telephone and telegraph, power and light, and electric-railroad operation groups have been combined and are presented as one group in this State compilation. Due to the extreme seasonal fluctuations in the canning and preserving industry, and the fact that during certain months the activity in this industry in a number of States is negligible, data for this industry are not presented separately. The number of employees and the amount of weekly earnings in April and May as reported by identical establishments in this industry are included, however, in the combined total of "All groups."

As the anthracite mining industry is confined entirely to the State of Pennsylvania, the changes reported in this industry in the summary table are the fluctuations in this industry by State total.

Where the identity of any reporting company would be disclosed by the publication of a State total for any industrial group, figures for the group do not appear in the separate industrial group tabulation but have been included in the State totals for "All groups." Data are not presented for any industrial group where the representation in the State covers less than three establishments.

COMPARISON OF EMPLOYMENT AND EARNINGS IN **IDENTICAL** ESTABLISHMENTS IN APRIL AND MAY, 1932, BY STATES

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

State	Total—all groups					Manufacturing				
	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change
Alabama	517	52,391	−2.6	$610,765	−1.4	218	35,811	−3.0	$411,256	−2.3
Arkansas	*445*	*14,083*	*+0.4*	*211,745*	*−0.1*	*180*	*9,465*	*+2.5*	*121,532*	*+0.8*
Arizona	360	10,095	−6.1	242,873	−0.3	66	2,508	+5.7	61,460	+8.9
California	*1,431*	*210,817*	*−3.1*	*5,274,024*	*−4.0*	*1,151*	*124,707*	*−4.4*	*3,040,752*	*−4.1*
Colorado	764	28,840	−2.4	634,259	−0.7	126	10,776	−0.2	235,520	+1.8
Connecticut	1,104	130,072	−4.7	2,345,867	−8.3	691	110,378	−5.4	1,810,814	−10.4
Delaware	135	8,826	−3.4	169,540	−6.3	53	6,076	−2.3	114,698	−7.7
Dist. of Col	589	29,434	−[1]	726,688	+0.7	56	3,342	−0.7	110,360	−2.5
Florida	547	22,353	−9.9	388,060	−9.3	140	13,761	−0.4	201,338	−5.5
Georgia	640	65,938	−5.8	835,528	−5.5	309	53,611	−6.8	563,007	−8.6
Idaho	186	6,350	−1.4	127,501	+5.0	37	2,610	−1.9	45,727	+4.3
Illinois	[2] *1,435*	*264,856*	*−2.4*	*5,686,197*	*−5.3*	*1,045*	*172,234*	*−2.7*	*3,246 498*	*−5.5*
Indiana	1,201	112,932	−5.4	2,223,514	−3.5	592	84,223	−6.9	1,610,753	−5.0
Iowa	1,175	43,566	+0.3	878,475	+1.3	467	23,273	+1.4	451,784	+1.0
Kansas	[3] *646*	*42,419*	*+0.2*	*954,171*	*+0.3*	*434*	*24,534*	*+2.3*	*565,302*	+3.6
Kentucky	822	58,878	−2.4	915,671	+0.2	223	22,034	−2.3	362,240	+3.8
Louisiana	498	30,235	−2.1	469,205	−2.5	221	18,396	−3.3	253,832	−5.5
Maine	569	36,052	−1.7	626,951	−5.3	191	29,173	−2.2	477,233	−6.9
Maryland	[4] *881*	*80,498*	*−3.7*	*1,516,053*	*−6.8*	*481*	*56,282*	*−4.5*	*963,610*	*−8.0*
Massachusetts	*7,704*	*326,497*	*−2.7*	*7,250,105*	*−3.8*	*1,088*	*143,213*	*−7.0*	*2,565,302*	*−11.1*
Michigan	**1,567**	**293,771**	**+0.8**	**7,176,417**	**+16.2**	*416*	*191,238*	*+1.5*	*4,683,550*	*+9.9*
Minnesota	1,046	61,583	+[1]	1,390,944	+2.3	286	31,178	+0.5	663,426	+2.9
Mississippi	403	9,320	−7.3	121,820	−3.4	77	5,153	−10.9	55,700	−9.8
Missouri	1,117	101,219	−2.6	2,186,341	−2.1	529	56,028	−4.3	1,096,080	−5.8
Montana	320	7,211	−2.1	180,176	+0.9	50	2,281	−2.3	47,663	+0.7
Nebraska	656	22,434	−1.6	534,011	+0.9	138	10,968	+[1]	262,200	+0.5
Nevada	137	1,691	+3.1	46,388	+4.6	25	384	+9.1	10,077	+6.7
New Hampshire	447	29,202	−3.5	470,669	−10.8	190	25,550	−4.3	380,862	−13.3
New Jersey	1,469	187,572	−2.5	4,333,849	−2.8	[5] *717*	*169,502*	*−1.8*	*3,766,684*	*−2.3*
New Mexico	173	4,555	+1.6	79,494	+2.4	24	301	+1.7	6,741	+4.5
New York	3,374	478,740	−4.4	11,627,522	−5.8	[6] *1,647*	*302,677*	*−7.3*	*6,835,321*	*−10.4*
North Carolina	1,160	95,204	−6.1	1,094,737	−8.9	543	88,729	−6.3	986,418	−9.7
North Dakota	320	3,637	+0.6	84,803	+4.6	59	1,059	−0.4	26,960	+3.9
Ohio	4,460	360,281	−2.2	7,172,910	−2.0	1,969	269,788	−1.7	5,173,953	−2.7
Oklahoma	713	24,234	−1.2	562,778	+0.8	128	7,775	+0.6	182,581	+1.7
Oregon	556	27,055	+3.2	563,028	+4.1	173	15,238	+3.0	279,151	+7.0
Pennsylvania	4,133	594,098	−3.1	11,039,958	−9.3	*1,754*	*321,677*	*−4.8*	*4,950,574*	*−9.4*
Rhode Island	904	46,486	−9.8	853,740	−12.4	278	35,140	−12.4	578,969	−16.4
South Carolina	406	43,799	−7.6	435,558	−12.2	178	39,836	−8.3	365,229	−14.3
South Dakota	232	5,528	−0.9	136,877	+4.0	48	1,977	−1.4	41,866	+11.5
Tennessee	758	59,879	−2.7	834,675	−5.4	286	42,740	−3.4	561,206	−7.3
Texas	*743*	*57,745*	*−1.5*	*1,343,793*	*−1.9*	*343*	*30,846*	*−1.9*	*645,005*	*−2.8*
Utah	330	11,335	−3.4	221,756	−3.9	82	3,036	+4.9	63,077	+7.4
Vermont	358	9,187	−2.6	193,745	−1.2	123	4,658	−6.0	99,474	+0.7
Virginia	1,295	76,580	−4.7	1,214,148	−8.8	447	55,901	−5.4	836,589	−12.3
Washington	1,204	48,285	−1.0	1,063,606	−0.9	265	22,860	−2.6	447,699	−1.9
West Virginia	739	81,079	−3.6	1,358,280	−5.3	187	31,797	−6.4	601,664	−7.0
Wisconsin	[7] *1,099*	*127,858*	*−3.3*	*2,260,362*	*−4.9*	[8] *831*	*100,243*	*−4.8*	*1,622,849*	*−9.5*
Wyoming	165	5,933	−1.6	156,910	+5.2	28	1,391	+4.2	44,197	+3.4

[1] Less than one-tenth of 1 per cent.
[2] Includes building and contracting.
[3] Includes transportation and financial institutions.
[4] Includes building construction.
[5] Includes laundries.
[6] Includes laundries and dry-cleaning.
[7] Does not include hotels.
[8] Weighted per cent of change, including canning and preserving.

COMPARISON OF EMPLOYMENT AND EARNINGS IN **IDENTICAL** ESTABLISHMENTS IN APRIL AND MAY, 1932, 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]

State	Wholesale trade					Retail trade				
	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change
Alabama	17	604	+1.3	$16,902	+5.6	64	1,806	−3.2	$29,049	−3.5
Arkansas	*17*	*474*	*−0.6*	*13,845*	*−0.9*	*139*	*1,447*	*−0.6*	*27,790*	*+1.1*
Arizona	18	150	−2.6	4,268	+1.9	169	1,257	−0.6	23,906	−6.5
California	*73*	*5,114*	*−2.0*	*157,891*	*−2.6*	*94*	*25,780*	*−2.0*	*539,315*	*−4.7*
Colorado	27	716	−0.8	23,622	+4.9	282	4,487	+1.8	98,858	+0.1
Connecticut	63	1,248	−0.3	37,348	−0.1	137	5,423	−1.2	115,998	−0.9
Delaware	11	187	−6.0	5,171	−4.6	15	185	(9)	2,923	+0.4
Dist. of Columbia	30	405	−1.9	13,773	+1.0	407	10,783	+1.8	245,303	+0.7
Florida	52	822	−0.1	20,901	−1.5	76	928	−8.8	19,722	−12.1
Georgia	33	384	+0.5	11,179	+3.1	33	2,002	+2.0	35,929	+2.6
Idaho	5	68	−1.4	2,512	+6.8	56	568	−3.4	11,820	+1.9
Illinois	*14*	*619*	*−1.3*	*15,625*	*−0.4*	*66*	*18,361*	*+0.4*	*430,957*	*−6.6*
Indiana	69	1,397	+2.5	39,610	+3.8	181	6,219	−1.9	117,211	−5.2
Iowa	35	1,054	−0.8	32,022	+3.1	128	3,415	+0.7	64,495	+1.2
Kansas	*23*	*766*	*+1.5*	*22,961*	*−0.5*	*42*	*2,394*	*−3.4*	*48,333*	*−6.2*
Kentucky	24	531	−1.5	12,065	+2.1	30	1,525	−3.1	25,686	−0.9
Louisiana	30	768	−1.0	18,370	+6.3	55	2,988	−3.6	47,088	−3.1
Maine	17	464	+1.8	10,966	+3.8	81	1,349	+0.7	25,503	+0.5
Maryland	*34*	*817*	*−1.8*	*18,924*	*−4.2*	*37*	*4,756*	*−2.0*	*84,671*	*−0.4*
Massachusetts	*677*	*14,371*	*−0.1*	*402,211*	*−1.1*	*3,904*	*58,266*	*−1.2*	*1,261,235*	*−3.1*
Michigan	*67*	*1,639*	*−0.9*	*53,792*	*−0.2*	*269*	*11,840*	*+0.7*	*252,537*	*−1.6*
Minnesota	63	3,950	−0.3	116,648	+2.0	290	7,904	+1.0	149,168	−0.7
Mississippi	5	125	−0.8	2,470	+6.8	76	457	−1.5	5,829	+4.1
Missouri	58	5,059	−1.6	132,979	+2.6	135	6,289	−2.0	129,395	−2.1
Montana	16	318	−0.3	9,600	+4.3	72	834	−0.5	19,713	+1.4
Nebraska	40	1,258	+0.1	37,557	+2.2	122	1,392	−0.9	28,370	+2.5
Nevada	6	80	(9)	3,356	+8.7	36	293	+1.7	7,889	+2.0
New Hampshire	15	166	−0.6	4,687	+0.2	64	605	(9)	11,751	+1.1
New Jersey	29	601	−2.0	19,205	−1.4	417	7,774	−0.4	179,318	−1.4
New Mexico	10	115	+0.9	4,244	+0.1	40	252	(9)	5,791	+5.4
New York	194	5,482	−2.5	185,333	−1.5	378	47,357	−3.6	1,140,467	−4.9
North Carolina	21	503	+1.0	12,921	+3.2	436	1,952	−0.9	31,771	−0.1
North Dakota	17	243	+0.8	7,635	+6.5	41	439	+1.4	7,524	+2.8
Ohio	229	4,818	−5.0	133,106	−0.9	1,318	31,149	−1.8	611,784	−2.7
Oklahoma	51	828	−2.8	24,704	+3.0	125	1,803	−7.4	37,509	−4.2
Oregon	61	1,471	−0.4	44,764	+2.0	55	1,793	+0.6	42,659	+5.7
Pennsylvania	141	3,605	−0.9	102,136	+1.3	328	27,021	+0.2	551,269	−1.2
Rhode Island	43	924	−0.8	23,949	−(1)	502	4,933	−0.3	108,563	−1.8
South Carolina	20	300	+4.2	6,725	+3.7	92	747	−1.1	10,223	−1.4
South Dakota	11	141	+2.2	4,563	+6.1	20	300	−4.2	5,214	+6.4
Tennessee	37	678	−0.6	16,187	+2.4	69	3,594	+1.6	59,216	+0.6
Texas	*118*	*2,585*	*+1.5*	*71,929*	*−1.5*	*89*	*6,800*	*−1.5*	*130,854*	*−4.3*
Utah	14	336	−1.2	8,607	+5.0	83	548	−5.0	13,548	+0.7
Vermont	5	111	+1.8	2,866	−0.6	45	497	+4.4	8,411	+2.2
Virginia	*52*	1,223	−10.5	27,978	−3.8	490	4,910	+0.1	96,129	+1.7
Washington	96	2,342	−1.9	71,512	+0.3	484	6,823	+0.4	135,897	−2.5
West Virginia	41	605	+0.8	19,109	+5.0	52	981	+0.6	19,871	+4.9
Wisconsin	*46*	*883*	*−1.4*	*31,443*	*+4.6*	*50*	*8,327*	*+3.1*	*136,348*	*−3.3*
Wyoming	10	84	−4.5	3,184	−2.2	21	173	−2.3	4,853	−0.1

[1] Less than 1/10 of 1 per cent.
[9] No change.

COMPARISON OF EMPLOYMENT AND EARNINGS IN **IDENTICAL** ESTABLISHMENTS IN APRIL AND MAY, 1932, 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]

State	Quarrying and nonmetallic mining					Metalliferous mining				
	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of chang
Alabama	6	229	−11.6	$2,802	−3.6	6	1,031	−6.4	$9,073	−20.2
Arkansas	9	160	−17.9	1,778	−22.4					
Arizona						15	4,031	−13.6	105,194	−2.7
California	30	650	−4.8	15,345	+1.8	19	1,407	−6.6	41,131	+1.0
Colorado	3	17	−5.6	288	−26.9	16	692	−0.7	20,888	+10.9
Connecticut	8	206	−0.5	3,666	+26.6					
Delaware										
Dist. of Columbia										
Florida	8	577	−4.3	6,946	−12.2					
Georgia	18	1,071	+2.8	11,566	+11.4					
Idaho						11	2,016	−2.6	47,043	+7.8
Illinois	28	597	+6.2	11,948	+30.0					
Indiana	38	1,701	+3.0	31,541	+6.7					
Iowa	16	279	+19.2	4,747	+19.8					
Kansas	*20*	*926*	*+8.2*	*20,242*	*+1.2*	8	413	−1.4	4,713	−10.8
Kentucky	14	524	+21.3	3,396	+0.9					
Louisiana	4	476	+3.9	5,581	−17.2					
Maine	5	60	−26.8	1,523	−40.8					
Maryland	*17*	*497*	*+12.7*	*6,739*	*+1.7*					
Massachusetts										
Michigan	23	1,009	+11.5	14,027	+29.5	42	6,136	−22.9	71,716	−16.2
Minnesota	5	155	+24.0	3,266	+24.1	33	629	−25.0	8,604	−28.7
Mississippi	3	44	(1)	406	+17.3					
Missouri	14	230	−2.8	3,975	+3.4	11	1,034	−1.6	20,298	−4.6
Montana	4	20	−37.5	414	+0.7	14	33	−19.5	814	−12.3
Nebraska	3	125	+23.8	2,369	+37.9					
Nevada						14	317	+1.9	9,223	+6.6
New Hampshire	10	135	+48.4	3,552	+118.7					
New Jersey	3	50	−5.7	1,614	+36.1	3	66	−41.1	896	−48.7
New Mexico						4	837	+6.5	15,513	+13.0
New York	42	2,021	+13.5	43,614	+17.6					
North Carolina	8	118	+9.3	1,467	−0.7					
North Dakota										
Ohio	63	1,695	+1.4	33,641	+6.4					
Oklahoma	4	64	−12.3	879	−11.7	27	727	+20.4	12,081	+13.7
Oregon						4	98	+3.2	2,286	+13.8
Pennsylvania	60	3,009	+5.4	39,487	+13.2					
Rhode Island										
South Carolina	7	152	−3.8	1,292	+29.8					
South Dakota	3	23	−4.2	606	+21.0					
Tennessee	18	682	−3.1	9,012	+3.4	4	266	−13.6	3,198	−7.3
Texas	*21*	*583*	*+8.2*	*13,233*	*+4.1*					
Utah						11	2,378	−8.6	43,311	−8.4
Vermont	39	2,366	+0.7	51,290	−5.7					
Virginia	19	984	−1.5	10,417	+4.8					
Washington	7	167	+42.7	4,155	+67.8	3	57	−14.9	1,352	−8.7
West Virginia	7	479	+13.2	4,749	−6.4					
Wisconsin										
Wyoming										

[1] No change.

