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This Issue in Brief

The "check-off" as a means of collecting union dues exists in a considerable number of industries besides bituminous coal mining, with which the idea is usually associated. Page 1.

An upward tendency in the frequency and severity of accidents in manufacturing industries (except iron and steel) is revealed by a survey by the Bureau of Labor Statistics for the year 1928, covering 3,181 establishments and 1,138,557 full-year workers in 32 States. Sixty-two per cent of the workers are in States reporting all accidents. Seventeen industry groups in the 26 States reporting all accidents show increases in frequency rates and 12 show decreases; 17 show increases in severity rates and 12 show decreases. Largest increases in frequency and severity, respectively, are noted in the manufacture of stamped and enameled ware, and steam fittings, apparatus, and supplies. Massachusetts and North Dakota show greatest reductions in accident frequency and severity rates, respectively, while Kansas and Nebraska show greatest increases in these rates. Page 54.

A new survey of the cost of living in the United States and a study of migratory labor in the Pacific Coast States are among the recommendations approved in the annual report of the Secretary of Labor for the fiscal year ending June 30, 1929. This publication, in which are reviewed the activities of the various bureaus and other services of the Department of Labor for the 12 months covered, is summarized on page 39.

A report on the salaries paid in the police departments of principal American cities is presented in detail in an article beginning on page 118.

Outstanding developments in industrial education in the United States in 1926-1928 are: An appreciable increase in the total number of different specific industrial courses offered in the public schools, a greater tendency to regard vocational-industrial training as a cooperative activity with industry, an increase in part-time school attendance laws, a growing recognition that the supervision of courses in industrial arts calls for special qualifications and training, and the later age at which young people are entering into full-time employment. Page 79.

The finding of jobs for older men becomes of greatest difficulty after the fifty-fourth year, according to a study by the Massachusetts Department of Labor and Industries. On the other hand, the highest percentage of placements occurred among male applicants between 45 and 54. Among female applicants, there was a larger percentage of placements of those 35 and over than of those under 35, but it is pointed out that of these older women, a large proportion was placed in domestic service and a relatively small proportion in manufacturing establishments. Page 49.

A new treatment for radium poisoning, involving the administration of parathyroid extract, offers hope of relief to persons suffering from this horrible disease. More experimentation will be necessary, however, before the full possibilities of the treatment can be known, Page 51.

The workmen's compensation systems of 10 South American countries are analyzed from the standpoint of administration in an article beginning on page 15. All 10 of these countries utilize existing machinery to make awards in compensation matters, when employer and employee fail to reach an agreement. In Brazil, Chile, Colombia, Paraguay, Peru, and Uruguay, such cases are brought before the civil courts. In Argentina, Bolivia, Ecuador, and Venezuela disputes concerning compensation are passed upon by existing executive authorities.

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The Check-off in Collective Agreements

THE "check-off" is an arrangement under which the employer agrees to deduct from the wages due to each union employee, who signs a written authorization, the amounts that may be due from month to month from such employee to the union for regular dues, special assessments, or fines. The aggregate amount thus collected from the individual employees is then paid over by the employer to the treasurer of the local union.

Provision for the check-off system of collecting union dues appeared in the earliest agreements between the bituminous coal operators and the miners' union. It seems to have been abandoned in some of the districts for a few years, but the provision appears again in the agreements of 1890, and continues to be a part of the agreements in the bituminous fields to the present date.

Although the mining industry is the best known example of the "check-off" system, the collective agreements received by the Bureau of Labor Statistics show that provision for the check-off is made in many other trades, such as bakers; barbers; brickmakers; cleaners, dyers, and pressers; retail clerks; window-glass cutters; hotel and restaurant employees; meat cutters; street-railway employees; teamsters and chauffeurs; carpenters; cement finishers; hod carriers and laborers; lathers; painters; plasterers; plumbers; roofers; and sheet-metal workers.

The provision for the check-off appears frequently in the agreements of teamsters and chauffeurs. In many of these agreements there is a provision that the employer shall hold the employee's receipt book for dues during the term of employment. In other agreements, if a nonunion teamster or chauffeur is employed, the employer agrees to deduct a given amount from each day's pay until the full amount of initiation fee has been deducted and the new employee automatically becomes a member of the union.

In the building-trades agreements the check-off generally covers only the collection of initiation fees when nonunion men are employed. In a few cases, however, the employer has agreed to deduct the amount of union dues, assessments, and fines when written authorization is given by the employee. In at least one case, it is provided that if a nonunion man holding a permit card from the union is employed, the employer is held responsible for the permit fee for each day that such man is employed.

A few of the trade agreement provisions for the check-off are given below:

Bakery and confectionery workers.—The purpose of the provisions in these agreements seems to be to guarantee the payment of the initiation fee. Two agreements provide, respectively, as follows:

Employer shall retain two days' pay of any journeyman not yet a member of the union; the two days' pay to be returned to employee when he joins the union.

Employer agrees, after being notified by union of the new employee's application for membership being filed, to hold \$5 of said baker's first week's pay toward his initiation fee.

Journeyman barbers.—Two agreements of barbers have the following provisions:

The employer is empowered and required to collect from employees not yet members of the union, out of first week's salary, one-half of any admission fee charged by local and turn such amount over to the secretary of the union.

If a new employee making application for membership has not the necessary amount for initiation fee, the employer agrees to pay the amount and deduct same from pay of such employee.

Brickmakers.—Three agreements of brickmakers provide for the check-off, as follows:

The manufacturer further agrees to check off all initiation fees, dues, fines, and assessments each month, provided that the local union or the business agent of this organization submit a list in duplicate to the manufacturer, arranged according to yards when necessary, at least 10 days prior to pay day.

The party of the first part agrees to check off all initiation fees, dues, fines, and assessments each month and pay the financial secretary of the local on the last day of each month.

The company agrees to check off all initiation fees, dues, fines, or assessments, provided local union submits a list in duplicate to the company showing amount due on the 15th of said month.

Auto and hardwood finishers.—One agreement of these workers and their employers specifies that "a nonunion man hired shall make application for membership and shall give order on his wages to party of the second part for his initiation fee to be paid at the rate of \$1 per day until paid in full, when he shall be initiated."

Carpenters.—The following appears in an agreement of a carpenters' district council: "The party of the first part agrees to recognize pay orders when properly signed by new applicant in his employ, when presented by the representative of the carpenters' district council."

Cement finishers.—In one agreement of cement finishers the employer guarantees the payment of permits or privilege cards issued by the union to nonunion employees.

Hod carriers and building laborers.—In two agreements of laborers the employer agrees to recognize all pay orders presented by the business agent or steward if signed by employees; in a third, the employer agrees to deduct the initiation fee when employing a nonunion man.

Lathers.—Two agreements of lathers provide as follows:

If nonunion lather is employed he must agree that \$1 per day of his wages be paid to steward to apply on his initiation fee until full amount is paid.

Employer agrees to recognize all orders for dues, assessments, etc., to the union.

Painters, paper hangers, and decorators.—Under four agreements of painters, "Employers agree to recognize pay order when signed by men in their employ and presented by representative of the union,"

while four other agreements provide for the collection of the initiation fee from men working on permit, the employer agreeing to withhold \$2 per day for each day worked until the full amount has been paid.

Three agreements contain, respectively, the following provisions:

Contractor employing any person on a permit from the business agent shall be held responsible for the permit money while such person is in his employ.

If nonmember is employed the employer shall demand \$10 deposit or shall hold out \$10 from the first two days' pay and \$2 each day worked thereafter until initiation fee, etc., is paid. This must be paid to steward or business agent. All applicants to sign order for same.

Employer must deduct 50 per cent of each day's wages on all new applicants until initiation fees are paid and must pay same to business agent. Applicant must sign order.

Operative plasterers.—The following appears in one agreement of these workers: "If nonunion man is employed he must become affiliated with local. Foreman to collect the initiation fee at the rate of \$2 per day deducted from such employee's wages until the full amount is collected."

Plumbers, steam fitters, and gas fitters.—In one plumbers' agreement, "Employer agrees to recognize pay order when signed by new applicant in his employ and presented by union representative."

Slate, tile, and composition roofers.—Under one agreement of the roofers, the employer pledges himself to honor all orders for money due the local when issued by the business agent or financial secretary and signed by the debtor.

Sheet-metal workers.—Two agreements of sheet-metal workers have the following provisions:

Employers are to honor orders for money due the local when presented by the shop steward.

When a man goes to work in a shop and owes local initiation, dues, or fines the business agent or shop steward shall secure a written order from the employee on the employer to cover his wages and take out what is agreed on and pay the rest to the employee.

Retail clerks.—The following appears in two agreements of retail clerks:

Firm agrees that if any member of union employed by it shall at any time during the life of this agreement be in arrears for one month or more in payment of dues or assessments, that upon notice in writing to that effect from secretary to withhold from the wages due such member a sum of money equal to such arrears and apply same to payment of unpaid dues or assessments.

Should the local request it, the employer agrees to deduct from the wages of clerks who are members or eligible to membership any amounts due this union for initiation fees, dues, fines, permit fees, or assessments which the union can not collect and turn such deductions over to financial secretary.

Cleaners, dyers, and pressers.—An agreement of cleaners, dyers, and pressers contains the following provision:

Employers authorized and directed to deduct from the first week's pay in each month, and in no case later than the 10th of the month, the amount of union dues that are to be paid by such individual to the union. List of such employees will be furnished by shop chairman 10 days before such pay day, with amounts to be deducted. This money to be turned over to shop chairman and he shall receipt for same. All members to sign this agreement as individuals and live up to it.

Window-glass cutters.—The following provision appears in the agreements of the Window Glass Cutters' League:

Company shall deduct from the earnings of all cutters and their apprentices all dues, fines, and assessments that may be imposed by officials of Window Glass Cutters' League, same to be forwarded to the secretary at league headquarters.

Hotel and restaurant employees.—Two agreements of hotel and restaurant employees provide as follows:

Employer agrees to collect and pay to local all initiation fees of parties applying for membership, same to be deducted from wages of such parties at rate of \$2.50 per week, and agree to employ only union help.

Employer agrees to accept signed orders on all employees to the amount of \$10 or such other amount less than \$10 for membership initiation, reinstatement, fines, dues, or assessments, and pay same to the secretary or business agent of local.

Meat cutters and butcher workmen.—The following provisions appear, respectively, in three agreements of meat cutters:

Representative of local shall be privileged to collect any arrearage of dues or fines from the employer.

If nonunion men are employed they must have a working permit from the union, and employer agrees to deduct \$1 out of each day's wages and pay same upon receipt to the local.

Members not attending meetings and not paying dues shall give the proprietor the right to check off from his pay for dues, or member will lose his job.

Street-railway employees.—Three street-railway agreements have the following provisions:

The company agrees to check off all dues, fees, and assessments payable to the union.

Members in leaving the service must furnish company with statement of dues or assessments due the union, which amount the company shall deduct from their pay.

Upon proper orders signed by the members of the association, the company will, until otherwise ordered, deduct from their pay on the 5th day of each month, the amount of association dues and assessments they so authorize the company to deduct, and pay the same over to the financial secretary of the division.

When the employees and other members of the association leave the service of the company, the company shall require and the employees agree to furnish a statement from the financial secretary of the association stating the amount of dues and assessments then due to date, and in that event the company shall deduct the amount due the association from the pay of said employee.

Teamsters and chauffeurs.—Twenty-three agreements of teamsters and chauffeurs make some provision for the collection of union dues through the check-off system. A few of the provisions of individual agreements are given below:

Employers agree to honor all orders given by officers of the union for payment of dues or initiation fees when signed by proper persons.

Employer agrees to accept any order for payment of dues not exceeding the amount due employee and pay same to the business agent. Employee will be informed that anything in excess of \$6 per week must be his voluntary act.

Employer agrees to deduct all dues or applications when signed orders are presented. If man is nonunion, he agrees to deduct \$1 per day until his initiation fee is deducted.

If nonunion man is hired, he shall sign agreement authorizing employer to pay union initiation fee and to deduct such amount from his salary.

On or about the 10th of the month it shall be compulsory on part of employer to examine the due books of each employee. If union dues are not paid for current month, employer shall be duly bound to deduct the monthly dues from current week's pay. If more than one month due, he shall collect one month's dues each week until all are paid and shall remit amount to union.

Employer agrees to collect all union dues each month from members in his employ, and shall collect 50 cents per day from members in arrears; 50 cents per day from men who are not members, such amount to apply on initiation fee. Members to leave receipt books with employer to be stamped by union official. All money to be turned over to union not later than one week after 1st of month.

Employer shall obtain member's union dues book and retain as long as man is in his employ. All dues shall be deducted from pay and forwarded to union secretary. If employee is in arrears for dues or initiation fee, firm shall deduct and forward to secretary \$10 per week until full amount is paid. Employee must sign order authorizing employer to deduct for dues, etc. Employer will not retain employee who refuses to sign order for union dues to be deducted.

If employee does not belong to union, the employer must have employee sign application for membership before he is allowed to go to work. Employer must deduct 5 cents per hour from his pay for each and every hour he works until total amount of his initiation fee is deducted, when due book will be furnished and employer shall deduct monthly dues.

Wages of Early American Building-Trades Workers¹

Seventeenth Century

BUILDING, in the earliest days of colonial settlement, was not important, and skilled building mechanics were few, especially in the southern colonies. There were 2 bricklayers, 4 carpenters, and 1 mason among the first settlers at Jamestown in 1607, but later, in 1609 and 1610, the Virginia Co. of London advertised, apparently without results, for building-trades men to emigrate to the colony.

The rough structures of plank or log which housed the first Virginia settlers were probably erected without the aid of skilled builders. At any rate, no mention is made of definite wages paid building-trades workers prior to 1624, when the price of bricklaying was fixed at 40 pounds of tobacco (\$2.43) per thousand bricks.

Scarcity of artisans of all trades persisted throughout the early history of Virginia. The Virginia Co. repeatedly issued broadsides advertising for mechanics and offered special inducements, such as grants of town properties for home building; and planters frequently wrote home to their agents directing that carpenters, bricklayers, and masons be dispatched to the colony under terms considerably more advantageous to the worker than those customarily offered for plantation labor. Later, after the Colonial Assembly was established, a law was enacted (1661-62) which exempted "handicraftsmen" from taxation. Although short-lived, this legislation suggests the lengths to which the colony found it necessary to go in its effort to secure an adequate supply of skilled craftsmen.

The indenture system, which seems to have been almost exclusively followed in the southern colonies, was not a satisfactory method of maintaining a supply of mechanics. If a craftsman had completed his apprenticeship before emigrating, his term of indenture was generally brief—four years at the most—and upon its expiration his place had to be filled by another craftsman, often with the attendant ex-

¹ Extracts from Chapter 4 of U. S. Bureau of Labor Statistics Bul. No. 499 (History of wages in the United States from colonial times to 1928), together with some additional new data. Conversion of colonial currency into the American equivalent as given in this article is based upon the following values: New England and Virginia shillings, 16.7 cents; Pennsylvania, New Jersey, Delaware, and Maryland shillings, 13.3 cents; New York and North Carolina shillings, 12.5 cents. For the period 1710-1750, conversion of Massachusetts currency is based upon varying standards following constant depreciation in the value of colonial paper money. (Bul. No. 499, ch. 2, "Money and money equivalent.")

pense increased by special inducements. Frequently, indentured mechanics became planters themselves when their terms were out. These difficulties resulted in the adoption by the planters of a practice of training their negro slaves, whose terms of service did not expire, in the crafts necessary for the self-contained community which a tobacco plantation became. Accordingly, the building industry as such can hardly be said to have existed in the South of the colonial period, and information about it is rare.

While not leaving so specific a record to show it, the northern colonies undoubtedly suffered with the southern in the matter of scarcity of building-trades workers. On the other hand, there are quite early stories which suggest how the building problem was handled. The southern colonists settled on widely scattered plantations and had slight need for towns—in fact, opposed them. In the North, particularly in New England, the town was the important factor in colonial development.

The records of the town of Dedham, Mass., show that in 1637, within a few years of its founding, a committee was "choesen to contrive the Fabricke of a meetinghouse to be in length 30 foote & 20 foote in breadth & between the upper & nether sill in ye studds 12 foote, the same to be girte, and to order men to worke upon the same in all workes as they are severally apted accordingly. As also to proportion the same worke and wages in all cases."

Daily wages in Massachusetts probably were at the time 3 shillings (73 cents) a day. An agreement, dated 1629, between the Massachusetts Bay Co. and Richard Claydon, carpenter, specifies that the emigrant's debt to the company was to be discharged by crediting him with 3s. a day for his work for the company. In 1630 the Colonial Court ordered that "carpenters, joyners, bricklayers, sawers, and thatchers shall not take above 2s. [48.6 cents] a day." If "they have meate and drinke" the 2s. rate was cut to 16d. (32 cents).

Nevertheless, the rate apparently remained around 3s. a day, for three years later Governor Winthrop said that because carpenters and masons were receiving 3s. a day, on account of the scarcity of workmen, "it grew a general complaint which the court, taking knowledge of, as also of some further evils which were springing out of the excessive rates of wages, they made an order that carpenters masons, etc., should take but 2s. a day."

The pay of bricklayers in New York in the year in which Dedham built its meeting house, 1637, was 80 cents a day.

Occasional items of record in the ensuing 10 years indicate, in most instances, somewhat lower rates. Mechanics engaged in the construction of Fort Charles and Fort James, on the Virginia coast, in 1643, were paid the equivalent of 1s. 2d. (19.5 cents) a day in tobacco, the rate being 7 pounds per day, a pound of which at this time "did not exceed two pence" in value. Bricklayers in Plymouth Colony were still working at the legal rate of 2s. a day, which the Plymouth Colony Court had undertaken to maintain even after the Massachusetts Bay Colony had abandoned the effort to control wages by legislation. The New Amsterdam rate remained about the same, that is, 2 florins, or 80 cents a day, for skilled men, and 40 to 50 cents for day laborers.

Dedham, Mass., built a schoolhouse in 1648, "the lengthe 18 foot being 14 foot beside the chimney, the wideness 15 foot, the studd 9 foote betwixt the joynts, one floor of joyce: 2 convenient windows in the lower roome and one in the chamber, the plancher layed, the stayers made, the sides boarded feather-edged and rabbited, the doors made and hanged." The total cost of construction was £17 6s. 10d. (\$57.80), of which the builder received £11 3d. (\$36.70) "for his worke about ye schoole house." Laborers working under him were paid 1s. 8d. (28 cents) a day.

A few scattered records complete the available data for the seventeenth century. Under date of September 26, 1673, Hendrick Van Borsum of New Amsterdam contracted "to serve the Honorable Governor as Carpenter for the period of the current year commencing to-morrow; for which service he shall receive a salary of fl. 30 a month [equal to \$12.—ED.] without board. * * * but whenever he shall be sent to work without the city he shall be provided with victuals." Salem, Mass., built a town hall in 1677 and paid the carpenter £20 (\$66.67), one-third in money and two-thirds in provisions for his work.

A building contract entered into in Henrico County, Va., in 1679, called for the erection of a house 40 feet long and 20 feet wide, clap-boarded and roofed, with a chimney at either end, "the upper and lower floors to be divided respectively into two rooms by a wooden partition." The house was to be finished in seven months, and the owner agreed to pay the builder "twelve hundred pounds of tobacco in cask." Tobacco was probably worth about 2d. a pound, and 1,200 pounds converted into American money would amount to \$33.60. A few years later a carpenter in a neighboring county agreed to build a house of similar dimensions for £9 sterling, or \$43.74.

The usual rate of pay for building craftsmen in New Jersey in 1680-1685 was 2s. (40 cents) a day; in Amboy, "where building was active," mechanics received 2s. 6d. (50 cents) a day. "The houses building at Amboy in 1683 are described as usually 30 feet long, 16 feet wide, 10 feet between joints, with double chimney of timber and clay 'as the manner of this country is to build,' and cost about £50 [\$200] each."

In Pennsylvania in 1698, according to a history of the colony published in that year, "Carpenters, both House and Ship, Bricklayers, Masons, either of these Trades-Men will get between Five and Six Shillings [\$1 and \$1.20] every day constantly. Brickmakers have twenty shillings [\$4] a thousand for their Bricks at the Kiln," and "Plasterers have commonly eighteen pence [30 cents] a yard for Plastering."

Eighteenth Century

A GRADUAL differentiation in building trades and in the rates paid different crafts becomes evident from the beginning of the eighteenth century. As wealth accumulated in the mercantile centers and on the plantations, building began to develop along more pretentious, or at least more substantial, lines. The generic "carpenter" who did practically all the building in the colonial period, was joined by the brick and stone mason, the ornamental-iron worker, the painter and paper hanger, the plasterer, the cabinetmaker and the wood carver.

By the middle of the century such homes as Mount Vernon and Monticello, in Virginia, and the Harrison Gray Otis mansion, in Boston, were being erected, calling for the highest degree of skilled craftsmanship in various lines. Some figures showing the remuneration of these crafts have come down to us, often not as actual wages, as we understand the term, but rather in accounts of work done on a piece or job basis. Unfortunately there are few data which would enable us to translate the job basis to a time basis and thus get a clearer idea of what the sums received meant in terms of a day's work.

Rates of pay of carpenters, bricklayers, and building laborers are given by the day in the accounts of public building in Massachusetts during the first quarter of the century, beginning at 3s. 6d. and 3s. 8d. (58.4 and 61 cents) for carpenters and 4s. (66.7 cents) for bricklayers in 1701. In 1712, carpenters working on the Boston town hall were getting 5s. (83.3 cents) a day, "all cash," and bricklayers 6s. (\$1) a day. Common labor was usually paid 2s. 6d. (42 cents) a day.

In New York during this period "handicraftsmen such as Carpenters, Joyners, Masons, and Bricklayers may earn at least 5 shillings New York money [62.5 cents] every day they will work," and common laborers "may earn 2 shillings and 3 pence [28 cents] New York money." Rates in South Carolina in 1710 were: Bricklayers, 6s. (\$1), carpenters and joiners, 3s. to 5s. (50 to 83.3 cents); "a labourer hath from 1 shilling and 3 pence to 2s. [21 to 33.3 cents] a day, with Lodging and Diett."

For the years between 1710 and 1730 there is very little information, such figures as are found showing slight change from the earlier record. Money inflation had begun by 1730 and rates began to rise, particularly in New England. Virginia money, however, maintained a fairly even standard, and the higher rate of 3s. (50 cents) a day for carpenters in 1731 undoubtedly represents an actual increase in wages. A "skilful carpenter" in South Carolina in the same year "is not ashamed to demand his 30s. per day besides his Diet, and the Common wages of a Workman is 20s. a day provided he speaks English. * * * But this is Carolina money," which at that time was worth about 3 cents a shilling in American money.

The following is "an account of work done" by a carpenter in York County, Va., in 1733, as given in a manuscript account book:

	£	s.	d.	
To 30 squares of shingling at 4/5 [73.7 cents]-----	6	15	00	[\$22.50]
To a sash frame and sashes-----		14	00	[\$2.33]
To 1 day's work myself and Thomas at 3/ [50 cents], 7 days' work Daniel at 2/6 [42 cents] and 7 days Matt at 1/8 [28 cents]-----	1	14	00	[\$5.67]
To putting in 71 diamond panes of glass at 2d. [2.8 cents]---		11	10	[\$1.97]
To putting in 5 sash panes of glass at 3d. [4.2 cents]-----		1	3	[\$0.21]
To painting 80 yards outside house at 10 d. [14 cents]-----	3	6	8	[\$11.11]

An Irish immigrant to New York wrote to his family in Ireland, in a letter dated November 7, 1737, that masons and carpenters in New York City "get 6 shillings [75 cents] a day."

The rate on public works in Massachusetts from 1735 to 1740, as shown by records in the State archives, was 12s. (45.6 cents) a day for "master workmen" in all trades, 7s. 9d. (30 cents) for "hands," and 7s. to 7s. 6d. (27 to 29 cents) for laborers. Twelve shillings in the inflated currency of the time, however, were "equal to only 3

shillings 4 pence of Former Times"; and, Dr. William Douglass, an early economist, declared, "even this is further reduced by obliging him to take one-half in Shop Goods at 25 per cent or more Advance over the Money Price; this Iniquity still grows by reducing the Goods part to the least vendable, the Shopkeeper refusing to let them have Provisions, West India Goods, or Goods of Great Britain that are in demand."

Stonemasons were paid 15s. (57 cents) per perch, and 3s. 6d. (13.3 cents) was paid for a square yard of "finish plaistering." John Simpson billed the provincial "Committee on Repair of ye Powder House" for labor at the rate of 14s. (53 cents) per day each for himself and two of his assistants, and 12s. (45.6 cents) per day for the rest of his crew. The bill suffered a substantial disallowance at the hands of the House of Representatives before payment, however, because of "overcharge on daye's work."

Interior painting of the Province House was charged for in 1737 at the rate of 3s. (11.4 cents) a "yard" (square yard) for "bright red," 2s. (7.6 cents) for "lead colour," and 12d. (3.8 cents) for priming. By 1741 prices on the same work had advanced to 1s. 6d. (5.4 cents) for priming, 10s. (36 cents) for "vermillion," 5s. (18 cents) for "light blue," 3s. 6d. (12.6 cents) for "pearl colour," and 8s. (29 cents) for green. The House reduced the rate on the green room 2s. a yard before approving the bill. The price for painting in Virginia at this time was 10d. (14 cents) for outside work and 12d. (16.7 cents) for inside, "painting over three times." A day's work was worth 3s. (50 cents).

Masons repairing one of the fortifications in Boston Harbor in 1740 received 10s. (36 cents) a day "and found," board being rated at 20s. (72 cents) a week. Masons' "attendants" received 5s. (18 cents) a day and board.

Carpenters' rates in Salem, Mass., in 1743 were 13s. 6d. a day and in Virginia 3s., but in this instance the southerner apparently had the advantage, since, converted into the American equivalent, 13s. 6d. in inflated Massachusetts paper currency was worth less than 40 cents, while in stable Virginia money 3s. amounted to half a dollar. Philadelphia carpenters at this time were earning 4s. 6d. (59 cents) a day.

Rates continued to soar in Massachusetts until 1750, when "lawful money" was established. After that, workmen on public construction were paid at the following rates and subsistence, which remained fairly constant up to the Revolution:

	Per day
Bricklayers	6s. (\$1.00)
Bricklayers' helpers	4s. 8d. (\$0.78)
Laborers	4s. (\$0.667)
Carpenters	4s. (\$0.667)
Laborers	2s. (\$0.333)

Building-trades rates in Pennsylvania from 1750 to 1775 were: Bricklayers, 5s. 6d. and 6s. (72.6 and 80 cents); bricklayers' helpers, 3s. 6d. to 5s. (46 to 66.7 cents); carpenters, 5s. to 6s. (66.7 to 80 cents); painters, 6s. (80 cents); and unskilled labor, 2s. 6d. to 3s. (32.6 to 40 cents) a day. These are the usual rates given in various manuscript accounts in the library of the Historical Society of Pennsylvania. Lower rates also appear, especially in the Norris and

Stiegel account books, in which, in the decade between 1756 and 1766, masons' rates are given as 3s. 6d. and 4s. (46 and 53 cents) a day, 4s. being the summer rate. An agreement with a carpenter, dated 1758, has the memorandum: "Hitherto, William says, he charged 5s. [66.7 cents] a day, but now offers to work at 4s. [53 cents] a day and find himself." A plasterer received only 2s. 6d. (32.6 cents), the rate for common labor, while shingle roofing paid 3s. (40 cents) a day.

A contract for shingle making in Pennsylvania in 1763 calls for 8,000 shingles at 25s. (\$3.33) and one-half gallon liquor per thousand, "but if any are found to be bad, to be deducted out of his wages, or if the above number should not come to hand."

In North Carolina at the same time "artificers" received "from 3 to 4 shillings a day [37.5 to 50 cents], common labour 2s. [25 cents]."

An advertisement in the Boston Gazette of November 6, 1760, calls for "a person who understands cutting slate to cover houses who will agree for one month or as many days as he will work this Fall and pay him 40s. O T [old tenor] or 4s. sterling [97 cents] per day, he finding himself; and if he wants to Board he may agree very reasonable with the Tenants who live nigh the works."

After the Revolution, from 1785 to the close of the century, the rates paid skilled building-trades workers in Philadelphia were 7s. 6d. (\$1) for carpenters; 6s. and 6s. 5d. (80 and 85 cents) for painters, and 6s. (80 cents) for plasterers. Five shillings (66.7 cents) a day was paid for whitewashing.

The Report of a Committee Appointed to Explore in the Western Waters in the State of New York for the Purpose of Prosecuting the Inland Lock Navigation, published in Albany in 1792, gives an estimate for the construction of a canal in the western part of New York. The number of workmen required and the daily rate of wages to be paid on the job, the duration of which was estimated as 160 days, would be, according to the committee's calculations, 40 carpenters, 10 masons, 5 miners, 1 blacksmith, 2 lime burners, and 8 "overseers" at 9s. (\$1.13); 200 laborers at 4s. (50 cents); a "master carpenter" and a "master mason" (superintendent), each at 13s. (\$1.63); 11 cooks at 4s. each; and "a clerk of the cheque, who is also to deliver the provisions and tools and keep all accounts," at 10s. (\$1.25).

Time costs for part of the operation were estimated thus: "Removing the blown stone and earth out of the canal, supposing 100 cubic feet removed by one man in one day, it will require 3,500 one-man day's work, at 4s. [50 cents] per day. * * * The whole of the dyking to be made by two parallel walls of 4 feet thick. A man will lay of such work 60 cubic feet per day."