COMPARISON OF EMPLOYMENT AND EARNINGS IN **IDENTICAL** ESTABLISHMENTS IN APRIL AND MAY, 1932, 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]

State	Bituminous coal mining					Crude petroleum producing				
	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change
Alabama	42	8,741	−1.8	$75,220	+4.5					
Arkansas	*5*	*54*	*−62.5*	*587*	*−57.8*	8	190	−10.8	$4,841	−2.7
Arizona										
California						41	5,464	+1.4	194,600	+6.4
Colorado	44	3,795	−16.5	46,150	−31.0					
Connecticut										
Delaware										
Dist. of Columbia										
Florida										
Georgia										
Idaho										
Illinois	*28*	*929*	*+165.4*	*20,336*	*+129.3*	9	191	−5.9	4,079	+5.0
Indiana	35	2,570	−3.6	54,985	−7.2	4	25	−7.4	435	−3.1
Iowa	22	2,235	−10.2	38,017	+1.4					
Kansas	*20*	*1,612*	*−11.7*	*24,676*	−8.4	34	1,177	+2.1	29,154	−0.3
Kentucky	145	23,119	−3.6	284,120	−5.2	6	176	+3.5	3,298	+8.1
Louisiana						6	139	+0.7	4,261	+6.7
Maine										
Maryland	*14*	*1,340*	*−5.2*	*9,995*	*−39.9*					
Massachusetts										
Michigan										
Minnesota										
Mississippi										
Missouri	15	811	−10.8	14,166	−11.8					
Montana	11	960	(9)	22,040	+7.4	5	45	−11.8	1,207	−0.7
Nebraska										
Nevada										
New Hampshire										
New Jersey										
New Mexico	13	1,863	−1.2	25,121	−4.4	4	45	(9)	1,528	−1.5
New York						5	175	−7.4	4,462	−3.8
North Carolina										
North Dakota										
Ohio	42	2,085	−52.3	40,954	−14.5	6	63	−11.3	1,177	−0.7
Oklahoma	14	343	+16.7	4,386	−3.1	67	4,610	−3.5	129,670	+0.7
Oregon										
Pennsylvania	378	52,681	−2.6	638,053	−14.6	20	359	−1.4	9,278	−0.3
Rhode Island										
South Carolina										
South Dakota										
Tennessee	18	2,994	−0.7	24,919	−17.2					
Texas						*3*	*6,354*	*+1.7*	*235,945*	+2.9
Utah	13	1,525	−14.9	26,542	−24.9					
Vermont										
Virginia	27	3,784	−7.8	35,437	−13.3					
Washington	11	1,466	−1.7	33,831	+5.1					
West Virginia	255	38,328	−2.2	499,047	−7.7	9	350	+2.6	8,903	+7.4
Wisconsin										
Wyoming	31	3,304	−4.0	81,179	+7.7	6	150	−3.2	4,440	−4.6

[9] No change.

COMPARISON OF EMPLOYMENT AND EARNINGS IN **IDENTICAL** ESTABLISHMENTS IN APRIL AND MAY, 1932, 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]

State	Public utilities					Hotels				
	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change
Alabama	123	2,056	−0.6	$45,274	−(1)	28	1,261	−0.1	$11,907	−3.8
Arkansas	*46*	*1,041*	*−0.4*	*28,156*	*+1.0*	*17*	*924*	*−4.2*	*11,352*	*−2.1*
Arizona	66	1,312	−5.5	34,240	+0.3	13	368	−8.9	5,931	−12.6
California	*40*	*49,210*	*−0.5*	*1,415,979*	*−3.8*	234	10,560	−2.6	182,318	−4.6
Colorado	197	5,828	+(1)	163,643	+5.4	32	1,131	−2.0	18,242	−(1)
Connecticut	130	10,012	−0.5	329,244	−0.7	29	1,202	(9)	16,656	−0.2
Delaware	28	1,099	−0.3	29,627	−3.0	7	272	−1.4	3,500	−5.5
District of Columbia	21	8,315	−0.5	250,053	+3.0	50	4,399	−1.8	68,887	−1.6
Florida	183	4,352	−0.1	118,608	+1.1	55	830	−70.1	9,760	−70.9
Georgia	183	6,408	−2.2	190,883	+1.5	34	1,559	+0.8	13,696	−4.8
Idaho	57	741	−0.1	15,137	+0.8	14	279	+14.3	3,746	+3.5
Illinois	*62*	*60,972*	*−3.2*	*1,743,442*	*−6.1*	[10] *48*	*8,096*	*−1.1*	*141,937*	*+1.6*
Indiana	132	10,502	−0.5	278,733	+3.9	61	2,858	−0.7	36,975	+1.2
Iowa	435	10,299	(9)	252,516	+1.5	54	2,371	−1.1	25,331	−3.0
Kansas	*24*	*7,243*	*−2.6*	*179,315*	*−4.5*	*21*	*606*	*−4.7*	*6,920*	*−4.8*
Kentucky	303	7,313	−1.0	177,029	+1.9	39	2,066	−0.7	24,853	+0.7
Louisiana	150	4,583	−0.8	113,389	+2.4	19	1,916	+0.7	23,139	+3.9
Maine	171	2,929	(9)	80,622	−1.1	24	835	+6.0	12,310	+3.1
Maryland	*92*	*11,874*	*−2.0*	*347,815*	*−5.7*	*24*	*1,492*	*−4.2*	*21,738*	*−0.4*
Massachusetts	[11] *138*	*47,872*	*−0.3*	*1,455,061*	*+0.5*	*98*	*5,321*	*−1.3*	*84,480*	*−2.0*
Michigan	419	24,740	−1.2	742,620	+3.3	74	4,511	−2.8	65,308	−7.2
Minnesota	267	13,277	+0.1	382,926	+4.0	59	2,990	−2.1	40,776	−3.9
Mississippi	202	2,409	+8.2	46,781	+6.2	21	578	−6.0	5,079	−6.1
Missouri	220	23,539	+0.9	673,226	+3.4	79	4,584	−0.8	59,776	−0.6
Montana	113	2,082	−2.5	67,045	−0.1	18	250	−4.9	4,185	−5.0
Nebraska	300	6,003	−4.7	165,716	+1.8	35	1,614	−2.5	19,270	−3.6
Nevada	40	407	+1.0	11,807	+2.9	12	151	+3.4	2,670	+5.1
New Hampshire	138	2,156	+1.3	61,092	−0.9	13	288	+1.8	3,755	+2.7
New Jersey	278	24,337	−0.6	773,690	+0.4	73	5,270	−1.8	72,846	−1.6
New Mexico	56	591	+4.8	13,162	+5.3	16	317	+5.3	3,676	+0.1
New York	913	112,946	−0.9	3,589,173	−0.6	277	32,213	−2.6	543,762	−2.7
North Carolina	97	1,898	−2.5	40,627	+2.5	40	1,200	−13.7	12,204	−14.8
North Dakota	171	1,266	+2.5	33,790	+6.0	20	395	−3.2	4,630	+3.2
Ohio	474	33,102	−0.4	906,523	+2.7	172	10,007	−0.9	141,051	−3.7
Oklahoma	246	6,401	−1.4	150,180	+0.7	36	775	−9.0	7,886	−4.2
Oregon	185	5,854	−1.8	156,462	−2.3	41	1,095	−1.6	16,833	−4.1
Pennsylvania	702	53,695	−0.7	1,607,594	−0.7	178	10,298	−0.5	144,682	−0.3
Rhode Island	35	3,630	−3.2	108,886	−4.7	19	413	(9)	6,130	−1.7
South Carolina	70	1,810	+2.5	43,059	+2.1	17	419	−5.8	3,582	−6.7
South Dakota	128	1,079	+0.3	29,731	+3.6	15	319	+0.3	4,079	+0.4
Tennessee	251	5,162	−1.5	122,899	+0.6	48	2,536	−1.2	24,667	+1.2
Texas	*115*	*7,183*	*−3.3*	*204,201*	*−2.8*	*54*	*3,394*	*−4.0*	*42,626*	*−3.1*
Utah	69	1,910	+0.6	41,076	+0.2	13	530	−2.2	8,274	−1.4
Vermont	117	1,013	−0.3	24,967	−0.4	20	424	+2.9	5,096	+1.0
Virginia	178	6,176	−1.8	163,259	+3.8	36	2,160	−0.5	26,111	−2.2
Washington	204	10,238	+0.1	298,076	−0.5	60	2,155	−1.6	29,890	−1.5
West Virginia	121	6,318	−1.5	176,091	+5.3	35	1,229	+4.6	14,267	+2.5
Wisconsin	[12] *41*	*10,982*	*−3.1*	*329,926*	*−1.6*	[10] *43*	*1,388*	*−1.8*	(13)	-------
Wyoming	47	448	+0.2	11,755	+6.5	12	200	+2.0	3,281	+2.5

[1] Less than one-tenth of 1 per cent.
[9] No change.
[10] Includes restaurants.
[11] Includes steam railroads.
[12] Includes steam railways and express.
[13] Data not supplied

COMPARISON OF EMPLOYMENT AND EARNINGS IN **IDENTICAL** ESTABLISHMENTS IN APRIL AND MAY, 1932, 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]

State	Laundries					Dyeing and cleaning				
	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change	Number of establishments	Number on pay roll, May, 1932	Per cent of change	Amount of pay roll (1 week) May, 1932	Per cent of change
Alabama	6	524	−1.1	$5,590	−0.8	4	167	+3.7	$2,043	+4.0
Arkansas	*19*	*508*	*−0.8*	*5,239*	*−0.3*	3	35	+2.9	434	−2.9
Arizona	10	429	−6.5	7,047	−7.4					
California	[14] *73*	*6,006*	*−2.4*	*120,087*	*−4.4*					
Colorado	13	920	−1.3	14,543	−1.8	10	151	+1.3	3,237	+5.6
Connecticut	31	1,281	(9)	24,547	+0.6	14	307	+2.3	7,334	+5.4
Delaware	4	313	−0.9	5,049	−2.0	3	40	+8.1	726	+14.5
Dist. of Columbia	19	2,074	−1.7	35,839	+0.8	5	110	(9)	2,369	+0.3
Florida	8	457	−0.4	5,101	−10.6	6	59	+1.7	788	−5.9
Georgia	14	683	+1.5	6,846	−0.9	5	140	(9)	1,730	−2.4
Idaho										
Illinois	[14] *21*	*1,566*	*−0.1*	*25,978*	*+1.0*					
Indiana	23	1,744	−2.6	27,350	+0.5	10	147	+3.5	2,757	+5.5
Iowa	3	217	−1.8	3,752	−1.2					
Kansas	*24*	*1,054*	*+2.1*	*13,355*	*−1.8*					
Kentucky	22	1,012	−1.2	13,946	+1.8	5	236	−0.4	3,955	+1.4
Louisiana										
Maine	23	489	+2.3	7,681	+1.5	4	122	+2.5	2,248	+1.4
Maryland	*23*	*1,625*	*−0.7*	*27,316*	*+2.3*	*13*	*195*	*+5.4*	*3,617*	*+9.9*
Massachusetts	*98*	*3,265*	*−0.4*	*58,173*	*−0.7*	*112*	*1,728*	*−6.3*	*35,129*	*+3.7*
Michigan	24	1,475	−0.5	25,663	−2.0	19	711	+6.0	16,227	+70.9
Minnesota	13	751	−0.8	13,644	(9)	9	344	+3.3	6,950	+2.5
Mississippi	7	347	−2.0	3,472	−0.9					
Missouri	35	2,916	−0.2	42,948	−0.2	12	387	(9)	7,320	+5.2
Montana	14	358	−1.1	6,905	−7.1					
Nebraska	10	787	−5.2	13,095	−7.4	5	153	−1.3	3,549	−0.1
Nevada	4	59	−1.7	1,366	−2.4					
New Hampshire	15	278	+1.5	4,537	−0.5					
New Jersey	30	3,042	−1.6	66,235	+0.2	9	351	(9)	10,818	+0.8
New Mexico	4	222	−1.8	3,441	+0.1					
New York	69	7,099	+0.6	133,435	+0.7	18	611	−0.7	13,875	+0.6
North Carolina	11	746	−0.3	8,774	−1.1	3	32	−22.0	355	−18.0
North Dakota	10	211	−0.9	3,807	−0.5					
Ohio	83	4,738	−0.6	82,414	−0.5	38	1,331	−0.5	25,490	+2.8
Oklahoma	7	610	−1.5	8,287	−2.0	7	287	−1.0	4,477	−4.2
Oregon	3	253	−0.8	4,587	−2.9	4	40	+17.6	960	+5.4
Pennsylvania	47	3,512	−0.6	57,816	−0.1	26	1,223	+7.1	24,765	+7.3
Rhode Island	19	1,102	(9)	20,732	+0.2	6	301	+5.6	5,848	+5.0
South Carolina	8	331	+1.2	3,431	+0.2	4	74	+1.4	1,165	+5.3
South Dakota	5	127	+0.8	2,077	+1.5					
Tennessee	14	1,048	−0.4	10,492	−3.6	5	43	+2.4	704	(9)
Texas	23	1,174	+1.1	14,490	—[1]	17	345	+5.8	6,293	+7.1
Utah	6	539	−1.1	7,813	−5.7	7	116	+0.9	2,235	−6.5
Vermont	6	84	+7.7	1,027	+1.2					
Virginia	13	907	−0.2	10,729	−1.6	27	398	−1.5	6,014	+3.1
Washington	14	718	+0.7	16,275	−2.6	13	189	+0.5	3,900	−4.9
West Virginia	22	778	+0.6	11,031	−1.3	10	214	+1.4	3,548	+0.8
Wisconsin	[14] 23	761	(9)	12,051	+0.7					
Wyoming	6	123	−1.6	2,486	−2.4					

[1] Less than one-tenth of 1 per cent.
[9] No change.
[14] Includes dyeing and cleaning.

Employment and Pay Roll in May, 1932, in Cities of Over 500,000 Population

IN THE following table are presented the fluctuations in employment and earnings in May, 1932, as compared with April, 1932, in 13 cities of the United States having a population of 500,000 or over. These fluctuations are based on reports received from identical establishments in each of the months considered.

These city tabulations include all establishments reporting in all of the industrial groups, except building construction in these 13 cities, and also additional employment information secured from banks, insurance companies, garages, and other establishments in these 13 cities. Building-construction data are not included in these totals, as information is not available for all cities at this time.

COMPARISON OF EMPLOYMENT AND PAY ROLL IN CITIES OF OVER 500,000 POPULATION, APRIL AND MAY, 1932

City	Number of establishments reporting in both months	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		April, 1932	May, 1932		April, 1932	May, 1932	
New York City	1,888	305,665	294,242	−3.7	$8,704,180	$8,283,814	−4.8
Chicago, Ill	1,897	205,525	201,758	−1.8	5,250,389	5,072,666	−3.4
Philadelphia, Pa	673	112,998	111,390	−1.4	2,502,504	2,409,234	−3.7
Detroit, Mich	570	191,715	200,417	+4.5	4,737,874	5,391,488	+13.8
Los Angeles, Calif	565	56,517	55,230	−2.3	1,426,623	1,406,224	−1.4
Cleveland, Ohio	1,012	80,137	78,730	−1.8	1,749,875	1,736,684	−0.8
St. Louis, Mo	502	68,025	66,050	−2.9	1,489,148	1,444,709	−3.0
Baltimore, Md	575	50,213	48,559	−3.3	1,034,229	983,510	−4.9
Boston, Mass	2,870	87,069	86,226	−1.0	2,248,179	2,202,145	−2.0
Pittsburgh, Pa	327	50,102	49,517	−1.2	1,054,139	1,013,351	−3.9
San Francisco, Calif	896	42,074	40,703	−3.3	1,072,784	1,046,600	−2.4
Buffalo, N. Y	269	40,182	37,831	−5.9	957,552	903,366	−5.7
Milwaukee, Wis	448	36,670	35,751	−2.5	755,227	732,217	−3.0

Employment in Executive Civil Service of the United States, May, 1932

THE table following shows for the months of May, 1931, and April and May, 1932, the number of officers and employees of the executive civil service of the United States Government. The figures are complete except for temporary employees in the field service of the Post Office Department. The number of temporary employees in this department varies greatly, mainly because of seasonal demand. The principal demand for such workers is during the Christmas mail rush. Their term of service is usually quite brief.

As indicated by the title of this article, the figures do not include the legislative, judicial, or Army and Navy services of the United States. The data are compiled by the various Federal departments and offices and sent to the United States Civil Service Commission where they are assembled. They are published here by courtesy of the commission and in compliance with the direction of Congress. No information has yet been collected relative to the amounts of pay rolls. Data are shown separately for the District of Columbia and the United States outside of the District of Columbia.

At the end of May, 1932, there were 577,211 employees in the executive civil service of the United States. Of this number, 544,624 were permanent employees and 32,587 were temporary employees. In the interval between May 31, 1931, and May 31, 1932, there was a loss of 3,524 employees. There was, however, a gain of 10,286 in the number of permanent employees during this period, or 1.80 per

cent. The number of temporary employees decreased 13,810, or 29.76 per cent.

Comparing the number on the pay roll on May 31, 1932, with the April 30, 1932, figures there was a loss of 294 in the number of permanent employees, but a gain of 2,235 in the number of temporary employees.

EMPLOYEES IN THE EXECUTIVE CIVIL SERVICE OF THE UNITED STATES, MAY, 1931; APRIL AND MAY, 1932

Class	District of Columbia			Outside District			Entire service		
	May, 1931	April, 1932	May, 1932	May, 1931	April, 1932	May, 1932	May, 1931	April, 1932	May, 1932
Permanent employees	64,163	[1] 66,194	66,062	[2] 505,975	478,724	478,562	[2] 570,138	544,918	544,624
Temporary employees (not including field service, Post Office Department)	8,254	3,192	3,313	38,143	27,160	29,274	46,397	30,352	32,587
Total	72,417	69,386	69,375	544,118	505,884	507,836	616,535	575,270	577,211

Gain or loss	District of Columbia				Outside District				Entire service			
	Number		Per cent		Number		Per cent		Number		Per cent	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
May, 1931–May, 1932	+1,899	−4,941	+3.0	−59.9	+8,387	−8,869	+1.7	−23.3	+10,286	−13,810	+1.8	−29.8
April, 1932–May, 1932	−132	+121	−.2	+3.8	−162	+2,114	−[3]	+7.8	−294	+2,235	−[3]	−7.4

Labor turnover	District of Columbia			Outside District			Entire service		
	Permanent	Temporary	Total	Permanent	Temporary	Total	Permanent	Temporary	Total
Additions in May, 1932	232	306	538	2,165	13,228	15,393	2,397	13,534	15,931
Separation in May, 1932	364	185	549	2,327	11,114	13,441	2,691	11,299	13,990
Labor turnover May, 1932	0.35	5.69	0.78	0.45	39.39	2.65	0.44	35.90	2.43

[1] 68 mail contractors and special-delivery messengers previously included have been deducted.
[2] 35,800 star-route and other contractors, clerks in charge of mail contract stations, clerks in third-class post offices, and special-delivery messengers, who were previously included in these totals have been deducted.
[3] Less than one-tenth of 1 per cent.

The number of employees in the District of Columbia showed a decrease of 3,042 comparing May, 1932, with May, 1931, and a decrease of 11 comparing May, 1932, with April, 1932.

During the month of May, 1932, there were 15,931 employees hired in the entire Federal service and 13,990 employees separated from the service on account of resignation, termination of appointment, death, retirement, or other causes. This gives a net turnover rate of 2.43 during the month.

The turnover rate for the District of Columbia was less than one-third of that for the entire service. The District of Columbia rate was only 0.78 per cent. There were 69,375 employees on the Government pay roll in the District of Columbia at the end of May, 1932.

Employment in Building Construction in May, 1932

EMPLOYMENT in building construction decreased 10.3 per cent in May as compared with April, and earnings decreased 19.4 per cent during the same period. These per cents are based on information received from 7,417 firms engaged on building operations which report direct to the Federal bureau and 2,677 additional firms reporting to various cooperating State labor departments which collect this information within their respective jurisdictions.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE **BUILDING CONSTRUCTION** INDUSTRY IN IDENTICAL FIRMS, APRIL AND MAY 1932

Locality	Number of firms reporting	Number on pay roll week ending near—		Per cent of change	Amount of pay roll week ending near—		Per cent of change
		Apr. 15	May 15		Apr. 15	May 15	
Alabama: Birmingham	82	409	435	+6.4	$5,700	$6,598	+15.8
California:							
Los Angeles [1]	25	874	727	−16.8	19,784	16,574	−16.2
San Francisco Oakland [1]	36	986	936	−5.1	25,400	25,601	+0.8
Other reporting localities [1]	27	615	610	−0.8	15,160	14,357	−5.3
Colorado: Denver	191	801	724	−9.6	20,876	17,544	−16.0
Connecticut:							
Bridgeport	136	593	649	+9.4	15,864	17,024	+7.3
Hartford	253	1,427	1,395	−2.2	37,698	39,039	+3.6
New Haven	203	2,134	1,499	−29.8	67,737	44,479	−34.3
Delaware: Wilmington	97	1,489	1,552	+4.2	31,356	34,031	+8.5
District of Columbia	552	8,603	7,587	−11.8	241,241	200,090	−17.1
Florida:							
Jacksonville	54	220	309	+40.5	3,373	4,741	+40.6
Miami	82	551	655	+18.9	12,056	13,853	+14.9
Georgia: Atlanta	134	1,177	1,149	−2.4	18,671	17,527	−6.1
Illinois:							
Chicago [1]	95	1,094	960	−12.2	33,149	30,641	−7.6
Other reporting localities [1]	35	652	550	−15.6	21,368	15,130	−29.2
Indiana:							
Fort Wayne	107	658	698	+6.1	13,723	15,061	+9.8
Indianapolis	153	851	875	+2.8	20,907	19,981	−4.4
South Bend	43	287	322	+12.2	6,393	6,617	+3.5
Iowa: Des Moines	106	522	504	−3.4	12,382	10,772	−13.0
Kansas: Wichita	55	206	210	+1.9	3,263	3,724	+14.1
Kentucky: Louisville	138	1,149	1,070	−6.9	24,891	22,991	−7.6
Louisiana: New Orleans	124	1,321	1,182	−10.5	23,253	21,995	−5.4
Maine: Portland	95	422	504	+19.4	10,079	13,144	+30.4
Maryland: Baltimore [1]	132	1,526	1,528	+0.1	28,660	29,977	+4.6
Massachusetts: All reporting localities [1]	752	6,584	7,148	+8.6	185,839	211,990	+14.1
Michigan:							
Detroit	424	2,971	2,637	−11.2	77,021	64,196	−16.7
Flint	35	140	148	+5.7	2,402	2,639	+9.9
Grand Rapids	108	345	600	+73.9	6,948	10,247	+47.5
Minnesota:							
Duluth	60	258	238	−7.8	5,181	4,716	−9.0
Minneapolis	243	1,680	1,816	+8.1	43,459	46,978	+8.1
St. Paul	143	1,304	1,312	+0.6	32,261	33,556	+4.0
Missouri:							
Kansas City [2]	231	1,689	2,033	+20.4	50,060	57,095	+14.1
St. Louis	435	2,069	2,129	+2.9	63,513	63,756	+0.4
Nebraska: Omaha	140	882	808	−8.4	22,164	19,857	−10.4
New York: New York City [1]	331	10,267	2,586	−74.8	491,763	74,966	−84.8
Other reporting localities [1]	107	3,482	3,002	−13.8	114,103	87,541	−23.3
North Carolina: Charlotte	38	209	231	+10.5	3,506	2,863	−18.3
Ohio:							
Akron	86	333	396	+18.9	6,346	7,286	+14.8
Cincinnati [3]	506	3,476	3,233	−7.0	98,719	94,396	−4.4
Cleveland	409	2,397	2,704	+12.8	62,871	74,677	+18.8
Dayton	113	548	427	−22.1	12,247	9,902	−19.1
Youngstown	45	141	177	+25.5	3,049	3,673	+20.5
Oklahoma:							
Oklahoma City	100	642	498	−22.4	11,801	9,059	−23.2
Tulsa	53	194	170	−12.4	3,441	2,903	−15.6
Oregon: Portland	196	1,105	1,021	−7.6	24,437	22,944	−6.1

[1] Data supplied by cooperating State bureaus.
[2] Includes both Kansas City, Kans., and Kansas City, Mo.
[3] Includes Covington and New port, Ky.

COMPARISON OF EMPLOYMENT AND TOTAL PAY ROLL IN THE **BUILDING CONSTRUCTION** INDUSTRY IN IDENTICAL FIRMS, APRIL AND MAY, 1932—Continud

Locality	Number of firms reporting	Number on pay roll week ending near—		Per cent of change	Amount of pay roll week ending near—		Per cent of change
		Apr. 15	May 15		Apr. 15	May 15	
Pennsylvania:							
Erie [1]	28	206	258	+25.2	$4,238	$6,466	+52.6
Philadelphia [1]	515	4,292	4,818	+12.3	109,314	121,201	+10.9
Pittsburgh [1]	245	1,831	1,756	−4.1	56,554	53,794	−4.9
Reading [1]	57	344	338	−1.7	7,292	7,120	−2.4
Scranton [1]	35	182	203	+11.5	3,770	4,637	+23.0
Other reporting localities [1]	197	1,243	1,260	+1.4	23,352	25,932	+11.0
Rhode Island: Providence	219	1,737	1,676	−3.5	43,253	43,915	+1.5
Tennessee:							
Knoxville	32	480	346	−27.9	6,914	6,032	−12.8
Memphis	95	744	587	−21.1	14,985	11,254	−24.9
Nashville	80	1,058	919	−13.1	19,619	18,424	−6.1
Texas:							
Dallas	135	781	819	+4.9	14,143	12,891	−8.9
Houston	122	691	744	+7.7	12,138	13,375	+10.2
San Antonio	77	481	527	+9.6	8,454	8,565	+1.3
Utah: Salt Lake City	92	527	555	+5.3	12,264	11,773	−4.0
Virginia:							
Norfolk-Portsmouth	90	551	584	+6.0	11,062	12,077	+9.2
Richmond	148	1,185	1,074	−9.4	25,520	21,530	−15.6
Washington:							
Seattle	190	1,018	863	−15.2	24,718	21,002	−15.0
Spokane	43	152	148	−2.6	3,335	2,847	−14.6
Tacoma	72	138	181	+31.2	2,874	4,183	+45.5
West Virginia: Wheeling	52	227	255	+12.3	4,612	5,354	+16.1
Wisconsin: All reporting localities [1]	60	1,243	1,405	+13.0	30,747	34,771	+13.1
Total, all localities	10,094	88,394	79,260	−10.3	2,473,273	1,993,874	−19.4

[1] Data supplied by cooperating State bureaus.

Employment on Class I Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to April, 1932, on Class I railroads—that is, all roads having operating revenues of $1,000,000 or over—is shown by the index numbers published in Table 1. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the 12-month average for 1926 as 100.

TABLE **1.**—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO APRIL, 1932

[12-month average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
January	98.3	96.9	95.6	95.8	95.5	89.3	88.2	86.3	73.7	61.2
February	98.6	97.0	95.4	96.0	95.3	89.0	88.9	85.4	72.7	60.3
March	100.5	97.4	95.2	96.7	95.8	89.9	90.1	85.5	72.9	60.5
April	102.0	98.9	96.6	98.9	97.4	91.7	92.2	87.0	73.5	60.0
May	105.0	99.2	97.8	100.2	99.4	94.5	94.9	88.6	73.9	-------
June	107.1	98.0	98.6	101.6	100.9	95.9	96.1	86.5	72.8	-------
July	108.2	98.1	99.4	102.9	101.0	95.6	96.6	84.7	72.4	-------
August	109.4	99.0	99.7	102.7	99.5	95.7	97.4	83.7	71.2	-------
September	107.8	99.7	99.9	102.8	99.1	95.3	96.8	82.2	69.3	-------
October	107.3	100.8	100.7	103.4	98.9	95.3	96.9	80.4	67.7	-------
November	105.2	99.0	99.1	101.2	95.7	92.9	93.0	77.0	64.5	-------
December	99.4	96.0	97.1	98.2	91.9	89.7	88.8	74.9	62.6	-------
Average	104.1	98.3	97.9	100.0	97.5	92.9	93.3	83.5	70.6	[1]60.5

[1] Average for 4 months.

Table 2 shows the total number of employees on the 15th day each of April, 1931, and March and April, 1932, and the total pay roll for the entire months.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES, APRIL, 1931, AND MARCH AND APRIL, 1932

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

Occupation	Number of employees at middle of month			Total earnings		
	Apr. 15, 1931	Mar. 15, 1932	Apr. 15, 1932	April, 1931	March, 1932	April, 1932
Professional, clerical, and general	230,359	197,049	194,336	$34,109,960	$26,992,117	$26,105,758
Clerks	125,328	105,267	103,759	17,525,537	13,649,048	13,126,370
Stenographers and typists	21,514	18,536	18,394	2,845,479	2,271,947	2,205,811
Maintenance of way and structures	290,569	210,004	219,252	27,060,604	17,237,901	17,068,340
Laborers, extra gang and work train	31,228	13,415	15,559	2,200,223	780,384	843,200
Laborers, track and roadway section	153,036	113,413	121,333	10,534,865	6,421,656	6,612,969
Maintenance of equipment and stores	362,654	307,146	298,650	46,035,439	33,446,735	31,136,637
Carmen	75,677	62,359	60,793	10,780,323	7,558,704	7,044,418
Machinists	47,473	42,427	41,287	7,055,912	5,350,669	4,936,818
Skilled trades helpers	79,601	67,021	64,856	8,450,424	5,976,245	5,475,841
Laborers (shops, engine houses, power plants, and stores)	29,655	25,080	24,022	2,712,074	2,020,674	1,873,274
Common laborers (shops, engine houses, power plants, and stores)	38,821	32,044	31,430	2,925,200	2,043,077	1,881,110
Transportation, other than train, engine and yard	163,290	140,491	138,036	20,495,309	16,204,960	15,506,609
Station agents	27,858	26,234	26,101	4,407,956	3,826,751	3,703,665
Telegraphers, telephoners, and towermen	20,040	17,634	17,373	3,078,199	2,520,480	2,401,123
Truckers (stations, warehouses, and platforms)	24,324	19,419	18,755	2,253,373	1,567,758	1,469,148
Crossing and bridge flagmen and gatemen	19,002	18,205	18,125	1,474,174	1,264,942	1,254,031
Transportation (yard masters, switch tenders, and hostlers)	18,283	15,418	15,049	3,507,194	2,618,187	2,492,497
Transportation, train and engine	250,216	212,168	207,201	48,422,115	37,151,440	34,159,125
Road conductors	28,447	24,285	23,772	6,640,226	5,186,902	4,832,558
Road brakemen and flagmen	54,735	46,087	45,401	9,080,839	6,888,225	6,363,046
Yard brakemen and yard helpers	42,616	36,144	35,064	6,947,326	5,179,072	4,694,863
Road engineers and motor men	33,399	28,740	28,003	8,793,049	6,895,901	6,360,990
Road firemen and helpers	34,199	29,481	28,947	6,368,046	4,959,494	4,562,737
All employees	1,315,371	1,082,276	1,072,524	179,680,621	133,651,340	126,468,966

RETAIL PRICES

RETAIL PRICES OF FOOD IN MAY, 1932

IT HAS been the custom of the Bureau of Labor Statistics to publish each month certain information in regard to the retail prices of food by cities and articles. In the interest of economy in the cost of printing, some of these detailed statistics are temporarily eliminated from current publications. Information comparable to that shown in previous publications is on record in the files of the bureau and available to those desiring to make use of it.

Rates of electricity for household use and price per 1,000 cubic feet of gas, by cities, are published in June and December of each year.

Table 1 shows for 51 cities of the United States retail prices and index numbers of food on May 15, 1931, and April 15 and May 15, 1932. These prices are simple averages of actual selling prices reported monthly by retail dealers in 51 cities. The index numbers are based on the average prices in the year 1913.