Government Building

The close of the century found public construction actively under way in various places. The Federal Government began in 1793 the erection of the United States Capitol and other buildings, and the laying out and development of the District of Columbia, and two years later Massachusetts began to build its new statehouse. The Virginia scale for skilled building-trades men, as shown in Thomas Jefferson's manuscript accounts, was, in 1796-97, 6s. a day (\$1); for helpers, 4s. (66.7 cents); and for laborers, 2s. 6d. (42 cents), and

probably those rates prevailed on the Government work in the District of Columbia. McMaster says that "hodcarriers and mortar mixers, diggers and choppers, who from 1793 to 1800 labored on the public buildings and cut the streets and avenues of Washington received \$70 a year, or if they wished, \$60 for all the work they could do from March 1 to December 20. (They were of course found, but not clothed.) The hours of labor were invariably from sunrise to sunset."

Data dealing with the cost of constructing the Massachusetts State capitol appear in voluminous detail in the account books of the period in the State archives. The administrative end of the work was apparently intrusted to a committee, composed largely of members of the two houses of the State legislature. Charles Bulfinch, the architect who designed the building, was also a member of the committee. Whereas to-day an undertaking of that nature is turned over to a building contractor who handles the administrative work as well as the materials and labor, it was much more complicated than that in Massachusetts in 1795. Each material dealer billed the committee for the amount of material delivered, no matter how small, and a dozen different carters presented bills for delivery, often in form and writing so illiterate as to make their deciphering difficult.

Carters charged 6s. (\$1) a load. The price of bricks seems to have been fixed at \$9 a thousand, and bricks were sold to the committee at that price by a variety of dealers. The masonry was apparently contracted for by a firm of mason contractors, whose accounts were presented on a printed billhead, in a businesslike manner more like present-day bookkeeping than the countless little statements on torn scraps of paper which represent other classes of participants in the undertaking. The mason contractors charged the State \$5 a thousand for laying brick and \$1.33 a perch for setting stone, but paid their bricklayers and stonemasons \$1.50 per day.

A dollar and a half a day was the standard rate for most of the skilled trades. Common or "general labor" received 6s. to 8s. (\$1 to \$1.33) a day. The "master mechanics" and foremen received \$2. The cabinetmakers who built the mahogany bookcases, the tables, the Speaker's chair, etc., were also paid \$2.

Piece prices are given for lathing and plastering at 25 cents per square yard; those for ornamental stucco work run from 1s. (16.7 cents) a foot for straight molding to 3s. 6d. (58 cents) for the most elaborate design; the price charged by the wood carver for the Corinthian capitals was \$70 each for the 23-inch columns and \$50 for the 3¼-inch columns, while the pine cone on the top of the dome was \$25. The columns range from \$3 to \$10 each for turning, depending upon the diameter.

The bill for painting reads thus:

To painting State House three times over, 10,822 square yards, at 1/6 [25 cents]-----	£	s	d	
	811	13	0	[\$2,705.50]
To painting the Dome over the fourth time, 9½ days' work, at 9s. [\$1.50]-----		4	5	6 [\$14.25]

Nineteenth Century

WAGES rose steadily with the opening of the new century, after Federal and State Governments had begun really to function and the new Republic to find itself. "It is impossible," McMaster states, "to read the many memorials which for 20 years (1790-1810) had been coming to Congress, without noticing the general complaint of the high price of wages. To us, when we consider the long hours of labor and the cost of living, these wages seem extremely low." John Jay calls the wage demands of mechanics and laborers at this period "very extravagant."

The carpenters of Boston in 1800 "chose a large and respectable committee out of their number" to formulate a new scale of piece rates to take the place of the 1774 "book of prices" which, "not considering that they were calculated upon a scale which bears no proportion to the price of other labor now, and which is by no means an equivalent compensation for the service, in reference to the raised price of the necessaries of life," was still in general use.

From about 1810 sources of information become numerous, and data from these various sources are on the whole consistent. They show enough uniformity to justify the conclusion that by that time wage standards had become fairly fixed for the respective crafts, and suggest about the same differences between geographic localities and trades that we find to-day.

McMaster reports that rates for all classes of work differed "in each of the three great belts along which population streamed westward." They were highest in the New England and New York area, as far west as Ohio, and lowest in the South, with the territory west of Ohio holding the middle ground. In each of these belts, wages were lower on the seaboard than inland.

Although Monticello, Thomas Jefferson's home in Virginia, was built in 1770-1772, most of the entries in his account books dealing with building costs and rates paid building-trades men cover a later period, 1800-1815. He gives not only rates, but a compilation of "observations," to use his own term, and data concerning both time and money costs in building which are worth reproducing substantially as he wrote them. Most of these entries, when dated at all, run from 1810 to 1815.

Jefferson's Notes on Building

Brick.—A demicord of earth (4-foot cube) makes 1,000 bricks. A man will turn up 4 such cubes, or even 5, a day. The price for turning up is 1s. [13.3 cents] (Maryland) the cube, or 1,000 bricks, the laborer finding himself.

A man moulds 2,000 bricks a day. His attendance is a man to temper, one to wheel the mortar to him, and a boy to bear off (Philadelphia).

At Georgetown in 1792 a brickmaker for 2½ dollars the thousand made the bricks, turning up the clay and finding himself everything except wood to burn and planks to cover them.

The brickwork is about one-third of the whole cost, the carpenter's material and iron-mongery one-third, the carpenter's work one-third.

1814.—Chisolm and two apprentices (one of them a new beginner) lay 1,600 bricks a day.

Stone.—Paving or other stone cut at 8d. [11.2 cents] the superficial foot, the block being found, and provisions.

The price for laying stone is 2s. 6d. [42 cents] per perch in an 18-inch wall. In Augusta it is 2s. [33.3 cents]. Such stone work is cheaper than brick in the

proportion of £1,056.4 to £581.5 [\$3,520.67 to \$1,937.50]. Everything calculated accurately by a workman at Georgetown, his brick work coming to \$9.60 per thousand and his stone work \$2 per perch, including the cost and carriage of everything, even of the rough stone. A man lays generally 3 perch a day, and even 5 in a very thick wall.

Wood.—The sawmills over the mountains saw for 20s. [\$3.33] the thousand, or one-half for the other.

Two mawlers and 3 rivers will rive 750 pine slabs a day, of 14 feet long, and double that number 6 feet long. Every slab clears about 4 inches, that is to say, 30 slabs properly clapped clear 10 feet.

Another estimate is that 3 men will get only 450 slabs a day if 6 feet long and 5 inches broad.

To rive and draw 500 shingles is a common day's work. A man may joint 3,000 a day.

Four men got out and out 600 chestnut pales a day, 7 feet long, for the garden.

Paint.—Venetian blinds. The upholsterer's part costs 2 dollars and the painting (by a coach painter) a French crown [about \$1].

Fresco painting.—Schneider charges a dollar a yard he finding paints, or 8s. [\$1.33] a day, paint, &c., found him. He can do half a yard an hour.

Carpentry.—June, 1812: Johnny Heming and Lewis made a set of Venetian blinds, with fixed slats, i. e., 2 pair, 3 feet 3 inches square, in 6 days, splitting out the slats from common plank with a handsaw. Say a window a week.

March 21, 1814: Johnny Heming began the body of a landau January 12 and finished it this day, being 9 weeks and 5 days. He had not more help from Lewis than made up for his own interruptions. The smith work employed the 2 smiths perhaps one-third of the same time.

A panelled door is done in 5 days, all the stuff being previously planed up.

A Boston painter's bill in 1814 reads as follows:

To 2 days' work	\$3. 75
To hanging 7½ rolls of paper	3. 50
To hanging 10½ rolls of paper, at 50 cents a roll	5. 25
To whitening ceiling	1. 00
To pink washing the sides	2. 00
To whitening and pinking 3 upper chambers at 4s. [66.7 cents] each	2. 00

Masons' wages had advanced in Massachusetts from \$1.50 a day in 1795–1800, when the statehouse was under construction, to \$2 in 1815 when Boston was building an almshouse and paying that rate for the brickwork, with bricks at \$1 per 100, an advance of \$1 per thousand over the price paid by the State for the capitol. Plastering at the almshouse was 50 cents a square yard, and slate roofers received \$2 a day.

This rate is higher, however, than the prevailing rate at the time. Official statistics of the Massachusetts Bureau of Statistics of Labor show an average rate of \$1.21 for masons over the entire State. Across the State line, in Rhode Island, a manufacturing concern was building a road and a bridge connecting two factories. Foremen on this job received \$1.75 a day, masons and carpenters, \$1.50, and laborers, 6s. (\$1). Carting was \$2.50 for man and team.

A contemporary historian gives presumably authentic daily rates for carpenters and bricklayers in several States for the period 1815–1817, as follows:

Bricklayers.—\$1.50 in New York and South Carolina; \$2 in Pennsylvania; \$1 in Ohio; and \$3 per M. in District of Columbia.

Carpenters.—\$1.50 per day in Maine and New York and \$1 in Ohio.

Another contemporary writer quotes a general average for the whole country in the following decade as \$1.45 for carpenters and \$1.62 for masons.

In 1832 carpenters in Boston were offered \$2 a day to break a strike for a 10-hour day. In New York in 1836 they were getting

\$1.75, and in that year the Philadelphia carpenters struck for \$1.50 per day from March 20 to November 20 and \$1.25 for the remainder of the year. The rate at the time of the strike was \$1.25 from April 1 to November 1, and \$1.12½ for the winter.

Nails

THAT nails should have been a really serious problem in any age seems almost fantastic now. Nevertheless the need for nails played an important part in colonial economics, and the value attached to their possession can be appreciated when one realizes that in early Virginia nails were a part of a planter's estate, listed in inventories and mentioned in wills. Throughout the first century of settlement evidently, all the nails used by the colonists were imported, and so valuable were they that, Philip A. Bruce relates in his *Economic History of Virginia in the Seventeenth Century*—

Small landowners, in deserting their homes with a view to making a settlement elsewhere on more fertile soil, were in the habit of burning their cabins when abandoned, in order to secure the nails by which the planks were held together, and so general did this habit become that in 1644-45 it was provided by law, as a means of destroying the motive for setting the houses on fire, that each planter, when he gave up his dwelling, should be allowed, at public expense, as many nails as two impartial men should calculate to be in the frame of the deserted residence.

After the manufacture of iron commenced in the Colonies, slitting mills were established which cut bar iron into nail rods, and the manufacture of nails became a widespread industry. It was a common practice for "country people to erect small forges in their chimney corners and in winter, and in evenings, when little other work can be done, great quantities of nails are made, even by children. These people take the rod iron of the merchant and return him the nails and in consequence of this easy mode of barter the manufacture is prodigiously great." Advertisements of nails for sale in large or small quantities are pretty sure to be found in the early newspapers.

Factory production began to displace the home manufacture of hand-wrought nails after 1790, with the introduction of a nail-cutting machine. Within a few years many machines for making nails were patented and put into operation, and "the occupation of making nails in the chimney corner met with a serious check."

Thomas Jefferson ran a nail factory on his Monticello plantation, which must have been an enterprising business, to judge from the many entries in his account books of purchases of nail rods in large quantities. The work was done by slaves. It was Jefferson's practice to work negro boys between 16 and 19 years of age in the "nailery," under the supervision of an overseer. In 1803 he was paying the overseer £10 (\$33.33) a year for his services as superintendent of the nailery, in addition to wages paid him for other duties about the plantation. Jefferson decided to change that method, however, and "from the commencement of the ensuing year he is to have 2 per cent on all the nails sold instead of the 10 pounds."

In 1781 nail makers in one of the early factories in Massachusetts were paid 48 cents a day. By 1817 this rate had more than doubled and in the manufacture of tacks the workers were paid \$1 a day. The piece rate in tack factories was 2.8 cents per thousand in 1822, by

which time the day rate had increased to \$1.25. Daily earnings of pieceworkers in a Pennsylvania nail factory in 1832 were \$1 to \$1.50.

Processes and earnings in a nail factory in Salem, Mass., in 1810, are given thus by Dr. William Bentley, after a visit to the works:

The heading machines are contrived to support by two levers the nail against an immovable cap. * * * The rollers for the iron-slitting mill are powerful. The cutting machines are of different sizes, with different motions. The larger machine is fed by tongs led by a pulley. The smaller is fed by hand and can give 1,400 strokes in a minute. The machine for heading is not used since the first experiment, as it is found heading is done better by hand than any machine as yet invented both as to time and goodness of execution. Board for the workmen can be had at 15s. [\$2.50] a week, and the men who head have about an average of 5s. [83.3 cents] per hundredweight and can earn from 6s. to 9s. [\$1 to \$1.50] a day.

Administration of Workmen's Compensation Laws in Ten South American Countries

Summary

A DIGEST of the administrative features of workmen's compensation laws of 10 South American countries—Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, and Venezuela—is here presented. Both the original laws, enacted to provide compensation for workers injured or diseased as a result of their employment and the various decrees and regulations subsequently passed for the purpose of clarifying basic legislation and aiding administrative interpretation, are considered.

Both industrial accident and occupational diseases are compensable under the laws of Argentina, Bolivia, Brazil, Chile, Ecuador, Paraguay, and Venezuela. The law of Bolivia specifically excludes from compensation, however, cases due to deliberate misconduct of the worker, and that of Chile injuries caused by the worker himself or due to force majeure not connected with the work; while that of Paraguay provides that only those occupational diseases are compensable which have arisen from the work done during the year preceding disability. The laws of Colombia, Peru, and Uruguay cover only industrial accidents. That of Colombia excludes from compensation accidents caused by force majeure foreign to the work or due to the fault of the worker, while that of Uruguay excludes those deliberately caused by the worker, or due to force majeure (which the employer must prove).

Administration.—The 10 South American Republics here considered utilize existing machinery to make awards in compensation matters when employer and employee fail to reach an agreement. Six of these countries (Brazil, Chile, Colombia, Paraguay, Peru, and Uruguay) provide that employers or employees shall bring their cases before the civil courts for adjudication. The laws in the other four countries specify that parties to a dispute concerning a compensation decision shall lay their differences before the executive authorities, i. e., the National Department of Labor in Argentina and Bolivia, the Ministry of Labor and Social Welfare in Ecuador, and the respective executive authorities in the various States of Venezuela. The Argentine law empowers the Department of Labor to mediate, and

provides that disputes which can not be settled by mediation shall be taken before the district judge and tried by summary proceedings. Under the terms of the Bolivian law the decisions of the Department of Labor are final. The law of Ecuador provides for court intervention in specific instances. In Venezuela a case may be appealed by either party to the Minister of the Interior, whose decision is final, but if either employer or employee does not wish to submit a case to arbitration in this manner it may be appealed in court.

Once a compensation case has been decided on by the legally designated court or executive authority, appeal and damage suits are variously handled. Thus, in Peru, acceptance of rights under the compensation law constitutes a waiver of rights under the common law, and in Uruguay no further rights accrue to the claimant unless he can prove fraud. In Brazil, Ecuador, and Paraguay, acceptance of rights under the compensation law does not exclude certain rights under the common law. The right to appeal, on the other hand, is specifically provided for in the laws of Chile, Peru, and Uruguay. The Chilean law makes special provision that appeals in compensation cases shall take precedence over other cases on the docket.

In some laws (namely, those of Argentina, Paraguay, and Peru) it is specified that action in compensation cases may be taken in forma pauperis, thus saving injured workers from the heavy expense ordinarily incurred in court trials.

Reporting of accidents.—All the countries, with the exception of Venezuela, have written into their compensation laws or regulations provisions requiring the employer, the employee, or his representative, or both, to notify some official of the labor office, or judicial or political system, of each accident that occurs. In some instances reports of accidents are transmitted to the local police or judicial authorities and through them to headquarters. In cases in which local authorities receive the first notice of accidents, as in Brazil, Chile, Ecuador, and Peru, they must verify the facts contained in the original accident report filed with them before submitting their reports to the proper authorities.

Time limits within which accident reports must be filed by employers vary from immediate notice up to 30 days. The Peruvian law demands immediate notice, the laws of Argentina and Colombia require notice within 24 hours, that of Ecuador within 48 hours, that of Bolivia within 3 days, that of Chile and Uruguay within 5 days, and that of Paraguay within 30 days. When employees are required to report on accidents, they are held within widely varying limits, from a notice within 24 hours to the employer in Venezuela to one within 30 days to the judicial authorities in Argentina.

It is provided that accident reports be furnished to the authorities in detail, since they serve as the basis for awards in compensation matters. In general these reports contain the name and address of the injured, his dependents, and his heirs in case of death, the name of the employer, the occupation and wage rate of the injured, the nature of injury and probable duration of disability, and the names of witnesses. Physicians' certificates are a part of the accident report; in certain countries provision is made for a further medical examination by a physician appointed by the court when dispute arises

in the course of trial, in which case the report of the physician so appointed forms the basis of the compensation award.

Determination of compensation.—Benefits vary according to the degree of disability sustained as a result of accident. In some cases the law lays down a schedule of compensation covering specific injuries or specifying the degree of disablement of certain injuries. In other instances the judicial or executive authority whose duty it is to make an award must determine from the physician's report, accident reports, testimony, etc., what degree of injury a claimant has sustained and therefore to what rate of compensation he is entitled.

The Peruvian law authorizes the judge to decrease the compensation if the accident has resulted from a careless act on the part of the injured, and to increase it if carelessness by the employer is proved, subject, however, to the minimum and maximum amounts fixed by the law. In Ecuador the judge may decrease the compensation if it is proved that the employer is financially unable to pay the benefits for which he is liable. Special power is also given in certain countries to compensate injured employees, who for some reason are not paid wages, on the basis of the current rate of wages paid for similar work. Calculation of wages paid partly or wholly in kind instead of in money is specifically covered in the compensation legislation of Chile, Ecuador, Paraguay, and Uruguay. In Chile and Ecuador the civil court, in Paraguay the judge of the court of claims, and in Uruguay the local justice of the peace is given the power to determine the value of payments in kind in cases in which employer and employee can not come to an agreement.

Provisions relating to payment of compensation benefits.—Not all the countries considered have specified the intervals at which compensation benefits are to be paid, but the laws of Brazil, Chile (in cases of temporary disability), Ecuador (temporary disability), and Paraguay provide that payments shall be made each week, or on the regular pay day, or "promptly," while those of Bolivia, Peru, and Uruguay provide for monthly payments, as does Ecuador also in cases of permanent disability to perform the regular work. In Chile, annuities for fatal cases must be paid monthly.

Lump-sum payment of compensation to heirs in case of death is provided for in Bolivia, Brazil, and Ecuador, and in Bolivia and Ecuador also for permanent total disability.

Compensation payments have preference over the other indebtedness of employers in those countries where this point is legislated upon (Brazil, Chile, Ecuador, and Peru). The law of Paraguay provides that failure to pay promptly compensation benefits exposes the employer's property to attachment.

Security of payments.—Eight of these 10 countries permit employers to insure their compensation risks with an insurance company, mutual association, or the Government fund, while the other countries (Paraguay and Venezuela) have no provision on this point. Three of the laws (those of Brazil, Chile, and Peru) state that the cost of insurance must be borne entirely by employers.

The laws of Argentina, Ecuador, and Peru require that in case of such insurance, the benefits under the policy must not be less than those provided by the law.

Insurance companies writing compensation insurance are subject to the supervision of the authorities in the respective countries in which they operate. Some laws have additional safeguards, such as that insuring companies invest a certain sum in Government bonds, that they deposit securities as a guaranty of financial responsibility, that they open their books for inspection, etc. Certain laws—i. e., those of Argentina, Brazil, Chile, and Peru—require the carriers to keep the compensation funds separate from other funds.

Where there is a special Government fund, as in Bolivia, that fund is subject to the direction of the Department of Labor and is held on deposit in the National Treasury.

A discussion of the administrative provisions for enforcing workmen's compensation laws in the various countries is given below.

Argentina¹

INDUSTRIAL accidents, whether arising out of and in the course of the employment or due to a fortuitous circumstance or force majeure connected with the work, are compensable in Argentina. Occupational diseases are also compensable.

Administration.—Workers who believe that they are entitled to compensation may carry the matter to the National Department of Labor, which may intervene and require the employer to pay it. On the other hand, an employer who thinks that the accident was caused intentionally or through culpable negligence on the part of the worker (which would exempt him from liability), also may notify the National Department of Labor. In all cases of known dispute the department is required to offer its services as mediator in order to effect a settlement. Disputes which it can not settle may be taken to the judge of the district in which the industrial accident occurred or in which the defendant resides, and he shall be competent to hear in summary proceedings any action brought for the recovery of compensation.

Workers and employees may choose between bringing a special action for compensation under the compensation law or an action under the common law for fraud or negligence on the part of the employer. However, both are exclusive, and the initiation of one of them or the acceptance of any sum thereunder constitutes in itself a surrender of the rights under the other.

In addition to his right of action against the employer or contractor, the injured worker, or his representatives, has, under the Civil Code, a right of action against a third party for damages for injury caused by him. This action may be brought by the employer at his own expense and in the name of the worker or his beneficiaries, if the latter do not initiate the same within eight days after the accident. Actions must be brought within one year after the accident.

The injured worker or his dependents have the right of proceeding in forma pauperis in the case of legal proceedings to obtain compensation.

In cases of accidents incurred in the service of the National Government, legal proceedings may be brought without previous claims being made through administrative channels.

¹ Law of Oct. 11, 1915, and decree of Jan. 14, 1916.

Reporting of accidents.—Workers injured in industrial accidents, or their beneficiaries, must notify the nearest judicial or police authority of the accident within 30 days thereafter, under penalty of a 25 per cent reduction in the compensation, except in case of force majeure or of other impediment duly proved. Employers must give a similar notice within 24 hours from the occurrence of the accident or from the time that they become cognizant thereof, which will be presumed to be within the following 24 hours when they were not present at the place where the accident occurred. An employer who fails to give the notice is liable to a fine of from 50 to 100 pesos.

Accidents occurring in the national capital are reported to the police of the precinct or to the National Department of Labor, while those occurring in the Federal territories and Provinces are reported to the police authority of the locality or to the justice of the peace. The police authorities in the Federal capital and national territories, upon being notified of an accident, must on the same day send notice to the National Department of Labor and to the employer of the injured worker.

In reporting the accident the name, nationality, age, salary, occupation, and status of the injured worker and the place and hour of the accident, as well as the apparent causes thereof, must be stated, on a form provided by the National Department of Labor.

When a serious accident occurs, inspectors of the National Department of Labor must visit the scene of the accident and deliver a report to the court when required.

In case of an accident causing immediate death, the employer shall give notice to the National Department of Labor, setting forth the pertinent facts. He must also notify the department in writing as soon as he has begun to carry out his obligations in regard to his liability for the accident; in this notice the interested parties, either personally or by their representatives, must signify their agreement. Notice must also be given the department of the intention to pay the compensation, specifying the amount, and the provision of law pertaining thereto.

If an injured worker has not returned to work within four days after the accident, the employer must deliver to the National Department of Labor a medical certificate in which the condition of the injured worker and the probable consequences of the accident are shown, as well as the time in which it will be possible to know the result. When an employer appoints a physician to attend the injured worker he must within 48 hours forward to the National Department of Labor the name and address of the same. If the employer does not select a physician, it is understood that the one attending the injured employee is acting for the employer.

Physicians are required to issue a certificate when the accident occurs, when the cure is effected, when a cure has been effected but the worker is still disabled, and when death occurs. A signed and certified copy of such certificates must be furnished by the employer to the National Department of Labor, if requested. If a worker does not agree with the certificates, either because he does not consider himself cured or because he disagrees with the classification of the disability, he may name physicians in order that, with the concurrence of the medical inspector of the National Department of

Labor and the employer's physicians, another examination may be made and a certificate issued, signed by the attending physicians, in which the consensus is shown.

Security of payments.—Employers may insure their compensation risk either with ordinary insurance companies or with a mutual association, provided the benefits are not less than those fixed in the law. In case of an accident, the employer, insurance company, or employers' (mutual) association must deposit, in the name of the injured worker or his beneficiaries, the amount of the compensation in a special division of the national annuity and pension fund which invests the money in Government bonds and pays monthly the pensions due the beneficiaries. Employers or insurers must also deposit in a special fund called the "Guaranty fund" the following: Death benefits, if the deceased worker leaves no dependents; pensions the beneficiaries of which have died without heirs; any amount due as compensation to foreigners who have left the country; fines imposed for failure to comply with the compensation law; gifts from private parties; and subsidies given by the State. The resources of this fund can be used only for the expenses of the accident division and to pay any compensation benefits left unpaid by insolvent employers.

Both ordinary insurance companies and employers' (mutual) associations must be licensed by the Executive Authority of the Nation or of the Provinces and must be organized in conformity with the general insurance regulations. The workmen's compensation business must be kept entirely separate from any other business of the carrier.

A workman may make complaint to the National Department of Labor against an insurance company which has failed to pay compensation due. The National Department of Labor is charged with strict oversight of any institution which writes workmen's compensation insurance. In case of proved irregularities indicating the company's failure to comply with the requirements, the Executive Authority may, upon recommendation of the labor department, revoke the license of an offending company.

Bolivia²

BOTH industrial accidents and occupational diseases arising from the employment are compensable in Bolivia, except when due to deliberate misconduct or violation of rules.

Administration.—In case of delay in compensation payments or if dispute arises as to the proper payment due an injured person the National Department of Labor has the right to make a final decision in the matter.

In fatal cases the Department of Labor is charged with the duty of giving an opinion, on the basis of the police investigation that is regularly made, as to whether the case should be opened for proof within eight days.

Employees earning more than 3,600 bolivianos a year have the right to compensation up to that sum without prejudice to sums receivable

² Law of Jan. 19, 1924; regulations, July 21, 1924; and decrees of July 21, 1924; June 7, 1926; Mar. 20, 1926; and May 24, 1927.

from any action that they may take at common law. It is not stated whether persons earning smaller sums have similar rights.

Actions at law in workmen's compensation must be brought within a year after the occurrence of the accident.

Reporting of accidents.—Employers and the police authorities in the district where an accident takes place are required to report the details of each accident to the Department of Labor within three days of its occurrence. This report must contain the attending physician's certificate; the name, the age, occupation and wage of the injured worker; conditions under which the accident occurred; the condition of the injured; the kind of injury sustained; and information as to the compensation payable and as to whether the injured person or his heirs (if he has died) are satisfied therewith. For failure to fulfill these requirements a fine is imposed.

The police authorities (or the mayor) are empowered to make a special investigation for the purpose of ascertaining the facts in a case. In case of a fatal accident, the police officer makes further inquiry as to the conditions in the case and the names of relatives and dependents and reports his findings to the Department of Labor.

Each employer is required to keep three books—a register showing the name, date of employment, address, age, (civil) estate, and nationality of workers, a book showing work done, and a third showing date, name, and occupation of injured, kind of accident, and compensation paid in each case of accident.

Determination and payment of compensation.—Compensation to injured workmen is based upon (1) a fixed scale for certain injuries; and (2) in case of injuries not covered by the scale, upon the decision of a physician chosen jointly by the parties.

Benefits are based upon the earnings of the injured as well as the severity of the injury. The wages of the injured are calculated on the basis of payment in money and kind and payments in the nature of a bonus for skill or speed or overtime are also included up to a maximum of 3,600 bolivianos a year.

Payment of compensation must be made at the end of each month either by receipt or voucher in accordance with the civil law of Bolivia, and a notice thereof must be sent to the Department of Labor. Commutation of benefits into a lump sum is directed in case of death and permanent disability.

Compensation benefits are not subject to waiver or attachment, nor may they be diminished by any agreement.

Security of payments.—All establishments having a capital of more than 100,000 bolivianos must provide accident insurance for their workers. An employer may insure his risk with a commercial insurance company which conforms to certain requirements or with the fund administered by the Government.

Employers who delay in making compensation payments or who fail to pay the benefits specified in the law are subject to investigation and fine by the National Department of Labor. In such cases the fine accrues to the injured workman or his heirs, without prejudice to any further amounts due as compensation benefits.

Any compensation payments held in the guaranty fund and unclaimed at the end of one year are delivered to the National Treasury to be used to pay compensation to the injured employees of firms

adjudged bankrupt. To effect payment from the special funds the Department of Labor must present an estimate as a basis for payment.

Brazil³

BOTH industrial accidents and occupational diseases are compensable in Brazil.

Administration.—All cases originating under the provisions of the workmen's compensation law of Brazil are subject to hearing before judges of the civil court in the particular locality where the accidents occur (except in case of accidents to Government employees, in which case the matter goes before a Federal judge). Within 12 days following the date of the accident the judge must render a decision. Cooperating with him are police officials who report on accidents and representatives of the district attorney's office who render legal assistance to injured persons.

Actions originating under the law must be brought within two years after the accident. This law does not exclude criminal proceedings if the employer is guilty of an offense covered by the ordinary criminal law.

Reporting of accidents.—Every industrial accident sufficiently severe to cause a worker to leave his work must be reported to local police officials by the employer, the worker himself, or some other person. The law further provides that a police official must immediately visit the place at which the accident occurred and the place to which the injured person has been removed, to obtain necessary facts.

Employers are required to communicate with the insurance carrier within 24 hours of an accident, reporting the accident and its attendant circumstances.

Five days from the date of the accident the employer is obliged to submit proof to the police that he has provided the injured person with all necessary medical and pharmaceutical assistance and hospital care.

He must also furnish a physician's certificate stating the condition of the injured person, the probable outcome of the accident, and the time in which it will be possible to know the result.

On the same day the police authorities are required to report their findings in the case.

If either the employer or worker desires a further report on the latter's physical condition during the course of the judicial proceedings the judge is empowered to designate a physician to make an examination in the presence of the attending physician. In case of a difference of opinion between these two physicians, the judge must designate a third physician whose report then forms the basis upon which the award is made.

Determination and payment of compensation.—Compensation is fixed according to a scale laid down in the law, classified by degree of injury, and on the basis of the findings in the case as reported by the police and physicians.