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF FOOD IN THE UNITED STATES ON MAY 15, 1931, AND APRIL 15 AND MAY 15, 1932

Article	Unit	Average retail price on—			Index numbers (1913=100)		
		May 15, 1931	Apr. 15, 1932	May 15, 1932	May 15, 1931	Apr. 15, 1932	May 15, 1932
		Cents	*Cents*	*Cents*			
Sirloin steak	Pound	39.5	33.4	33.0	155.5	131.5	129.9
Round steak	do	34.5	28.6	28.4	154.7	128.3	127.4
Rib roast	do	29.1	24.3	23.8	147.0	122.7	120.2
Chuck roast	do	21.7	17.4	17.0	135.6	108.8	106.3
Plate beef	do	14.5	11.7	11.1	119.8	96.7	91.7
Pork chops	do	30.1	21.5	19.9	143.3	102.4	94.8
Bacon, sliced	do	37.6	24.9	23.9	139.3	92.2	88.5
Ham, sliced	do	46.5	36.3	35.4	172.9	134.9	131.6
Lamb, leg of	do	31.2	25.6	25.0	165.1	135.4	132.3
Hens	do	31.7	26.6	25.7	148.8	124.9	120.7
Salmon, red, canned	do	33.8	28.1	26.9			
Milk, fresh	Quart	12.3	11.0	10.8	138.2	123.6	121.3
Milk, evaporated	14½-oz. can	8.2	7.5	7.3			
Butter	Pound	31.2	26.8	25.1	81.5	70.0	65.5
Oleomargarine (all butter substitutes)	do	19.6	15.4	15.1			
Cheese	do	27.4	23.3	22.6	124.0	105.4	102.3
Lard	do	13.5	8.7	8.3	85.4	55.1	52.5
Vegetable lard substitute	do	23.3	21.4	20.7			
Eggs, strictly fresh	Dozen	24.8	20.1	20.3	71.9	58.3	58.8
Bread	Pound	7.7	6.9	6.9	137.5	123.2	123.2
Flour	do	3.7	3.2	3.2	112.1	97.0	97.0
Corn meal	do	4.6	3.9	3.9	153.3	130.0	130.0
Rolled oats	do	8.0	7.6	7.6			
Cornflakes	8-oz. package	9.0	8.7	8.6			
Wheat cereal	28-oz. package	24.1	22.6	22.5			

TABLE 1.—AVERAGE RETAIL PRICES AND INDEX NUMBERS OF FOOD IN THE UNITED STATES ON MAY 15, 1931, AND APRIL 15 AND MAY 15, 1932—Continued

Article	Unit	Average retail price on			Index numbers (1913=100)		
		May 15, 1931	Apr. 15, 1932	May 15, 1932	May 15, 1931	Apr. 15, 1932	May 15, 1932
		Cents	*Cents*	*Cents*			
Macaroni	Pound	17.1	15.5	15.4			
Rice	do	8.3	6.9	6.7	95.4	79.3	77.0
Beans, navy	do	8.2	5.2	5.1			
Potatoes	do	2.8	1.7	1.8	164.7	100.0	105.9
Onions	do	4.6	10.3	6.7			
Cabbage	do	4.1	6.4	6.6			
Pork and beans	16-oz. can	7.5	7.9	7.4			
Corn, canned	No. 2 can	13.6	10.8	10.8			
Peas, canned	do	14.1	13.1	12.9			
Tomatoes, canned	do	10.2	9.5	9.5			
Sugar	Pound	5.6	5.1	4.9	101.8	92.7	89.1
Tea	do	74.5	72.4	71.9	136.9	133.1	132.2
Coffee	do	33.5	30.5	30.0	112.4	102.3	100.7
Prunes	do	12.1	9.6	9.4			
Raisins	do	11.0	11.5	11.5			
Bananas	Dozen	26.6	23.6	23.2			
Oranges	do	37.8	31.9	33.0			
Weighted food index					121.0	103.7	101.3

Table 2 shows the trend in the retail cost of three important groups of food commodities, viz, cereals, meats, and dairy products, by years for 1913, 1920, 1928, 1929, 1930, 1931 and by months for 1931 and 1932. The articles within these groups are as follows:

Cereals: Bread, flour, corn meal, rice, rolled oats, corn flakes, wheat cereal, macaroni.

Meats: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, hens, and leg of lamb.

Dairy products: Butter, cheese, fresh milk, and evaporated milk.

TABLE 2.—INDEX NUMBERS OF RETAIL COST OF CEREALS, MEATS, AND DAIRY PRODUCTS, FOR THE UNITED STATES, BY YEARS FOR 1913, 1920, 1928, 1929, 1930, AND BY MONTHS, 1931 AND 1932

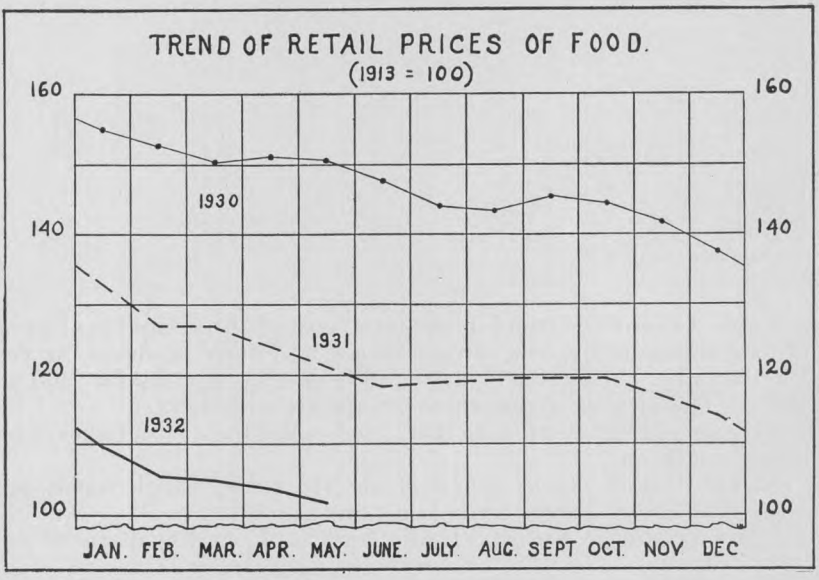
[Average cost in 1923=100.0]

Year and month	Cereals	Meats	Dairy products	Year and month	Cereals	Meats	Dairy products
1913	100.0	100.0	100.0	1931—Continued.			
1920	232.1	185.7	185.1	August	132.0	149.1	111.9
1928	167.2	179.2	150.0	September	130.2	147.7	114.3
1929	164.1	188.4	148.6	October	129.8	142.7	117.0
1930	158.0	175.8	136.5	November	129.1	135.4	114.4
1931: Average for year	135.9	147.0	114.6	December	127.8	129.3	111.4
January	147.1	159.5	123.6	1932:			
February	144.6	153.4	120.2	January	126.4	123.4	106.5
March	142.4	152.5	120.5	February	125.0	117.3	102.9
April	138.9	151.4	116.5	March	124.3	118.9	101.9
May	137.7	149.3	110.3	April	122.9	118.6	97.4
June	136.3	145.7	108.3	May	122.6	115.3	94.4
July	134.3	147.8	109.6				

Index Numbers of Retail Prices of Food in the United States

In Table 3 index numbers are given which show the changes in the retail prices of specified food articles, by years, for 1913, 1920, 1928, 1929, 1930,[2] 1931 and by months for 1931 and 1932. These index numbers, or relative prices, are based on the year 1913 as 100.0 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913.

In the last column are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921,



these index numbers have been computed from the average prices of the articles of food shown in Table 1, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles varied, these index numbers have been so computed as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100.0 are 103.7 for April, 1932, and 101.3 for May, 1932.

The accompanying chart shows the trend in the cost of the food budget in 51 cities of the United States by months, January 15, 1930, to date.

The curve pictures more readily to the eye the changes in the cost of all articles of food than do the index numbers given in Table 3.

[2] For index numbers of each month, January, 1913, to December, 1928, see Bulletin No. 396, pp. 44 to 61; and Bulletin No. 495, pp. 32 to 45. Index numbers for 1929 are published in each Labor Review, February, 1930, to February, 1931.

TABLE 3.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920, 1928, 1929, 1930, 1931, AND BY MONTHS FOR 1931 AND 1932

[Average for year 1913=100.0]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Lamb, leg of	Hens	Milk	Butter
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	207.9	209.9	187.6	183.0
1928	188.2	188.3	176.8	174.4	157.0	165.7	163.0	196.7	208.5	175.6	159.6	147.5
1929	196.9	199.1	185.4	186.9	172.7	175.7	161.1	204.1	212.2	186.4	160.7	143.9
1930	182.7	184.8	172.7	170.0	155.4	171.0	156.7	198.5	185.7	166.7	157.3	120.4
1931	155.1	154.3	146.0	134.4	118.2	138.6	134.8	170.6	156.1	145.5	138.2	92.4
January	167.3	168.2	159.1	152.5	138.0	141.9	148.9	188.1	166.1	153.5	149.4	98.4
February	161.4	161.0	154.0	145.6	131.4	131.4	145.2	183.3	164.6	148.8	146.1	94.8
March	158.7	157.8	153.0	141.9	128.1	140.0	143.0	178.4	164.0	150.2	144.9	97.4
April	157.5	156.5	150.0	139.4	124.8	141.4	141.1	175.5	165.6	153.1	141.6	91.9
May	155.5	154.7	147.0	135.6	119.8	143.3	139.3	172.9	165.1	148.8	138.2	81.5
June	152.4	151.1	142.9	130.6	112.4	140.0	136.7	170.6	161.9	146.0	134.8	80.7
July	154.3	154.3	142.9	130.0	110.7	151.4	137.0	171.4	158.7	144.6	136.0	82.8
August	155.5	155.2	143.9	130.0	109.9	158.6	135.6	171.4	156.6	145.1	136.0	89.8
September	155.1	154.3	142.9	130.6	111.6	153.3	134.1	169.5	152.4	145.1	136.0	96.1
October	152.0	150.7	141.4	129.4	111.6	139.5	127.0	164.3	145.5	140.4	134.8	104.2
November	146.9	144.8	137.9	126.3	109.9	119.0	118.9	155.4	138.1	137.1	134.8	97.4
December	142.9	140.4	134.8	122.5	108.3	103.8	112.2	147.6	131.7	134.3	130.3	95.3
1932:												
January	137.4	135.0	129.8	115.6	101.7	99.5	101.5	139.8	127.5	131.0	129.2	84.3
February	130.7	127.4	123.2	108.1	96.7	91.0	96.7	136.4	125.4	127.2	128.1	77.0
March	129.9	127.8	123.2	108.1	95.9	102.4	95.2	136.1	131.7	128.2	127.0	77.0
April	131.5	128.3	122.7	108.8	96.7	102.4	92.2	134.9	135.4	124.9	123.6	70.0
May	129.9	127.4	120.2	106.3	91.7	94.8	88.5	131.6	132.3	120.7	121.3	65.5

Year and month	Cheese	Lard	Eggs	Bread	Flour	Corn meal	Rice	Potatoes	Sugar	Tea	Coffee	All articles[1]
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.	100.0
1920	188.2	186.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4
1928	174.2	117.7	134.5	162.5	163.6	176.7	114.9	158.8	129.1	142.3	165.1	154.3
1929	171.9	115.8	142.0	160.7	154.5	176.7	111.5	188.2	120.0	142.6	164.8	156.7
1930	158.8	107.6	118.8	155.4	142.4	176.7	109.2	211.8	112.7	142.5	136.2	147.1
1931	127.1	84.2	91.9	135.7	109.1	153.3	94.3	135.3	103.6	138.6	113.4	121.3
January	145.2	99.4	104.6	146.4	121.2	170.0	102.3	170.6	107.3	141.0	126.8	132.8
February	141.2	91.8	78.8	142.9	121.2	166.7	102.3	158.8	107.3	140.6	125.2	127.0
March	137.1	89.9	82.6	141.1	118.2	166.7	98.9	158.8	105.5	139.7	121.8	126.4
April	132.6	89.9	79.4	137.5	115.2	163.3	96.6	164.7	103.6	138.2	116.1	124.0
May	124.0	85.4	71.9	137.5	112.1	153.3	95.4	164.7	101.8	136.9	112.4	121.0
June	119.9	82.3	74.8	135.7	112.1	150.0	94.3	141.2	101.8	136.8	111.1	118.3
July	118.6	82.3	82.9	133.9	109.1	150.0	93.1	135.3	101.8	137.3	109.1	119.0
August	119.9	81.0	92.5	132.1	103.0	150.0	93.1	129.4	103.6	138.6	108.7	119.7
September	122.2	79.8	98.0	130.4	100.0	150.0	92.0	117.6	103.6	139.3	108.7	119.4
October	122.6	78.5	109.9	130.4	100.0	146.7	89.7	105.9	101.8	139.0	107.7	119.1
November	121.3	77.2	115.1	130.4	100.0	140.0	86.2	100.0	101.8	138.1	106.7	116.7
December	118.6	70.9	111.6	128.6	100.0	136.7	85.1	105.9	100.0	138.1	105.7	114.3
1932:												
January	115.4	63.9	86.1	126.8	100.0	133.3	85.1	100.0	98.2	136.2	104.4	109.3
February	110.4	59.5	70.1	125.0	100.0	133.3	82.8	100.0	96.4	135.3	104.0	105.3
March	107.7	57.0	61.2	125.0	97.0	130.0	81.6	100.0	94.5	134.7	103.4	105.0
April	105.4	55.1	58.3	123.2	97.0	130.0	79.3	100.0	92.7	133.1	102.3	103.7
May	102.3	52.5	58.8	123.2	97.0	130.0	77.0	105.9	89.1	132.2	100.7	101.3

[1] 22 articles in 1913–1920; 42 articles in 1921–1932.

Comparison of Retail Food Costs in 51 Cities

TABLE 4 shows for 39 cities the percentage of increase or decrease in the retail cost of food in the United States in May, 1932, compared with the average cost in the year 1913, in May, 1931, and April, 1932. For 12 other cities comparisons are given for the 1-year and the 1-month periods; these cities have been scheduled by the bureau at different dates since 1913. The percentage changes are based on actual retail prices secured each month from retail dealers and on the average consumption of these articles in each city. The consumption figures which have been used since January, 1921, are

given in the Labor Review for March, 1921 (p. 26). Those used for prior dates are given in the Labor Review for November, 1918, (pp. 94 and 95).

TABLE 4.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN MAY, 1932, COMPARED WITH THE COST IN APRIL, 1932, MAY, 1931, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase May, 1932, compared with 1913	Percentage decrease May, 1932, compared with—		City	Percentage increase May, 1932, compared with 1913	Percentage decrease May, 1932, compared with—	
		May, 1931	April, 1932			May, 1931	April, 1932
United States	1.3	16.3	2.4	Minneapolis	0.1	17.9	2.3
				Mobile		18.3	4.2
Atlanta	0.7	17.1	0.7	Newark	5.8	14.5	2.5
Baltimore	2.3	18.4	3.8	New Haven	8.8	13.2	3.1
Birmingham	0.9	14.9	3.3	New Orleans	[1] 0.7	14.3	4.5
Boston	0.1	17.4	3.1				
Bridgeport		13.8	2.7	New York	10.0	13.6	1.1
				Norfolk		13.6	2.0
Buffalo	6.6	13.8	3.7	Omaha	[1] 5.6	17.4	4.0
Butte		16.7	2.7	Peoria		15.7	4.0
Charleston, S. C	6.5	14.9	1.8	Philadelphia	6.1	16.8	0.9
Chicago	8.9	17.6	3.9				
Cincinnati	[1] 1.6	23.0	2.2	Pittsburgh	[1] 1.9	19.8	3.8
				Portland, Me		12.3	2.5
Cleveland	[1] 3.4	18.2	1.5	Portland, Oreg	[1] 2.7	10.6	[2] 0.2
Columbus		19.6	3.5	Providence	3.1	14.0	2.2
Dallas	[1] 2.3	15.4	3.0	Richmond	2.7	17.8	3.3
Denver	[1] 5.3	13.2	0.7				
				Rochester		13.0	3.0
Detroit	[1] 6.4	24.3	2.6	St. Louis	1.9	18.0	2.7
Fall River	0.6	14.8	2.2	St. Paul		16.5	0.9
Houston		19.9	4.8	Salt Lake City	[1] 10.9	16.0	0.3
Indianapolis	[1] 4.7	17.2	3.4	San Francisco	7.3	12.6	2.2
Jacksonville	[1] 7.2	18.8	1.9	Savannah		19.0	3.0
Kansas City	[1] 1.1	19.4	2.5	Scranton	8.8	14.5	2.0
Little Rock	[1] 9.5	20.1	1.8	Seattle	2.8	13.4	1.7
Los Angeles	[1] 7.4	15.6	0.1	Springfield, Ill		16.2	2.9
				Washington, D. C	6.2	18.9	3.3
Louisville	[1] 4.8	16.9	1.8				
Manchester	0.6	16.3	2.1	Hawaii:			
Memphis	[1] 3.5	14.0	0.4	Honolulu		9.4	2.4
Milwaukee	1.7	15.4	3.4	Other localities		8.8	1.5

[1] Decrease. [2] Increase.

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of March schedules were received from 99 per cent of the firms in the 51 cities from which retail prices of food are collected.

Out of about 1,212 food reports 15 were not received—1 each in Birmingham, Cleveland, Detroit, Jacksonville, Minneapolis, New Orleans, Peoria, San Francisco, and Seattle; 2 each in Denver, St. Louis, and Salt Lake City.

Out of about 350 bread reports 2 were missing—1 each in Portland (Oreg.) and Seattle.

A perfect record is shown for the following-named cities: Atlanta, Baltimore, Boston, Bridgeport, Buffalo, Butte, Charleston (S. C.), Chicago, Cincinnati, Columbus, Dallas, Fall River, Houston, Indianapolis, Kansas City, Little Rock, Los Angeles, Louisville, Manchester, Memphis, Milwaukee, Mobile, Newark, New Haven, New York, Norfolk, Omaha, Philadelphia, Pittsburgh, Portland (Me.), Providence, Richmond, Rochester, St. Paul, Savannah, Scranton, Springfield (Ill.), and Washington.

Retail Prices of Coal in May, 1932 [1]

RETAIL prices of coal are secured in each of the 51 cities in which retail food prices are obtained. The prices quoted are for coal delivered to consumers but do not include charges for storing the coal in cellar or bins where an extra handling is necessary.

Average prices for the United States for bituminous coal and for stove and chestnut sizes of Pennsylvania anthracite are computed from the quotations received from retail dealers in all cities where these coals are sold for household use.

Table 1 shows the average prices of coal per ton of 2,000 pounds and index numbers for the United States on May 15, 1932, in comparison with the average prices on May 15, 1931, and April 15, 1932, together with the percentage change in the year and in the month.

AVERAGE RETAIL PRICE PER 2,000 POUNDS OF COAL FOR THE UNITED STATES, AND PER CENT OF CHANGE ON MAY 15, 1932, COMPARED WITH MAY 15, 1931, AND APRIL 15, 1932

Article	Average retail price on—			Per cent of decrease May, 1932, compared with—	
	May 15, 1931	Apr. 15, 1932	May 15, 1932	May 15, 1931	Apr. 15, 1932
Pennsylvania anthracite:					
Stove—					
Average price per 2,000 pounds	$14.22	$13.62	$13.31	6.4	2.3
Index (1913=100.0)	184.0	176.3	172.2		
Chestnut—					
Average price per 2,000 pounds	$14.19	$13.46	$13.11	7.6	2.6
Index (1913=100.0)	179.4	170.0	165.7		
Bituminous—					
Average price per 2,000 pounds	$8.04	$7.85	$7.60	5.5	3.2
Index (1913=100.0)	148.0	144.5	139.9		

Table 2 shows average retail prices of coal by cities. In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

[1] Prices of coal were formerly secured semiannually and published in the March and September issues of the Labor Review. Since June, 1920, these prices have been secured and published monthly.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAY 15, 1931, AND APRIL 15 AND MAY 15, 1932

City, and kind of coal	1931	1932	
	May 15	Apr. 15	May 15
Atlanta, Ga.:			
Bituminous, prepared sizes	$6.69	$5.73	$5.42
Baltimore, Md.:			
Pennsylvania anthracite—			
Stove	13.25	11.50	11.50
Chestnut	13.00	11.25	11.25
Bituminous, run of mine—			
High volatile	7.61	6.93	6.89
Birmingham, Ala.:			
Bituminous, prepared sizes	6.31	5.33	4.98
Boston, Mass.:			
Pennsylvania anthracite—			
Stove	14.75	13.35	13.25
Chestnut	14.69	13.10	13.00
Bridgeport, Conn.:			
Pennsylvania anthracite—			
Stove	14.13	13.00	13.00
Chestnut	14.13	13.00	13.00
Buffalo, N. Y.:			
Pennsylvania anthracite—			
Stove	12.60	11.75	11.88
Chestnut	12.60	11.50	11.63
Butte, Mont.:			
Bituminous, prepared sizes	10.49	9.73	9.76
Charleston, S. C.:			
Bituminous, prepared sizes	9.67	9.50	9.50
Chicago, Ill.:			
Pennsylvania anthracite—			
Stove	15.75	16.75	15.30
Chestnut	15.75	16.75	15.05
Bituminous—			
Prepared sizes—			
High volatile	7.39	7.86	7.65
Low volatile	9.86	10.41	8.97
Run of mine—			
Low volatile	7.24	7.23	6.95
Cincinnati, Ohio:			
Bituminous—			
Prepared sizes—			
High volatile	5.05	4.75	4.75
Low volatile	7.03	6.50	6.50
Cleveland, Ohio:			
Pennsylvania anthracite—			
Stove	14.00	14.44	13.81
Chestnut	13.88	14.31	13.56
Bituminous—			
Prepared sizes—			
High volatile	6.58	6.56	6.28
Low volatile	8.57	9.21	8.39
Columbus, Ohio:			
Bituminous—			
Prepared sizes—			
High volatile	5.30	5.25	5.10
Low volatile	7.00	6.67	6.17
Dallas, Tex.:			
Arkansas anthracite—Egg	14.50	14.00	14.00
Bituminus, prepared sizes	12.25	10.00	10.00
Denver, Colo.:			
Colorado anthracite—			
Furnace, 1 and 2 mixed	15.25	14.88	14.88
Stove, 3 and 5 mixed	15.25	14.88	14.81
Bituminous, prepared sizes	8.47	7.87	7.74
Detroit, Mich.:			
Pennsylvania anthracite—			
Stove	14.50	13.67	13.17
Chestnut	14.50	13.58	13.00
Bituminous—			
Prepared sizes—			
High volatile	6.97	6.04	6.06
Low volatile	8.13	6.61	6.85
Run of mine—			
Low volatile	7.13	6.25	6.25
Fall River, Mass.:			
Pennsylvania anthracite—			
Stove	15.00	14.00	14.00
Chestnut	15.00	13.75	13.75
Houston, Tex.:			
Bituminous, prepared sizes	$10.40	$10.20	$9.90
Indianapolis, Ind.:			
Bituminous—			
Prepared sizes—			
High volatile	5.68	5.54	5.08
Low volatile	7.75	7.96	6.75
Run of mine—			
Low volatile	6.65	6.55	5.85
Jacksonville, Fla.:			
Bituminous, prepared sizes	10.00	10.00	10.00
Kansas City, Mo.:			
Arkansas anthracite—			
Furnace	11.94	11.38	11.38
Stove No. 4	13.33	12.67	12.67
Bituminous, prepared sizes	6.73	6.12	6.00
Little Rock, Ark.:			
Arkansas anthracite—Egg	13.00	12.25	11.75
Bituminous, prepared sizes	9.39	8.72	8.33
Los Angeles, Calif.:			
Bituminous, prepared sizes	15.50	16.25	15.88
Louisville, Ky.:			
Bituminous—			
Prepared sizes—			
High volatile	5.03	4.73	4.71
Low volatile	7.50	6.75	6.75
Manchester, N. H.:			
Pennsylvania anthracite—			
Stove	15.50	14.50	14.50
Chestnut	15.50	14.50	14.50
Memphis, Tenn.:			
Bituminous, prepared sizes	7.02	6.82	6.87
Milwaukee, Wis.:			
Pennsylvania anthracite—			
Stove	15.25	15.05	14.45
Chestnut	15.25	14.80	14.20
Bituminous—			
Prepared sizes—			
High volatile	7.45	7.45	7.02
Low volatile	9.54	10.01	8.78
Minneapolis, Minn.:			
Pennsylvania anthracite—			
Stove	17.25	16.60	16.75
Chestnut	17.20	16.35	16.50
Bituminous—			
Prepared sizes—			
High volatile	9.91	9.34	9.61
Low volatile	12.48	12.04	11.87
Mobile, Ala.:			
Bituminous, prepared sizes	8.31	8.13	7.70
Newark, N. J.:			
Pennsylvania anthracite—			
Stove	12.81	11.75	11.88
Chestnut	12.81	11.50	11.63
New Haven, Conn.:			
Pennsylvania anthracite—			
Stove	14.15	13.75	13.65
Chestnut	14.15	13.75	13.65
New Orleans, La.:			
Bituminous, prepared sizes	8.07	9.93	8.64
New York, N. Y.:			
Pennsylvania anthracite—			
Stove	12.96	11.67	11.79
Chestnut	12.96	11.42	11.54
Norfolk, Va.:			
Pennsylvania anthracite—			
Stove	13.50	14.50	12.50
Chestnut	13.50	14.50	12.50
Bituminous—			
Prepared sizes—			
High volatile	6.50	7.00	6.50
Low volatile	7.00	9.00	7.50
Run of mine—			
Low volatile	6.63	7.00	6.38
Omaha, Nebr.:			
Bituminous, prepared sizes	9.11	8.74	8.84

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON MAY 15, 1931, AND APRIL 15 AND MAY 15, 1932—Continued

City, and kind of coal	1931	1932	
	May 15	Apr. 15	May 15
Peoria, Ill.:			
Bituminous, prepared sizes	$6.23	$6.10	$6.16
Philadelphia, Pa.:			
Pennsylvania anthracite—			
Stove	12.25	11.00	11.00
Chestnut	12.25	10.75	10.75
Pittsburgh, Pa.:			
Pennsylvania anthracite—			
Chestnut	14.25	13.75	13.00
Bituminous, prepared sizes	4.66	4.46	4.46
Portland, Me.:			
Pennsylvania anthracite—			
Stove	15.84	14.88	14.88
Chestnut	15.84	14.64	14.64
Portland, Oreg.:			
Bituminous, prepared sizes	12.82	11.98	11.98
Providence, R. I.:			
Pennsylvania anthracite—			
Stove	[1] 14.75	[1] 14.00	[1] 14.00
Chestnut	[1] 14.75	[1] 13.75	[1] 13.75
Richmond, Va.:			
Pennsylvania anthracite—			
Stove	13.50	14.00	12.75
Chestnut	13.50	14.00	12.75
Bituminous—			
Prepared sizes—			
High volatile	7.25	7.25	6.67
Low volatile	7.83	8.05	7.15
Run of mine—			
Low volatile	6.75	6.75	6.25
Rochester, N. Y.:			
Pennsylvania anthracite—			
Stove	13.50	12.50	12.00
Chestnut	13.50	12.25	11.75
St. Louis, Mo.:			
Pennsylvania anthracite—			
Stove	15.97	16.47	14.85
Chestnut	15.91	16.47	14.85
Bituminous, prepared sizes	5.19	5.61	5.75
St. Paul, Minn.:			
Pennsylvania anthracite—			
Stove	$17.25	$16.60	$16.75
Chestnut	17.25	16.35	16.50
Bituminous—			
Prepared sizes—			
High volatile	9.67	9.36	9.53
Low volatile	12.52	12.06	11.87
Salt Lake City, Utah:			
Bituminous, prepared sizes	7.60	7.54	7.58
San Francisco, Calif.:			
New Mexico anthracite—			
Cerillos egg	25.00	26.00	25.00
Colorado anthracite—			
Egg	24.50	25.50	24.50
Bituminous, prepared sizes	15.75	17.00	15.00
Savannah, Ga.:			
Bituminous, prepared sizes	[2] 9.62	[2] 8.53	[2] 8.45
Scranton, Pa.:			
Pennsylvania anthracite—			
Stove	9.50	8.55	8.63
Chestnut	9.48	8.28	8.35
Seattle, Wash.:			
Bituminous, prepared sizes	10.68	10.24	10.17
Springfield, Ill.:			
Bituminous, prepared sizes	4.34	4.34	4.34
Washington, D. C.:			
Pennsylvania anthracite—			
Stove	12.92	[3] 13.36	[3] 13.56
Chestnut	12.92	[3] 13.06	[3] 13.26
Bituminous—			
Prepared sizes—			
High volatile	7.36	[3] 8.29	[3] 8.29
Low volatile	9.25	[3] 9.86	[3] 9.93
Run of mine—			
Mixed	7.04	[3] 7.50	[3] 7.50

[1] The average price of coal delivered in bins is 50 cents higher than here shown. Practically all coal is delivered in bin.

[2] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

[3] Per ton of 2,240 pounds.

WHOLESALE PRICES

Index Numbers of Wholesale Prices, May, 1932

THE following table presents the index numbers of wholesale prices by groups of commodities, for specified years, and by months, from January, 1931, to date.

INDEX NUMBERS OF WHOLESALE PRICES

[1926=100.0]

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
1913	71.5	64.2	68.1	57.3	61.3	90.8	56.7	80.2	56.3	93.1	69.8
1920	150.7	137.4	171.3	164.8	163.7	149.4	150.1	164.7	141.8	167.5	154.4
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
1931:											
January	73.1	80.7	88.7	71.3	73.3	86.9	83.8	84.5	88.3	72.2	78.2
February	70.1	78.0	86.9	70.9	72.5	86.5	82.5	83.3	88.1	71.5	76.8
March	70.6	77.6	87.6	70.0	68.3	86.4	82.5	82.9	88.0	72.0	76.0
April	70.1	76.3	87.5	68.2	65.4	85.7	81.5	81.3	87.9	71.5	74.8
May	67.1	73.8	87.6	67.4	65.3	85.0	80.0	80.5	86.8	70.5	73.2
June	65.4	73.3	88.0	66.6	62.9	84.4	79.3	79.4	86.4	69.7	72.1
July	64.9	74.0	89.4	66.5	62.9	84.3	78.1	78.9	85.7	69.7	72.0
August	63.5	74.6	88.7	65.5	66.5	83.9	77.6	76.9	84.9	68.3	72.1
September	60.5	73.7	85.0	64.5	67.4	83.9	77.0	76.3	82.7	68.2	71.2
October	58.8	73.3	82.5	63.0	67.8	82.8	76.1	75.6	81.0	66.6	70.3
November	58.7	71.0	81.6	62.2	69.4	82.6	76.2	76.1	80.9	68.7	70.2
December	55.7	69.1	79.8	60.8	68.3	82.2	75.7	76.1	78.5	66.8	68.6
1932:											
January	52.8	64.7	79.3	59.9	67.9	81.8	74.8	75.7	77.7	65.6	67.3
February	50.6	62.5	78.3	59.8	68.3	80.9	73.4	75.5	77.5	64.7	66.3
March	50.2	62.3	77.3	58.7	67.9	80.8	73.2	75.3	77.1	64.7	66.0
April	49.2	61.0	75.0	57.0	70.2	80.3	72.5	74.4	76.3	64.7	65.5
May	46.6	59.3	72.5	55.6	70.7	80.1	71.5	73.6	74.8	64.4	64.4

INDEX NUMBERS OF SPECIFIED GROUPS OF COMMODITIES

Group	May, 1931	April, 1932	May, 1932
Raw materials	66.5	55.5	53.9
Semimanufactured articles	69.8	59.6	58.1
Finished products	76.9	71.1	70.3
Nonagricultural commodities	74.5	68.9	68.1
All commodities other than farm products and foods	75.1	70.9	70.4

Weekly Index Numbers of Wholesale Prices

A SUMMARIZATION of the weekly index numbers for the 10 major groups of commodities and for all commodities combined as issued during the month of May will be found in the following statement:

INDEX NUMBERS OF WHOLESALE PRICES FOR THE WEEKS OF MAY, 1932

Group	Week ending—			
	May 7	May 14	May 21	May 28
All commodities	65.1	64.9	64.5	64.3
Farm products	47.9	47.8	47.1	46.3
Foods	60.2	59.9	59.1	59.3
Hides and leather products	73.3	73.3	72.2	72.1
Textile products	56.5	56.1	55.8	55.4
Fuel and lighting	71.7	71.6	71.4	71.4
Metals and metal products	80.2	80.1	79.9	79.8
Building materials	71.7	71.7	71.8	71.3
Chemicals and drugs	74.0	73.7	73.6	73.4
House-furnishing goods	76.2	75.9	75.9	75.9
Miscellaneous	64.7	64.6	64.4	64.1

Wholesale Price Trends During May

THE index number of wholesale commodity prices as computed by the Bureau of Labor Statistics of the United States Department of of Labor shows a decrease from April, 1932, to May, 1932. This index number, which includes 784 commodities or price series weighted according to the importance of each article, and based on the average prices for the year 1926 as 100.0, averaged 64.4 for May as compared with 65.5 for the month of April, showing a decrease of approximately 1¾ per cent between the two months. When compared with May, 1931, with an index number of 73.2 a decrease of about 12 per cent has been recorded in the 12 months.

In the group of farm products, decreases in the average price of grains, cows, steers, hogs, sheep, live poultry, cotton, hay, fresh milk at Chicago, peanuts, onions, tobacco, and wool, caused the group as a whole to decline 5⅓ per cent from the previous month. Increases in the average price for the month were shown for calves, dried beans, eggs, lemons, oranges, and sweet potatoes.

Among foods, price decreases were reported for butter, cheese, evaporated milk, bread, crackers, meats, lard, raw and granulated sugar, and vegetable oils. On the other hand, wheat flour, prunes, canned spinach, and coffee averaged higher than in the month before. The group as a whole declined 2¾ per cent in May when compared with April.

The hides and leather products group decreased 3⅓ per cent during the month, with all of the subgroups sharing in the decline. The group of textile products as a whole decreased 2½ per cent from April to May, due to marked declines for cotton goods, knit goods, silk and rayon, woolen and worsted goods, and other textile products. The subgroup of clothing declined slightly.

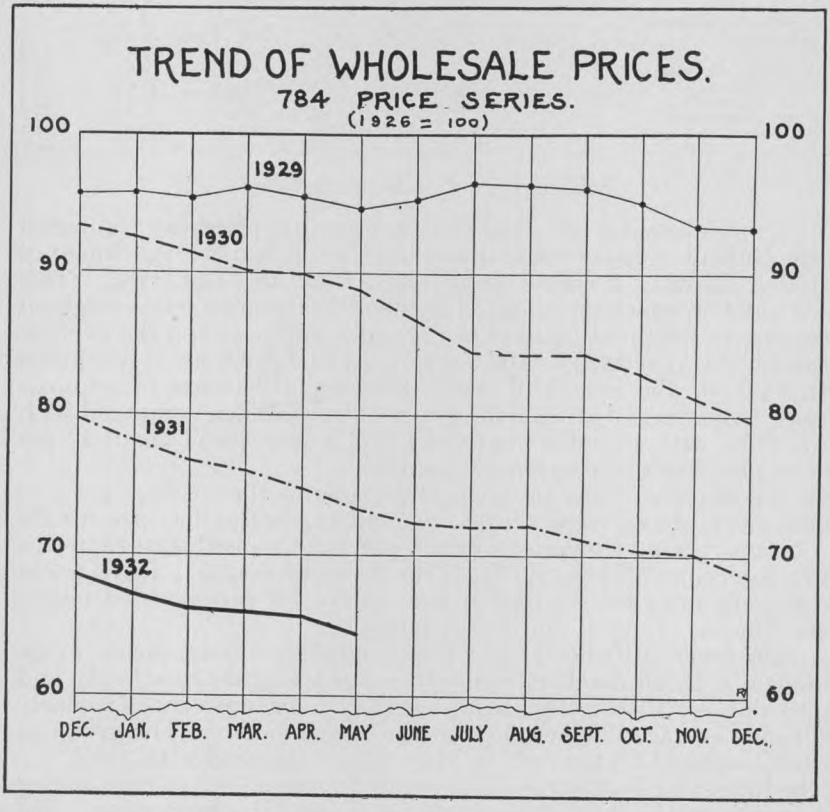
In the group of fuel and lighting materials increases in the prices of gas, Pennsylvania gasoline, and crude petroleum more than offset decreases in the prices of anthracite coal, bituminous coal, coke, and electricity, resulting in a net advance of three-fourths of 1 per cent over the April level for the group as a whole.