Sums due injured persons by way of compensation are privileged and free from attachment or seizure. Such sums have a preferential

³ Act No. 3724, Jan. 15, 1919; and regulative decree No. 13493, Mar. 5, 1919, and No. 13498, Mar. 12, 1919.

claim on the funds of the respective establishments in which accidents occur.

The law provides that compensation shall be paid in the establishment in which the accident occurs, the daily allowances to be paid at weekly intervals. If an accident occurs in a transportation enterprise payment is made at the head office of the enterprise.

In case of death the benefits are paid in a lump sum.

Security of payments.—Employers may insure their liability for compensation and for medical, hospital, and pharmaceutical care with a duly authorized commercial insurance company or with a mutual association that conforms with the legal requirements.

In no case may an employer make any deduction from the wages of his employees to cover the expenses of insurance or dues.

In case of the failure of the employer or insurance carrier to fulfill the obligations under the law the injured employee or his representatives may appeal to the office of the district attorney which must enforce the law.

The workmen's compensation business must be kept entirely separate from the other business of the insurance carrier.

The Government is empowered to revoke the authority granted to any carrier to write compensation insurance if the company fails to comply with the law.

Chile⁴

THE workmen's compensation law of Chile provides that compensation shall be paid for industrial accidents and for occupational diseases arising out of or in the course of employment. Liability of the employer or contractor in charge of work for another does not preclude the subsidiary liability of the proprietor. Injuries due to force majeure not connected with the work or those caused intentionally by the worker himself are not compensable.

Administration.—Compensation cases are handled by the judges of the civil court. Having received reports covering a case, the judge shall order that the parties be informed of the proceedings, and that they or their representatives be summoned to a hearing which shall take place on the fifth working-day following the last notification. At the hearing the judge shall invite the parties to come to an agreement, and if such is reached in accordance with the law, he must, within five days, pass upon it and the compensation due.

The judge is empowered to appoint guardians for legally incapable persons, including minors who have a right to compensation but have no guardian. He may by judicial procedure levy fines for non-observance of the provisions of this law. After paying a fine, however, a violator may appeal the case before the judge who has imposed it.

In cases involving dispute between employer and employee as to choice of attending physicians the civil judge is empowered to settle the matter by summary proceedings. Appeals are not admitted against decisions issued, including the final decree, without a stay depriving the lower court of jurisdiction.

Action under the civil law is necessary to recover damages from an employer above the maximum allowed under the compensation

⁴ Law No. 4055, Sept. 8, 1924; decree law No. 379, Mar. 19, 1925; and regulations No. 238.

provisions. Similar recourse to the civil law is necessary against third parties who are liable in accidents. It is specified in this connection that the employee or employer may bring action against a third party without diminishing the responsibility of the employer but with the understanding that the employer is released from liability up to the amount of damages a third party may pay.

Actions to enforce the payment of compensation or annuities payable under the law must be brought within two years after the accident.

Reporting of accidents.—Within five days after an accident, employers or their representatives are required to report to the civil judge of the locality where the accident occurred each case which causes death or disability. A similar report may be made by the injured worker or any person in the locality. In reporting the accident the following items are to be included: The names and addresses of the employer of the injured person and of the witnesses of the accident, as well as the age, wage, and civil status of the worker; the time, place, and circumstances under which the accident occurred; the nature of the injuries; a certificate by the attending physician; the name and address of the insurance carrier (if any). If the report is not properly made, the employer is subject to fine.

Except in cases of temporary disability in which the injured person has submitted a medical certificate or has taken no action in the matter, the judge, either personally or through a representative, upon being informed of the accident, must proceed immediately to the place where the accident occurred and investigate the case as regards the following points: (a) The cause, nature, and circumstances of the accident; (b) the names of the employer and the injured person; (c) the nature of the injuries; (d) the names of the persons entitled to compensation and the date and place of their birth; (e) the earnings of the injured person; (f) name and address of the company with which the employer is insured.

The attending physician must issue a certificate when the accident occurs, when recovery is effected, when the injured dies, etc. In case either worker or employer is not satisfied with the physician's classification of the injury, the judge shall decide the matter on the basis of information furnished by the court physician.

Determination and payment of compensation.—Injuries are compensated for in accordance with a fixed schedule, but in cases not covered by the schedule the degree of disability (and therefore the compensation payable) may be agreed upon by the employer and employee, or failing that by the civil judge.

Payment for temporary disability may be made to an injured worker daily or on the pay day adopted in each industry or enterprise, provided that these pay days are not less frequent than every 15 days. Annuities payable in case of death must be paid monthly.

Except in cases covering payment of compensation in excess of that granted by the law and which employer and employee have agreed to, a different form of payment from that established by law, such as payment in kind or in lump sum, instead of the regular periodic annuities, is not allowable.

Compensation benefits may not be waived, ceded, or attached, and are preferred claims against the employer in case of bankruptcy and

upon the fire insurance policy in case of loss of the employer's property by fire.

Wages paid other than in money shall be fixed by agreement of the interested parties or by the judge.

Security of payments.—Employers may insure their risk with a mutual association, a Chilean insurance company, or an organization meeting the requirements laid down in the regulations governing insurance companies.

Employers who do not insure their employees in one of these ways and in whose employ a worker meets his death or sustains a permanent injury are obliged to (1) deposit a sum equal to the annuity or pension due in the accident section of the National Savings Bank (*Caja Nacional de Ahorros*) plus an amount equal to 5 per cent of the capital representing the annuities and pensions he is required to deposit (the latter becoming part of a special guaranty fund) or (2) take out a pension in the amount owed, with a national pension company, delivering to this company the capital representing the annuities. This insurance may also be effected in a Chilean insurance company, provided the latter has capital of not less than 1,000,000 pesos. If the employer contracts for a pension in this way, the carrier shall issue a pension certificate to the injured person or other persons entitled to the pension.

The guaranty fund shall be used to meet compensation payments defaulted upon by employers or carriers. The National Savings Bank is empowered to take action in such cases against the offenders, to compel the reimbursement of sums paid by it in compensation.

No deductions may be made from an employee's wages toward the payment of the insurance or compensation cost.

The insurance carrier must effect complete separation of its workmen's compensation business from any other insurance written by it.

If a carrier fails to carry out its obligations under the law, authorization to write accident insurance may be revoked or suspended.

Colombia ⁵

THE Colombian law provides compensation for industrial accidents except in cases where the injury was due to the fault of the worker or to force majeure not connected with the work.

Administration.—Disputes arising under the act come before the judge of the municipality in which the accident occurred. The procedure in cases involving municipal employees follows the general rules.

The law further charges governors, intendants, commissioners, inspectors, and other Government agents with the duty of seeing that the provisions covering compulsory collective insurance be strictly observed and of notifying the Ministry of Agriculture and Commerce of any infraction of law.

Actions under the act must be brought within one year.

Reporting of accidents.—Employers are required to report to the local judge each accident within 24 hours following its occurrence. The employer's statement must give the hour and place of the accident, the cause, witnesses, the name and wage rate of the injured

⁵ Laws No. 57, Nov. 15, 1915; No. 37, Nov. 19, 1921; and No. 32, June 17, 1922; decrees No. 502, Mar. 28, 1923, and No. 682, Apr. 25, 1924.

person, the place to which he has been removed, the names of attending physicians, the name of the insurance carrier.

If death results from accident the employer is obligated to give immediate notice to the judge, certifying as to the above information and stating whether death occurred instantly.

Determination of compensation.—Specific rates of compensation are laid down by the law according to the degree of injury. The degree of incapacity and the consequent awards are determined on the basis of the medical findings.

Security of payments.—Establishments with a pay roll of 1,000 pesos or more per month are required to take out, at their own expense, collective life insurance on all employees earning less than 2,400 pesos annually, in an amount equal to a year's salary for each worker. The insurance may be carried in a commercial insurance company. Where a commercial policy is taken out by an employer he must provide each of his employees with a certificate giving the details of the policy held on his account. Enterprises with a capital of 50,000 pesos or over may be granted permission to act as self-insurers, upon providing proper guaranties.

Ecuador⁶

BOTH industrial accidents and occupational diseases are compensable under the Ecuador compensation law.

Administration.—The Ministry of Labor and Social Welfare of Ecuador is charged with the enforcement of the law providing for compensation for workers injured or suffering from disease as a result of their employment. The courts, however, are empowered to intervene in certain cases of dispute regarding benefits. The law states that the court may so act: (1) When the amount of compensation due to a worker paid in kind is at issue; or (2) when a worker is entitled to compensation for a disease that has developed gradually but only in part in his present employment, and the proportional rate to be paid by the present employer can not be agreed upon; or (3) when the financial position of the employer is such that a rate of compensation payment lower than that for which he is liable is justified.

Employees may sue at common law (1) to recover compensation at a higher rate than that provided by the law, but which an employer has agreed to pay; and (2) recover damages from a third party who caused an accident. In the latter case the suit may be brought by the injured person or by the employer for him, the employer being released from liability up to the amount recovered from the third party.

Actions under the terms of the law must be brought within one year after the accident.

Reporting of accidents.—Under penalty of a 25 per cent reduction in compensation, the injured person, or his heirs in case of his death, must, within 48 hours of an accident (unless due cause for delay can be shown) give notice to the labor inspector in the locality where an accident occurs or to the highest police official if there is no labor inspector. The employer must likewise report within 48 hours of

⁶ Law of Oct. 6, 1928.

receiving notification of an accident, under penalty of fine. Both notices must contain information on the causes of the accident, the number of persons injured, the place of the accident, nature of injuries, persons entitled to compensation, and the daily and annual wages of the injured persons.

A police official receiving such notification must verify the facts and transmit the information to the labor inspector. The latter in turn submits a monthly report of accidents in his district to the Ministry of Labor and Social Welfare.

Determination and payment of compensation.—Compensation is determined on the basis of wages and the disability caused, i. e., temporary, permanent partial, permanent total, or death. The law does not lay down a fixed schedule of compensation for specific injuries.

In case of wages in kind, if their value can not be agreed upon by employer and employee, the court is empowered to determine it, taking into consideration the value of the services rendered, the rates of wages of persons doing similar work, and the circumstances under which the work is carried on.

The court may decrease the compensation in cases in which it is proved that the employer is financially unable to pay the compensation for which he is liable.

Compensation payments must be paid on the same days and at the same intervals that an injured worker has been accustomed to receive his wages, if he sustains temporary disability; monthly in advance for injuries producing permanent partial or permanent total disability to perform the regular work; and in a lump sum for injuries producing either permanent total disability to perform any work, or death.

Compensation benefits are not subject to waiver or attachment. In cases of bankruptcy they constitute preferred claims.

Security of payments.—An employer may insure his liability under the workmen's compensation act in any insurance company legally established in accordance with the provisions of the Commercial Code. In no case, however, may the benefits so secured be less than those provided by the compensation law.

Paraguay ⁷

THE compensation law of Paraguay provides compensation for accidents arising as a result of the employment, or fortuitous event, or force majeure connected with the work. The employer is liable for compensation even though the employee works under the direction of a middleman or contractor.

Certain occupational diseases are also compensable, provided they arose from the work which the injured was doing during the year preceding disability. In cases of diseases contracted gradually, the respective employers are liable for a proportionate amount of the compensation. When the proportional amount to be paid by an employer can not be agreed upon, it is fixed by arbitrators.

Administration.—All claims for workmen's compensation must be brought under the civil law and in forma pauperis. Both parties are required to bring charges and defenses in their declarations and answers

⁷ Law No. 926.

and inclose all documents and the facts on which they base their claims.

The injured person may take action against a third party in conformity with the Civil Code, or the employer may take this action for the injured person or his heirs if they have not done so within eight days after the accident. The employer is exempt from liability up to the amount recovered from the third party. Right of action to demand payment for compensation expires one year from the date of accident, except in case of injured minors.

The Executive Authority of Paraguay is vested with the right of issuing the necessary regulations for enforcement of the law.

Reporting of accidents.—Employers are obligated to give notice of accidents to the nearest judicial authority within 30 days in cases of death or manifest permanent or temporary total disability of workers. As a basis for such notice a record must be taken stating the circumstances under which each accident occurs. Violations are punishable by fines of varying amounts.

Further reports on accidents are furnished to the court as outlined in the section on "Administration."

Determination and payment of compensation.—Compensation is determined according to whether the injury produces temporary total, permanent partial, or permanent total disability or death. The Executive Authority for Paraguay has the power to determine, by means of regulations, what injuries shall be classed as permanent, total, or temporary.

The "average wages" used in calculations of compensation payments must include any payments in kind and profit-sharing or other bonuses. In case all or part of the wages are paid in kind, the compensation benefits payable are subject to settlement by the judge of the court of claims.

The law specifies that compensation for injuries must be paid promptly and that failure to do so exposes the employer's property to attachment. No mention is made of what constitutes promptness or how payments shall be made. Compensation payments are not subject to attachment, transfer, or waiver.

In cases of occupational disease the worker is entitled to receive 15 per cent of the total award as a first payment; when the total sum due amounts to less than 10,000 pesos it must be paid in a lump sum.

Security of payments.—The law is silent as to insurance of the compensation risk by the employer.

Peru⁸

UNDER the Peruvian law an employer is responsible for compensation for accidents occurring to his employees during the performance of the work or as a direct result of it.

Administration.—The State Department is charged with the enforcement of the law.

The law provides benefits for those workers and employees whose annual wages do not exceed 120 gold libras. Employees whose annual earnings exceed that amount may choose between acceptance of benefits under the compensation law (in which case benefits are

⁸ Law No. 1378 of Jan. 20, 1911; decrees of July 4, 1913, and July 11, 1914; and Law No. 2290 of Oct. 20, 1916

limited to 120 gold libras) or of suing under the common law. Acceptance of rights under the workmen's compensation law implies a waiver of rights to damages under the common law.

Recovery of damages from third parties and for illicit acts of the employer must be effected under the common law. In case of third-party suits, the liability of the employer is reduced by the amount recovered from the third party. Action to recover compensation under the compensation law must be taken within one year from the date of injury.

If an accident involves only a temporary disability and the employer meets his obligations under the law, no official intervention takes place. In a more serious accident the employer or the worker may request the judge of the lower court or justice of the peace to investigate in order to determine the character and degree of liability arising. (In case of accidents in mines, metallurgical works, or refining plants the mining deputation or delegation acts for the judge of the lower court.) The judge then names physicians and technical experts, on petition, to determine the facts in the case, 10 days being allowed for such investigation. At the expiration of this time employer and employee are ordered to appear before the court and a decision is handed down. If the investigation is not finished in the time allotted, the judge must issue a report stating the reason and assigning a new term of three days. A second failure to complete a case furnishes sufficient cause to "challenge" him.

If on the day of the court appearance or on the following day one of the parties to the dispute requests a trial the judge is empowered to allow 10 legal days, at the end of which time he makes an award in the case.

Appeal of cases may be made within three days, but in matters involving payment of temporary compensation or funeral and medical expenses, award is ordered notwithstanding the appeal. The appeal court has power to order investigation of a case even though neither party requests such action. Decision on appealed cases must be rendered within 10 days.

In every case there is opportunity for an extraordinary appeal, which must be made within three days from the time that the appeal court makes an award. Awards upon extraordinary appeal are made by the Supreme Court after having received the documents and without any proceedings other than review. Sentence having been passed, its execution may be asked under the Civil Code of Judicial Procedure.

An injured person or his beneficiaries may exercise the privilege of insolvency without having passed through bankruptcy proceedings and are thus freed from the necessity of hiring legal assistance.

Transactions regarding rights to compensation must be approved by a judge to be valid.

Revision of awards of compensation may be requested within a term of three years. Appeals for this purpose must be made before the first session of the Supreme Court. If a revision is granted, the documents in the cases must be sent to the judge who originally rendered the decision. No appeal is allowed from the award granting or denying revision.

The judge has the right to make provisional awards of compensation, up to 50 per cent of the compensation granted by the law for the type of disability sustained, at any stage in the proceedings.

Claims of injured persons for compensation, medical attendance, medicine, and funeral expenses have preference over claims of other creditors, and in case of bankruptcy or judicial settlement the judge must order immediate payment of amounts due employees, for deposit in specified banks.

The judge has the power to levy fines upon physicians and employers for failure to comply with certain rulings in the prosecution of compensation cases.

Reporting of accidents.—Notice of the occurrence of an accident must be given by the employer to the highest political authority in a locality, within three days of its happening. The notice must give the name and address of the employing enterprise, the name and address of the injured, the time, nature, and circumstances of the accident, the character of the injuries, names and addresses of witnesses, the name of the insurance company and the value of the policy if the injured was insured, a certificate from the attending physician, and the probable duration of disability. A similar report may be made by the injured person, or his representatives or heirs, within one year from the date of the accident.

The decree of July 11, 1914, specifies that the person in charge when an accident occurs must immediately notify the political and judicial authorities in the nearest place. The authorities notified must ascertain the facts and send telegraphic statements at once and detailed statements within 48 hours, apprising the State Department of the accident, its origin, name and address of the injured, character of injuries, and all other facts deemed necessary.

Within 30 days of an accident the authorities must send further notice to the State Department stating how the law has been applied. Mining delegates who act to adjudicate compensation for mine accidents are required to submit similar information.

Railway and maritime accidents must be reported, respectively, to the highest political or maritime authority in the Provinces traversed by the railway and in the ports at which vessels dock. These authorities are then responsible for submitting reports to the State Department, as above.

Determination and payment of compensation.—Compensation is fixed according to a scale laid down in the law and based upon the degree of disability sustained. The duty of making rules for classifying individual injuries as to whether constituting permanent total or temporary partial disability, etc., devolves upon the Executive Authority.

The compensation may be reduced when, in the opinion of the judge, an accident has resulted from an inexcusable act of the injured and increased 50 per cent when injury results from lack of safeguards which the employer is required to furnish or from criminal negligence on his part. In either case, the award made must fall within the minimum and maximum rates set by the Executive Authority. Provisional compensation, up to 50 per cent of the total compensation allowed under the law for the kind of injury sustained, may be granted by the judge at any stage of a trial.

Compensation must either be paid monthly or the total sum due a worker may be placed in a savings bank at the legal rate of interest and at the disposition of the injured person or his heirs.

Compensation benefits are not subject to waiver or attachment, except for articles of prime necessity, and then only up to one-third of the benefits.

Security of payments.—Employers may substitute individual or collective insurance on their employees for their direct obligation to pay compensation as outlined in the law. If they choose to carry insurance they must insure their employees either in a company organized under the Code of Commerce; in a mutual association; or in the fund authorized by Law No. 1378 of January 20, 1911, which the Executive Authority was directed to organize, the purpose of which is to insure exclusively against industrial accidents, subject to the State authority as regards revision and approval of rates.

The workmen's compensation operations of insurance carriers must be kept separate from the other operations.

No deductions are allowable to employers from wages to meet insurance payments nor may any employer insure his employees for amounts less than the benefits to which they are entitled under the compensation law.

Uruguay ⁹

THE law of Uruguay provides for compensation for industrial accidents (but not for occupational diseases), except in cases in which the accident was deliberately caused by the worker or in which it was due to force majeure foreign to the work. In the latter case, however, the employer must prove that the accident occurred through the cause mentioned.

Administration.—In lawsuits or disputes arising between an employer and an employee or his heirs, the departmental judge (*juez letrado departamental*) has jurisdiction to render a decision on the basis of the report of the summary inquiry made by the justice of the peace of the district in which the accident occurred. An appeal from his decision may be taken to the court of appeals, whose decision is final. The procedure in such cases is that established by the Code of Civil Procedure for actions for possession.

If the two parties come to an agreement, the justice of the peace must prepare a document to be signed by them, describing the accident and fixing the compensation due the injured worker. The agreement shall be invalid if the legal adviser of the national labor office has not had a part therein and the document must be signed by him, or by the fiscal agent (or his representative) if the accident occurred outside the capital.

In cases in which death results after the compensation has been decided upon and in those in which the disability becomes greater or less, the injured worker or his lawful heirs, and also the employer, may demand a revision of benefits. Proceedings for revision may be instituted not later than a year following the final decision or the agreement of the parties before the justice of the peace, and may be renewed each year until the disability is declared final and unchange-

⁹ Law of Nov. 26, 1920.

able. The procedure followed is that for actions for possession, and the case must be brought before the departmental judge.

Proceedings may be instituted by the worker to obtain an increase of the annuity and by the employer to obtain a decrease in or relief from the obligations imposed upon him by the first decision or by the agreement entered into before the justice of the peace.

Action for injury caused by a third party may be brought by the injured worker, by the employer at his own expense and in the name of the injured worker or his lawful heirs, or by the employer and employee jointly.

In controversies concerning compensation that require the intervention of an attorney to defend the worker's rights, the national labor office must furnish one.

The worker is entitled to bring an action directly against the insurer under the provisions of the Civil Code.

Right to actions for compensation lapses twelve months after the date of the accident.

Workmen have no further rights against the employer than those provided by the compensation law unless there has been fraud on the part of the latter.

Reporting of accidents.—Every accident which incapacitates a worker for more than three days must be reported to the justice of the peace of the district by the employer before the fifth day.

The injured worker or his representatives may also report it to the same magistrate within two weeks.

An employer who, having knowledge of the occurrence of an accident to one of his workers, fails to report it to the justice of the peace, is liable to a fine which is greatly increased in case of a second offense.

Employers who insure their workers against industrial accidents in the State Insurance Bank must notify the bank of the accident within 48 hours after it happens, and the bank then makes the proper report.

If the worker has not returned to work within two weeks after the accident, the employer is required to present to the justice of the peace to whom the report of the accident was made a medical certificate showing the worker's condition, the probable consequences of the accident, and the approximate date when the final result may be known. The report must contain the name and address of the employer, the location of the establishment, the time of the accident, its nature, the surrounding circumstances, the nature of the injuries, the name, address, age, and civil status of the injured worker, and the names and addresses of witnesses who were present at the accident or had knowledge thereof.

Immediately after the presentation of the report the justice of the peace must commence a summary inquiry, taking the testimony of the injured employee if his condition permits and also that of the employer and the witnesses. He must make inspections in cases requiring attention and order any technical investigations and medical examinations that may be necessary. In case of death, and on the petition of the party concerned, he must order an autopsy to be performed within 48 hours.

The justice of the peace must endeavor to secure proof of: (a) The cause, nature, and circumstances of the accident; (b) the persons injured in the accident, where they can be found, and the place and date of their birth; (c) the nature of the injuries; (d) the beneficiaries in case of death and the date and place of birth of these; (e) the daily and annual wages of the injured workers; and (f) in the case of apprentices or workers under age, he must also endeavor to secure proof of the wages of ordinary workers employed in the same establishment or in similar ones in the locality.

The summary inquiry shall be begun with the knowledge of the parties concerned, who may demand any judicial proceedings they may consider necessary.

Justices of the peace are required to send, every month, to the National Labor Office, detailed notes of the investigations of industrial accidents, of their results, and of the proceedings arising therefrom.

Determination and payment of compensation.—Compensation benefits are based upon the degree and duration of the injury.

Payment of compensation for industrial accidents must be made monthly, and benefits may not be transferred or attached.

The basic wages used in computing compensation benefits must include any tips or bonuses habitually received by the worker. If the wage is paid partly or wholly in kind, the average value of the commodities in the locality is used. Any disputes as to the basic wage are decided by the justice of the peace.

Security of payments.—Employers may fulfill their obligations under the law by taking out insurance with the State Insurance Bank, which then assumes all the rights and obligations of the employer under the law, but it may hold the employer responsible when he has not complied with existing laws and regulations concerning the prevention of industrial accidents. All employers who do not take out insurance with the State bank must, within 10 days after the compensation has been decided, deposit in the State bank an amount equal to the annuities owed, which shall be calculated according to the tables adopted by the bank.

Venezuela ¹⁰

THE law of Venezuela provides for compensation for industrial accidents or diseases arising out of and in course of the employment, regardless of fault on the part of either employer or employee.

Administration.—The executive authorities of the States and governors of the Federal district or national territories are empowered to act as arbitrators to adjust differences that may arise in fixing compensation for injury incurred owing to occupational hazards when cases are voluntarily submitted to them by employers or workers. The decision of the arbitrator may be appealed by either of the parties to the Minister of the Interior, whose decision is final.

If the parties fail to agree to submit the question to arbitration, either one has the right of appeal to the court. Right of action for

¹⁰ Although Venezuela has no separate workmen's compensation law, as have the other South American Republics, its labor law, passed on July 23, 1928, and the regulative decree thereof, dated Aug. 13, 1928, contain several chapters dealing exclusively with workmen's compensation.

claiming compensation terminates at the end of one year counting from the date of the accident.

Reporting of accidents.—A worker who is injured as the result of an industrial accident or who contracts an occupational disease must notify, if he is able, the owner of the enterprise, the manager, or person in charge of the work within 24 hours after it occurs. If he fails to do this within the period stipulated, the latter will be exempt from responsibility as regards the medical, surgical, and pharmaceutical service.

No reports are, apparently, required of the employer.

Security of payments.—No mention is made in the Venezuelan law as to whether employers may insure their compensation risks.

INDUSTRIAL AND LABOR CONDITIONS

President's Conferences for Continued Industrial Progress

FOLLOWING the recent panic in the stock market, the President of the United States announced on November 15, 1929, that he had been "during the past week engaged in numerous conferences with important business leaders and public officials with a view to the coordination of business and governmental agencies in concerted action for continued business progress."¹ He also stated that he was calling, for the middle of the next week, "a small preliminary conference of representatives of industry, agriculture, and labor to meet with the Secretaries of the Treasury, Agriculture, Commerce, and Labor, together with the chairman of the Federal Farm Board, to develop certain definite steps." The remaining paragraphs of this call to collective industrial action read as follows:

For instance, one of the results of the speculative period through which we have passed in recent months has been the diversion of capital into the security market, with consequent lagging of the construction work in the country. The postponement of construction during the past months, including not only buildings, railways, merchant marine, and public utilities, but also Federal, State, and municipal public works, provides a substantial reserve for prompt expanded action. The situation is further assured by the exceptionally strong, cash position of the large manufacturing industries of the country.

The magnificent working of the Federal reserve system and the inherently sound condition of the banks have already brought about a decrease in interest rates and an assurance of abundant capital—the first time such a result has been so speedily achieved under similar circumstances.

In market booms we develop overoptimism with a corresponding reverse into overpessimism. They are equally unjustified, but the sad thing is that many unfortunate people are drawn into the vortex of these movements with tragic loss of savings and reserves. Any lack of confidence in the economic future or the basic strength of business in the United States is foolish. Our national capacity for hard work and intelligent cooperation is ample guaranty of the future.

My own experience has been, however, that words are not of any great importance in times of economic disturbance. It is action that counts. The establishment of credit stability and ample capital through the Federal reserve system and the demonstration of the confidence of the administration by undertaking tax reduction with the cooperation of both political parties, speak more than words.

The next practical step is the organizing and coordinating of a forward movement of business through the revival of construction activities, the stimulation of exports and of other legitimate business expansion, especially to take such action in concert with the use of our new powers to assist agriculture. Fortunately, the sound sense, the capacity, and readiness for cooperation of our business leaders and governmental agencies give assurance of action.

Conference with railway executives.—The first of the preliminary industrial conferences held by the President at the White House met

¹ This article is based on mimeographed statements secured from the White House; New York Times, Nov. 27, 1929; United States Daily, Nov. 23 and Nov. 26, 1929; and The Week's Work, Dec. 7, 1929, and press release (both issued by the Chamber of Commerce of the United States).

on November 19. In addition to the President, the Secretary of the Treasury, and the Secretary of Commerce, this session was attended by representatives of the American Railway Association, various important railroads, and the United States Chamber of Commerce.

The railway representatives unanimously agreed to cooperate in maintaining employment and business progress. It was also stated that they would give consideration to possibilities of expansion. Several days later the President received a message from the American Railway Association, representing approximately 97 per cent of the total operating revenues and approximately 91 per cent of the total railway mileage in the United States, stating that the roads had already arranged for capital expenditures amounting up to October 1 of this year to \$1,247,792,000 for Class I railways, of which \$673,972,000 remained on that date to be expended. This figure of \$1,247,792,000 compares with a capital program of \$902,307,000 for the same period of 1928, an increase of over 38 per cent.

The same message estimated that steel-rail deliveries in 1930 would approximate 2,500,000 tons—a considerable increase over 1929. According to a statement issued by the White House under date of November 22, "This program will assure larger employment in the railway-equipment industry next year than in 1929 and a very substantial addition to the railway demands for steel."

Conferences with industrial and business leaders.—At the meeting on the morning of November 21, the 22 industrial and business leaders present unanimously agreed that "there was no reason why business should not be carried on as usual." A preliminary survey of a number of industries indicated that in 1930 construction activities could be expanded even over 1929. The conferees decided to establish a definite organization under a committee representing the various industries and sections of the business community, to follow up the President's program in the various industries.

The members of the group agreed to act as a temporary advisory committee with the Secretary of Commerce who was authorized to add to the committee. Mr. Julius Barnes, chairman of the chamber of commerce, was asked to create an executive committee from members of this group and the various trade organizations who could assist in expansion of construction and maintenance of employment. A definite canvass will be made of the different industrial fields to develop the amount of such construction.

The President was authorized by the employers in attendance at this conference to state for them individually that they would not initiate any wage-reduction movement and that they strongly recommended that the country as a whole take this attitude. "They considered that aside from the human considerations involved, the consuming power of the country will thereby be maintained."

Labor conference.—The conferees with the President on the afternoon of November 21 included the Secretary of Labor and the official representatives of the American Federation of Labor, and the international organizations of miners, men's garment workers, carpenters, and the four railroad brotherhoods. As a result of this meeting the representatives of labor authorized the President to state that they strongly recommended that "no movements beyond those already in negotiation should be initiated for increase of wages, and that every cooperation should be given by labor to industry in the handling of its problems." The purpose of this declaration, as well

as that authorized by the employers, the White House statement explains, is to maintain stability of employment.

Conference on construction.—Leaders of the construction industry who conferred with the President and the Secretary of Commerce on November 22 pledged themselves to cooperate in such building programs as may be launched without dislocating conditions within the industry.

The Federal Government has given assurance that notwithstanding the promise of a cut of \$160,000,000 in taxes, it will be in a position to expend an additional \$175,000,000 in its program for public building, thus increasing the total to \$423,000,000 to be used over a period of years.

A program has also been put forward by the Government to stimulate the construction of 40 mail-carrying steamships at a cost of \$250,000,000. Money to aid in the construction is available in a Federal fund from which advances may be secured at attractive interest rates by steamship companies which guarantee to build vessels in accordance with governmental requirements.

Agricultural conference.—The representatives of four national agricultural organizations in session with the President and the Secretary of Agriculture on November 25 promised their aid in support of the Chief Executive's program for the stabilization of the industrial situation and the mobilization of the economic power of agriculture. The general opinion expressed was that "Confidence has been gaining in agriculture and that the morale of agriculture is now better than it has been for years past."

Exclusive of short-crop areas, agriculture was reported as genuinely improved. In this connection it was also stated that higher income has expanded the purchasing power in 1929.

The conferees also favored an immediate extension of the road program with special emphasis of far-to-market roads. The opinion also was expressed that agricultural prices which had suffered in sympathetic action in the stock market have now begun to recover, and that the efforts of the Farm Board in stabilizing those prices have been very helpful.

Telegrams to governors.—In pursuance of his plans for strengthening the existing economic situation and making provision for the absorption of any unemployment that might be occasioned by present disturbed conditions the President sent telegrams to all the State governors, inviting their cooperation and that of municipal, county, and other local officials through the speeding up and adjustment of road, street, public building, and other construction of this type in such manner as to further employment.

The President publicly announced that the State, county, and municipal governments were responding in the most gratifying way. An examination of available copies of replies to his telegrams discloses the fact that huge sums of money are to be spent on public works in 1930. The Governor of New York reported that he expected to "recommend to the legislature, which meets January 1, a much-needed construction program for hospitals and prisons. This program will be larger than ever before and will be limited only by estimated receipts from revenues without increasing taxes."

The Governor of Pennsylvania replied: "I shall do all in my power to carry into effect your comprehensive plans for the support

of the business situation of the country and the relief of unemployed labor. The appropriations at the recent session of the legislature make possible in Pennsylvania a construction program for highways and public buildings of about \$155,000,000. This will be judiciously distributed throughout the State keeping in view labor conditions. I shall take immediate steps to ascertain from local authorities the extent of their plans for public improvements and shall urge full cooperation with the Federal Government under your leadership."

The President has requested the Secretary of Commerce to handle the detailed measures in connection with the cooperation of the governors in the matter of public-construction projects.

Conference with public utility officials.—The last of this series of White House sessions in the interest of continued prosperity took place on November 27, the presidents or other representatives of street-railway companies of Baltimore, Chicago, Cincinnati, Louisville, Omaha, Council Bluffs, and Washington, D. C., and of 24 other public-utility organizations being present.

At that meeting the president of the National Electric Light Association reported that "The electric light and power, manufactured and natural gas, and electric-railway utilities contemplate the expenditure of \$1,400,000,000 during 1930 for new construction and expansion of facilities, an increase over the corresponding expenditures for 1929 of \$110,000,000. In addition to this amount, they will spend to maintain existing properties \$410,000,000."

More detailed statements were also presented, one of them giving the results of a recent survey made at the suggestion of the president of the American Electric Railway Association, which indicated that "this industry, which during 1929 is spending approximately \$1,000,000 a day for maintenance, betterments, and extensions, expects to maintain or exceed this rate of expenditure during 1930."

Conference called by the Chamber of Commerce of the United States.—Upon the initiative of President Hoover, the United States Chamber of Commerce called a meeting for December 5 in Washington, D. C., to which 400 delegates, representing more than 300 trade organizations, were invited. The opening address was delivered by the President himself, who explained the purpose of this assembly. He said in part:

This body represents the industries of the United States. You have been invited to create a temporary organization for the purpose of systematically spreading into industry as a whole the measures which have been taken by some of our leading industries to counteract the effect of the recent panic in the stock market. There has necessarily been some unemployment, starting with diversion of capital from the channels of business into the speculation, and after the break by some reduction in the demand for luxuries and seminecessities from those who met with losses. But the large effect was to create undue pessimism, fear, uncertainty, and hesitation in business. These emotions, being emotions, if they had been allowed to run their course would, by feeding on themselves, create difficulties. The American mind is prone to revert to previous occasions when we were much less able to organize to meet such situations.

These are potential difficulties which can not be cured with words. If we could do so, the merest description of the fundamental stability of our vast organism of production and distribution, touched with the light of the future of the United States, would cure it instantly. The cure for such storms is action; the cure for unemployment is to find jobs.

After referring to various lines of action recently taken for the purpose of assuring employment and removing the fear of unemployment, the President closed his remarks as follows:

The very fact that you gentlemen come together for these broad purposes represents an advance in the whole conception of the relationship of business to public welfare. You represent the business of the United States, undertaking through your own voluntary action to contribute something very definite to the advancement of stability and progress in our economic life. This is a far cry from the arbitrary and dog-eat-dog attitude of the business world of some thirty or forty years ago. And this is not dictation or interference by the Government with business. It is a request from the Government that you cooperate in prudent measures to solve a national problem. A great responsibility and a great opportunity rest upon the business and economic organization of the country. The task is one fitted to its fine initiative and courage.

Beyond this, a great responsibility for stability and prosperity rests with the whole people. I have no desire to preach. I may, however, mention one good old word—work.

To carry out the Presidential counsel the conference, after hearing reports from the representatives of 32 basic industrial and trade groups, authorized the appointment of an executive committee by Julius Barnes, chairman of the board of the Chamber of Commerce of the United States to secure and collate more detailed reports and to formulate measures for the eradication of whatever weaknesses in the national economic structure such reports might disclose.

A larger general committee, which may include as many as 50 members, was also authorized by the conference, such members to serve as contact men between the executive committee and trade associations and commercial groups. The personnel of the general committee will be announced later.

Annual Report of the Secretary of Labor, 1929

THE Secretary of Labor in his annual report for the fiscal year 1928-29 reviews the work of the various bureaus and other services of the United States Department of Labor. A brief account of some of these activities is given below.

Bureau of Labor Statistics

In addition to its regular continuing surveys of certain topics of major interest and value to labor, such as wages and hours of labor, strikes and lockouts, trend of employment, prices, cost of living, industrial accidents, labor legislation, workmen's compensation, and building operations, the Bureau of Labor Statistics in the 12-month period covered by the Secretary's report carried on a number of rather extensive special investigations. Included in the subjects of such studies were the hazards of spray painting, radium poisoning, public-service retirement systems, and the care of the aged in the United States. Among the wage studies referred to above are those covering wages in this country from colonial times, wages of common street labor in municipalities of the United States, and rates of wages in foreign countries.

The Seventieth Congress appropriated additional funds for the use of the bureau in extending its employment surveys, which now cover

over 31,000 establishments having more than 5,000,000 employees. While the reports based on these surveys give valuable information on employment conditions they do not show the extent of unemployment. The Department of Labor has again and again emphasized the need for a country-wide unemployment survey, and such a survey is to be made in connection with the Federal census of 1930. The facts thus secured and the bureau's figures, as noted above, will constitute a fairly accurate barometer of unemployment and employment conditions in this country. The bureau has also undertaken a number of studies of employment stabilization.

Arrangements have also been made by the bureau to take over the turnover surveys formerly carried on by the Metropolitan Life Insurance Co., summaries of which have been published quarterly in the Monthly Labor Review.

The Secretary of Labor approves the recommendations of the United States Commissioner of Labor Statistics: For a resurvey of the cost of living, to be made on somewhat broader lines than the investigation of 1918; that the United States Bureau of Labor Statistics be made a clearing house for accident statistics and that in this connection there should be a complete linking up of the States with that office; that the bureau should be immediately placed in a position to cooperate more effectively with State organizations willing to assist in establishing a substantial basis for a labor turnover index by industries; and that a study of migratory labor in California, Oregon, and Washington State be made.

Conciliation Service

DURING the year covered in the report 522 strikes, lockouts, or disputes were referred to the department for adjustment. These controversies occurred in 28 different States and the District of Columbia. The greater number of these were centered in the northern industrial States—Pennsylvania having 139, New York, 98; Massachusetts and New Jersey, 41 each; Illinois, 36; Indiana, 34; and Delaware, Maine, and Oregon, 1 each. The work of the Conciliation Service for 1928-29 as compared with the preceding year is shown in the following statement:

Cases	1927-28	1928-29
Adjusted.....	307	385
Unable to adjust.....	57	40
Pending.....	53	76
Unclassified.....	61	21
Total.....	478	522

Employment Service

EVERY month this service collects data on employment from all sections of the country and issues a bulletin in which comment is made on conditions in each State and in approximately 590 industrial centers.

In order to facilitate cooperation with State agencies, directors of public employment offices are designated as representatives of the United States Employment Service, usually with only the minimum

compensation necessary under the law which forbids the Federal Government accepting voluntary unpaid service. The following statement of the Director General of the United States Employment Service is quoted by the secretary:

To meet the changing conditions and to give more effective service, the several States now cooperating with the United States Employment Service should place more money at the disposal of their public employment services. Practically all offices are undermanned and many are inadequately housed in undesirable locations. Many of the offices of the cooperating service are unable to give proper attention to higher class placements, by reason of the lack of facilities.

It is a matter of much regret that the public employment offices in many of the cooperating States have made no advance or forward movement in the development of the employment service in their States. In fact, some States, instead of making progress, have lost ground, and some have ceased to function owing to the legislatures of their respective States failing to make appropriations to maintain the same.

No independent employment offices are maintained by the United States Employment Service except those which supply seasonal farm labor in the larger agricultural sections of this country. This work is carried on strictly as a Federal operation. According to the report of the farm labor division, 541,280 men were recruited for seasonal harvesting during the calendar year 1928.

The United States Employment Service cooperates with the junior placement offices in 31 cities and 16 States. In the fiscal year 1928-29 over 31,300 juniors were placed in employment. Proposals have been made to establish special employment services for the boy and girl graduates of Indian schools and for ex-service men.

United States Housing Corporation

DURING the year under review the United States Housing Corporation collected \$1,142,089.19 from the sources listed below:

Disposal of properties.....	\$929, 938. 41
Operation of properties.....	8, 837. 71
Interest on loans.....	203, 313. 07

Disbursements on account of appropriations affecting the above collections amounted to 4.93 per cent of their total. Attention is called to the fact that the amount realized in operation and interest, \$212,150.78, was \$155,866 in excess of expenditures.

The receipts from the operation of the Government Hotels at Washington, D. C., in the same fiscal year, which totaled \$288,737.49, are not included in the preceding statement. These receipts amounted to \$7,756.12 more than disbursements in connection with the operation of the hotels. This excess, however, can not be regarded as profit as neither interest nor amortization has been calculated.

Bureau of Immigration

THE Commissioner General of Immigration reports that 279,678 immigrant aliens entered and 69,203 emigrant aliens departed from the country during the fiscal year. These figures represent the permanent or real immigration and emigration of the year. The number of immigrant aliens admitted was 27,577 less in the fiscal year 1928-29 than in the preceding 12 months, the decrease being due mainly to a decline in immigration from Canada and Mexico. The immigration

from Europe was practically the same in volume in the two years. The admissions in the year ended June 30, 1929, were less than in any year since 1918 and 1919. The Secretary expresses the conviction that the restrictive immigration policy of the United States has contributed more to the greater stabilization of employment in this country than all other causes combined and holds that the need for continuing that policy is clearly obvious.

In a brief discussion of immigration legislation in 1929, the Secretary analyzes the act of March 2 of that year, which provides that under certain circumstances an alien resident of the United States concerning whose admission to the country no record is available, may secure registration. Referring to the law of March 4, 1929, which not only makes reentry after deportation a felony punishable by fine and imprisonment but provides that any entry without inspection shall be a misdemeanor, the Secretary states that this measure in some particulars is the most drastic general immigration law ever enacted. This legislation was modified somewhat by an act of June 24, 1929. The Secretary repeats in his report a recommendation already made by him to the chairman of the Senate Committee on Immigration that the act "shall not apply to any alien arrested and deported before March 4, 1929, in pursuance of law, in whose case prior to his reembarkation at a place outside the United States, or his application in foreign contiguous territory for admission to the United States, the Secretary of Labor has granted such alien permission to reapply for admission."

Bureau of Naturalization

THE records of the Bureau of Naturalization show that 224,728 aliens became citizens of the United States through naturalization during the fiscal year 1929, compared to 233,155 in the previous year. A declaration of intention, which is the first step toward citizenship, was made by 280,645 aliens, compared to 254,588 in the fiscal year 1928. The courts denied citizenship to 11,848 petitioners during the year because of inadequacy on their part, involving chiefly ignorance of our institutions of government, unsatisfactory moral character, insufficient residence, and incompetent witnesses. Continuance for further hearing and consideration occurred in the cases of 37,781 petitioners. A total of 255,519 petitions were filed by the approximately 2,200 courts exercising naturalization jurisdiction in continental United States, Porto Rico, Hawaii, the Virgin Islands, and Alaska, an excess of 15,198 over the previous year.

The nationalities principally represented among aliens who were admitted to citizenship during the year, exclusive of Alaska, Hawaii, Porto Rico, and the Virgin Islands, were as follows:

Number of aliens admitted to citizenship, by nationality

Italy.....	44, 843	Rumania.....	5, 817
British Empire:		Serbs, Croats, and Slovenes...	5, 573
Ireland.....	13, 162	Hungary.....	4, 824
England.....	9, 697	Austria.....	4, 154
Canada.....	8, 223	Turkey.....	3, 610
Scotland.....	6, 218	Norway.....	3, 311
Wales.....	514	Lithuania.....	3, 249
Others.....	3, 200	Netherlands.....	2, 100
	41, 014	Denmark.....	2, 095
Poland.....	31, 801	Switzerland.....	1, 931
Russia.....	18, 291	Finland.....	1, 447
Germany.....	16, 700	France.....	1, 240
Czechoslovakia.....	9, 215	Syria and the Lebanon.....	1, 089
Greece.....	6, 253	Belgium.....	1, 013
Sweden.....	5, 963		

No other nationalities contributed as many as 1,000 new citizens during the year, the numbers ranging from Latvia, 853, and Spain, 808, to Afghanistan and Haiti, with 1 each.

The Secretary discusses the far-reaching effect on naturalization of certain legislation passed by the Seventieth Congress and points out that the major portion of the recommendations for legislative enactments that have been made by the Bureau of Naturalization from year to year for the last four or five years have been accomplished by these new laws.

Women's Bureau

DURING the fiscal year the Women's Bureau completed several studies of woman wage earners, including a survey of Florida, a study of laundries, and one of employment trends in Ohio. It consolidated and published data collected by the bureau in various States and at various times concerning negro women, and women employed in 5, 10, and 25 cent stores, which reports are important contributions to the literature on these subjects. Statistics are being prepared relating to women in meat-packing plants and in Hawaiian pineapple canneries, output in relation to hours in various industries, conditions in the cigar industry, existing and former scheduled hours in Indiana industrial establishments, and domestic service questionnaires in Philadelphia.

The year has been prolific in congresses or conferences of importance to working women, in many of which the bureau has participated.

The work of public information has gone steadily forward during the year. It has included news releases on all new bulletins and outstanding activities of the bureau, popular and technical articles on the various problems connected with wage-earning women for many types of magazines, the furnishing of information to correspondents of newspapers and press associations and to editors of periodicals upon request, eight radio talks, and the preparation and circulation of popular exhibits.

Children's Bureau

DURING the past year the work of the Children's Bureau has continued along three general lines: (1) Scientific studies of child health, child labor and vocational guidance, recreation, dependency, delinquency, and neglect; (2) cooperation with State departments of

health under the maternity and infancy act in the development of an educational program for the promotion of the health of mothers and babies and with State departments of public welfare in the collection of information regarding children who are physically, mentally, and socially handicapped; and (3) preparation and distribution of popular material on maternal, infant, and child care and other subjects.

With the close of the fiscal year 1929 Federal and State cooperation in promoting the welfare and hygiene of maternity and infancy under the act of November 23, 1921, came to an end. In extending by two years the original 5-year period for which appropriations were authorized, Congress declared in January, 1927, that after June 30, 1929, the act should be of no force and effect. During the fiscal year 1929, 45 States and the Territory of Hawaii were cooperating with the Children's Bureau in accordance with the terms of the act.

A review of the annual reports of the States shows a great expansion and improvement in the child-health work being done by the States and by local units of government—county, city, and town—since 1922.

The most important survey during the fiscal year 1928-29 in the field of maternal and child health was an investigation of every registered maternal death during 1927 and 1928 in 13 States and in 2 States for 1928 only. Included among other important investigations carried on in the year 1928-29 was a survey of juvenile delinquency in Maine, a study of the activities and functions of the children's bureau of the Minnesota State Board of Control, a study of the children of maintenance-of-way employees, and a study of workmen's compensation laws as they affect injured minors.

The number of courts cooperating with the Children's Bureau in its plan for the uniform recording of juvenile court statistics is steadily increasing. On July 1, 1929, 150 courts had asked for the statistical cards, and at least 100 may be expected to report for the entire year 1929; 65 courts reported throughout the calendar year 1928 and 43 throughout the year 1927.

The annual report of the Children's Bureau contains a valuable summary of laws passed in 1929 relative to child welfare.

Cooperation in Industry

THE Secretary holds that "there is great cause to rejoice over the new human relationship between employers and workers, the two principals in our productive forces." He finds that both are now interested in securing a full measure of production from mines, mills, and factories, with a view to having more to divide among the producers themselves.

With mass production, skilled workers, and modern methods of management the worker of to-day has been enabled to purchase not only the necessities in abundance but of the luxuries of life. His children have better advantages in the way of education. The three "r's" are no longer considered a sufficient educational equipment. The high schools and colleges are filled with the children of wage earners, and I look for the worker and his family to go still further forward, keeping pace with the advance in science, invention, education, and recreation.

Meeting of International Association for Social Progress, 1929

THE third general assembly of the International Association for Social Progress was in session in Zurich from September 19 to 21, 1929. Official representatives from several governments and the International Labor Office were in attendance. The principal subjects selected for discussion were: Family protection policy, the school-leaving age, migration, and high real wages. Some of the discussions and decisions of the meeting are given in *Industrial and Labor Information*, October 14, 1929.

As regards family protection, agreement was reached on the matter of providing allowances for members of the families of persons being paid social-insurance benefits because of unemployment, accident, sickness, invalidity, etc. The delegates accepted the principle of providing various supplementary social services such as maternity protection, aids to child welfare, educational facilities, housing, etc., for persons with families. There was, however, quite a lack of accord with reference to the principle of granting cash allowances for the ordinary expenses arising from having children or other dependents in the household and concerning methods for the provision of such allowances. The British representatives advocated an expansion of social services and objected to grants in cash. In general, the representatives from central Europe were in favor of the social-insurance system. In view of the remarkable development of family allowance funds in Belgium and France, however, a compromise was effected which recognized this scheme, under certain conditions, pending the provision for such grants under social insurance. A large number of delegates abstained from voting on this compromise.

The following recommendations were adopted as an educational minimum:

1. That entry into the primary school, other than the infant department and the nursery school, should be at the age of at least 6 years, and at most 7 years;
2. That the minimum school-leaving age should be raised to 15 as soon as possible, and that it should coincide with entry into employment;
3. That the curriculum should be of a general character, with a practical bias in the last year;
4. That, to meet the economic needs of those parents who may be receiving a low income, maintenance grants should be given at any rate during the last school year;
5. That there should be compulsory daytime continuation schools, as far as possible, primarily for vocational instruction, but a certain time should be set apart for physical development and teaching in citizenship;
6. That attendance should be compulsory at these classes for a minimum period to be determined upon, the position of seasonal trades being specially considered when the period of attendance is fixed;
7. That the continued education shall be for a period of at least three years, or until a minimum standard of education has been reached in the case of backward or negligent students;
8. That the attendance shall be compulsory, by legal enforcement if necessary, upon both employers and employed.

A decision was reached to send the above recommendations to the International Labor Office with a view (1) to having them placed as soon as possible on the agenda of a future labor conference; and (2) to the creation of a permanent committee to watch developments in workers' education and to act as an advisory body.

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The congress invited each of the association's national sections to prepare for the 1931 general assembly a report expressing its views on: "(a) Steps taken by the public authorities or trade-unions in their respective countries with regard to the emigration, transit, or immigration of workers; (b) steps taken by the public authorities or trade-unions in other countries affecting the position of their nationals."

The general discussion of the subject of high real wages was based on a report in which attention was called to the relation between greater productivity and wage increases and the opinion expressed that such increases give a healthy stimulus to rationalization. The importance of high wages in connection with the demand for commodities was also emphasized. Recommendation was made for the establishment of official statistics of real wages in every important country and that such statistics be based on uniform methods decided upon by international agreement.

A resolution was submitted in the report, which requested the association to place the subject of high real wages on the program for the next general assembly. Among the points brought out by one of the representatives from France was the need for taking into consideration social-insurance benefits when making comparisons between the United States and the countries of Europe.

Penalties for Breach of Labor Discipline in Russia

THE Commissariat of Labor of the Soviet Union (U. S. S. R.) approved a new list of penalties for breach of labor discipline by wage earners in industry, on August 27, 1929,¹ which replaces the former list approved on July 19, 1927.

According to the new list, the management of an industrial establishment has the right to impose penalties for any breach of labor discipline, such as refusal to carry out obligations incurred under the collective or individual labor contract, or any works rules, or regulations. The penalties inflicted are: Reprimand communicated to the entire body of workers in the establishment and to the factory committee; and dismissal. These punishments may be inflicted independently by the management of the establishments owned by the Government, but in private establishments dismissal may not be inflicted without consent of the joint committee, except when the worker violates either the collective contract or a law by refusing to accept work other than his usual duties.

Punishable offenses include absenteeism, tardiness, wasting time by "loafing," reading newspapers, unexcused absences or sleeping during work time; performance of private work; drunkenness; conduct prejudicial to production (fighting, hooliganism, etc.), gambling; admission of outsiders to the work premises (if such is forbidden); disobedience of orders, violation of safety regulations; failure to produce an agreed amount of work or production of an unduly large amount of spoiled work; damaging goods or machinery, etc.

¹ *Izvestiia Narodnago Komissariata Truda*, No. 37, Sept. 12, 1929, pp. 577-581.

Generally the first offense is punishable by reprimand, but a second or third offense by dismissal. Any worker who commits more than three offenses punishable by reprimand during the course of one year is regarded as a habitual offender and may be dismissed. The worker may also be dismissed if an offense normally giving rise to reprimand leads to a serious consequence, such as stoppage of work, damage of machines and tools, deterioration of material, lowering of productivity of labor or production of inferior goods by a considerable number of workers, etc.

The management may require the worker to pay the losses caused by him, withhold his wages in cases of absenteeism or deliberate refusal to work, or reduce or withhold altogether wages to cover losses from spoiled product or from goods made from materials of obviously poor quality if the worker has failed to draw the attention of the management to the poor quality.

The accused worker must be given an opportunity to explain his conduct, either orally or in writing.

A wage earner who has been either reprimanded or dismissed without reference to the joint committee may appeal to the committee within 15 days. The decision of the committee is final. In regard to dismissal no notice is given and no compensation whatever is paid.

Labor Conditions and Employment in South Africa

THE 1927-28 issue of the Official Year Book of South Africa contains some data regarding the general industrial situation in that country. The situation is complicated by the presence, in the working population, of two races—the white Europeans and the colored natives. The latter greatly outnumber the former, and as the report points out, in considering labor and industrial matters, the native and Asiatic elements “must be accepted as a qualifying and in some cases a governing factor.”

The development of the sugar industry in Natal was largely carried out through the employment of imported Indian workers, and these workers were also used by the tea planters and the railroads. The gold mines of the Witwatersrand still depend upon native labor; while in the industrial districts of the Cape Province, and to some extent also in Natal, colored workers of mixed race have very largely filled the demand for unskilled labor. In many cases these workers have qualified as semiskilled artisans and frequently have shown themselves of equal skill with the European artisan. Practically all the farms in the country employ native or colored labor.

The European workers have been employed in the better-paid jobs in the skilled trades or the supervisory positions. The Europeans who were unskilled have found themselves in active competition with the natives. The former have a higher standard of living than the natives, but have not always been able to command a rate of pay which would enable them to maintain that standard.

The conditions thus brought into being have affected in the most marked degree every question concerning labor in the Union and have introduced social and economic difficulties of a serious kind, and of a type not to be found in countries possessing a less complex racial structure. There is, for example,

in the Union a portion of the population generally known under the somewhat unsatisfactory name of poor whites, whose number, though never accurately determined, is known to be very considerable, and whose presence in the great industrial centers and other urban areas has been recognized as constituting one of the greatest social problems of the Union. The solution of this problem, involving specifically the rehabilitation of a substantial proportion of the poor white class and in general its absorption in the normal productive occupations of the country, has become a major task of Government policy in the Union.

As a result of these conditions sentiment has developed for the increased employment of Europeans in work hitherto regarded as suitable only for natives. Out of this the formulation of the Government's "civilized-labor policy" evolved, definitely committing the Government to the substitution wherever practicable of white for "uncivilized" labor, on the ground that "the employment of the higher-grade capabilities in all classes of work will result in greater and more permanent economic and social advantage." Since 1924, when the policy was announced, the different Government departments have systematically endeavored to give effect to it. It is stated that in the railway and harbor service the policy has had far-reaching effects, and a wide field of employment has been thus opened to European labor.

It is estimated that in the rural sections there are from 100,000 to 150,000 poor whites. An attempt has been made to provide for some of these by giving them training in agriculture. Training farms have been established for this purpose, to which "rural unemployed capable of benefiting from such training are drafted," along with their families. After training, these workers are placed as tenant farmers, or, if they show themselves capable, are promoted to be independent farmers, certain loans being advanced by the Government to enable them to make a start. Up to June 30, 1928, 556 persons had been trained and placed, of whom 231 had gone on to qualify as independent farmers.

EMPLOYMENT OF THE OLDER WORKER

Age of Applicants for Work in Relation to Ease of Placement

A STUDY of the applicants for work through public employment offices has been made by the Massachusetts Department of Labor and Industries¹ in an attempt to find out what relation exists between age and ease of securing employment. The statistics cover a total of 15,453 male and 2,303 female applicants. Classification is made by 10-year periods for males and for two groups of females, namely, those under 35 years of age and those 35 and over according to marital status. The statistical results of the study are given below:

RECORD OF PLACEMENT OF APPLICANTS FOR EMPLOYMENT AT FOUR MASSACHUSETTS PUBLIC EMPLOYMENT OFFICES IN 1928

Age group	Male applicants			Age group	Female applicants		
	Number registered	Number placed	Per cent placed		Number registered	Number placed	Per cent placed
Under 25 years.....	5,247	2,890	55.1	Single:	6,080	2,025	33.3
25 to 34 years.....	4,789	2,650	55.3				
35 to 44 years.....	3,344	1,828	54.7	35 years and over..	961	473	49.2
45 to 54 years.....	1,576	938	59.5	Married:	1,076	499	46.6
55 to 64 years.....	448	192	42.9				
65 years and over.....	49	14	28.6	35 years and over..	1,342	751	56.0
Total.....	15,453	8,512	55.1	Total:	7,156	2,524	35.3
				35 years and over..			

Placement of Male Applicants

IN view of the popular belief that discrimination against men occurs after the age of 45, it is of interest to find that in the present instance the highest percentage of placements occurred among applicants between 45 and 54 (59.5 per cent of the total applicants in that age group). The decided falling off in percentage of total applicants past 55 years of age placed shows that men between 55 and 64 find it increasingly difficult to find employment and those 65 and over are still more hampered.

The report states that in the Springfield and Worcester employment offices, where applicants for employment seek positions in the metal trades, a larger proportion of those under 45 years of age were placed than of those of 45 years and over. In Boston, where there is a greater diversification of industries, the reverse was found to be true.

¹ Bulletin of the Taylor Society, October, 1929, p. 222: "Employment age limitations."

Placement of Female Applicants

THE figures for female employees bring out the fact that a much larger percentage of women 35 years of age and over was placed than of those under 35. From this study it is concluded that discrimination against women does not begin at age 35. However, the authors bring up the point that of these older women a large proportion was placed in domestic service and a relatively small proportion in manufacturing establishments.

Consideration of the conjugal condition of the women shows no discrimination against married women when figures for all four employment offices are considered together. But in Boston, where placement of employees in offices and stores is the main activity, 26.5 per cent of the single women under 35 years of age were placed and 79.9 per cent of the single women 35 years and over, as compared with 19.6 per cent of the married women under 35 and 3.7 per cent of those 35 years and over.

Gasoline Stations Operated by Men Over 60 Years of Age

THE "Smileage Gasoline" stations in California are operated almost exclusively by men over 60 years of age, according to the Service Letter of Industrial Relations, October 5, 1929, issued by the National Industrial Conference Board (Inc.). The wages of the employees, whose ages range from 45 to 85, are reported to begin at \$75 a month.

The owner is reported to consider the employment of older men good business and not philanthropy. He is said to find them "more courteous to customers, more careful in their care of the stations, with more pride in their work, and more reliable than younger men." The writer of the article in the Service Letter comments that "this merely illustrates that there are undoubtedly fields where the very considerations which make it difficult to secure industrial employment may turn out to be assets rather than liabilities."