Metals and metal products showed a slight downward tendency for May. Decreases were shown for agricultural implements, iron and steel, and nonferrous metals. Motor vehicles and plumbing and heating fix-

tures showed no change between April and May. In the group of building materials, cement and structural steel showed no change in average prices for the two months. Brick and tile, paint and paint materials, and other building materials continued their downward movement, forcing the group as a whole to decline approximately 1½ per cent.

Mixed fertilizers showed further recession during May, as did also chemicals, drugs and pharmaceuticals, and fertilizer materials. The group as a whole decreased more than 1 per cent from the April level.

Furniture averaged 4 per cent lower in May than in April, while furnishings were slightly higher. As a whole the house-furnishing goods group declined about 2 per cent from the month before.



The group of miscellaneous commodities decreased one-half of 1 per cent between April and May due to sharp declines in prices of cattle feed. Paper and pulp declined slightly, while for crude rubber and other miscellaneous commodities the trend was upward. Automobile tires and tubes remained at the April level.

The May averages for all of the special groups of commodities were below the averages for April, ranging from a little more than one-half of 1 per cent in the case of all commodities other than farm products and foods to nearly 3 per cent in the case of raw materials.

Between April and May, price decreases took place in 302 instances, increases in 55 instances, while in 427 instances no change in price occurred.

INDEX NUMBERS OF WHOLESALE PRICES BY GROUPS AND SUBGROUPS OF COMMODITIES

[1926=100.0]

Commodity groups and subgroups	May, 1931	April, 1932	May, 1932	Purchasing power of the dollar, May, 1932
All commodities	73.2	65.5	64.4	$1.553
Farm products	67.1	49.2	46.6	2.146
Grains	59.6	44.5	42.6	2.347
Livestock and poultry	64.1	49.2	44.4	2.252
Other farm products	71.5	51.2	49.6	2.016
Foods	73.8	61.0	59.3	1.686
Butter, cheese, and milk	78.1	61 6	59.6	1.678
Cereal products	74.6	68.2	68.1	1.468
Fruits and vegetables	76.1	62.3	61.5	1.626
Meats	74.4	59.8	56.5	1.770
Other foods	67.9	55.8	54.9	1.821
Hides and leather products	87.6	75.0	72.5	1.379
Boots and shoes	94.8	88.4	88.4	1.131
Hides and skins	62.6	40.8	35.7	2.801
Leather	88.1	67.2	60.6	1.650
Other leather products	101.4	98.0	97.9	1.021
Textile products	67.4	57.0	55.6	1.799
Clothing	76.9	68.7	68.2	1.466
Cotton goods	69.2	55.1	52.9	1.890
Knit goods	60.7	51.9	50.5	1.980
Silk and rayon	41.4	31.3	29.1	3.436
Woolen and worsted goods	68.5	59.7	58.3	1.715
Other textile products	76.7	68.2	67.2	1.488
Fuel and lighting materials	65.3	70.2	70.7	1.414
Anthracite coal	87.5	85.7	85.6	1.168
Bituminous coal	83.9	82.7	82.0	1.220
Coke	83.7	79.8	77.1	1.297
Electricity	98.0	103.5	[1]	----------
Gas	99.0	99.1	[1]	----------
Petroleum products	35.9	45.5	47.2	2.119
Metals and metal products	85.0	80.3	80.1	1.248
Agricultural implements	94.3	85.0	84.9	1.178
Iron and steel	83.8	80.1	80.0	1.250
Motor vehicles	94.5	93.8	93.8	1.066
Nonferrous metals	63.3	49.3	48.3	2.070
Plumbing and heating	86.6	64.4	64.4	1.553
Building materials	80.0	72.5	71.5	1.399
Brick and tile	83.7	78.4	77.4	1.292
Cement	79.7	75.0	75.0	1.333
Lumber	69.4	60.0	59.5	1.681
Paint and paint materials	80.2	74.7	73.9	1.353
Plumbing and heating	86.6	64.4	64.4	1.553
Structural steel	84.3	81.7	81.7	1.224
Other building materials	86.3	80.2	78.2	1.279
Chemicals and drugs	80.5	74.4	73.6	1.359
Chemicals	83.9	79.7	79.1	1.264
Drugs and pharmaceuticals	63.2	58.9	58.7	1.704
Fertilizer materials	80.5	70.1	69.4	1.441
Mixed fertilizers	82.8	71.1	69.0	1.449
House-furnishing goods	86.8	76.3	74.8	1.337
Furnishings	83.6	75.4	75.5	1.325
Furniture	90.4	77.4	74.1	1.350
Miscellaneous	70.5	64.7	64.4	1.553
Automobile tires and tubes	46.9	39.2	39.2	2.551
Cattle feed	67.9	53.4	45.9	2.179
Paper and pulp	81.5	76.8	76.5	1.307
Rubber, crude	13.7	6.6	6.7	14.925
Other miscellaneous	88.5	84.5	84.6	1.182
Raw materials	66.5	55.5	53.9	1.855
Semimanufactured articles	69.8	59.6	58.1	1.721
Finished products	76.9	71.1	70.3	1.422
Nonagricultural commodities	74.5	68.9	68.1	1.468
All commodities other than farm products and foods	75.1	70.9	70.4	1.420

[1] Data not yet available.

COST OF LIVING

Budget for Dependent Families or Children

THE following budget for dependent families or children was prepared by the Heller Committee for Research in Social Economics in response to a request in February, 1932, by the probation committee of the Juvenile Court of San Francisco and a committee of the community chest of that city.[1]

The budget suggests a minimum expenditure of $1,188 per annum or $99 per month for a family of five—a man, wife, boy of 11, girl of 6, and a boy of 3. This amount, the committee declares, "is admittedly an income below that commonly considered a living wage." The prices are for San Francisco, November, 1931.

MONTHLY BUDGET FOR DEPENDENT FAMILIES OR CHILDREN

Item	For family	Additional for each person in family
Food:		
Man, moderately active	[1] $9.10	
Man, sedentary	[1] 8.75	
Woman, moderately active	[1] 8.75	
Boy, 14 to 18 years	[1] 11.01	
Girl, 14 to 18 years	[1] 8.93	
Child, 9 to 13 years	[1] 8.23	
Child, 6 to 8 years	[1] 6.73	
Child, 3 to 5 years	[1] 6.76	
Child, 1 to 2 years	[1] 6.48	
Clothing: [2]		
Man, employed	3.45	
Man, unemployed	2.62	
Woman, housewife	3.55	
Boy, 16 to 20, employed	5.89	
Girl, 16 to 20, employed	6.01	
Boy, 14 to 15	3.50	
Girl, 14 to 15	3.29	
Boy, 9 to 13	2.91	
Girl, 9 to 13	2.65	
Boy, 6 to 8	2.64	
Girl, 6 to 8	2.30	
Child, 1 to 5	1.59	
Rent:		
Family of 3 (3 rooms)	20.00	
Family of 4 (4 rooms)	21.00	
Family of 5 or 6 (5 rooms)	26.00	
House operation:		
Electricity, for all families (25 kilowatt-hours per month)	1.53	
Gas (cooking), for all families (1,150 cubic feet)	1.58	
Add 115 cubic feet for each person in family		$0.10
Wood and coal (heating), for all families (on yearly basis of—1 ton coal, $17; 9 sacks wood blocks, $4.50)	1.79	
House-cleaning supplies, for all families (on yearly basis of—24 cakes laundry soap, $0.91; 1 can bleach, $0.10; 8 cans cleanser, $0.40; 3 cans disinfectant, $0.30; other, $1.25)	.25	
Add for each person in family (on yearly basis of—16 cakes laundry soap, $0.61; ½ pound starch, $0.04)		.05
Stationery and postage, all families	.12	
Garbage removal, all families	.50	
Furnishings:		
Total initial cost of kitchen equipment, bedding, dishes, laundry equipment, brooms, etc., for family of five, $200. Annual replacement (10 per cent), $20, of which half charged to house	.82	
Remainder allocated among members of family		.1

See footnotes at end of table.

[1] California, University of. Heller Committee for Research in Social Economics. Cost of living studies: Budget for dependent families or children. For use by social welfare agencies. Berkeley, February, 1932. (Mimeographed.)

MONTHLY BUDGET FOR DEPENDENT FAMILIES OR CHILDREN—Continued

Item	For family	Additional for each person in family
Care of the person:		
Cleaning supplies, per person (on yearly basis of—10 cakes toilet soap, $0.62; 2 toothbrushes, $0.50; 2 tubes toothpaste, $0.36; other, $0.65)		$0.18
Shaving upkeep, per man or grown son (on yearly basis of 2 packages blades, $1.42)		.12
Barber (haircuts)—		
Man or boy over 13 years (1 a month)		.50
Woman or girl over 13 years (1 a month)		.50
Child, 9 to 13 years [3] (1 a month)		.26
(Younger children's hair cut at home.)		
Leisure-time expenses:		
Movies—		
Adults (1 a month)		.25
Working children, 16 to 20 years (1 a week)		[4] 1.08
Children, 14 to 15 years (1 a month)		.25
Children, 6 to 13 years [3] (1 a month)		.10
Gifts, toys, etc. (on yearly basis of $1 per person)		.08
Excursions, persons 6 years and over (car fare, $0.10 twice a month)		.20
Newspaper (evening), all families	$0.75	
Boy Scouts: Boys 9 to 15 years [5]—dues, $3.10 a year; uniform $9 every 3 years		.50
Camp Fire Girls: Girls 9 to 15 years [5]—dues $1.85 a year (uniform is middy and skirt)		.15
Spending money—		
Working children, 16 to 20 years ($1 a week)		[6] 4.33
Children, 14 to 15 years ($0.10 a week)		.43
Children, 6 to 13 years ($0.05 a week)		.22
Tobacco, for man (2 cans a week at $0.10, plus $1 a year for pipes)		.95
Education—incidentals at public school (not lunches): [7]		
Children, 14 to 15 years (on yearly basis of—binder, $0.25; fillers, $1; notebooks, $0.60; typing paper, $1; pencils, $0.30; erasers, $0.10; gymnasium outfit, $1.50; locker, $0.50; student body dues, $1 ($0.50 per term); average laboratory fees, supplies, etc., for special courses, $3—total per year, $9.25)		.77
Children, 9 to 13 years		.30
12 to 13 years (same as senior high, except for laboratory fees, etc.—total per year, $6.25).		
9 to 11 years (binder, $0.25; fillers, $0.60; notebooks, $0.40; erasers, $0.10; pencils, $0.10; paints, crayons, $0.20; scissors, paste, $0.20—total per year, $1.85).		
Average per year, children 9 to 13 years, $3.61.		
Children, 6 to 10 years (on yearly basis of—notebooks, $0.30; erasers, $0.10; pencils, $0.10; paints, crayons, $0.20; scissors, paste, $0.20—total per year, $0.90)		.08
Church:		
Adults and children over 13 years ($0.05 per week for 40 weeks, plus $0.50 for special contributions)		.21
Children, 6 to 13 years ($0.02 per week for 40 weeks, plus $0.20 for special contributions)		.08
Car fare:		
Working members ($0.10 per day for 300 days)		2.50
High school children, if needed (half fare—$0.05 per day for 200 days)		.83
Mother, for shopping ($0.20 a week)		.87
Add as needed for trips to clinic, etc.		
Incidentals, per person ($0.10 per week)		.43

[1] Basic amount. Assumes that school children and working members of the family come home for lunch or carry it. 5 per cent should be added for less than perfect management.
[2] Makes no allowance for clothing handed down from older children or bought second hand.
[3] Children of 12 and 13 probably pay adult prices.
[4] May be used for occasional dance halls or other amusements.
[5] Boys under 12 and girls under 11 belong to junior organizations in which costs are less.
[6] To cover tobacco, cosmetics, candy, "treating," etc.
[7] Additional expenses for school activities, such as plays and journal, must be met from child's spending or movie money.

Cost of Living of Working-Class Families in Germany

A GENERAL cost-of-living study of working-class families in Germany was made by the Federal Statistical Office in 1927–28, the results of which were published in 1929.[1] The results of a similar official study for the city of Hamburg, made during the period 1925–1929, have recently been published by the bureau of statistics of that city.[2] A summarization of the principal findings of these two studies is presented in this article.

[1] Germany. Wirtschaft und Statistik, 1929, No. 20, p. 818, No. 22, p. 902.
[2] Hamburg (Germany). Statistisches Landesamt und Landeswahlamt. Statistische Mitteilungen über den hamburgischen Staat, Nr.26: Die Lebenshaltung der wirtschaftlich schwachen Bevölkerung in Hamburg in den Jahren 1925 bis 1929, insbesondere im Jahre 1927. Hamburg, 1931.

The families covered in the studies numbered 896 for the country as a whole and 146 for Hamburg. As 43 of the families in the Hamburg total were also included in the national study, the records overlap to that extent. To what degree the figures obtained may be regarded as typical may be judged from the fact that, of the 896 families for whom statistics were compiled, 771 lived in large cities, 120 in medium-sized cities, and 5 in small cities. The Hamburg statistics shed light on the living costs of working-class families in a large maritime city.

Source of Income

THE average income of the 896 working-class families in the national study amounted to 3,325.12 marks ($791.38)[3] and of the 146 families in Hamburg to 3,728.57 marks ($887.40). The percentage of the income derived from various sources is shown in Table 1.

TABLE 1.—PER CENT OF INCOME OF WORKING-CLASS HOUSEHOLDS IN GERMANY AND IN HAMBURG OBTAINED FROM SPECIFIED SOURCES

Source of income	Per cent of income from specified sources						
	Germany—households with annual income of—						Hamburg: Average
	Under 2,500 marks ($595)	2,500 and under 3,000 marks ($595–$714)	3,000 and under 3,600 marks ($714–$857)	3,600 and under 4,300 marks ($857–$1,023	4,300 marks ($1,023) and over	Average	
Wages of head of household	89.1	86.5	83.4	76.5	67.7	80.7	78.6
Wages of wife	1.8	2.4	4.0	6.2	6.0	4.2	1.9
Wages of other members of household	.4	.8	2.3	6.2	16.6	4.8	9.5
Insurance, room rent, etc	6.8	8.3	8.1	8.7	7.2	8.0	7.4
Returns from investments, etc	.6	.8	1.1	1.1	1.0	1.0	1.8
Collection of debts	.9	.8	.8	1.0	1.2	.9	.4
Miscellaneous	.4	.4	.3	.3	.3	.4	.4

The figures show that the earnings of the head of the household form a larger proportion of the total family income for the country as a whole (80.7 per cent) than for Hamburg (78.6 per cent). At the same time the wife's earnings are more important throughout Germany than in Hamburg. The situation is reversed, however, with respect to the earnings of other members of the household, this item amounting to 9.5 per cent of the total income of the household in Hamburg and only 4.8 per cent in Germany.

In Germany the wife's earnings form a part of the income in 411 households, or 45.9 per cent of the total. It is stated that in the families where the income is small the wife works less frequently than where the reverse is true. In Hamburg the record shows that the wife's earnings are included in the income of 51 households, or 34.9 per cent of the total.

The returns by income groups show that the lower the total family income in Germany the higher the percentage contributed by the labor of the head of the household, the percentage being 89.1 for households with income of under 2,500 marks ($595) as compared with 67.7 in households where the income averages 4,300 marks ($1,023) and over.

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

The earnings of the head of household range from 2,025 marks ($482), in households where total income is under 2,500 marks, to 3,403 marks ($810) where the total income is 4,300 marks and over.

Wages of all members of the household form a high proportion of the total income in the households analyzed—about 90 per cent. The remaining 10 per cent comes from a variety of sources, among which income from insurance, rent, and presents is most important, forming 7 to 8 per cent of the total. Other income is of minor importance only since it is small in amount and represents a low percentage of the annual total.