Proposed Survey on Employers' Attitude Toward Employment of Older Workers in New York

A SURVEY is to be made of employers in New York State to ascertain their attitude on the question of the hiring of workers over 45 years of age, according to a member of the New York Commission on Old Age Security, quoted in the American Federation of Labor Weekly News Service for November 23, 1929. The survey will be financed by funds privately contributed.

HEALTH AND INDUSTRIAL HYGIENE

Prevention of Cancer Due to Lubricating Oils

IT is only within recent years that mule spinners' cancer,¹ appearing chiefly in British cotton mills, has been recognized as a separate disease entity. Special committees have been appointed in Great Britain to study the cause of epitheliomatous ulceration among mule spinners and, according to a note in the *Journal of the American Medical Association*, November 30, 1929, the Manchester committee on cancer has obtained valuable new information on the causation of malignant disease by the lubricating oils used in cotton mills.

Previous tests showing that certain of the crude oils, fuel oils, and lubricating oils are capable of producing epitheliomatous ulceration have been confirmed by the researches of the committee, and the concentration of the cancer-producing principle is being investigated. It is said that the active principle of a pure artificial tar has been concentrated to such an extent that a 5 per cent solution is more powerful in the production of cancer than shale oil, the most dangerous of all the commercially used oils. Also two pure compounds of known chemical constitution have been found capable of producing tumors.

Further investigations are being made of the factors which change a noncancer-producing substance into one capable of causing cancer. Bitumen could not be shown to have any cancer-producing property, but pitch was proved to be very active as a cancer-producing agent. The researches of the committee have been directed toward the destruction of the cancer-producing power of certain oils, in order to make them safe for industrial use, and a purified oil has been obtained which has as high a lubricating value as the crude untreated oil, and when subjected to severe tests has failed to produce cancerous growths. Until the committee is ready to submit the oil to the public, however, the use of lubricating oils which contain no shale oil is recommended.

New Treatment for Radium Poisoning

INDUSTRIAL radium poisoning in the painting of watch and clock dials with luminous paint was the subject of a recent field study² by the Bureau of Labor Statistics. In view of the deaths which have occurred and the seeming hopelessness of the condition of the living victims, the apparently favorable effects of a new treatment reported in the *Bulletin of the Johns Hopkins Hospital*³ is of great interest.

¹ See *Labor Review*, November, 1926, pp. 55-57, and September, 1928, pp. 27-45.

² *Labor Review*, June, 1929, pp. 20-61; see also, May, 1926, pp. 18-31, and June, 1929, pp. 62-95.

³ Parathormone in the treatment of radium poisoning. A preliminary report, by F. B. Flinn, Ph. D., and S. M. Seidlin, M. D. Reprinted from *Bulletin of the Johns Hopkins Hospital*, November, 1929, pp. 269-275.

The report deals with the results of the administration of Collip's parathyroid extract to three young women showing definite radioactivity as well as other evidences of the destructive effect of the radium. The treatment was suggested by the work of J. C. Aub and his coworkers, who used ammonium chloride for the purpose of increasing the calcium elimination, and similar experiments in the elimination of lead. The administration of ammonium chloride or phosphoric acid was found to be very effective in the elimination of calcium and lead, the method producing a temporary acidosis and converting the insoluble calcium and lead salts into soluble ones, thereby raising the excretion of these metals. A lowering of the blood calcium in dogs was shown by MacCallum and Voegtlin to follow parathyroidectomy and Collip showed that the injection of his parathyroid extract raised the blood calcium and increased the calcium excretion. Aub found that this was true for man as well as animals and these findings suggested the treatment of the radium victims by injections of parathyroid extract.

The cases subjected to treatment are those of young women who worked with the radioactive paint before 1925 and before the danger was generally recognized. The first case was that of a girl 24 years of age who was suffering from slight general undernutrition; the second, that of a married woman 25 years old who showed general undernutrition, a cavity in the upper jaw which failed to heal after the extraction of the teeth, and serious effects following upon the birth of a child; and the third was that of a young girl 20 years old whose jaw failed to heal after the extraction of a tooth and who when she was admitted to the hospital showed slight general undernutrition, marked pallor, inability to open her mouth, and swelling of the left side of the face, left lower jaw, and submaxillary lymph nodes. The X-ray examinations of these patients all showed characteristic X-ray lesions of the skull—round, sharply circumscribed areas of rarefaction, these lesions being similar to those found in a piece of skull removed during the autopsy of a recent case of "radium poisoning."

The first case was treated with injections of Collip's parathyroid extract given intramuscularly every other day for a period of seven weeks, and the electroscopic demonstration showed a loss of 45.6 per cent of radioactivity during that time. The second and third cases treated with the extract for the same length of time showed a loss of 57.7 per cent and 50.5 per cent, respectively. In the latter case, however, the improvement was judged on the basis of the gamma-ray determinations alone, as the electroscopic determinations of the patient's expired air could not be carried out with accuracy on account of her inability to open her mouth. In all of the cases the general condition of the patients showed improvement and there was a considerable gain in weight.

While the report seems to hold out hope to the victims of radium poisoning, the question has been raised whether in cases where the radioactivity has been present for some years the bones have not been devitalized to such an extent that permanent improvement can not be hoped for. It is considered, however, that the treatment should be valuable in cases which are discovered, through periodic examinations, soon after they develop. Another angle of the case which is

also engaging attention is the possibility that children born to mothers suffering from radium poisoning may also be affected by the radium. While not all of the children in these families have yet been examined, the tests on some of them have shown radioactivity.

Recent Death from Radium Poisoning

ANOTHER fatality has been reported among the former employees of the United States Radium Corporation. A newspaper report¹ of December 9 states that an autopsy on the body of the young woman in question established radium poisoning as a contributory cause of death, the femur and the spinal column showing typical mesothorium or radium osteitis. This young woman was one of the five former employees of the corporation receiving compensation under the terms of a settlement² made in June, 1928. Up to the present time a total of 24 fatalities, which were apparently the result of poisoning from the radioactive materials, have been reported.

¹ The World (New York), Dec. 9, 1929.

² See Labor Review, July, 1928, pp. 42, 43.

INDUSTRIAL ACCIDENTS

Accidents in Selected Manufacturing Industries in 1928

THE following table presents a very brief summary of the bureau's annual statistics of accidents in selected manufacturing industries for the year 1928, including also summaries for the years 1926 and 1927. The iron and steel industry is not included, having been treated separately in the Labor Review for October, 1929 (pp. 32-42). All this information in detail to the end of 1927 is included in Bulletin No. 490, recently issued by the bureau, and the detailed statistics for 1928 and 1929, including iron and steel, will appear in the next issue of the bureau's bulletin on industrial accidents in the United States.

The year 1925 was the first year that an attempt was made to collect comprehensive accident data covering manufacturing industries, and while more than half a million full-year workers in nearly 1,300 establishments were included, the data covered only 11 States, and because of this fact and to conserve space in the Review the figures for that year have been omitted from the table. They appear, however, in Bulletin No. 490.

Thirty-two States are included for 1928. This is an increase of six over 1927, Colorado, Idaho, Montana, Oregon, Utah, and Washington having been added. The number of industry groups, 29, has not been changed and probably will remain more or less constant from year to year. It should be stated, however, that considerable difficulty was experienced in gathering accurate accident data covering the various phases of the lumber industry. Heretofore an attempt has been made to separate the records for planing mills and sawmills, but with rather unsatisfactory result. This is chiefly due to the fact that in many instances where planing-mill and sawmill operations are carried on at the same point and under the same management, accident reports are not clear as to whether the injury occurred in the one or the other, and sometimes the location is omitted altogether. This situation is further complicated when the mills are located in the woods or near the source of supply. Accident reports in such instances often do not state definitely whether the injured man was working in the sawmill or swinging an ax in the woods at the time of injury. In an effort to overcome this difficulty, the lumber industry has been, for 1928 at least, renamed "wood industries." Where possible the reports have been definitely classified under planing mills, with the record for sawmill, woods, and logging operations, either or all, as may be reported in various States, placed under "other." The bureau, with the cooperation of industry and the States, is now attempting to straighten out this matter so that in the future the accident record will be more definitely classified. It is hoped that logging and woods operations may be put into a separate classification because of the greater hazard involved—considerably greater than in either planing mills or sawmills.

Accident records for fertilizer manufacturing carried on in connection with slaughtering and meat packing can not always be separated from the latter. Where reports have not specifically stated that the injury occurred in the fertilizer department they have been included under slaughtering and meat packing. These instances, however, are not numerous and do not materially affect the rates.

The number of full-year workers covered in 1928 was 1,138,557, which is an increase of about 6 per cent over 1927; the number of establishments covered was 3,181, or an increase of nearly 19 per cent over 1927.

The industries have been grouped according to the extent of reporting accidents in the States included in each industry group—a plan inaugurated in Bulletin No. 490. In 1927 more than 56.6 per cent of the full-year workers covered were in States reporting all disabilities extending beyond the day of injury; in 1928 more than 62 per cent were in such States. This is an index of the completeness of the record.

From the following table it will be noted that while there were in 1928 as compared with 1927 material reductions in accidents as measured by the frequency rates in a number of industry groups, there were altogether too many industries in which the number of accidents per million man-hours increased. The severity rate, which is based on time loss, tells the same story—a general increase in 1928 over 1927.

Considering the industries in the group of States reporting all accidents, including 26 of the 32 States covered and therefore reasonably representative of the entire number, there are 17 industries which show increases in total frequency rates and 12 which show decreases; 17 which show increases in total severity rates and 12 which show decreases. Twelve industries show increases in the fatality frequency rates, 15 show decreases, and 2 no change. Twenty-one industries increased their permanent disability rates; 8 decreased them.

Sixteen industries made a gain in the temporary disability rates and 13 reduced their rates. As to severity of injury the changes are as follows: Fatalities—14 increases and 15 decreases; permanent disabilities—20 increases and 8 decreases, 1 no change; temporary disabilities—17 increases and 10 decreases, 2 no change. There was an increase of 113.21 per cent in the total frequency rate in stamped and enameled ware, and a decrease of 60.2 per cent in shipbuilding. The severity rate in steam fittings, apparatus, and supplies increased 171.43 per cent, while in shipbuilding this rate decreased 48.6 per cent. These are the greatest changes revealed in the table, and of course their significance is modified by factors which can not here be explained in detail, such as extent of reporting in the various States, a very large number of fatalities in one year in a single industry and a much smaller number in the other year, and the inclusion of certain States in the group reporting all accidents in 1928 which are not included in that group for 1927, etc.

The State making the greatest reduction in its accident frequency rate was Massachusetts, with a reduction of 18.5 per cent. North Dakota made the greatest reduction in its severity rate (90.37 per cent). Kansas increased its frequency rate by 46.78 per cent and Nebraska increased its severity rate by 107.83 per cent. Of 16

States reporting for both years, in this general group, 12 show an increase in the total frequency rate and 8 show an increase in the total severity rate.

While the number of full-year workers covered in each State or in each industry by no means represents the total employment, it is believed that the sample presented here is a fairly reliable cross section of each industry, and it is doubtful if the frequency and the severity rates would be materially affected by an increase in the total man-hours. However, the bureau is striving to enlarge its work in this connection from year to year in order to present data as accurate and complete as possible.

For full explanation of accident rates and their method of computation and for data covering each industry by State and each State by industry for the years 1925, 1926, and 1927, reference is made to Bulletin No. 490 issued by this bureau.

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure.]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for States reporting all disabilities extending beyond day of injury													
Agricultural implements:													
1926	5,126				39	2.54	3.08	554	36.03	0.58	593	38.57	3.66
1927	7,282	6	0.27	1.65	28	1.28	1.10	598	27.37	.46	632	28.92	3.21
1928	13,144	5	.13	.76	74	1.88	1.33	1,082	27.48	.55	1,161	29.49	2.64
Automobiles:													
1926	28,360	10	.12	.71	180	2.12	5.19	2,145	25.21	.35	2,335	27.45	6.25
1927	48,886	7	.05	.29	142	.97	1.27	1,852	12.63	.23	2,001	13.65	1.79
1928	56,381	10	.06	.35	278	1.64	1.27	3,733	22.02	.36	4,021	23.72	1.98
Automobile tires:													
1926	17,951	3	.06	.33	32	.59	.46	2,913	54.07	.72	2,948	54.72	1.51
1927	30,696	7	.08	.46	61	.66	.51	3,771	40.95	.73	3,839	41.69	1.70
1928	34,271	7	.07	.41	61	.59	.53	3,733	36.21	.62	3,801	36.87	1.56
Boots and shoes:													
1926	14,779	1	.02	.14	5	.11	.05	316	7.13	.09	322	7.26	.28
1927	39,763	1	.01	.05	69	.58	.47	892	7.48	.14	962	8.07	.66
1928	38,537	2	.02	.10	87	.75	.76	985	8.47	.18	1,074	9.24	1.04
Brick:													
1926	4,703	3	.21	1.28	11	.78	1.67	809	57.34	.92	823	58.33	3.87
1927	13,497	9	.22	1.33	31	.77	.75	1,436	35.46	.55	1,476	36.45	2.63
1928	11,874	8	.22	1.35	33	.93	1.09	1,399	39.31	.73	1,440	40.46	3.17
Carpets:													
1926	1,482							19	4.31	.08	19	4.31	.08
1927	15,321	1	.02	.13	12	.26	.25	214	4.66	.11	227	4.94	.49
1928	14,091	4	.09	.57	25	.59	.67	251	5.47	.14	260	6.15	1.38
Chemicals:													
1926	3,117				2	.21	.06	124	13.26	.25	126	13.47	.31
1927	8,540	5	.20	1.17	17	.66	.68	308	12.02	.22	330	12.88	2.07
1928	11,938	18	.50	3.01	48	1.34	1.75	750	20.98	.51	816	22.77	5.27
Cotton goods:													
1926	44,194				23	.17	.14	1,171	8.83	.18	1,194	9.00	.32
1927	56,903	6	.04	.21	57	.33	.33	2,258	13.23	.27	2,321	13.60	.81
1928	62,880	5	.03	.16	81	.43	.36	2,288	12.13	.22	2,374	12.59	.74
Electrical machinery:													
1926	18,137	2	.04	.22	56	1.03	.64	1,095	21.13	.37	1,153	22.20	1.23
1927	60,927	11	.06	.36	210	1.15	1.02	2,611	14.28	.36	2,832	15.49	1.74
1928	67,098	11	.05	.33	213	1.06	.86	2,331	11.59	.33	2,555	12.70	1.52

¹ The record for Kansas, included here, covers 6 months only (July to December).

² The record for Oklahoma, included here, omits fatal cases.

INDUSTRIAL ACCIDENTS

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for States reporting all disabilities extending beyond day of injury—Contd.													
Fertilizers:													
1926	1,309	1	0.26	1.54	2	0.51	0.28	174	44.54	0.88	177	45.31	2.70
1927	2,498	3	.40	2.40	7	.93	1.79	261	34.83	.66	271	36.16	4.85
1928	4,047	10	.82	4.94	26	2.14	3.56	462	38.02	.72	498	40.98	9.22
Flour:													
1926	3,889	4	.34	2.06	15	1.29	1.94	310	26.57	.50	329	28.20	4.50
1927 ¹	7,107	5	.23	1.41	25	1.17	.90	477	22.37	.41	507	23.77	2.72
1928 ²	10,224	6	.20	1.17	34	1.11	1.53	894	29.14	.54	934	30.45	3.04
Foundry and machine shop products:													
1926	27,069	17	.21	1.26	85	1.05	1.05	3,193	39.32	.58	3,295	40.58	2.89
1927 ¹	72,963	38	.17	1.04	358	1.54	1.33	6,356	29.05	.51	6,732	30.76	2.88
1928 ²	72,189	29	.13	.80	365	1.68	1.35	6,009	27.64	.51	6,403	29.45	2.66
Glass:													
1926	6,717	1	.05	.30	17	.84	1.04	797	39.55	.49	815	40.44	1.83
1927	19,267	14	.24	1.45	24	.42	.35	2,233	38.63	.51	2,271	39.29	2.31
1928 ²	20,236	7	.12	.69	25	.41	.25	2,562	42.27	.54	2,594	42.20	1.48
Hardware:													
1926	886				5	1.88	.73	75	28.22	.58	80	30.10	1.31
1927	3,764	1	.09	.53	15	1.33	1.02	330	29.22	.44	346	30.64	1.99
1928	6,391	3	.16	.94	35	1.88	1.19	451	23.54	.44	489	25.53	2.57
Leather:													
1926	5,530	2	.12	.72	7	.42	.62	187	11.27	.26	196	11.81	1.60
1927	11,521	3	.09	.52	19	.55	.41	948	27.43	.43	970	28.07	1.36
1928	14,192	4	.09	.56	37	.87	1.11	842	19.79	.30	883	20.75	1.97
Machine tools:													
1926	9,303	3	.11	.64	15	.54	.32	623	22.32	.25	641	22.97	1.21
1927	12,207	3	.08	.49	28	.76	.70	780	21.30	.34	811	22.14	1.53
1928	15,406	7	.15	.91	51	1.10	.91	971	20.97	.42	1,029	22.22	2.24
Paper and pulp:													
1926	16,770	7	.14	.83	36	.72	.83	1,562	31.05	.51	1,605	31.91	2.17
1927 ¹	26,074	18	.23	1.38	126	1.61	1.62	2,224	28.43	.60	2,368	30.27	3.60
1928	26,822	13	.16	.97	160	1.98	2.12	2,307	28.61	.69	2,480	30.75	3.68
Petroleum refining:													
1926	3,783				6	.53	.32	99	8.72	.20	105	9.25	.52
1927 ¹	19,951	25	.42	2.51	67	1.12	1.12	1,979	33.04	.52	2,071	34.58	4.15
1928 ²	24,818	25	.34	2.01	58	.78	.54	1,443	19.34	.45	1,526	20.46	3.00
Pottery:													
1926	3,946	1	.08	.51	2	.17	.36	142	12.00	.25	145	12.25	1.12
1927	6,053	2	.11	.66	6	.33	.18	229	12.61	.17	237	13.05	1.01
1928	7,449	3	.13	.81	7	.31	.46	299	13.40	.26	309	13.84	1.53
Shipbuilding steel:													
1926	745				2	.89	1.92	123	55.03	.96	125	55.92	2.88
1927	6,011	5	.28	1.66	36	2.00	2.58	798	44.25	.76	839	46.53	5.00
1928	8,361	3	.12	.72	43	1.72	1.37	418	16.68	.48	464	18.52	2.57
Slaughtering and meat packing:													
1926	19,809	8	.13	.81	93	1.56	1.50	2,935	49.39	.66	3,036	51.08	2.97
1927 ¹	36,222	15	.14	.83	136	1.25	1.00	3,810	35.05	.54	3,961	36.44	2.37
1928 ²	49,383	18	.12	.72	218	1.46	1.29	5,587	37.43	.62	5,823	39.01	2.63
Stamped and enameled ware:													
1926	2,848				25	2.93	2.10	175	20.48	.22	200	23.41	2.32
1927	6,260	2	.11	.64	34	1.81	1.10	234	12.46	.29	270	14.38	2.03
1928	7,878	2	.08	.51	54	2.28	1.29	669	28.30	.41	725	30.66	2.21
Steam fittings, apparatus and supplies:													
1926	5,897				7	.40	.77	966	54.60	.57	973	55.00	1.34
1927	19,396	2	.03	.21	27	.46	.27	1,630	28.01	.36	1,659	28.50	.84
1928	14,507	4	.09	.55	63	1.45	1.33	910	20.90	.40	977	22.44	2.28

¹ The record for Kansas, included here, covers 6 months only (July to December).

² The record for Oklahoma, included here, omits fatal cases.

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for States reporting all disabilities extending beyond day of injury—Contd.													
Stoves:													
1926	4,379				21	1.60	1.93	532	40.50	0.62	553	42.10	2.55
1927	7,515	1	0.04	0.27	25	1.11	1.04	1,002	44.44	.62	1,028	45.59	1.93
1928	9,653	3	.10	.62	36	1.24	.84	962	33.19	.48	1,001	34.53	1.94
Structural-iron work:													
1926	1,737	12	2.30	13.82	12	2.30	3.78	358	68.70	1.32	382	73.30	18.92
1927 ¹	8,862	23	.87	5.20	20	.75	.51	1,046	39.43	.61	1,089	41.06	6.32
1928 ²	10,315	15	.48	2.91	65	2.10	1.80	1,607	51.91	1.01	1,687	54.49	5.72
Wood industries:													
Furniture—													
1926	11,726				60	1.71	1.44	795	22.60	.53	855	24.31	1.97
1927 ¹	21,918	5	.08	.46	124	1.88	1.43	1,296	19.70	.30	1,425	21.66	2.19
1928 ²	26,185	8	.10	.61	111	1.41	1.05	1,261	16.01	.29	1,380	17.52	1.95
Planing mills—													
1926	5,242	3	.19	1.14	47	2.99	2.15	467	29.70	.65	517	32.88	3.94
1927	9,416	9	.32	1.91	72	2.55	2.64	634	22.44	.57	715	25.31	5.12
1928 ²	12,327	6	.16	.97	127	3.43	2.58	1,169	31.56	.72	1,302	35.15	4.27
Other													
1926	5,302	15	.94	5.60	33	2.07	3.28	1,012	63.62	1.59	1,060	66.63	10.51
1927	13,631	22	.54	3.23	130	3.19	3.74	2,386	58.46	1.25	2,538	62.19	8.22
1928	37,680	72	.63	3.80	379	3.34	3.19	5,589	49.18	1.05	6,040	53.15	8.04
Woolen goods:													
1926	7,757	1	(³)	.26	3	.01	.06	252	10.84	.30	256	11.01	.62
1927	15,796	1	.02	.13	10	.21	.17	444	9.37	.15	455	9.60	.45
1928	22,258				23	.35	.29	745	11.18	.19	768	11.53	.48
All industry groups:													
1926 ⁴	283,172	94			855			24,002			24,951		
1927 ¹	608,247	250			1,896			43,037			45,183		
1928 ²	710,535	308			2,817			51,689			54,814		
Accidents for State reporting only disabilities extending beyond 5 days—Oklahoma													
Brick: 1927	163	(⁵)						30	61.51	1.02	30	61.51	1.02
Flour: 1927	201	(⁵)						21	34.90	.82	21	34.90	.82
Foundry and machine-shop products: 1927	220	(⁵)			2	3.03	3.18	45	68.16	1.55	47	71.19	4.73
Furniture: 1927	62	(⁵)						1	5.34	.09	1	5.34	.09
Glass: 1927	656	(⁵)						17	8.64	.20	17	8.64	.20
Lumber—sawmills: 1927	1,123	(⁵)			3	.89	1.16	56	16.62	.37	59	17.51	1.53
Petroleum refining: 1927	1,779	(⁵)			12	2.25	1.71	107	20.04	.57	119	22.29	2.28
Slaughtering and meat packing: 1927	1,140	(⁵)			1	.29	.09	59	17.25	.25	60	17.54	.34
Structural-iron work: 1927	117	(⁵)						15	42.74	.54	15	42.74	.54
All industry groups: 1927	5,461				18			351			369		

¹ The record for Kansas, included here, covers 6 months only (July to December).

² The record for Oklahoma, included here, omits fatal cases.

³ Less than 0.01.

⁴ Data for carriages and wagons industry group, which has since been discontinued, are included in this total.

⁵ Fatal cases are not reported.

INDUSTRIAL ACCIDENTS

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for State reporting only disabilities extending beyond 3 days—Maryland													
1928													
Automobile tires...	2,106	2	0.32	1.90	1	0.16	0.12	144	22.80	0.47	147	23.28	2.49
Boots and shoes	589							18	10.19	.17	18	10.19	.17
Brick	290							29	33.31	1.57	29	33.31	1.57
Chemicals	2,038	3	.49	2.94				75	12.27	.61	78	12.76	3.55
Cotton goods	1,072				1	.31	.09	44	13.68	.51	45	13.99	.60
Electrical goods	1,094				5	1.52	.46	43	13.10	.39	48	14.62	.85
Fertilizers	791							61	25.71	1.01	61	25.71	1.01
Flour	250							14	18.64	1.11	14	18.64	1.11
Foundry and machine-shop products	324							30	30.87	1.02	30	30.87	1.02
Glass	871				3	1.15	1.88	58	22.21	.74	61	23.36	2.62
Leather	429							6	4.66	.20	6	4.66	.20
Paper and pulp	1,214	1	.27	1.65	1	.27	.08	54	14.82	.49	56	15.36	2.22
Shipbuilding	880							35	13.27	.53	35	13.27	.53
Slaughtering and meat packing	687				1	.49	.15	134	65.06	1.51	135	65.55	1.66
Stamped and enameled ware	686							35	17.01	.78	35	17.01	.78
Steam fittings, apparatus, and supplies	617				1	.54	.16	56	30.27	.64	57	30.81	.80
Stoves	478				2	1.39	.42	26	18.13	.58	28	19.52	1.00
Structural-iron work	505				2	1.32	.40	36	23.75	.53	38	25.07	.93
Wood industries:													
Furniture	663				2	1.01	1.66	40	20.10	.60	42	21.11	2.26
Planing mills	415				2	1.61	.72	32	25.72	.67	34	27.33	1.39
Woolen goods	349							17	10.21	.51	17	16.21	.51
All industry groups	16,348	6	.12	.73	21	.43	.28	987	20.12	.63	1,014	20.67	1.64
Accidents for States reporting only disabilities extending beyond 1 week													
Agricultural implements:													
1926	9,881	3	0.10	0.61	54	1.82	1.55	499	16.83	0.43	556	18.75	2.50
1927	8,931	1	.04	.22	46	1.72	1.51	347	12.95	.29	394	14.71	2.02
1928	3,367	2	.19	1.19	10	.99	.42	191	18.91	.48	203	20.09	2.09
Automobiles:													
1926	213,978	49	.08	.46	876	1.36	1.08	5,595	8.72	.27	6,520	10.16	1.81
1927	179,064	61	.11	.68	649	1.21	.90	4,491	8.36	.22	5,201	9.68	1.80
1928	239,763	49	.07	.41	872	1.21	.87	5,117	7.11	.18	6,038	8.39	1.46
Automobile tires:													
1926	4,875	2	.14	.82	23	1.57	1.16	196	13.80	.37	221	15.11	2.35
1927	3,697				7	.63	.85	70	6.31	.16	77	6.94	1.01
1928	3,142				14	1.49	.86	102	10.82	.32	116	12.31	1.18
Boots and shoes:													
1926	25,942	4	.05	.31	61	.78	.53	449	5.77	.20	514	6.60	1.04
1927	6,735				17	.84	.62	131	6.48	.15	148	7.32	.77
1928	2,103				5	.79	.82	16	2.54	.05	21	3.33	.87
Brick:													
1926	8,000	1	.04	.25	38	1.58	2.34	435	18.13	.48	474	19.75	3.07
1927	6,427	1	.05	.31	23	1.19	1.38	263	13.64	.30	287	14.88	1.09
1928	2,529				12	1.58	3.60	117	15.42	.36	129	17.00	3.96
Carpets:													
1926	8,704	1	.04	.23	20	.77	.61	143	5.48	.28	164	6.29	1.12
1927	923				3	1.08	1.37	28	10.11	.21	31	11.19	1.58
1928	1,371				1	.24	.07	21	5.12	.12	22	5.36	.19
Chemicals:													
1926	11,523	6	.17	1.04	46	1.33	1.71	352	11.05	.44	434	12.55	3.19
1927	8,804	12	.45	2.73	55	2.08	1.84	387	14.65	.42	454	17.18	4.99
1928	6,491	3	.15	.92	22	1.13	1.61	160	8.21	.21	185	9.49	2.74

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for States reporting only disabilities extending beyond 1 week—Continued													
Cotton goods:													
1926	24,360	1	0.01	0.08	35	0.48	0.31	350	4.79	0.13	386	5.28	0.52
1927	32,389	7	.07	.43	55	.57	.49	48	4.98	.12	546	5.62	1.04
1928	3,460				22	2.12	4.15	24	2.31	.07	46	4.43	4.22
Electrical machinery:													
1926	36,106	5	.05	.28	188	1.74	1.74	997	9.20	.49	1,190	10.99	2.51
1927	18,984	1	.02	.11	64	1.12	1.09	368	6.46	.16	433	7.60	1.36
1928	15,068	3	.07	.40	74	1.64	1.76	284	6.28	.15	361	7.99	2.31
Fertilizers:													
1926	1,087	1	.31	1.84	2	.61	2.45	46	14.11	.45	49	15.03	4.74
1927	2,764	4	.48	2.89	23	2.77	2.94	167	20.14	.51	194	23.39	6.34
1928	511	1	.65	3.91	6	3.91	6.45	22	14.34	.55	29	18.90	10.91
Flour:													
1926	2,042				11	1.80	1.91	103	16.81	.74	114	18.61	2.65
1927	953	1	.05	.27	3	.14	.05	43	1.96	.05	47	2.15	.37
1928	1,014	1	.33	1.97	1	.33	.39	49	16.12	.41	51	16.78	2.77
Foundry and machine-shop products:													
1926	44,932	29	.22	1.29	418	3.10	2.65	2,845	21.11	.73	3,292	24.43	4.67
1927	27,295	8	.10	.59	246	3.00	2.78	1,569	19.16	.49	1,823	22.26	3.86
1928	22,821	2	.03	.18	167	2.44	2.44	1,272	18.57	.47	1,441	21.04	3.09
Glass:													
1927	2,558				9	1.16	1.83	64	8.24	.21	73	9.40	2.04
1928	2,397	1	.13	.83	6	.83	.92	70	9.74	.24	77	10.70	1.99
Hardware:													
1926	3,023				35	3.86	2.08	86	9.48	.28	121	13.34	2.36
1927	3,586				36	3.35	3.26	86	7.99	.20	122	11.34	3.46
1928	1,267	1	.26	1.58	11	2.89	1.38	36	9.47	.19	45	12.62	3.15
Leather:													
1926	9,775	2	.07	.41	58	1.98	1.92	406	13.85	.57	466	15.90	2.90
1927	8,181	1	.04	.24	42	1.71	1.97	227	9.25	.21	270	11.00	2.42
1928	4,358	1	.08	.46	18	1.38	1.34	77	5.89	.14	96	7.35	1.94
Machine tools:													
1926	5,635	1	.06	.35	48	2.84	2.63	252	14.91	.51	301	17.81	3.49
1927	3,793	2	.18	1.05	23	2.02	1.70	130	11.42	.27	155	13.62	3.02
1928	2,382				13	1.82	1.27	76	10.64	.24	89	12.46	1.51
Paper and pulp:													
1926	17,649	12	.23	1.36	126	2.38	2.60	1,263	23.85	.77	1,401	26.46	4.73
1927	8,630	10	.39	2.32	29	1.12	.72	386	14.91	.40	425	16.42	3.44
1928	8,434	5	.20	1.19	23	.91	.49	286	11.30	.34	314	12.41	2.02
Petroleum refining:													
1926	13,320	9	.23	1.35	92	2.30	3.00	293	7.33	.27	394	9.86	4.62
1927	9,579	1	.03	.21	69	2.40	2.89	140	4.87	.12	210	7.30	3.22
1928	7,008	1	.05	.29	81	3.86	5.16	62	2.95	.08	144	6.86	5.53
Pottery:													
1926	3,948	1	.08	.51	8	.68	.66	132	11.14	.34	141	11.90	1.51
1927	2,450				5	.68	.93	100	13.61	.40	105	14.29	1.33
1928	2,018				6	.99	2.74	56	9.25	.21	62	10.24	2.95
Shipbuilding, steel:													
1926	5,196	4	.26	1.54	32	2.05	1.45	187	12.00	.59	223	14.31	3.58
1927	5,765	5	.29	1.73	28	1.62	.70	232	13.41	.40	265	15.32	2.83
1928	1,493	4	.89	5.36	12	2.68	3.96	85	18.97	.64	101	22.54	9.96
Slaughtering and meat packing:													
1926	25,088	7	.09	.56	121	1.61	1.57	1,292	17.18	.39	1,420	18.88	2.52
1927	20,868	11	.18	1.05	155	2.48	2.55	1,201	19.18	.40	1,367	21.84	4.00
1928	3,285	1	.10	.61	9	.91	.37	209	21.21	.53	219	22.22	1.51
Stamped and enameled ware:													
1926	10,204	3	.10	.59	53	1.73	1.08	180	5.88	.25	236	7.71	1.92
1927	3,985				18	1.51	.80	64	5.35	.09	82	6.86	.89
1928	3,282				20	2.03	1.20	63	6.39	.14	83	8.42	1.34

INDUSTRIAL ACCIDENTS

61

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for States reporting only disabilities extending beyond 1 week—Continued													
Steam fittings, apparatus, and supplies:													
1926	5,813	1	0.06	0.34	48	2.75	2.34	380	21.79	0.87	429	24.60	3.55
1927	3,411	1	.10	.59	32	3.13	3.15	185	18.08	.42	218	21.31	4.16
1928	1,096				9	2.74	1.55	44	13.38	.33	53	16.12	1.88
Stoves:													
1926	3,160	1	.11	.63	12	1.27	1.16	146	15.40	.52	159	16.78	2.31
1927	2,079	1	.16	.95	9	1.42	1.94	60	9.47	.23	70	11.05	3.12
1928	850				7	2.74	5.64	48	18.82	.61	55	21.56	6.25
Structural-iron work:													
1926	2,428	7	.96	5.77	28	3.84	2.85	215	29.52	1.17	250	34.32	9.79
1927	2,274	2	.29	1.76	30	4.40	4.22	286	41.92	1.02	318	46.61	7.00
1928	1,448	2	.46	2.76	19	4.38	3.30	180	41.45	1.28	201	46.29	7.34
Wood industries:													
Furniture—													
1926	20,745	3	.05	.29	123	1.98	1.72	613	9.85	.23	739	11.88	2.24
1927	20,225	1	.02	.10	77	1.27	.87	469	7.73	.18	547	9.02	1.15
1928	13,903	1	.02	.14	53	1.27	1.00	255	6.12	.15	309	7.41	1.29
Planing mills—													
1926	8,463	11	.43	2.60	78	3.07	3.62	695	27.37	1.06	784	30.87	7.28
1927	5,215	3	.19	1.15	47	3.00	2.78	360	23.01	.67	410	26.20	4.60
1928	1,718				6	1.16	.73	55	10.67	.30	61	11.83	1.03
Other—													
1926	7,121	9	.42	2.53	34	1.59	1.63	867	40.58	1.37	910	42.59	5.53
1927	9,400	16	.57	3.40	35	1.24	1.21	1,052	37.30	1.16	1,103	39.11	5.77
1928	6,517	9	.46	2.76	16	.82	.53	682	34.85	1.13	707	36.13	4.42
Woolen goods:													
1926	5,722				23	1.34	1.56	75	4.37	.20	98	5.71	1.76
1927	6,876				18	.87	.94	67	3.25	.08	85	4.12	1.02
1928	4,817				19	1.31	1.64	42	2.91	.08	61	4.22	1.72
All industry groups:													
1926	538,836	173			2,694			19,129			21,996		
1927	415,871	150			1,853			13,457			15,460		
1928	367,913	87			1,534			9,701			11,322		
Accidents for State reporting only disabilities extending beyond 10 days—Virginia													
Boots and shoes:													
1926	1,664				2	0.40	0.86	16	3.20	0.06	18	3.60	0.92
Brick: 1926	274				1	1.25	.91	7	8.75	.23	8	10.00	1.14
Chemicals: 1926	851	2	0.77	4.70	9	3.46	7.28	78	30.00	1.08	89	34.23	13.06
Cotton goods:													
1926	5,999				10	.56	.87	77	4.28	.13	87	4.84	1.00
Fertilizers: 1926	517	4	2.50	15.48	1	.63	.19	39	24.38	.85	44	27.51	16.52
Flour: 1926	78				1	5.00	2.57	4	20.00	.96	5	25.00	3.53
Foundry and machine-shop products: 1926	717	1	.45	2.79	6	2.73	4.65	80	36.36	.90	87	39.54	8.34
Furniture: 1926	559				5	2.94	1.34	14	8.24	.27	19	11.18	1.61
Leather: 1926	113							11	36.67	1.30	11	36.67	1.30
Lumber—Planing mills: 1926	480	1	.71	4.16	4	2.86	3.22	30	21.43	.48	35	25.00	7.86
Lumber—Saw-mills: 1926	3,288	2	.20	1.21	17	1.72	1.22	195	19.70	.69	214	21.62	3.12
Paper and pulp: 1926	358							14	11.67	.33	14	11.67	.33
Pottery: 1926	167							2	4.00	.05	2	4.00	.05
Ship building, steel: 1926	4,233	2	.16	.94	31	2.44	2.12	112	8.82	.22	145	11.42	3.28

⁴ Data for carriage and wagon industry group, which has since been discontinued, are included in this total.

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for State reporting only disabilities extending beyond 10 days—Virginia—Con.													
Slaughtering and meat packing: 1926	53												
Stoves: 1926	73						7	35.00	.62	7	35.00	.62	
Structural-iron work: 1926	43				1	10.00	23.76	8	80.00	3.45	9	90.00 27.21	
Woolen goods: 1926	446							3	2.30	.06	3	2.30 .06	
All industry groups: 1926	19,943	12			88			697			797		
Accidents for State reporting only disabilities extending beyond 2 weeks—Alabama													
Cotton goods: 1926	5,917				5	0.28	0.29	62	3.48	0.12	67	3.76 0.41	
1927	6,353				4	.21	.06	66	3.46	.12	70	3.67 .18	
1928	8,396				11	.44	.32	111	4.41	.14	122	4.85 .46	
Fertilizers: 1927	196							3	5.10	.28	3	5.10 .28	
1928	416				1	.80	1.92	5	4.00	.11	6	4.80 2.03	
Foundry and machine-shop products: 1926	2,092				6	.95	.84	102	16.19	.45	108	17.14 1.29	
1927	1,888	1	0.18	1.06	7	1.24	.66	54	9.53	.34	62	10.95 2.06	
1928	1,438				3	.70	.21	51	11.82	.38	54	12.52 .39	
Shipbuilding, steel: 1927	250				2	2.67	7.75	22	29.38	.92	24	32.05 8.67	
1928	437				1	.76	.23	15	11.44	.63	16	12.20 .86	
Slaughtering and meat packing: 1926	47							1	10.00	.15	1	10.00 .15	
1927	186							4	7.16	.27	4	7.16 .27	
1928	182				1	1.83	.55	3	5.50	.17	4	7.33 .72	
Wood industries: Sawmills— 1926	2,312	1	.14	.86	4	.58	.43	48	6.96	.14	53	7.68 1.43	
1927	2,182	1	.15	.92	8	1.22	1.37	78	11.92	.56	87	13.29 2.85	
Other—1928	1,769	4	.75	4.52	8	1.50	.45	71	13.38	.49	83	15.63 5.46	
All industry groups: 1926	10,368	1			15			213			229		
1927	11,055	2			21			227			250		
1928	12,638	4			25			256			285		
Accidents for States reporting only fatalities and permanent disabilities ⁶													
Agricultural implements: 1926	1,019				5	1.64	0.93				5	1.64 0.93	
1927	614				6	3.26	2.61				6	3.26 2.61	
1928	1,223				1	.27	.08				1	.27 .08	
Automobiles: 1926	9,555	6	0.21	1.26	46	1.60	1.37				52	1.81 2.63	
1927	915				3	1.09	.51				3	1.09 .51	
1928	1,280				3	.78	.70				3	.78 .70	

⁶ California for the 3 years and Pennsylvania for 1926.

INDUSTRIAL ACCIDENTS

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,000,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for States reporting only fatalities and permanent disabilities—Continued													
Automobile tires:													
1926	4,246	2	0.16	0.94	12	0.94	0.63				14	1.10	1.57
1927	2,165	1	.15	.92	4	.62	.57				5	.77	1.49
1928	2,047				1	.16	.20				1	.16	.20
Boots and shoes:													
1926	3,539												
Brick:													
1926	6,037	3	.17	.99	17	.94	.67				20	1.11	1.66
1927	2,567	2	.26	1.56							2	.26	1.56
1928	1,537	2	.43	2.60	2	.43	.13				4	.86	2.73
1928	2,440				4	.55	.41				4	.55	.41
Carpets: 1926													
1926	1,166	1	.29	1.72	1	.29	.09				2	.58	1.81
1927	373	1	.89	5.36	1	.89	.45				2	1.78	5.81
1928	382												
Chemicals:													
1926	2,539				3	.39	.20				3	.39	.20
1927	913	1	.37	2.19	1	.37	.11				2	.74	2.30
1928													
Cotton goods:													
1926	21,146	4	.06	.38	21	.33	.22				25	.39	.60
1927	201												
1928	250				2	2.67	2.00				2	2.67	2.00
Electrical machinery:													
1926	142												
1927	68												
1928	34												
Fertilizers:													
1926	93												
1927	372												
1928													
Flour:													
1926	30,483	17	.19	1.12	123	1.35	1.10				140	1.54	2.22
1927	2,056	2	.32	1.95	14	2.27	1.92				16	2.59	3.87
1928	2,104	1	.16	.95	7	1.11	.38				8	1.27	1.33
Glass:													
1926	4,833	4	.28	1.66	14	.97	.97				18	1.25	2.63
1927	653	1	.51	3.06	1	.51	.15				2	1.02	3.21
1928	691	1	.48	2.89							1	.48	2.89
Hardware: 1926													
1926	2,337				11	1.37	.53				11	1.37	.53
Leather:													
1926	4,510	2	.15	.89	9	.67	.52				11	.82	1.41
1927	554	1	.61	3.61	3	1.80	.78				4	2.41	4.39
1928	471				1	.71	.21				1	.71	.21
1928	196	1	1.67	10.18	1	1.67	.50				2	3.34	10.68
Machine tools: 1926													
1926	2,501	2	.27	1.59	4	.53	.24				6	.80	1.83
Paper and pulp:													
1926	6,072	12	.66	3.95	9	.49	.22				21	1.15	4.17
1927	3,927	15	1.27	7.64	30	2.55	1.44				45	3.82	9.08
1928	3,937	20	1.69	10.16	34	2.88	1.71				54	4.57	11.87
Pottery:													
1926	277				2	2.67	1.07				3	4.01	9.10
1927	249	1	1.34	8.03							2	.70	2.22
1928	943	1	.35	2.12	1	.35	.11						
Shipbuilding, steel:													
1926	3,563	3	.28	1.68	12	1.12	.48				15	1.40	2.16
1927	2,924	3	.34	2.05	8	.91	.46				11	1.25	2.51
1928	1,378	4	.97	5.81	6	1.45	.59				10	2.42	6.40
Slaughtering and meat packing:													
1926	1,102												
1927	1,424	2	.47	2.81	4	.94	.48				6	1.41	3.29
1928	1,163				2	.57	.60				2	.57	.60

NUMBER OF ACCIDENTS AND ACCIDENT FREQUENCY AND SEVERITY RATES FOR SPECIFIED INDUSTRIES IN 1926, 1927, AND 1928—Continued

[Where no figures are shown no accidents were reported. California reported no temporary disabilities. Frequency rates are based on 1,009,000 hours' exposure; severity rates on 1,000 hours' exposure]

Industry and year	Full-year workers	Death			Permanent disability			Temporary disability			Total		
		Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate	Number of cases	Frequency rate	Severity rate
Accidents for States reporting only fatalities and permanent disabilities—Continued													
Stamped and enameled ware:													
1926	108				1	0.33	2.31				1	0.33	2.31
1927	410												
1928	439				1	.76	.23				1	.76	.23
Steam fittings, apparatus and supplies:													
1926	2,173	1	.15	.92	2	.31	.16				3	.46	1.08
1927	43												
1928	26												
Stoves:													
1926	821	1	.40	2.43	1	.40	.30				2	.80	2.73
1927	280				3	3.58	1.85				3	3.58	1.85
1928	321				1	1.04	.31				1	1.04	.31
Structural-iron work:													
1926	3,374	4	.40	2.37	21	2.07	1.08				25	2.47	3.45
1927	647	2	1.03	6.19	4	2.06	.98				6	3.09	7.17
1928	334				1	1.00	.30				1	1.00	.30
Wood industries:													
Furniture—													
1926	3,839				12	1.04	.64				12	1.04	.64
1927	1,108	1	.30	1.81	8	2.41	1.10				9	2.71	2.91
1928	1,056				3	.95	.66				3	.95	.66
Planing mills—													
1926	3,038				15	1.65	.99				15	1.65	.99
1927	6,371	10	.53	3.13	23	1.20	1.10				33	1.73	4.23
1928	1,363	7	1.71	10.27	9	2.20	2.53				16	3.91	12.80
Other—													
1926	13,520	27	.67	3.99	88	2.17	1.70				115	2.84	5.69
1927	6,958	15	.72	4.31	47	2.25	1.36				62	2.97	5.67
1928	8,636	35	1.35	8.11	51	1.97	1.38				86	3.32	9.49
Woolen goods:													
1926	4,041				6	.49	.66				6	.49	.66
1927	141												
1928	223				1	1.50	.45				1	1.50	.45
All industry groups:													
1926	138,763	90			438						528		
1927	34,648	57			161						218		
1928	31,123	72			128						200		
Grand total, all industry groups:													
1926	991,082	370			4,090			44,041			48,501		
1927	1,075,282	459			3,949			57,072			64,480		
1928	1,138,557	477			4,525			62,633			67,635		

⁴Data for carriages and wagons, industry group, which has since been discontinued, are included in this total.

Accidents in the Oil Industry in Rumania, 1919 to 1928

THE following figures show, by results, the number of accidents in the oil industry, including wells and transportation of oil, during the decade of 1919 to 1928:¹

¹Rumania, Institutul de Statistica Generala a Statului. Statistica Minieră a României pe Anul 1928. Bucharest, 1929, p. 266.

INDUSTRIAL ACCIDENTS

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NUMBER OF ACCIDENTS IN THE OIL INDUSTRY IN RUMANIA, 1919 TO 1928, BY YEAR AND RESULT

Year	Accidents resulting in—			Total
	Temporary disability	Permanent disability	Death	
1919	555	177	60	792
1920	519	239	235	993
1921	787	81	59	927
1922	919	72	136	1,127
1923	937	109	64	1,110
1924	1,005	81	100	1,186
1925	1,253	115	69	1,437
1926	1,771	76	89	1,936
1927	1,852	197	94	2,143
1928	1,550	65	86	1,701

WORKMEN'S COMPENSATION

Recent Compensation Reports

Illinois

THE Department of Labor of the State of Illinois in its eleventh annual report, for the year ending June 30, 1928, presents statistical tables showing the experience under the workmen's compensation act during 1927. The two tables following summarize the tables found in the report. Table 1 shows the compensation paid during the year, by extent of disability, industry, cause of accident, and location of injury:

TABLE 1.—AMOUNT OF COMPENSATION PAID FOR SPECIFIED DISABILITIES IN 1929, BY INDUSTRY GROUP, CAUSE OF ACCIDENT, AND LOCATION OF INJURY

Item	Death	Perman-ent total dis-ability	Perman-ent partial dis-ability	Tempo-rary total dis-ability	Tempo-rary partial dis-ability	Dis-fig-urement	Not other-wise class-ified
<i>Industry group</i>							
Agriculture and extractive industries.....	\$4, 426	\$510	\$24, 134	\$9, 690	\$63	\$597	\$2, 767
Mining and quarrying.....	215, 483	2, 686	1, 006, 495	295, 022	8, 449	129, 604	236, 100
Manufacturing.....	263, 877	5, 449	2, 118, 524	835, 183	7, 803	55, 391	222, 794
Construction.....	151, 563	8, 631	1, 031, 567	372, 915	3, 608	29, 188	244, 145
Communication.....	9, 366	-----	11, 874	19, 474	55	-----	2, 626
Trade and finance.....	76, 570	2, 451	356, 931	187, 928	2, 854	10, 375	72, 998
Transportation and storage.....	99, 184	4, 590	241, 035	166, 340	1, 381	8, 767	43, 337
Professional service.....	12, 040	-----	38, 482	13, 582	11	340	2, 145
Governmental service.....	7, 000	-----	22, 395	27, 595	41	50	8, 234
Services, not otherwise classified.....	44, 561	110	136, 022	95, 332	410	5, 367	18, 060
Industry, not otherwise classified.....	-----	-----	336	16	-----	-----	-----
Industry, not reported.....	3, 705	190	22, 302	5, 107	-----	380	1, 112
Total.....	887, 775	24, 617	5, 010, 097	2, 028, 094	24, 675	240, 059	854, 318
<i>Cause of accident</i>							
Prime movers.....	-----	10	4, 971	7, 177	-----	-----	-----
Transmission.....	3, 750	-----	8, 360	6, 255	-----	1, 002	10, 827
Working machines.....	16, 563	-----	935, 292	82, 445	1, 634	19, 325	38, 919
Machines other than working.....	-----	750	35, 535	3, 073	1, 014	153	4, 993
Hoisting apparatus.....	41, 499	-----	89, 824	13, 374	-----	1, 976	35, 044
Vehicles:							
Steam or electric.....	190, 924	1, 339	543, 182	86, 342	263	49, 595	162, 671
Auto or animal.....	108, 541	9, 484	263, 475	130, 866	395	7, 131	37, 303
Explosions.....	53, 948	3, 851	48, 761	10, 790	-----	10, 496	16, 095
Falls of persons.....	41, 789	-----	21, 526	5, 166	30	2, 068	10, 116
Fire or hot substances.....	33, 580	-----	58, 998	88, 823	57	8, 264	22, 588
Stepping on or striking against objects.....	164, 966	2, 170	531, 267	398, 867	2, 344	19, 350	214, 280
Falling objects.....	23, 895	-----	374, 337	237, 244	2, 277	27, 421	37, 867
Falling objects.....	33, 793	416	362, 288	183, 850	3, 966	19, 282	99, 166
Cave-ins.....	7, 680	-----	62, 740	11, 801	3, 940	5, 647	25, 659
Handling objects.....	53, 088	660	808, 504	526, 224	5, 476	40, 226	99, 044
Hand tools.....	21, 954	495	384, 209	74, 425	2, 304	18, 932	13, 488
Corker.....	-----	-----	26, 241	3, 653	-----	-----	972
Animals.....	12, 285	440	19, 553	19, 258	18	6, 020	7, 520
Poisonous or corrosive substances.....	14, 916	-----	12, 747	16, 019	28	379	7, 072
Gases or fumes.....	10, 213	-----	2, 295	11, 273	-----	105	6, 502
Flying particles, not otherwise classified.....	-----	-----	26, 720	1, 112	-----	-----	-----
Natural causes.....	5, 400	-----	3, 867	3, 328	-----	552	521
Cause not determined.....	4, 750	-----	2, 615	1, 320	-----	134	1, 319
All other causes.....	44, 241	5, 002	382, 790	105, 409	929	1, 029	2, 682
Total.....	887, 775	24, 617	5, 010, 097	2, 028, 094	24, 675	240, 059	854, 318

TABLE 1.—AMOUNT OF COMPENSATION PAID FOR SPECIFIED DISABILITIES IN 1929, BY INDUSTRY GROUP, CAUSE OF ACCIDENT, AND LOCATION OF INJURY—Contd.

Item	Death	Perman-ent total dis-ability	Perman-ent partial dis-ability	Tempo-rary total dis-ability	Tempo-rary partial dis-ability	Dis-figu-rement	Not other-wise class-ified
<i>Location of injury</i>							
Head, general.....	\$161,870	\$5,945	\$86,790	\$60,615	\$1,228	\$32,445	\$133,148
Eye or eyes.....		3,002	463,311	53,211	2,251	19,058	4,616
Face and neck.....	34,976	3,961	50,350	32,543	1,288	89,717	66,121
Trunk, general.....	7,350		8,583	45,573			5,412
Thorax.....	115,900	75	199,130	305,526	5,062		226,100
Abdomen.....	51,631		38,491	72,111	1,629		57,778
Hernia.....	17,108	174	15,901	73,189	596		12,964
Upper extremities, general.....	9,396		122,673	26,039	221		20,986
Arm.....	10,304	2,135	575,876	193,296	444		50,247
Hand.....	6,880		267,316	1,225	1,225	40,535	11,294
Fingers, thumb.....	19,265	906	1,617,554	274,870	2,757	58,302	43,316
Lower extremities, general.....			3,487	2,302			10,392
Leg.....	16,125	440	585,401	226,991	874		75,284
Foot.....	28,534	3,020	377,715	370,475	1,909		26,893
Location not otherwise classified.....	408,346	4,959	397,519	183,271	5,191		109,758
Total.....	887,775	24,617	5,010,097	2,028,094	24,675	240,059	\$54,318

Table 2 classifies the accidents, by age and sex of the injured, and by the extent of disability.

TABLE 2.—NUMBER OF ACCIDENTS, BY AGE AND SEX OF THE INJURED, AND EXTENT OF DISABILITY, 1927

Age	Death		Permanent total dis-ability		Permanent partial dis-ability		Temporary total dis-ability		Temporary partial dis-ability		Disfigure-ment		Not other-wise class-ified	
	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male
	14 years or under.....	1		2		2	1	18	4			1		
15 years.....					3		28	2						
16 years.....	2				36	6	206	44			9	4	3	
17 years.....	2				106	22	432	99			34	2	2	1
18 years.....	3	1	1		160	35	701	98	3		33	11	6	1
19 years.....	4				194	25	864	111	5		47	2	13	1
20 years.....	7				197	20	900	104	2		51	4	15	
21 to 24 years.....	38		4	1	1,033	50	4,652	226	19	3	279	11	75	
25 to 34 years.....	78	1	7	1	2,656	77	10,800	441	58	2	653	8	235	6
35 to 44 years.....	89	1	4		2,606	82	9,400	289	41	3	618	3	286	2
45 to 64 years.....	90	1	5		2,236	41	8,521	204	37	1	438	2	240	4
65 years or over.....	17		1		179	2	744	10	4		26		15	
Age not reported.....	18	1			63	2	125	12	1		9	1	12	
Total.....	349	5	24	2	9,471	363	37,391	1,644	170	9	2,198	48	902	15

New Jersey

THE September, 1929, issue of the Industrial Bulletin, published by the New Jersey Department of Labor, contains several tables showing the compensation cases closed during 1928. The following

table gives the number and cost of compensated accidents, by industry and extent of disability:

TABLE 1.—NUMBER AND COST OF COMPENSATED ACCIDENTS IN 1928, BY INDUSTRY GROUP AND EXTENT OF DISABILITY

Industry group	Extent of disability						All cases	
	Death or permanent total		Permanent partial		Temporary		Number	Total compensation
	Number	Total compensation	Number	Total compensation	Number	Total compensation		
Agriculture.....	6	\$14, 015	79	\$60, 222	361	\$20, 089	446	\$94, 326
Clerical and professional service, care and custody of buildings and grounds.....	1 13	40, 387	179	111, 366	660	34, 933	852	186, 686
Construction (includes shipbuilding).....	2 92	489, 218	1, 626	1, 292, 198	3, 756	267, 117	5, 474	2, 048, 533
Manufacturing.....	3 105	522, 447	3, 345	1, 726, 758	8, 167	392, 253	11, 617	2, 641, 458
Mining, metallurgy, and quarrying.....	4 13	85, 472	233	112, 869	360	19, 855	606	218, 196
Trade.....	11	48, 477	393	175, 907	1, 295	58, 669	1, 699	283, 053
Transportation and public utilities.....	2 84	429, 845	873	545, 274	2, 689	159, 683	3, 646	1, 134, 802
Miscellaneous occupations.....	5 15	52, 716	383	221, 494	1, 242	73, 214	1, 640	347, 424
Total.....	6 339	1, 682, 577	7, 111	4, 246, 088	18, 530	1, 025, 813	25, 980	6, 954, 478

¹ Includes 2 cases of permanent total disability.

² Includes 5 cases of permanent total disability.

³ Includes 4 cases of permanent total disability.

⁴ Includes 3 cases of permanent total disability.

⁵ Includes 1 case of permanent total disability.

⁶ Includes 20 cases of permanent total disability.

Table 2 classifies the accidents by cause:

TABLE 2.—NUMBER AND COST OF COMPENSATED ACCIDENTS IN 1928, BY CAUSE

Cause	Number of cases				Total compensation
	Total	Extent of disability			
		Death or permanent total	Permanent partial	Temporary	
Machinery.....	3, 615	1 43	1, 741	1, 831	\$1, 199, 059
Boilers and steam pressure apparatus.....	39	5	7	27	29, 655
Explosions, electricity, hot substances, and flames.....	1, 239	58	154	1, 027	492, 382
Falls of persons.....	4, 393	2 71	1, 217	3, 105	1, 696, 412
Falling objects not being handled by injured persons.....	1, 920	2 33	606	1, 281	594, 378
Objects and tools being handled.....	8, 693	3 15	2, 125	6, 553	1, 253, 405
Stepping on or striking against objects.....	1, 780	4 6	222	1, 561	211, 057
Vehicles.....	2, 448	5 75	657	1, 716	964, 946
Poisonous and corrosive substances and occupational diseases.....	523	3 17	70	436	217, 410
Miscellaneous.....	1, 321	16	312	993	295, 774
Total.....	25, 980	6 339	7, 111	18, 530	6, 954, 478

¹ Includes 5 cases of permanent total disability.

² Includes 3 cases of permanent total disability.

³ Includes 2 cases of permanent total disability.

⁴ Includes 1 case of permanent total disability.

⁵ Includes 4 cases of permanent total disability.

⁶ Includes 20 cases of permanent total disability.

Table 3 shows the cases of injury caused by specified poisonous and corrosive substances and by occupational diseases:

TABLE 3.—NUMBER AND COST OF COMPENSATED CASES CAUSED BY POISONOUS AND CORROSIVE SUBSTANCES AND OCCUPATIONAL DISEASES, IN 1928, BY CAUSE

Cause	Number of cases			Total compensation	
	Total	Extent of disability			
		Death or permanent total	Permanent partial		Temporary
<i>Poisonous substances</i>					
Arsenic.....	2			2	\$32
All other (not otherwise classified, including gasoline fumes and indefinite gases, poisonous substances in water or materials handled).....	60	7	7	46	64,434
Dyes and chemical preparations of same, etc. (handling material).....	4			4	370
Illuminating gas (including coal gas).....	3			3	92
Poison ivy and other plants.....	28			28	973
Septic infection.....	2		1	1	6,510
<i>Corrosive substances</i>					
Acids (nitric, hydrochloric, sulphuric, carbolic, and picric).....	125	1	17	107	35,153
Alkalies (soda and potash).....	48		9	39	7,399
Cement burns.....	15		3	12	1,428
Lime burns.....	60		13	47	14,861
Irritant but not corrosive.....	26		1	25	1,074
<i>Occupational causes</i>					
Anthrax.....	5	1		4	2,832
Arsenic.....	2			2	206
Carbon monoxide.....	8	1	1	6	6,730
Compressed air (bends).....	7		4	3	3,770
Chrome ulceration.....	5			5	198
Dust.....	1			1	44
Handling and preparing hides, furs, etc.....	1			1	22
Heat and light (including heat from asphalt, not burns).....	3			3	77
Lead poisoning.....	77	13	6	68	23,602
Benzol, its homologues and derivatives.....	18	14	6	8	43,973
Occupational activity (cellulitis, etc.) ²	23		2	21	3,630
Total.....	523	³ 17	70	436	217,410

¹ Includes 1 case of permanent total disability.