Family Composition

THE average size of the workingman's family is 4.2 persons in Germany as a whole and 3.9 in Hamburg. The standard weights for the computation of expenditures given the various members of the households, on the basis of the adult male as 100, are as follows:

TABLE 2.—STANDARD WEIGHTS FOR COMPUTATION OF EXPENDITURES FOR HOUSEHOLD MEMBERS, BY SEX

Item	Males	Females
For nourishment:		
Under 10 years old	0.50	0.50
10 and under 15 years old	.75	.75
15 years old and over	1.00	90
For other requirements:		
Under 6 years old	.20	.20
6 and under 10 years old	.30	.30
10 and under 15 years old	50	.50
15 and under 20 years old	.70	.70
20 years old and over	1.00	.90

Distribution of Expenditures

IN Table 3 is shown the proportion of the total income per adult male expended for each item by working-class families throughout Germany and in Hamburg.

TABLE 3.—PER CENT OF EXPENDITURE PER ADULT MALE, IN WORKING-CLASS HOUSEHOLDS IN GERMANY AND IN HAMBURG, FOR SPECIFIED ITEMS

Item	Per cent of total expended		Item	Per cent of total expended	
	Germany	Hamburg		Germany	Hamburg
Food and drink	41.2	35.6	Fees	0.1	0.3
			Interest		(1)
Rent	10.8	11.7	Losses	.1	.1
Upkeep of home	4.2	4.5	Wages for service	.1	(1)
Heat and light	3.9	4.3	Charity and gifts	1.7	1.8
Clothing and laundry	13.3	12.1	Not specified	1.3	2.4
Personal hygiene	.9	.8			
Health	.7	.5	Total other than food and drink	56.4	59.6
Education	2.1	2.0			
Recreation	1.0	1.3	Savings	1.5	3.2
Sickness	1.2	1.3	Debts	.7	.3
Transportation	1.3	2.6	Miscellaneous	.2	1.3
Taxes, insurance, membership dues	13.7	13.9			

[1] Less than five one-hundredths of 1 per cent.

Food and drink form a considerably higher proportion of the total outlay per adult male throughout Germany than in Hamburg—41.2 per cent as compared with 35.6 per cent. For rent, upkeep of home, and heat and light the percentage is higher in Hamburg than in the country as a whole, these three items representing 20.5 per cent of the total expenditure in that city and 18.9 per cent in all cities taken together. Requirements other than food and drink account for a higher percentage of total expenditures in Hamburg (59.6) than in the whole group of cities (56.4); and the savings of the Hamburg families (3.2 per cent) are more than double those in all cities (1.5 per cent).

Detailed statistics in the original report (not shown here) indicate that, for Germany as a whole, the lower the available income per adult male the higher the percentage of the total expenditure for food. This percentage declines from 46.4 where the income per adult male is under 800 marks ($190) to 36.9 where the income amounts to 1,500 marks ($357) and over. The percentage devoted to rent also tends to decline as income rises, but there is an increase in the percentages devoted to upkeep of home, personal hygiene, recreation, savings, and similar purposes in the higher income brackets. This is noticeable in spite of the fact that even the families in this sample with the highest incomes fall in a relatively low-paid group.

In view of the importance of diet and the interest centering on this subject, the German studies under review have gone into food expenditures in considerable detail. Table 4 shows the amount of food consumed and average expenditures for major food commodities per adult male in workingmen's households throughout Germany and in Hamburg.

TABLE 4.—AMOUNT OF, AND AVERAGE ANNUAL EXPENDITURE PER ADULT MALE FOR, FOOD AND DRINK IN WORKINGMEN'S HOUSEHOLDS IN GERMANY AND IN HAMBURG

[Conversions into U. S. currency on basis of mark=23.8 cents]

Item	Germany				Hamburg			
	Average quantity	Average annual expenditure			Average quantity	Average annual expenditure		
		German currency	United States currency	Per cent of total		German currency	United States currency	Per cent of total
	Kilograms[1]	*Marks*			*Kilograms*[1]	*Marks*		
Animal products:								
Milk	150.1	45.75	$10.89	9.6	143.7	45.22	$10.76	9.0
Butter	5.9	24.46	5.82	5.1	8.6	35.78	8.52	7.1
Cheese	4.8	10.24	2.44	2.2	5.9	16.29	3.88	3.2
Eggs	[2]152.0	18.75	4.46	3.9	[2]167.0	20.16	4.80	4.0
Fats other than butter	14.2	25.06	5.96	5.3	17.7	28.93	6.89	5.7
Meats	46.3	110.51	26.30	23.2	48.7	114.09	27 15	22.6
Fish	6.6	6.67	1.59	1.4	11.6	9.91	2.36	2.0
Total		241.44	57.46	50.8		270.38	64.35	53.5

[1] Kilogram=2.2046 pounds.
[2] Number of eggs.

TABLE 4.—AMOUNT OF, AND AVERAGE ANNUAL EXPENDITURE PER ADULT MALE FOR, FOOD AND DRINK IN WORKINGMEN'S HOUSEHOLDS IN GERMANY AND IN HAMBURG—Continued

Item	Germany				Hamburg			
	Average quantity	Average annual expenditure			Average quantity	Average annual expenditure		
		German currency	United States currency	Per cent of total		German currency	United States currency	Per cent of total
	Kilograms	*Marks*			*Kilograms*	*Marks*		
Vegetable products:								
Bread and bakery products	112.2	66.93	$15.93	14.1	109.0	65.35	$15.55	12.9
Meal, rice, dried peas, etc	24.5	17.63	4.19	3.7	20.9	14.62	3.48	2.9
Potatoes	153.6	20.36	4.85	4.3	139.1	21.35	5.08	4.2
Vegetables	39.9	17.93	4.27	3.8	46.5	23.04	5.48	4.6
Fruit	31.0	17.89	4.26	3.7	35.8	26.95	6.41	5.3
Sugar	16.6	11.78	2.80	2.5	19.2	13.55	3.22	2.7
Coffee, tea, and cocoa	5.1	14.77	3.52	3.1	5.9	20.18	4.80	4.0
Chocolate and other sweets	1.3	4.57	1.09	.9	1.7	5.81	1.38	1.2
Vegetable oils and fats	2.1	3.26	.78	.7	.9	1.51	.36	.3
Miscellaneous	-------	4.70	1.12	1.0	-------	4.57	1.09	.9
Total	-------	179.82	42.81	37.8	-------	196.93	46.87	39.0
Food and drinks consumed outside the home	-------	8.56	2.04	1.8	-------	8.60	2.05	1.7
Total food and drinks	-------	429.82	102.30	90.4	-------	475.91	113.27	94.2
Luxuries:								
Alcoholic drinks	37.0	27.58	6.56	5.8	12.2	12.87	3.06	2.6
Nonalcoholic drinks	2.0	1.37	.33	.4	3.9	1.60	.38	.3
Tobacco	-------	16.96	4.04	3.5	-------	14.97	3.56	3.0
Total luxuries	-------	45.91	10.93	9.6	-------	29.44	7.01	5.8
Grand total	-------	475.73	113.22	100.0	-------	505.35	120.27	100.0

These studies indicate a slightly higher apportionment of available funds spent in Hamburg than throughout the country for animal products (53.5 and 50.8 per cent, respectively) and vegetable products (39.0 and 37.8 per cent, respectively). There are differences also in choice as to which of the respective products within the groups are purchased. In Germany as a whole the expenditures for milk and meats form a relatively higher percentage of the total expenditure for animal products than in Hamburg. At the time same, the Hamburg families show a higher percentage for butter, cheese, fats other than butter, and fish. In the class designated "vegetable products," Germany shows a larger percentage use of bread, pastry, potatoes, and vegetable oils and fats than Hamburg, and Hamburg families report greater use of vegetables, fruits, sugar, coffee, tea, and cocoa, and chocolate. Under the head of "luxuries" it appears that families throughout the country covered by this study spent a greater percentage of money for alcoholic beverages than the families in Hamburg.

Detailed analysis of the figures for Germany by income class show that total expenditures per household for butter more than doubled as between households in the lowest and highest income classes. When expenditures per adult male are referred to, it is found that such expenditures have quadrupled, the figures being 10.83 marks

($2.58) and 42.08 marks ($10.02). At the same time expenditures for animal fats other than butter declined slightly or from 27.31 marks ($6. 50) to 21.05 marks ($5.01).

Animal products as a whole represent 52.3 per cent of the total expenditures per adult male in families with the lowest income as compared with 57.2 per cent in families with the highest income. Thus, although total expenditures for animal products in the lowest income class were higher than in the highest income class (56.3 and 54.9 per cent, respectively), the expenditure per adult male is higher for the person in the highest income class than for the person in the lowest.

Although expenditures per adult male for vegetable products are generally higher where income per adult male is higher, the differences in expenditure are not nearly so great as they are for animal products. For instance, bread and bakery products have an average cost of 62.75 marks ($14.93) per adult male in the lowest income class and 74.97 marks ($17.84) in the highest. However, bread represents 20.2 per cent of the total expenditures for food per adult male in the low average income group and only 13.2 per cent in the high income group.

The aggregate expenditure for all food per adult male in the lowest income group is approximately half that in the highest, 331.48 marks ($78.90) and 651.69 marks ($155.10), respectively. Especially large increases in size of expenditure as between low and high income classes are those for butter, eggs, meats, fruits, chocolate and other sweets, alcoholic drinks, and tobacco. Greater equality as between classes is found in expenditures for animal fats other than butter, fish, bread, potatoes, and sugar.

IMMIGRATION AND EMIGRATION

Statistics of Immigration for April, 1932

By J. J. KUNNA, CHIEF STATISTICIAN, UNITED STATES BUREAU OF IMMIGRATION

THERE was an increase in both the inward and outward movement of aliens during April, 1932, as compared with the previous month. In April, 13,735 aliens were admitted and 16,632 departed, an increase of 2,384 and 296, respectively, over March.

Of the aliens admitted in April, 2,469 were immigrants and 11,266 nonimmigrants. The departures included 6,746 emigrants and 9,886 nonemigrants. Europe supplied 1,441 of the April immigrants, of whom one-third (480) came from Italy; Germany with 203 was second in the list, followed by Poland with 131, and Great Britain with 103. Canada contributed 516, Mexico 204, Asia 109, and other countries 199. During the corresponding month a year ago 3,470 immigrants entered this country, 2,265 coming from Europe, 615 from Canada, 149 from Mexico, 154 from Asia, and 287 from other countries.

Over half of the newcomers continue to settle in the States along the Atlantic, 1,439 of the April immigrants giving the North and South Atlantic States as their intended future permanent residence, while 594 were bound for the North and South Central States and 436 to the other States. The outgoing aliens again outnumbered the newcomers, or about eight emigrants leaving in April for permanent residence in a foreign country for every three immigrants admitted for permanent residence in the United States.

There were 1,633 undesirable aliens deported in April, making a total of 16,021 for the 10 months from July to April last, an increase of 1,163 over the 14,858 deportations during the corresponding months a year ago.

INWARD AND OUTWARD PASSENGER MOVEMENT, JULY 1, 1931, TO APRIL 30, 1932

Period	Inward					Aliens debarred from entering [1]	Outward					Aliens deported after entering [2]
	Aliens admitted			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total	
	Immigrant	Nonimmigrant	Total				Emigrant	Nonemigrant	Total			
1931												
July	3,174	12,361	15,535	30,944	46,479	761	7,428	20,450	27,878	46,961	74,839	1,681
August	4,090	16,580	20,670	59,372	80,042	657	9,541	23,009	32,550	65,895	98,445	1,584
September	5,017	20,940	25,957	62,581	88,538	684	8,733	20,393	29,126	42,247	71,373	1,446
October	3,913	17,096	21,009	32,427	53,436	806	10,857	16,525	27,382	35,016	62,398	1,663
November	2,899	9,832	12,731	16,823	29,554	573	11,318	14,271	25,589	23,224	48,813	1,524
December	2,642	8,086	10,728	16,932	27,660	485	10,727	17,370	28,097	24,351	52,448	1,336
1932												
January	2,220	7,242	9,462	17,158	26,620	577	8,550	14,693	23,243	25,016	48,259	1,537
February	1,984	7,346	9,330	19,829	29,159	392	6,188	9,691	15,879	22,920	38,799	1,515
March	2,103	9,248	11,351	22,012	33,363	445	6,239	10,097	16,336	24,718	41,054	2,112
April	2,469	11,266	13,735	23,261	36,996	580	6,746	9,886	16,632	19,980	36,612	1,633
Total	30,511	119,997	150,508	301,339	451,847	5,960	86,327	156,385	242,712	330,328	573,040	16,021

[1] These aliens are not included among arrivals, as they were not permitted to enter the United States.
[2] These aliens are included among aliens departed, they having entered the United States, legally or illegally, and later being deported.

PUBLICATIONS RELATING TO LABOR

Official—United States

CONNECTICUT.—Department of Motor Vehicles. Research section. *Connecticut motor-vehicle statistics for 1931. Hartford, 1932. 32 pp., maps, diagrams, illus.*

Reported motor-vehicle accidents decreased 13 per cent during 1931, as compared with 1930, and the number of persons injured decreased 2 per cent, but the number of persons killed increased 15 per cent. Figures for 1931 show 17,081 accidents reported, 12,903 persons injured, and 482 persons killed, and that 4,387 of the 28,255 motor vehicles involved in accidents were commercial cars.

ILLINOIS.—Emergency Relief Commission. *First interim report, April 15, 1932. [Springfield?], 1932. 48 pp.*

The report contains a statement of the duties and powers of the commission, its organization, operation, and procedure, and shows what has been done in allocating funds for relief in communities of the State.

MARYLAND.—Industrial Accident Commission. *Seventeenth annual report, for the year November 1, 1930, to October 31, 1931. Baltimore, [1932?]. 47 pp.*

Reviewed in this issue.

MASSACHUSETTS.—Department of Labor and Industries. Board of Conciliation and Arbitration. *Report, together with the decisions rendered by the board, for the year ending November 30, 1931. Boston, [1932?]. 99 pp.*

MINNEAPOLIS (MINN.).—Municipal Pension and Retirement Board. *Annual report, year ending December 31, 1931. Minneapolis, 1932. 34 pp.*

NEW JERSEY.—Emergency Relief Administration. *Unemployment and relief conditions in New Jersey. [Trenton?], 1932. 120 pp.*

A report of unemployment conditions in New Jersey and the methods followed in providing emergency relief, together with recommendations as to State policy and permanent organization.

—— Pension Survey Commission. *Report No. 3: Analysis of existing pension systems for public employees in New Jersey. Newark, 1932. 112 pp.*

———— *Report No. 4: Recommendations for the sound financing of public-employee pension systems in New Jersey. Newark, 1932. 85 pp.*

The findings and recommendations of the commission, given in these two reports, are summarized in this issue of the Labor Review.

NEW YORK.—Temporary Emergency Relief Administration. *Report, January 11, 1932. Albany, 1932. 20 pp.*

The report outlines the accomplishments of the relief organization in the first three months of its existence and shows the amount spent on different work projects.

NORTH DAKOTA.—Coal Mine Inspection Department. *Thirteenth annual report, from November 1, 1930, to October 31, 1931. Bismarck, 1931. 31 pp.*

The report shows that three accidental fatalities occurred during the year in the 100 strip mines and 190 underground mines of the State, the same number as during the previous year. Nonfatal injuries, however, declined from 301 to 190, or 37 per cent, principally due to a 60 per cent reduction in nonfatal injuries for one mine, which produced about one-fifth of the total output of coal for the year and employed a maximum of 156 miners and 50 other men.

PORTO RICO.—Mediation and Conciliation Commission. *Annual report, fiscal year 1930–31. San Juan, 1931. English section, 37 pp. (In Spanish and English.)*

Includes some wage scales.

PRESIDENT'S CONFERENCE ON HOME BUILDING AND HOME OWNERSHIP.—*Slums, large-scale housing, and decentralization. Reports of the committees on blighted areas and slums, large-scale operations, business and housing, and industrial decentralization and housing. Washington, 1932. 245 pp., illus.*

WEST VIRGINIA.—Workmen's Compensation Department. *Eighteenth annual report of the workmen's compensation fund, year ending June 30, 1931. Charleston, 1932. 89 pp.*

Reviewed in this issue.

WYOMING.—Coal Mine Inspection Department. *Annual report, year ending December 31, 1931. Cheyenne, 1932. 63 pp., illus.*

Includes data relating to accidents and production.

UNITED STATES.—Congress. House of Representatives. *Report No. 584 (72d Cong., 1st sess.), to accompany H. R. 8088; Cooperation of Federal Government for relieving unemployment. Report of Mr. Connery, from Committee on Labor. Washington, 1932. 3 pp.*

—— —— —— Committee on Labor. *Unemployment in the United States. Hearings (72d Cong., 1st sess.), on H. R. 206, a bill authorizing an appropriation for the relief of destitution in the United States, etc., February, 1932. Washington, 1932. 207 pp.*

—— —— Senate. *Report No. 509 (72d Cong., 1st sess.), to accompany S. 3847: Rates of wages paid for labor on public buildings. Report of Mr. Copeland (for Senator Metcalf), from Committee on Education and Labor. Washington, 1932. 3 pp.*

—— —— —— *Report No. 589 (72d Cong., 1st sess.), to accompany S. 2687, National and State employment service. [Part 1], Report of Mr. Copeland, from Committee on Commerce. Part 2, Minority views, of Mr. Dale, from Committee on Commerce. Washington, 1932. 4 and 2 pp.*

—— —— —— *Report No. 629 (72d Cong., 1st sess.), pursuant to S. Res. 483: Unemployment insurance. Individual views [minority report] of Mr. Wagner, from the Select Committee to Investigate Unemployment Insurance. Washington, 1932. 26 pp., chart.*

Senator Wagner advocates compulsory unemployment insurance established by State legislation and under State supervision, but maintained by the payment by employers of a fixed percentage of their pay roll into an unemployment reserve fund.