² Cellulitis cases due to cuts and bruises from falls or handling objects.

³ Includes 2 cases of permanent total disability.

The cases involving penalty for illegal employment of minors under 16 years of age, i. e., payment of double compensation, are shown in Table 4:

TABLE 4.—NUMBER AND COST OF ACCIDENTS INVOLVING ILLEGAL EMPLOYMENT OF MINORS IN 1928, BY INDUSTRY GROUP AND CAUSE

[Cases awarded double compensation]

Industry group or cause	All cases				Extent of disability ¹							
	Number		Total compensation		Permanent partial				Temporary			
					Number		Total compensation		Number		Total compensation	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<i>Industry group</i>												
Manufacturing.....	4	5	\$428	\$1,203	3		\$1,130		4	2	\$428	\$73
Transportation and public utilities.....	1		107						1		107	
Trade.....	9		1,627		4		\$1,513		5		114	
Clerical and professional service, care and custody of buildings and grounds.....		1		30		1		30				
Miscellaneous occupations.....	1		22						1		22	
Total.....	15	6	2,184	1,233	4	4	1,513	1,160	11	2	671	73
<i>Cause</i>												
Machinery.....	5	4	1,626	1,171	2	3	1,294	1,130	3	1	332	41
Falls of persons.....	3		279		1		130		2		149	
Objects and tools being handled.....		2		62		1		30		1		32
Stepping on or striking against objects.....	1		32						1		32	
Vehicles.....	5		225		1		89		4		136	
Miscellaneous.....	1		22						1		22	
Total.....	15	6	2,184	1,233	4	4	1,513	1,160	11	2	671	73

¹ No fatalities reported.

Miners' Phthisis in South Africa

THE problem of miners' phthisis or silicosis in the gold mines of South Africa has been so serious that it has been the subject of numerous legislative enactments, the latest of which was the act of 1925, consolidating the previous legislation and making certain additional provisions for beneficiaries and their dependents.

According to the report on miners' phthisis in the 1929 issue of the Official Yearbook of South Africa,¹ there were 1,553 miners of an average age of 48.4 years receiving compensation for disability from miners' phthisis on March 31, 1928. The amount of the allowances during life averaged £12 9s. 9d. (\$60.77) per month for the incapacitated miners, and additional allowances were paid for wives and dependent children. Allowances were also being paid to 1,815 adult dependents of deceased miners and 3,279 minor children. On March 31, 1927, a total of £9,113,313 (\$44,349,938) had been paid to and in respect of silicosis and tuberculosis cases under the miner's phthisis acts since 1911. During the period April 12, 1911, to March 31, 1928,

¹ Union of South Africa. Official Yearbook, 1927-28. Pretoria, 1929, pp. 233-246.

a total of 14,356 persons had received awards for silicosis, tuberculosis, or silicosis and tuberculosis combined, 3,343 (or less than one-fourth) being in the anteprietary or earliest stage of silicosis.

The following table shows the number of cases and percentage of deaths of miners who had received compensation for secondary silicosis or tuberculosis and silicosis, from August 1, 1912, to March 31, 1928:

NUMBER OF CASES, PER CENT OF DEATHS, AND AVERAGE AGE AT DEATH OF MINERS SUFFERING FROM SECONDARY SILICOSIS OR SILICOSIS AND TUBERCULOSIS IN SOUTH AFRICA FROM AUGUST 1, 1912, TO MARCH 31, 1928

Year	Born in South Africa				Born elsewhere			
	Number of beneficiaries	Number of deaths	Per cent of deaths	Average age at death	Number of beneficiaries	Number of deaths	Per cent of deaths	Average age at death
1912-13.....	419	219	52.3	43.5	1,213	819	67.5	46.6
1913-14.....	214	109	50.9	42.8	923	614	66.5	45.7
1914-15.....	102	52	51.0	41.6	409	303	74.1	44.8
1915-16.....	132	72	54.5	42.0	350	234	66.9	43.3
1916-17.....	57	55	95.5	40.1	260	226	86.9	45.7
1917-18.....	104	87	83.7	42.6	304	251	82.6	45.9
1918-19.....	107	61	57.0	43.1	304	226	74.3	46.6
1919-20.....	54	54	100.0	44.6	142	142	100.0	46.6
1920-21.....	43	37	86.1	43.9	93	82	88.2	45.5
1921-22.....	62	52	83.9	42.3	113	87	77.0	46.0
1922-23.....	70	60	85.7	43.4	109	86	78.9	45.8
1923-24.....	81	51	63.0	43.5	111	81	73.0	43.2
1924-25.....	337	62	45.3	43.2	165	97	58.8	46.3
1925-26.....	151	63	41.7	44.1	156	73	46.8	48.2
1926-27.....	195	30	15.4	40.4	188	40	21.3	52.0
1927-28.....	167	7	4.2	48.7	163	8	4.9	55.9
Total.....	2,095	1,071	51.1	42.8	5,003	3,369	57.3	45.6

LABOR LAWS AND COURT DECISIONS

Injunctive Powers of Court Invoked to Curb Small-Loans Business

THE Supreme Court of Kansas in a recent decision (*State ex rel. Smith, attorney general, et al. v. McMahon et al.*, 280 Pacific Reporter, 906) held that a system by which usurious interest was exacted from laboring men was not only illegal but a "grievous antisocial iniquity."

The attorney general of the State of Kansas sought by court action to stamp out the business of usurers who prey upon the poorer classes of working people in the State exacting from them yearly rates of interest ranging from 240 per cent to 520 per cent. Accordingly, a petition was filed in the district court of Wyandotte County to suppress the evil. Among the several allegations set forth in the petition of the attorney general were the following: (1) That the usurers purposely selected poor and necessitous wage earners as their customers for the purpose of compelling them to renew their usurious loans from pay day to pay day, so that once obtained as customers they would, for a long period of time, be compelled to pay the exorbitant rates of interest; (2) that the borrowers were compelled to pay the high rate and forced to sign the pretended wage assignments for fear of losing their jobs; (3) that threatened garnishment disturbed the borrowers' peace of mind and jeopardized their standing in the eyes of the employer, thereby depriving them of "rights to peacefully follow their respective lawful occupations without annoyance or injury"; (4) that the loan business carried on in the State was "repugnant to good conscience and good morals and against public policy," and the exaction of the excessive rate of interest was in direct violation of the provisions of the law of Kansas.

The petition concluded by requesting that temporary and permanent injunctions be granted, restraining the usurers "from loaning money in small sums to laboring men at rates of interest in excess of 10 per cent per annum."

The lower court denied the petition and the State of Kansas, through the attorney general, appealed to the supreme court of the State. The contention of the loan agencies was that the exaction of usurious interest was of no concern to third parties, even to the State itself, and that if any of the borrowers were aggrieved they had a plain and adequate remedy at law.

The State statute (R. S. 41-102) provided in part that any person so contracting for a greater rate of interest than 10 per cent per annum shall forfeit all interest so contracted for in excess of such 10 per cent. The attorney general maintained that the statute was annulled by the money lenders and made ineffective until invoked in some lawsuit. The wage earner, the State maintained, due to his

condition "has no time to attend court nor means to employ a lawyer to invoke the defense to the usurer's claim accorded by this statute."

The State's right to maintain the suit was upheld by the court, which stated that—

The long-continued subjection of hundreds of indigent debtors to the usurious exactions of defendants by keeping them in fear of losing their jobs if they should have the temerity to assert the rights accorded them by the beneficent statutes of this Commonwealth presents a situation which can not be tolerated, and one which quite justifies the institution of this litigation by the State itself.

The court reviewed several cases in which it was held that the State had the right to initiate litigation over matters primarily of private concern but secondarily of far-reaching consequence to the public, and Judge Dawson in his opinion said:

The courts are not helpless to put a stop to such a nefarious business as that of which plaintiff complains when that business has reached the widespread prevalence it has attained in the principal industrial communities of the State.

From the foundation of our Commonwealth it has been a matter of civic pride that one of this State's primary concerns has been that the poor man shall have a fair chance to better his material condition. To that end we have made the family homestead immune to judicial process in invitum. The household goods of the family, the tools of the workman, and the needful agricultural chattels of the husbandman are generously exempted from execution sale.

The court, continuing, said that precedents for the particular form of redress sought by the State of Kansas to suppress the evil were rare, but referred to a New Jersey case (*State v. Martin*, 77 N. J. Law, 652), in which it was held that although the taking of usurious interest was not a criminal offense in New Jersey, yet interest in excess of 6 per cent per annum was forbidden and a loan office where "the exaction of such usurious interest was systematically practiced was a disorderly house, for the maintenance of which the usurer could be indicted and punished."

After reviewing the Kansas statute prohibiting usury, the court concluded, in part, as follows:

It will thus be seen that the exaction of usurious interest has been denounced as unlawful and penalized by our legislature although it is not one of the specific offenses enumerated in our crimes act. It is not only illegal, but it is a grievous antisocial iniquity and, when its practice assumes the proportions and prevalence alleged by the plaintiff, a court of equity should not hesitate to suppress it. * * *

The Kansas statute does prohibit usury and does prescribe penalties (civil penalties inuring to the debtor), and, the practice of usury being unlawful in this State, upon sufficient aggravation it may be suppressed by injunction.

The judgment of the district court was therefore reversed.

Employer Held Liable in Death of Employee Repairing His Own Automobile

THE Supreme Court of Nebraska in a recent decision (*Lehmer v. City of North Bend*, Supreme Court of Nebraska, October 22, 1929) sustained a lower court decision awarding compensation to a widow of an employee who was asphyxiated while repairing his own automobile.

David G. Lehmer for a period of 25 years was employed by the city of North Bend, Nebr., as marshal and street, water, and sewer commissioner, together with several other municipal employments. On the morning of March 31, 1928, he was found dead in his garage. From the facts in the case it appeared:

That on said 31st day of March he was going to a neighboring town in his automobile to obtain some medicine for his wife who, at that time, was ill. He procured the same, returned, and after a short time, which he devoted to some household duties which his wife was not able to perform, he went to the garage for the purpose of taking his automobile therefrom and proceeding to meet an appointment concerning which his presence was necessary as an employee in one of the departments heretofore specified. Shortly thereafter it was discovered that smoke was issuing from the garage and, upon investigation, he was found dead in the garage with all the evidence of his having been asphyxiated by carbon monoxide gas. The engine of the car was running; the lights were lit, the cover had been removed or turned back from the engine, and pliers were near at hand, and the reasonable supposition was that in an effort to remedy some defect in his engine he had been overcome.

His widow prosecuted her claim before the Compensation Commission of Nebraska, but compensation was denied her. She appealed to the district court, which held her to be entitled to compensation from the city of North Bend at the rate of \$15 a week for a period of 350 weeks from the date of her husband's death. The city carried the case to the Supreme Court of Nebraska, assigning several errors as a cause for reversal of the decision of the district court, the chief of which was that Lehmer was not at the time engaged in the business of his employer but was on his own place repairing the engine of his own automobile, that he had not been authorized to use his car in his daily work, that no contract for its use had ever been given by the city, and therefore the city was not liable under the compensation law of Nebraska.

The Supreme Court of Nebraska, after reviewing the evidence in the case, held that it was clear that the employee had been using his car for the benefit of the city, and on the morning of his death had gone to the garage to get his car to perform a duty in line with his work. The court said that: "It makes no difference, from our view of the authorities, whether it was an implied or expressed contract."

After reviewing several decisions adopted by the court in the State of Nebraska and in other jurisdictions the court concluded that the cases were:

Not only similar but it enunciates a definite proposition that if the use of a machine was for the benefit of the employer and it was used with the knowledge and consent of the employer, even without any contract as to its use, and while using this instrumentality and by it he was injured, he was in his master's business and could recover.

The supreme court also took occasion to remark in the course of the opinion that in the type of case under consideration the workmen's compensation statute should be liberally construed in favor of the injured party.

The judgment of the district court was therefore affirmed.

COOPERATION

Progress Toward Federated Action by Consumers' Cooperative Societies

AT the recent meeting of the board of directors of the cooperative league some interesting facts were brought out regarding the progress which has been made toward the federation of the local consumers' societies in the United States.¹ At the close of 1928 there were in affiliation with the central educational body 140 societies. In addition there are three district leagues. The Northern States League has 88 affiliated societies (which have a combined membership of 50,000) and some 760 individual members. The Central States League has 14 societies and 170 individuals in membership, while the Eastern States League has 25 affiliated societies. If there is no district league in operation in a given region a local society may affiliate directly with the central league, but where a district league has been formed the local society is expected to affiliate with it, becoming also a member of the central league through the medium of the district league.

There was formerly a league for the State of Ohio, but this was dissolved in 1926, since which time there has been no federated action among the cooperatives of that State. At the recent executive board meeting mentioned above it was decided that the Ohio field should be taken over by the Central States League, which will create a special Ohio department. The societies in the district were to hold a conference for this purpose in Cleveland on December 1.

Efforts are being made in Oregon and southern Washington to form a district league there among the Finnish societies and those run by the local granges.

The question of a national wholesale society was discussed at the board meeting. There are now in existence four district wholesales and one joint-buying organization. It was brought out that in some instances they are buying their merchandise from identical manufacturers, each wholesale having these goods packed under its own label. The elimination of such duplication and the valuable research work that could be accomplished through a central wholesale were discussed as were also the commercial activities such as insurance and publishing of publicity matter which could thus be organized centrally. The directors agreed that central warehousing will not be possible "for many years." It was finally decided that a conference for a more thorough discussion of this subject should be held in connection with the next cooperative congress, which will take place late in October, 1930, at Superior, Wis.

¹ Cooperation (New York), November, 1929, pp. 202, 203.

Program of the Credit Union Movement

THE credit union movement has had a remarkable growth in the United States during the past few years. To a large extent this has been due to the activities of the Credit Union National Extension Bureau, at Boston. The work of the bureau and the purposes and aims of the cooperative credit movement are described in an article by the secretary of the extension bureau in a recent number of the *Review of International Cooperation*.¹

As the article explains, the bureau was established and financed by Edward A. Filene, a merchant of Boston. The purposes of the organization are (1) to promote credit union legislation in every State whose population is large enough to warrant the effort; (2) to assist in organizing credit societies as soon as enabling legislation is secured; (3) to help the credit societies in the formation of State leagues; and (4) to aid, finally, in the formation of a national league when 15 State leagues have been formed.

Although the preliminary work has been financed by Mr. Filene, the plan has, from the first, been that the whole movement shall become self-sustaining.

Until the past few years, laws authorizing the formation of credit unions were very few and not altogether satisfactory. Much educational work has been carried on to acquaint the public and the legislators with the purposes of the cooperative credit movement. A "standard" law was formulated and introduced into the legislatures of many States, and its passage has been obtained in 32 States, which, according to the article, contain 80 per cent of the total population. Eight of these laws have been enacted since January 1, 1929.

It is hoped that by December 1, 1929, the work will have progressed far enough to concentrate attention upon the organization of State leagues, preliminary to the final step to a national organization.

Most of the credit unions have been formed among groups which already had some common bond, such as employment in the same plant or membership in the same organization. Thus, some 40 societies have been formed among the employees of the Rock Island lines, each of which serves the railroad employees at a given point, such as repair shop, terminal, etc. There are more than 200 such societies in the Postal Service, and 60 or more among lodges of the Brotherhood of Railway Clerks. At least three credit unions have been formed within the membership of consumers' cooperative societies (at Minneapolis, Minn., Rock, Mich., and New York City). This, the writer explains, was done "with the thought in mind that the credit union will specialize in the credit problems of the members of the society, relieving the cooperative store of the problem of credit trading."

The report concludes as follows:

The second thought which naturally presents itself in connection with our societies has to do with our possible contribution at some time to a substantial consumers' cooperative movement in the United States. Each one of our societies is developing from its own membership men and women skilled in the management of a cooperative credit society. Just how skilled they are may be indicated by the fact that our societies operate under the supervision of State banking de-

¹ *Review of International Cooperation* (London), September, 1929, pp. 341-344: "The Cooperative Credit Movement in America," by Roy F. Bergengren.

partments, as do commercial banks, and they have an exceptionally fine record for honest and efficient management. It has been my lot to organize many hundred cooperative credit societies, and to enjoy the process of developing men and women who have demonstrated latent capacity to manage a cooperative society despite the fact that their previous experience had been in such walks of life as had prevented them from having to do with the management of anything more important than the management of their individual earnings. Not only are we developing personnel, but we are already conscious of the fact that the greatest problem with which we shall eventually be confronted will have to do with the utilization of savings in our cooperative groups in excess of what they need to carry on the credit side of their operations. While that problem does not press immediately, yet increasingly we have in our older and larger societies totals of savings of members not needed to take care of their credit problems.

Cooperative Purchasing of Gasoline and Motor Oil in the United States

AN address delivered at the fifth annual session of the American Institute of Cooperation, held at Baton Rouge, La., in July, 1929, dealt with the development of the cooperative oil movement in this country.¹ Oil stations have been a feature of the cooperative movement only since 1921, but have had a rather remarkable development in the eight years since the first one was started. According to the speaker, such stations are now found in Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, and the Dakotas, and he estimates the total number at some 400.

East of the Mississippi the associations generally operate on a cooperative nonstock basis but farther west most of them issue capital stock. As in other types of cooperative societies, interest is paid on stock at a moderate rate, and the surplus earnings above reserves and depreciation are returned on patronage.

The speaker estimated the cost of establishing a bulk station at about \$1,500, the equipment including 2 or 3 twelve or fifteen thousand gallon storage tanks on property with railroad sidetracks or lease, a pump for unloading tank cars, a warehouse (for storing oils, grease, etc., and providing office space), a tank truck, etc. Where a service station is operated, the cost varies from \$3,000 to \$10,000 depending upon the value of the land and the type of station. In the opinion of the speaker, the society operating a bulk station should have capital of at least \$5,000.

The following five reasons are given for the rapid growth of cooperation in this field:

(1) Practically all farmers and a great many townspeople are consumers of petroleum products.

(2) Only a small amount of capital is necessary.

(3) Gasoline stations are easy to operate. It is pointed out that, compared with most other businesses in which cooperators have engaged, comparatively little skill or training is required for the operation of an oil station. Previous experience in that particular line is not absolutely necessary, though business experience of some sort is an asset. "The most important requirement * * * is that he be a thorough-going cooperator."

¹ The Cooperative Marketing Journal (Memphis, Tenn.), September, 1929, pp. 126-130; "The Cooperative Oil Movement," by Howard A. Cowden.

(4) There is a wide margin between wholesale and retail prices, so that a cooperative organization with a sizeable membership is in a position to save its members a considerable percentage on their purchases. The speaker emphasized that if a large proportion of the consumers of the locality can not be secured as members, it is inadvisable to start a station. "It can be generally stated that a company starting in business should be able to count on not less than 15 gallons of gasoline or kerosene combined, for each dollar of total assets, and approximately 45 gallons for each dollar of plant investment."

(5) The stations already in operation have had a remarkable success. "From the very beginning cooperative oil companies have been uniformly successful. We do not know of a single failure."

One of the most successful companies is that of Greeley, Colo., which started in business in 1922 with 800 members and \$4,000 capital. The membership has increased to more than 1,400 and the capital to \$14,000. The association has built up a surplus of \$100,817, while it has returned in dividends the sum of \$285,967. The dividends returned for 1928 amounted to 26 per cent. "This is an outstanding example, and the record made by it can not be duplicated in many communities for the reason that the volume available is not sufficiently large. We find, however, that in any community where there is an average volume, a cooperative oil company can render a very vital service to its members."

Profits in one group of 19 companies averaged 11.7 per cent of sales and in another group 11.6 per cent.

Central Purchasing Agencies

DURING the first few years each local association was buying its supplies independently. Lately, however, several central buying agencies have been formed, among which are the Illinois Farm Supply Co., the Minnesota Cooperative Oil Co.,² and the Union Oil Co.

The Union Oil Co. has an authorized capital of \$100,000, with shares of \$25 each, purchaseable by local associations and individual cooperators. Its board of directors includes representatives of the Missouri Farmers' Association, the Farmers' Union, and the Farmers' Equity Union. The labor unions have also been asked to select a board member.

The company is endeavoring to develop a chain of cooperative associations, each of which will be a member of the central organization but will retain its autonomy. "The principal features of the program of the Union Oil Co. are: (1) A uniform brand name owned by the cooperatives; (2) the handling of high quality, uniform merchandise; (3) cooperative advertising; (4) cooperative buying of merchandise; (5) cooperative buying of equipment; (6) organization of new companies; (7) development of a national chain of cooperative oil companies."

A trade name and trade-mark have been adopted, and a distinctive color scheme adopted for tanks, trucks, etc.

² For a description of these two companies see Labor Review, March, 1928, pp. 93, 94.

WORKERS' EDUCATION AND TRAINING

Problems and Trends in Industrial Education, 1926 to 1928

OUTSTANDING developments in the field of industrial education in the United States in the biennium 1926-1928 are summarized in Bulletin, 1929, No. 21, of the Federal Bureau of Education,¹ from which report the following data are taken:

1. In 1926-1928 the total number of different specific industrial courses which the public schools offered increased substantially. Moreover, a disposition is shown to go even farther along these lines to meet the requirements of industry and labor.

2. There is an increasing tendency to consider vocational-industrial training as a cooperative activity with industry—a work in which the parent, the school, and industry have a vital interest. School authorities are aware of the importance of securing the sympathetic cooperation of both employers and employees in the working out of vocational-industrial programs.

3. A comparatively large development of the part-time program is shown for the two years under review, part-time work, particularly the cooperative type, being considered a highly effective training method.

4. In certain large municipalities vocational courses are being organized with reference to housing and administration, according to trades; that is, by the provision of separate trades schools, for example, an automobile trade school, a printing-trades school, etc. In other cities trade schools are being organized in which a variety of unit trades are housed and taught under the direction of one principal.

5. An increase in compulsory part-time school attendance laws is reported, 31 States having passed legislation of this character.

6. While there have been some studies in occupational levels, the information on this subject is meager. Emphasis is laid on the need for investigation to ascertain the occupational levels in the main occupational fields for the purpose of throwing light upon requirements for specific training and placement opportunities.

7. Little or no progress has been made toward the solution of the problem as to the character and amount of training which should be made available for seriously retarded children. Studies covering all of the principal occupational vocations should be undertaken in order to discover fields of employment for such children after they have had the required training.

8. Improvement is recorded for the biennium in housing facilities for all types of industrial work. In certain localities plans have been definitely formulated for the improvement of the housing facilities for part-time classes.

¹ United States, Department of the Interior. Bureau of Education. Bulletin, 1929, No. 21. Industrial education, 1926-1928, by Maris M. Proffitt, specialist in industrial education in the United States. Washington, 1929, pp. 22-24.

9. There is a growing recognition that the supervision of courses in industrial arts calls for special qualifications and training.

10. There is an increasing conviction that the junior colleges should give vocational terminal courses for certain positions in the intermediate industrial occupational levels.

11. To secure a position as a teacher of industrial arts a person must meet higher requirements than formerly in academic and professional work and in practical training.

12. More schools are using the general shop with its various activities as a type of organization for offering instructions in the field of industrial arts in the junior high-school years.

13. According to reports from over 200 representative school systems, the number of schools offering a course in occupations increased approximately 15 per cent in the biennium, 1926-1928.

14. Young people are going into full-time employment at a later age.

15. There is tendency toward an increase in the number of schools offering a course in home mechanics or some type of general mechanics courses.

16. More girls are taking up work which will fit them to do more effectively the mechanical tasks in connection with home and leisure-time activities. Training is also demanded which will enable girls to operate and care for mechanical and electrical appliances for home and leisure uses.

17. Model boat and airplane building projects are proving very popular in junior high schools.

18. Instruction costs and the size of classes in shop courses in industrial arts are subjects of study in various schools by persons who have an interest in the progress of such education.

19. Teachers and supervisors in the industrial arts are taking an attitude of intelligent questioning and experimenting toward the use of tests for mechanical aptitudes.

20. During the biennium industrial arts and vocational-industrial education teachers and supervisors showed a great deal of interest in organizing and in promoting the usefulness of local and regional professional-improvement clubs and associations and in the development of the various types of industrial education.

Application of Psychology to Business and Industry

AT THE Ninth International Congress of Psychology, held in New Haven in September, 1929, Walter Van Dyke Bingham, of the Personnel Research Federation, New York, presented an appraisal of industrial psychology in the United States in 1929. He reported that about 1 per cent of the association's members are devoting their efforts, outside of universities, to the advancement of the application of psychology to business and industry. The greater part of the worth-while technopsychological work now under way in this country is being done by those who have entered this field by way of engineering or business management. Others have taken up such work after advanced professional training in economics, sociology, physics,

physiology, medicine, or law. Their psychology has been acquired by experience on the job and private study.

There are, however, at least 60 psychologists in universities who give instruction in industrial psychology to undergraduates in engineering and the liberal arts courses. Certain of these university teachers also have outside contacts which furnish opportunities for research and service in near-by industries. The following universities are listed in the paper as carrying on psychological research of significance to industry: Boston, Chicago, Columbia, George Washington, Harvard, Iowa, Michigan, Minnesota, New York, Northwestern, Pennsylvania, Ohio, Oregon, Stanford, and Yale.

Both inside and outside the universities some psychologists are working to improve employment methods—a subject to which psychologists in the United States have given special attention. The United States Civil Service Commission's research staff is "setting the pace" in this connection. The simplification of certain work in the postal service and the development of new types of examination for testing applicants for that service are cited. With reference to progress in the development of psychological aids for selecting and placing workers, emphasis is laid on the need of confronting the fact that at present most executives do not consider the improvement of employment tests as a major problem in industry in the United States. Leaders in business are now more interested in such problems as the following:

1. How can particular sorts of work be simplified—made less difficult, irritating, dangerous, or fatiguing?
2. How can the workers best be trained to do their work most easily and well?
3. How can tools and physical conditions be improved and adapted to physiological and psychological requirements?
4. How can the real work interests of employees be determined so that the most potent incentives to good work may be used?
5. How can management insure wholesome personal relationships of workmen and supervisors and the maximum of good will among its personnel?

Among the recent experiments in applying psychology to industry the effort to determine the factors influencing variation of output in a manufacturing plant is cited. Almost every innovation made in this plant, such as the inauguration of rest periods, changing the basis of remuneration, etc., resulted in increased production. The factor which outweighed all others, however, was apparently the response of these girl employees to the active interest which the management manifested in them and their work. A study of individual differences in motormen in the matter of liability to accident on the Boston street railways has led to developments and improvement by means of which accidents have been reduced over 35 per cent as compared with the previous 5-year average. Despite a number of recent striking but rather sporadic applications of psychology to industry which might be reported, it is acknowledged in the paper here summarized that only in a slight measure and in restricted fields is psychology assuming its responsibility as an aid to the improvement of management, labor conditions, and industrial relations. In closing the author recommends in brief:

1. That industrial psychology should focus on problems that are vital now, in an age of machinery and of commerce.
2. That to do this, psychologists must know the working world, outside the schools and the laboratory.

3. That there must be practical and effective organization to this end. Picture, for instance, an American institute of industrial psychology, a national center for practical psychological research in the science of work, an institution serving employer and employed in the common interest, a place where able young men who have already learned what the university laboratories teach can find their internship in technopsychology, in association with mature investigators and experienced managers; an institute manned by psychologists who see the great opportunity for molding the evolution of an industrial age in the direction of sanity, of enduring satisfactions, and of good will among all who labor.

Workers' Education in California in 1929

THE fifth year (1928-29) of workers' education in California was reported upon at the 1929 convention of the Federation of Labor of that State, the activities being under the auspices of the joint committee on workers' education representing the Federation and the extension division of the University of California.¹

Of the 13 activities reported upon, 3 were courses of eight sessions each given for Electrical Workers' Local No. 18, of Los Angeles; 3 were courses in the study of wages given, respectively, for Engineers' Local No. 72, of Los Angeles, Ornamental Plasterers' Local No. 640, of San Francisco, and Electrical Engineers' Local No. 104, of Oakland; and 1 was a course of six sessions, on the social wage policy of the American Federation of Labor, given for the Central Labor Council of Long Beach.

Two summer schools were held, one lasting 10 days, at Neeley's Grove, on the Russian River, and the other, lasting 16 days, at Joywoods, Bodega.

Four week-end conferences were held, one of which dealt with the problems of poverty, the second with the social wage policy of the American Federation of Labor, the third with unemployment, and the fourth with technological unemployment.

Workers' Education in Oklahoma

SINCE 1924 the extension division of the University of Oklahoma has been cooperating with the wage earners of that State in the development of a workers' education program. The following brief account of the progress of the movement is taken from the September, 1929, issue of the *American Federationist*. In the first year of this cooperation classes were formed in Enid, Miami, Shawnee, and other towns. Classes in foremanship, mechanical drafting, and other vocational subjects received special attention. The work instituted in these different centers was afterwards turned over to the public-school authorities, the undertaking being supported and supervised to some extent by the Oklahoma Board of Vocational Education. In 1927, plans for a closer cooperation with organized labor were perfected. On the invitation of the Oklahoma City Central Labor Council, the dean of the university extension division offered, during the first semester of the year, a course in labor problems during the hour preceding the council's weekly meeting, and during the re-

¹ American Federation of Labor (California branch). Proceedings of the thirtieth annual convention, held at Long Beach, Calif., Sept. 23 to 27, 1929. San Francisco, 1929, p. 25.

mainder of the year the representative of the university's public speaking department gave a course in public speaking. According to the council's officials, these courses stimulated to an unusual degree the activities of the organization. The numbers attending weekly meetings increased from 15 or 18 to 30 or 40, and the next year's attendance was reported good.