—— —— —— Committee on Commerce. *Hearings (72d Cong., 1st sess.) pursuant to S. 2687, a bill to provide for the establishment of a national employment system and for cooperation with the States in the promotion of such system, and for other purposes, March 24–31, 1932. Washington, 1932. 170 pp. (Corrected print.)*

—— —— —— Committee on Education and Labor. *Hearing (72d Cong., 1st sess.) on S. 3847, a bill to amend the act approved March 3, 1931, relating to the rate of wages for laborers and mechanics employed by contractors and subcontractors on public buildings, March 17, 1932. Washington, 1932. 44 pp.*

—— Department of Commerce. Bureau of Mines. *Coal in 1930, by F. G. Tryon, L. Mann, and H. O. Rogers. Washington, 1932. (From Mineral Resources of the United States, 1930, Pt. II, pp. 599–773.) Charts.*

A comprehensive review of the coal industry during 1930, with comparative figures for earlier years.

—— —— Bureau of Standards. *Miscellaneous Publication No. 133: Standards yearbook, 1932. Washington, 1932. 394 pp., chart.*

Presents summaries of standardization activities in various fields of industry, conducted by national and international agencies, including technical societies and trade associations in the United States. The subjects covered range from accident prevention to zoning systems. A special feature is a series of interesting

articles, contributed by experts, describing the accomplishments in standardization of materials and operations in the different fields of communication—aeronautics, the telephone, telegraph, and radio, television, etc.

—— Department of Labor. Bureau of Labor Statistics. *Bulletin No. 550: Cargo handling and longshore labor conditions. Washington, 1932. 559 pp., charts, illus.*

Advance summaries of data obtained in this study were published in the Labor Review for October, 1930 (pp. 1–20), November, 1930 (pp. 11–25), and February, 1931 (pp. 1–30).

—— —— —— *Bulletin No. 565: Park recreation areas in the United States, 1930. Washington, 1932. 116 pp.*

Reviewed in this issue.

—— —— Women's Bureau. *Bulletin No. 92: Wage-earning women and the industrial conditions of 1930—a survey of South Bend, by Caroline Manning and Arcadia N. Phillips. Washington, 1932. 81 pp., map, charts.*

Reviewed in this issue.

—— —— —— *Bulletin No. 93: Household employment in Philadelphia, by Amey E. Watson. Washington, 1932. 85 pp.*

Reviewed in this issue.

—— Federal Board for Vocational Education. *Bulletin No. 160, Trade and Industrial Series No. 46: Apprentice training for shipyard trades—a study of the selection of apprentices and their progress in training. Washington, January, 1932. 35 pp.*

—— Personnel Classification Board. *Salaries for routine clerical work in private industry, 1929. Washington, 1931. 189 pp.*

Official—Foreign Countries

Australia.—Bureau of Census and Statistics. *Official yearbook of the Commonwealth of Australia, 1931. Canberra, [1931?]. 807 pp., maps, charts.*

Includes index numbers of wholesale and retail prices and data on wages and hours of labor, employment, industrial disputes, and workers' and employers' organizations.

Canada.—Civil Service Commission. *Twenty-third annual report, for the year 1931. Ottawa, 1932. 83 pp.*

—— Department of Labor. *Twenty-first annual report on labor organization in Canada (for the calendar year 1931). Ottawa, 1932. 275 pp., charts.*

Data from the publication are given in this issue.

Denmark.—Arbejderforsikrings-Raadet. *Beretning fra aaret 1930. Copenhagen, 1932. 110 pp. (Reprint from Socialt Tidsskrift, March, 1932.)*

Annual report of the Public Insurance Council on sickness and invalidity insurance in Denmark during 1930, including number of insurance funds, their membership, financial transactions, etc.

—— Direktoratet for Arbejdsanvisningen og Arbejdsløshedsforsikringen. *Indberetning om arbejdsanvisningen og arbejdsløshedsforsikringen i regnskabsaaret 1930–31. Copenhagen, 1932. 75 pp.*

Annual report on the employment service and unemployment insurance in Denmark for the fiscal year ending March 31, 1931.

—— Direktoratet for Sygekassevæsenet. *Beretning om Statens tilsyn med sygekasser, gensidige sygeforeninger, begravelseskasser m. v. samt om bestyrelsen af invalideforsikringsfonden i aaret 1930. Copenhagen, 1932. 101 pp. (Reprint from Socialt Tidsskrift, February, 1932.)*

Annual report on sickness insurance funds, including invalidity insurance funds, in operation in Denmark during 1930, including information on membership, beneficiaries, and financial condition of the funds. The report has table of contents, résumé, and table heads in French.

FRANCE.—Bureau de la Statistique Générale de la France. Service d'Observation des Prix. *Indices généraux du mouvement économique en France de 1901 à 1931. Paris, 1932. 165 pp., charts.*

The various financial, commercial, and industrial indexes published by the French statistical bureau are brought together in this volume, covering the 30-year period from 1901 to 1931.

GERMANY.—Gutachterkommission zur Arbeitslosenfrage. *Gutachten zur Arbeitslosenfrage. Berlin, 1931. Part I, 16 pp.; Part II, 8 pp.; Part III, 15 pp.*

Contains a report on the unemployment problem and proposed measures to combat unemployment in Germany. The first part deals principally with shortening of hours of labor and with the so-called "double earners," the second part with the creation of new employment, and the third part with relief measures, such as insurance and charity.

GREAT BRITAIN.—Home Office. *Report on conferences between employers and inspectors concerning methods for suppressing dust in asbestos textile factories. London, 1931. 36 pp., diagrams, illus.*

The processes in asbestos textile factories which are productive of a harmful amount of dust have been the subject of study and experimentation and a series of agreements have been reached with manufacturers embodying specific recommendations for securing the suppression of dust by exhaust ventilation. The report contains drawings and illustrations of apparatus which has been successfully used in these mills.

—— —— *Welfare Pamphlet No. 6: Seats for workers in factories and workshops. London, 1932. 39 pp., illus.*

The general principles regarding seating are discussed and the types of seats adapted to various uses are explained and illustrated.

—— Industrial Health Research Board. *Report No. 63: Inspection processes in industry (a preliminary report), by S. Wyatt and J. N. Langdon. London, 1932. 53 pp., diagrams.*

A study of efficiency in certain inspection processes in industry.

—— —— *Report No. 64: A classification of vocational tests of dexterity, by Amalie E. Weiss Long and T. H. Pear. London, 1932. 64 pp.*

The different types of skill and manual dexterity are discussed and the principles of vocational psychology, including vocational guidance and selection, and occupation analysis, are reviewed. There is also a description of various tests of skill and dexterity.

INTERNATIONAL LABOR OFFICE.—*International Labor Conference, sixteenth session, Geneva, 1932. Analysis of information supplied by Governments concerning the application of the recommendations of the International Labor Conference. Geneva, 1932. 63 pp.*

MOSCOW DISTRICT (SOVIET UNION [U. S. S. R.]).—Planning Commission. *Statistical manual. Moscow, 1931. 418 pp. (In Russian.)*

Contains statistical information in regard to the District of Moscow, including public instruction, public health, housing, industries, trades, and large-scale collective farms.

ONTARIO (CANADA).—Department of Labor. *Twelfth annual report, 1931: Toronto, 1932. 94 pp.*

Contains information relating to accidents, apprenticeship, employment service, factory inspection, strikes and lockouts, and wages and hours, by occupations.

—— Minimum Wage Board. *Eleventh annual report, 1931. Toronto, 1932. 40 pp.*

—— Workmen's Compensation Board. *Report for 1931. Toronto, 1932. 74 pp. (Sessional Paper No. 28, 1932.)*

Reviewed in this issue.

ONTARIO (CANADA).—[Workmen's Compensation Board?]. *Report of the commissioner in the matter of the workmen's compensation act. Toronto, 1932. 17 pp. (Sessional Paper No. 37, 1932.)*

Reviewed in this issue.

RUMANIA.—Ministerul Muncii Sănătăţii şi Ocrotirilor Sociale. *Mişcarea salariilor, conflictele şi contractele colective de muncă din 1930. Bucharest, 1932. 93 pp., charts.*

A report on industrial disputes, collective agreements, and wages (indexes) in 1930, with comparative data for earlier years.

SASKATCHEWAN (CANADA).—Department of Railways, Labor, and Industries. *Third annual report, for the 12 months ended April 30, 1931. Regina, 1931. 60 pp.*

Includes data on labor legislation, strikes and lockouts, minimum wages, unemployment relief, and employment service.

SWEDEN.—Kommerskollegium. *Industri. Berättelse för år 1930. Stockholm 1932. 139 pp.*

This report on Swedish industries in 1930 includes data on number of establishments and workers and amount and value of production in different industries. Includes a table of contents in French.

Unofficial

AMERICAN ASSOCIATION FOR OLD AGE SECURITY (INC.). *Old-age security in the United States, 1932: A record of the fifth national conference on old-age security, New York City, March 30, 1932; together with a census of old-age security in the United States. New York, 22 East 17th Street, 1932. 91 pp.*

Some of the discussion at this conference, relating to administration and administrative problems under old-age pension laws, is summarized in this issue of the Labor Review.

AMERICAN LABOR YEAR BOOK, 1932. *New York, Labor Research Department, Rand School of Social Science, 7 East 15th Street, 1932. 299 pp.*

The information presented in this yearbook is arranged under the following heads: Industrial and social conditions, trade-union organizations, strikes and lockouts, independent labor politics, American labor legislation, foreign labor legislation, court decisions affecting labor, civil liberties, workers' education, labor banking and insurance, cooperation, international relations of labor, and labor abroad.

AMERICAN MANAGEMENT ASSOCIATION. *Job Production Series 5: Estimating the labor outlook, by William M. Leiserson. New York, 20 Vesey Street, 1932. 15 pp.*

BAKER, CHARLES WHITING. *Pathways back to prosperity: A study of defects in our social machine and how to mend them. New York, Funk & Wagnalls Co., 1932. 351 pp.*

CALLCOTT, MARY STEVENSON. *Principles of social legislation. New York, Macmillan Co., 1932. 416 pp.*

CHAMBER OF COMMERCE OF THE UNITED STATES. Domestic Distribution Department Committee. *Price indices. Washington, 1932. 42 pp., charts.*

COOPERATIVE UNION (LTD.). *The economic advance of British cooperation, 1913 to 1931, by H. J. Twigg. Manchester, 1931. 104 pp.*

An analysis of the progress made by the various branches of the cooperative movement—retail distribution, wholesale distribution, production, banking, and insurance—with regard to membership, capitalization, employment of capital, trade, cost of operation, surpluses, etc. One chapter deals with cooperative employment, from the standpoint of composition and distribution of staff, wages and hours, unionization, participation in management, and wage costs and sales.

DEANE, ALBERT L., AND NORTON, HENRY KITTREDGE. *Investing in wages: A plan for eliminating the lean years. New York, Macmillan Co., 1932. 155 pp., charts.*

FRANKL, PAUL T. *Machine-made leisure. New York, Harper & Bros., 1932. 192 pp.*

The author discusses the effects of machine development upon customs and living habits and the ways in which our leisure time, which may be expected to grow with the introduction of still shorter working periods, may be utilized to advantage.

GALLERT, DAVID J., HILBORN, WALTER S., AND MAY, GEOFFREY. *Small-loan legislation: A history of the regulation of the business of lending small sums. New York, Russell Sage Foundation, 1932. 255 pp.*

In two parts, dealing, respectively, with small-loan laws and wage-assignment laws. The first part discusses the basis of small-loan legislation; the various attempts at legislation on the subject, leading up to the formulation of the so-called "uniform small-loan law"; and the present development of small-loan legislation. Part II covers wage assignments and wage purchasing.

HOAR, ROGER SHERMAN. *Unemployment insurance in Wisconsin. South Milwaukee, Stuart Press, 1932. 101 pp.*

The writer reviews and analyzes the Wisconsin unemployment insurance law. The text of the law is given, together with the majority and minority reports of the special legislative committee dealing with unemployment reserves.

LEECH, HARPER. *The paradox of plenty. New York, McGraw-Hill Book Co. (Inc.), 1932. 203 pp.*

NATIONAL EDUCATION ASSOCIATION OF THE UNITED STATES. *Proceedings of the sixty-ninth annual meeting, held at Los Angeles, Calif., June 27–July 3, 1931. Washington, 1201 Sixteenth St., NW., [1931?]. 1200 pp.*

Among the contributions in this publication that are of special interest from the labor viewpoint are: Addresses on adult life in this machine age and on the social significance of the vocational agricultural department in a rural high school, and papers and reports presented under the association's departments of vocational education, adult education, and social studies.

NATIONAL INDUSTRIAL CONFERENCE BOARD (INC.). *A picture of world economic conditions at the beginning of 1932. New York, 247 Park Avenue, 1932. 287 pp.*

NEW JERSEY CONFERENCE OF SOCIAL WORK. *New Jersey Conference on Child Health and Protection [New Brunswick], April 17–18, 1931. 197 pp.*

NUGENT, ROLF. *The Provident Loan Society of New York—an account of the largest remedial loan society. New York, Russell Sage Foundation, 1932. 23 pp.*

PENNSYLVANIA, UNIVERSITY OF. Wharton School of Finance and Commerce. Industrial Research Department. *Monthly Release No. 8: Unemployment and part-time employment in Philadelphia, April 15, 1932. Philadelphia, 1932. 3 pp. (Mimeographed.)*

PRINCETON UNIVERSITY. Industrial Relations Section. *Statistical analysis of twenty employee stock purchase plans, 1925–1932. Princeton, 1932. 23 pp. (Mimeographed.)*

This report gives the current financial situation of the stock-ownership plans of 20 companies which were first studied in 1926. No general summary is given showing the results of the operation of these plans, but it is stated that 5 plans are now definitely discontinued and that in 5 others no recent offering of stock for employee purchase has been made.

PRINCETON UNIVERSITY. Industrial Relations Section. *The use of credit union. in company programs for employee savings and investment. Princeton, 1932. 43 pp.* (*Mimeographed.*)

Covers the development of credit unions in this country, their organization and operation, and gives details regarding the credit unions of certain industrial concerns.

REPONY, D. *When and how we will get out of this depression. Clifton, N. J., 1932. 61 pp.* (*Privately printed.*)

ROBINSON, E. A. G. *The structure of competitive industry. New York, Harcourt, Brace & Co., 1932. 184 pp.*

SELIGMAN, EDWIN R. A., AND LOVE, ROBERT A. *Price cutting and price maintenance: A study in economics. New York, Harper & Bros., 1932. 539 pp.*

UNION SUISSE DES PAYSANS. Secrétariat des Paysans suisses. *Publication No. 102: Enquête sur les associations agricoles de la Suisse en 1930. Brugg, 1932. 116 pp., map.*

The results of an inquiry by the Secretariat of the Swiss Farmers' Union, showing the number and membership of the various types of agricultural cooperative associations in Switzerland in 1930.

—— —— *Publication No. 103: Sténogramme des débats de l'assemblee ordinaire des délégués de l'Union suisse des Paysans, 10 novembre 1931, à Berne. Brugg, 1931. 113 pp.*

Proceedings of the 1931 meeting of the Swiss Farmers' Union. Printed partly in French and partly in German.

—— —— *Rapport au Département fédéral de l'Economie Publique: Recherches relatives à la rentabilité de l'agriculture pendant l'exercice 1929–30, II^e partie. Berne, 1931.* (*Tirage à part de l'Annuaire agricole de la Suisse, 1931, pp. 433–543.*) *Charts.*

Analysis of farm income in Switzerland during 1929–30, showing receipts, various elements of cost, etc., and the factors determining income, such as consumption, prices, size of farms, stock, equipment, investment, etc.

UNITED HOSPITAL FUND OF NEW YORK. Hospital Information and Service Bureau. *Preliminary report of the committee to review medical and hospital problems in connection with workmen's compensation insurance. Published for the information of hospitals, without comment. New York, 122 East 22d Street, 1932. 32 pp.*

Reviewed in this issue.

VAN WOERDEN, F. A. *La Société des Nations et le rapprochement économique international. The Hague, Martinus Nijhoff, 1932. 298 pp.*

A survey of the accomplishments of the League of Nations in both the economic and financial fields, with a general review of the postwar economic situation and an account of the economic organization of the league.

WILEY, CLARENCE ALTON. *Agriculture and the business cycle since 1920: A study in the postwar disparity of prices. Madison, Wis., 1930. 237 pp., charts.* (*University of Wisconsin Studies in the Social Sciences and History, No. 15.*)

○