In 1928-29 the labor problems course was repeated; among those taking it were bricklayers, plumbers, and painters. Courses were also offered in social evolution and urban sociology. Upon the completion of the new labor temple, it is planned to expand these workers' educational activities. The matter of appointing a committee representing the wage earners has been discussed with the Oklahoma Federation of Labor, such committee to cooperate with the university in selecting the subjects for workers' education courses. While this educational program is under the auspices of unionized labor, it is also proposed to interest the unorganized wage earners as well. For the present, the organization of workers' education will be done by a member of the extension division's staff. It is hoped, however, that later on trade-unionists will be able not only to contribute financially to this organization work but also to aid in selecting assistants for such task. As to meeting instruction costs, it has been the practice for the university to pay one-half of the instructor's honorarium and for the study groups to pay the other half.

Attention is called to the fact that the workers express a wish to study cultural subjects in sociology, ethics, philosophy, English, and certain other nonvocational fields. According to the dean of extension, it is believed that there is a real opportunity in Oklahoma for service in providing for the desire on the part of wage-earning groups for participation in the larger intellectual and cultural life of the State.

Movement for Education of the People in China

BY MARCH, 1922, approximately 1,400 students had been recruited for a remarkable experiment in mass education in a small Province in central China, and 80 volunteer teachers had been secured. Less than 3 years later 150,000 persons from 12 to 50 years of age were studying in that Province alone, and early in 1929 the number of students had reached more than 4,000,000, according to Yu Chuen James Yen, a Yale graduate and the leader of this Chinese mass-education movement. The following brief history of the progress of the movement is taken from a recent article by Mr. Yen.¹

Illiteracy in China

ALTHOUGH China had an elaborate educational system as far back as 2000 B. C. and gave paper and the printing press to the world, many millions, perhaps 50 per cent of the Chinese people, are illiterate. It is explained that this situation is due mainly to the existence of two distinct Chinese languages, in which the same characters are

¹ Journal of Adult Education, New York, February, 1929, pp. 35-40: "Forward four million! The mass-education movement in New China," by Yu Chuen James Yen.

used—one a classical language and the other (known as Pai-Hua) the simple language of the common people. For 4,000 years all literature of China was written in the classical language. The use of this by nine-tenths of the people is impossible, as proficiency in it demands a lifetime of study. The difference between the classical language and Pai-Hua is said to be as great as that between Latin and modern English. Pai-Hua is used, the author estimates, by 80 per cent of 400,000,000 people in China and already has some literature. This plain language, he declares, is the hope of China's illiterate millions who have no money to pay for education and are too busy to attend schools.

Preparation of Textbooks

AT THE TIME the report upon which this digest is based was written, a collection had been made of about 200 different types of publications in Pai-Hua, among them novels, stories, magazines, business letters, railroad notices, and official proclamations. More than four years and a half have been spent in studying and analyzing these specimens. Consideration has also been given to approximately 1,600,000 Chinese characters, with a view to deciding on a minimum Pai-Hua vocabulary which every Chinese man, woman, and child should learn. An attempt has been made to discard every unnecessary character in order to save the student's time. As a result, the vocabulary of 40,000 Chinese characters has been cut down to 1,300, which have been used in the preparation of a series of four reading books of 24 lessons each. A busy man or woman spending only one hour per day in the classroom can complete the first reader in 24 days. This reader contains 300 of the most basic and useful Pai-Hua characters. The second reader can also be finished in 24 hourly periods. In 96 hours a fundamental vocabulary can be acquired, at a cost of 12 cents or 3 cents per reader. As a supplement, however, to this basic vocabulary, a pocket dictionary of some 2,000 additional Chinese characters has been compiled to meet the needs of the average writer. A student who has mastered the essential vocabulary and is the possessor of a pocket dictionary is able to read any literature in Pai-Hua that a citizen of the Republic is required to read.

Arousing the People's Interest

CAMPAIGNS were organized to interest the people in mass education. The importance of interesting the educated was recognized, as many of them were not in favor of teaching the rank and file to read and write. Others among the educated classes advocated teaching the common people the classical language instead of Pai-Hua. These objectors had to be converted to the scheme. An educational campaign was begun in a small Province in Central China. Posters, mass meetings, and a parade of 5,000 persons were the means resorted to for propaganda purposes.

College students, boys and girls, business men, and laborers marched through the streets, accompanied by 50 different kinds of Chinese bands, all playing at the same time. Men, women, and children poured out of the houses to see what the noise was about. The students in the parade began to explain to the people on both sides of the street as they walked along. "Can you read? If you can not read, you are a blind man. If you are a blind man you ought to come to our

school to study. We do not waste your time—one hour a day. We do not waste your money—3 cents a book.”

Following these efforts, recruiting teams of college boys and girls endeavored to persuade illiterates to enroll. As stated above, by March, 1922, approximately 1,400 students had been secured. After 4 months' study 1,250 took a final examination and 967 passed. The graduates had the degree of "literate citizen" conferred upon them by the governor, 5,000 persons attending the commencement exercises. These and other successful experiments changed the viewpoint of the scholars and gentry, and a mass education association was formed for the Province as a whole. In the latter part of 1923 a national conference on mass education was held in Peking, 600 representatives from 21 Chinese Provinces and special districts being in attendance. A national association of the movement was then formed and at present there are branch associations even in remote Provinces, including the northern plains of Manchuria. The number of students has reached between 4,000,000 and 5,000,000, according to the latest estimate. The writer declares that the educated Chinese men and women now realize that in order to give their country its rightful place among the family of nations her millions of common people, the backbone of the nation, must be given a chance for education and citizenry. This realization has led many of the educated class to become teachers. From 100,000 to 200,000 persons are reported as teaching without pay.

Some Problems to be Solved

THIS mass education movement is regarded by its leader as the beginning of a new civilization in the Orient. Among the problems confronting those engaged in this gigantic undertaking are the preparation of men and women for the training of local supervisors, the creation of a literature in the language of the common people, and the instruction of the farmers in rural economics.

LABOR ORGANIZATIONS AND CONGRESSES

Trade-Union Activities in the Electric-Power Industry

A RECENTLY published article on trade-union activities in the electric-power industry¹ traces the history of unionism in this branch of industry, the problems to be met, and the tendencies in organizing electrical workers as reflected in the progress of the International Brotherhood of Electrical Workers. The author groups the wage earners in the electric-power industry into two broad classes: (1) Those engaged in operation and maintenance, and (2) those engaged in construction. As the industry has progressed, the first class of workers, notably the linemen, who are both construction and operating workers, has become increasingly important. The question of organization is then that of organizing the linemen rather than the construction workers of the second class, who properly fall under the jurisdiction of the building trades.

The International Brotherhood of Electrical Workers, affiliated with the American Federation of Labor, has jurisdiction over operation and maintenance workers, such as linemen, cable splicers, meter men, and trouble men. This union is the most influential in the electrical industry, and the writer summarizes its influence on wages and working conditions. Between 1903 and 1924, he states, the union's influence was strengthened and lowered periodically, following to a large extent the peaks and troughs of the business cycle. When in 1924 the union found wages and working conditions disadvantageous to labor because of the trend toward consolidation within the industry, a stand for public ownership was taken. This phase lasted until 1927, when President Green of the American Federation of Labor announced that the union would not seek public ownership of the electrical industry if it could secure recognition of its rights under private ownership.

Negotiations with the National Electric Light Association followed, out of which the author predicts that some national understanding between central-station employers and the union will eventually result. But he continues by pointing out that not all maintenance workers who fall within the jurisdiction of the union will be covered, (1) because the union already has a membership largely composed of linemen and wiremen to the exclusion of those workers who come in more direct contact with consumers, and (2) because employers oppose organization of workers who deal directly with consumers, on the ground that such organization would destroy "family spirit."

¹ Journal of Land and Public Utility Economics, November, 1929, pp. 363-369: "Trade-union activities in the electric-power industry," by Charles F. Marsh.

If organization of central-station workers does gain ground it will be advantageous in that greater solidarity will result and the companies will gain the support of employees rather than their antagonism. The author points out, however, that the proposed understanding, even though opposed to strikes and recognizing the union, might result in greater insecurity of employment if the present tendency to hire linemen on a temporary job basis grows. This problem, he thinks, may be met by (1) budgeting work so that times of active expansion will not be followed by inactivity, (2) developing unemployment insurance plans, and (3) increasing wages so that the worker may save for periods of idleness.

In conclusion it is stated that the consumer is more interested in continuity of electric service than in rates and that interruptions of service have grown and will continue to grow less frequent as peaceful methods of settling differences are resorted to. Other problems of the industry must be so adjusted as not to be oppressive to the consumer, the worker, or the employer.

Thirteenth International Labor Conference ¹

A SPECIAL session of the International Labor Conference was held in Geneva, October 10-26, to consider questions related to maritime affairs. Thirty-four States were represented at the conference and a total of 267 delegates and advisers were present. The agenda consisted of the following four items: Regulation of hours of work on board ship; protection of seamen in case of sickness (including the treatment of seamen injured on board ship); promotion of seamen's welfare in ports; and establishment by each maritime country of a minimum requirement of professional capacity in case of captains, chief engineers, and navigating and engineer officers in charge of watches on board merchant ships.

The conference was called for the preliminary discussion of these questions with a view to determining whether they should be the subject of a second and decisive discussion at the next conference and it was the decision of the delegates that all the questions should be placed on the agenda of the next special maritime session to be held at the conclusion of the regular session of the conference in 1930. It was considered that these questions could be made the subject of draft conventions or that in the case of the promotion of seamen's welfare in ports the question might be the subject of either a draft convention or a resolution.

National Congress of the French General Confederation of Labor

THE twentieth national congress of the Confédération Générale du Travail was held in Paris, September 17-20, 1929.² The congress was attended by nearly 2,200 delegates, as well as by many guests from other countries. The principal subjects dealt with by the con-

¹ International Labor Office. *Industrial and Labor Information*, Nov. 4, 1929.

² Data are from *L'Information Sociale*, Paris, Sept. 26, 1929.

gress were the social insurance law, general social legislation, general and technical education, and scientific management.

The resolution relative to the social insurance law which was passed by the congress stated that the members were unalterably opposed to all proposals to put the law into effect by degrees or to reduce or limit the operations of the departmental funds. It protested against any attempt to restrict the benefits of agricultural workers and stated that there should be equality for all workers. To this end it was demanded that the upper salary limit should be raised so as to admit salaried workers now excluded. In regard to sickness and invalidity insurance, a second resolution was passed calling for a reorganization of the public health services of the country, with centralization and coordination of these services.

The report of the committee upon social legislation was adopted unanimously. The resolution called for the enactment into law of various bills before Parliament, including one providing for an increase in the rates of compensation for industrial accidents and for the extension of the law relating to occupational diseases to cover other diseases than those caused by mercury and lead. It also dealt with the subjects of compulsory conciliation in labor conflicts, the labor contract, family allowances, and the provision of workers' dwellings.

The position of the congress in regard to the reform of education was the same as that of the preceding congress, which demanded an entire reorganization of the educational system so that the children of the working classes should have the opportunity to secure a higher education. Technical and vocational education were declared to be inseparable from the general educational system, and it was urged, therefore, that the maintenance of such a service should be a function of the Ministry of Public Instruction.

The report of the committee upon production stated that rationalization in its industrial aspect was an attempt to stimulate production within the industry by means of scientific management and in its commercial aspect through the avoidance of useless competition and the promotion of national and international trade combinations and trusts. Industrially it was regarded as holding grave risks for the workers, such as unemployment, speeding-up work processes, and wage decreases, especially as in most instances the employers refused all suggestions of the trade-unions looking toward the avoidance of these dangerous consequences of the movement. The unions therefore, the congress stated, should insist upon labor contracts carrying guaranties against these economic risks and should strive both for a reduction in working hours and increases in wages commensurate with the constant improvement in production in the various industries. Labor should also claim the right to participate in the application of the new methods, so that the workers may benefit by the increased production.

Other questions considered were the place of women in modern industry, with particular attention to adequate rest before and after childbirth, abolition of the night work of women, and control of home work; and a solution of the problem of musicians and mechanical music.

Labor Union Membership in Germany, 1925 to 1928

THE membership of the General German Federation of Trade Unions (*Allgemeine Deutsche Gewerkschaftsbund*) reached about 1,000,000 in 1904. From that year on it showed a steady growth up to 1913, when it was about 2,500,000. Although during the war the membership fell again to about 1,000,000, after the war it rose sharply, reaching nearly 8,000,000 in the period 1920-1923. From 1923 it dropped to about 4,000,000 in 1926. At the end of 1927 the membership was somewhat over 4,400,000 and at the end of 1928 slightly over 4,800,000.¹

The number of member unions was 15,052 in 1927 and 13,810 in 1928.

The income and expenditures of the organization have been as follows:

INCOME AND EXPENDITURES OF GENERAL GERMAN FEDERATION OF TRADE UNIONS

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

Year	Income		Expenditures	
	Marks	United States currency	Marks	United States currency
1925-----	148,000,000	\$35,224,000	126,000,000	\$29,988,000
1926-----	148,000,000	35,224,000	136,000,000	32,368,000
1927-----	182,000,000	43,316,000	130,000,000	30,940,000
1928-----	222,000,000	52,836,000	189,000,000	44,982,000

¹ Allgemeine Deutsche Gewerkschaftsbund, Jahrbuch, 1928, Berlin, 1929, pp. 196-202; and Gewerkschafts-Zeitung, Berlin, July 27, 1929.

LABOR TURNOVER

Labor turnover in American factories, November, 1929

THE preliminary index of labor turnover in American factories for November is here presented. The number of companies included in this index now numbers over 450 and they have approximately 750,000 employees. Reports were received from 70 per cent of these firms in time to be included in these preliminary figures.

It is the intention of the Bureau of Labor Statistics to present turnover indexes for certain separate industries in about two months.

AVERAGE LABOR TURNOVER RATES IN SELECTED AMERICAN FACTORIES¹

The rate is per 100 employees on the pay roll. The monthly rate is the rate for the calendar month. The equivalent annual rate is the rate for the month expressed as an annual rate²

A.—Monthly Rates

Month	Separation rates								Accession rate		Net turnover rate	
	Quit		Lay-off		Discharge		Total ²		1928	1929	1928	1929
	1928	1929	1928	1929	1928	1929	1928	1929				
January	1.3	2.3	0.7	0.4	0.3	0.4	2.4	3.1	2.8	5.0	2.4	3.1
February	1.2	2.4	.6	.4	.4	.5	2.1	3.2	2.4	4.4	2.1	3.2
March	1.7	3.1	.7	.5	.4	.6	2.8	4.2	3.0	5.2	2.8	4.2
April	2.1	3.6	.6	.5	.4	.6	3.1	4.6	3.3	5.8	3.1	4.6
May	2.4	3.5	.7	.5	.4	.5	3.5	4.4	4.0	5.1	3.5	4.4
June	2.2	3.2	.6	.4	.4	.5	3.2	4.2	3.4	5.0	3.2	4.2
July	2.3	3.0	.5	.4	.4	.5	3.2	3.9	4.0	5.2	3.2	3.9
August	2.7	3.4	.4	.4	.4	.4	3.6	4.1	4.7	4.6	3.6	4.1
September	3.3	3.1	.4	.5	.4	.5	4.2	4.1	4.7	4.9	4.2	4.1
October	2.7	2.4	.4	.8	.4	.4	3.6	3.6	4.8	3.9	3.6	3.6
November	2.1	³ 1.6	.4	³ 1.2	.4	³ .3	2.9	³ 3.1	4.1	³ 1.9	2.9	² 1.9
December	1.7		.4		.4		2.5		3.2		2.5	
Average	2.1		.5		.4		3.1		3.7		3.1	

B.—Equivalent Annual Rates

January	15.7	26.7	8.5	4.2	3.6	5.3	27.8	36.2	33.4	58.6	27.8	36.2
February	15.1	31.0	7.9	4.7	4.6	6.0	27.6	41.7	31.6	56.9	27.6	41.7
March	20.1	36.8	8.4	5.7	4.3	6.7	32.8	49.2	35.9	61.2	32.8	49.2
April	26.0	43.3	7.1	5.5	5.1	6.9	38.2	55.7	40.0	70.2	38.2	55.7
May	28.2	40.8	8.3	5.7	5.0	5.6	41.5	52.1	47.2	59.9	41.5	52.1
June	27.1	39.5	7.5	5.4	4.9	6.2	39.5	51.1	41.3	60.9	39.5	51.1
July	27.2	35.7	5.9	5.0	4.9	5.8	38.0	46.5	46.9	61.4	38.0	46.5
August	31.9	38.4	5.1	4.8	5.3	5.3	42.3	48.5	55.7	54.3	42.3	48.5
September	40.3	38.2	5.0	6.3	5.3	6.1	50.6	50.6	56.9	59.7	50.6	50.6
October	31.9	28.5	4.7	9.4	5.3	4.7	41.9	42.8	57.1	46.0	41.9	42.8
November	25.6	³ 19.3	4.8	³ 14.6	4.9	³ 3.7	35.3	³ 37.6	50.1	³ 23.7	35.3	³ 23.7
December	20.1		4.7		4.4		29.2		38.1		29.2	
Average	25.8		6.5		4.8		37.1		44.5		37.1	

¹ Now numbering over 450, with nearly 750,000 employees. The form of average used is the unweighted median of company rates.

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

³ Preliminary, subject to revision.

Comparing November, 1929, with October, 1929, there was a decided drop in the quit rate and the discharge rate, but an equally decided rise in the lay-off rate. The total separation rate for November expressed on an equivalent annual basis was 37.6 compared with 42.8 for October. The accession rate for November, 1929, was decidedly lower than the October accession rate. In October the accession rate was 46.0 and in November only 23.7. This is the first time during the last two years that the separation rate has been higher than the accession rate.

Comparing November, 1929, with November, 1928, the quit rate falls from 25.6 in the former year to 19.3 for November, 1929. On the other hand the lay-off rate increased from 4.8 to 14.6. The total separation rate increased 2.3 points, but the accession rate falls 26.4 points.

The last issue of Turnover Talks sent out by the Metropolitan Life Insurance Co. is reprinted herewith. It is a further discussion of the standard procedure advocated by the Bureau of Labor Statistics for reporting labor turnover experience.

[Turnover talk by Metropolitan Life Insurance Co.]

A STANDARD PROCEDURE—Continued

In the November issue we discussed the meaning of "quits," "discharges," and "lay-offs," particularly with reference to the compilation of company data used in the National Indexes of Factory Labor Turnover. These items constitute the "numerators" of most turnover fractions. It is the "denominator" which we wish to consider in this issue.

We favor the use of the "average number on pay roll" rather than the "average number at work." It is probable that an absent employee is as much, if not more, exposed to the risk of termination as one actively at work.

The real questions involved may be stated as follows:

How shall one arrive at the average monthly number on pay roll?

Is the method simple and practicable?

Some of the possible methods are:

An average daily number on the pay roll.

An average of the number on each of the weekly pay rolls within the period.

An average of the number on pay roll the first and last of the month.

The pay rolls are apt to be "padded" with names of employees who have left, and unless these names are cleared at frequent intervals the "denominator" used in calculating the various turnover rates is larger than it should be. The effect is artificially to lower the turnover rates. Furthermore, any pay roll includes all employees who have been at work for any length of time, however short, during the period. This figure would thus be larger than the actual number receiving pay for any one day.

While it would be desirable to have each company report the average daily number on the pay roll, it may not be practicable to urge all companies to compute this figure.

It is recommended, therefore, that each reporting company clear from its pay roll those no longer employed, this to be done at least twice a month, but preferably every week, and, secondly, that the monthly "average number on pay roll" be computed by the most convenient of the methods above outlined.

In this, the concluding issue of Turnover Talks, the Metropolitan Life Insurance Co., through its policyholders' service bureau, wishes to thank the many companies and individuals who, through their friendly cooperation, have made it possible to establish National Indexes of Labor Turnover. "The Bureau of Labor Statistics of the United States Department of Labor has developed these indexes considerably since taking over this project last June. Without doubt you will find it profitable to continue your cooperation with the Federal Bureau."

INDUSTRIAL DISPUTES

Strikes and Lockouts in the United States in November, 1929

DATA regarding industrial disputes in the United States for November, 1929, 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 is a summary table showing for each of the months—January, 1927, to November, 1929, inclusive—the number of disputes which began in those months, the number in effect at the end of each month, and the number of workers involved. It also shows, in the last column, the economic loss (in man-days) involved. The number of workdays lost is computed by multiplying the number of workers affected in each dispute by the length of the dispute measured in working-days as normally worked by the industry or trade in question.

TABLE 1.—INDUSTRIAL DISPUTES BEGINNING IN AND IN EFFECT AT END OF EACH MONTH, JANUARY, 1927, TO NOVEMBER, 1929

Month and year	Number of disputes		Number of workers involved in disputes		Number of man-days lost during month
	Beginning in month	In effect at end of month	Beginning in month	In effect at end of month	
1927					
January	37	18	5,915	2,287	58,125
February	65	45	9,756	5,717	115,229
March	74	67	13,142	8,182	214,283
April	87	88	202,406	199,701	5,265,420
May	107	116	22,245	200,702	5,136,006
June	80	88	18,957	196,323	4,863,345
July	65	63	33,994	199,287	5,308,123
August	57	53	8,150	198,444	4,999,751
September	57	58	12,282	196,829	4,945,702
October	50	58	13,024	82,095	2,724,117
November	27	51	5,282	82,607	2,040,140
December	28	54	4,281	81,229	2,129,153
1928					
January	48	63	18,850	81,880	2,128,028
February	52	58	33,441	103,496	2,145,342
March	41	47	7,459	76,069	2,291,337
April	71	48	143,700	129,708	4,806,232
May	80	56	15,640	133,546	3,455,499
June	44	46	31,381	143,137	3,670,878
July	54	42	18,012	132,187	3,337,386
August	59	42	8,887	105,760	3,553,750
September	52	34	8,897	62,862	2,571,982
October	61	42	27,866	41,474	1,304,913
November	44	38	37,840	38,745	1,300,362
December	23	29	5,172	35,842	991,238
1929					
January	45	34	14,727	39,484	949,692
February	48	34	20,134	40,385	921,583
March	77	42	14,052	41,321	1,094,161
April	103	52	30,130	52,292	1,429,046
May	98	73	26,220	53,959	1,578,929
June	69	71	19,702	54,584	1,526,627
July	74	75	35,900	21,872	1,116,557
August	68	55	25,138	8,123	380,681
September	95	62	19,224	8,818	259,410
October ¹	65	50	16,302	8,415	291,750
November ¹	45	55	12,130	12,658	317,846

¹ Preliminary figures, subject to change.

Occurrence of Industrial Disputes, by Industries

TABLE 2 gives, by industry, the number of strikes beginning in September, October, and November, 1929, and the number of workers directly involved.

TABLE 2.—INDUSTRIAL DISPUTES BEGINNING IN SEPTEMBER, OCTOBER, AND NOVEMBER, 1929

Industry	Number of disputes beginning in—			Number of workers involved in disputes beginning in—		
	September	October	November	September	October	November
Bakers	1		1	600		81
Building trades	15	7	11	2,010	427	1,620
Chauffeurs and teamsters	4	12	7	278	6,100	2,359
Clothing	26	11	7	10,340	1,222	4,793
Electrical and gas supply workers	1			500		
Food workers			2			48
Furniture	9	2	2	1,057	158	77
Glass workers		1			100	
Iron and steel			2			765
Leather	1			60		
Longshoremen, freight	1			12		
Metal trades	8	3	1	3,006	315	36
Miners	1	12	4	176	3,573	1,060
Motion-picture operators, actors, and theatrical employees	14	1		347	20	
Oil and chemical workers	1			12		
Pottery workers			1			40
Printing and publishing	1	1		53	40	
Railway workers		1			75	
Rubber	1			14		
Stationary engineers and firemen	1			26		
Municipal workers	1	1		30	1,800	
Teachers		1			140	
Textiles	5	11	6	618	1,432	651
Other occupations	4	1	1	85	900	600
Total	95	65	45	19,224	16,302	12,130

Size and Duration of Industrial Disputes, by Industries

TABLE 3 gives the number of industrial disputes beginning in November, 1929, classified by number of workers and by industries.

TABLE 3.—NUMBER OF INDUSTRIAL DISPUTES BEGINNING IN NOVEMBER, 1929, CLASSIFIED BY NUMBER OF WORKERS AND BY INDUSTRIES

Industry	Number of disputes beginning in November, 1929, 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
Bakers		1			
Building trades	4	2	4	1	
Chauffeurs and teamsters	1	3	2		1
Clothing	1	2	1	1	2
Food workers	1	1			
Furniture		2			
Iron and steel		1		1	
Metal trades		1			
Miners		1	2	1	
Pottery workers		1			
Textiles	1	2	3		
Other occupations				1	
Total	8	17	12	5	3

In Table 4 are shown the number of industrial disputes ending in November, 1929, by industries and classified duration.

TABLE 4.—NUMBER OF INDUSTRIAL DISPUTES ENDING IN NOVEMBER, 1929, BY INDUSTRIES AND BY CLASSIFIED DURATION

Industry	Classified duration of strikes ending in November					
	One-half month or less	Over one-half and less than 1 month	1 month and less than 2 months	2 months and less than 3 months	6 months and less than 7 months	7 months and less than 8 months
Bakers		1				
Building trades	5	2				
Chauffeurs and teamsters	4		1			
Clothing	3	1			1	
Furniture	1	1	2			
Iron and steel	1	1				
Metal trades	1					
Miners	3	1				
Pottery workers		1				
Railway workers			1			
Shipbuilding						1
Textiles	2	4		1		
Other occupations			1			
Total	20	12	5	1	1	1

Principal Strikes and Lockouts Beginning in November, 1929

Cleaners and dyers, Chicago.—The Chicago Master Cleaners and Dyers' Association, representing 110 establishments, declared a lockout on November 4 against their 2,500 employees, demanding that they withdraw their union affiliation because of "cooperative plants financed and controlled by union officers and members, in competition with employers recognizing union." The workers, about two-thirds of whom are females, are members of cleaners, dyers, and pressers' union, Local No. 17742, affiliated with the American Federation of Labor.

According to press reports, employees were back at work by December 13 on the basis that prevailed before the lockout, "with points of difference to be arbitrated." The most difficult problem to solve is said to be a large cleaning and dyeing plant which the union is erecting. The employers want this project abandoned.

Iron and steel workers, Pennsylvania.—A strike of 700 employees of the Reading Iron Co. at Reading is reported to have been in effect from November 12 to November 29 because of objection to the "Bedaux system of computing wages." Committees are to investigate the Bedaux system.

Clothing workers, New Jersey.—The firm of William B. Kessler, clothing manufacturer, of Hammonton, was affected by a strike of approximately 550 employees of both sexes from November 12 to November 16, to enforce demands for union recognition, a working day of 8 hours (instead of 9½), a 44-hour week, and 10 per cent pay increase. These demands were allowed, except that pieceworkers were given an increase of 5 per cent and time workers an increase of \$1 a week, which also averages, it is said, about 5 per cent.

Millinery workers, Chicago.—A lockout of 1,500 millinery workers, members of the Cloth Hat, Cap, and Millinery Workers' Union,

in Chicago, by the Millinery Manufacturers' Association, is reported to have begun on November 15, involving the question of open or closed shop, the employers demanding that the workers sever their union affiliation.

This dispute, it is understood, is still in progress.

Bituminous-coal mines, Illinois.—A strike of approximately 500 employees of Mine No. 14 of the Old Ben Coal Corporation at Buckner began on November 19 because of grievances involving working conditions and wage reductions. The mine, according to press reports, has been operating under what is called the split-crew system, whereby only one-half the force worked each week, in order to afford more employment for miners. When the operators announced that they had decided to work the underground men half time and to reduce the wages of the surface workers, a strike resulted, which ended with the resumption of operations on November 25, under conditions which formerly prevailed.

Principal Strikes and Lockouts Continuing into November, 1929

NONE of the strikes commented on in previous issues of the Review continued into November, with the possible exception of the strike of street-car workers in New Orleans, which was covered in the December Labor Review.

Conciliation Work of the Department of Labor in November, 1929

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION

THE Secretary of Labor, through the Conciliation Service, exercised his good offices in connection with 27 labor disputes during November, 1929. These disputes affected a known total of 33,390 employees. The table following shows the name and location of the establishment or industry in which the dispute occurred, the nature of the dispute (whether strike or lockout or controversy not having reached the strike or lockout stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

On December 1, 1929, there were 44 strikes before the department for settlement and in addition 16 controversies which had not reached the strike stage. The total number of cases pending was 60.

LABOR DISPUTES REPORTED DURING THE MONTH OF NOVEMBER, 1929

Company or industry, and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Duration		Workers involved	
					Beginning	Ending	Directly	Indirectly
Coal Bluff Mining Co., Terre Haute, Ind.	Controversy	Miners	Right to remove coal from Bardyke mine through Talleydale shaft.	Adjusted. Satisfactorily settled	1929 Oct. 28	1929 Dec. 1	230	120
Heron Stove & Foundry Co., Chattanooga, Tenn.	Lockout	Molders	Alleged discrimination	Unable to adjust	Nov. 1	Nov. 5	27	20
Lathers, Chicago, Ill.	do	Lathers	Violation of agreement	Adjusted. International union to fix terms.	Nov. 5	Nov. 6	300	
Kraemer Hosiery Mills, Nazareth, Pa.	Strike	Hosiery knitters	Asked union working conditions. So-called "yellow dog contract" at issue.	Pending	Nov. 6		150	
Cleaners and dyers, Chicago, Ill.	Lockout	Cleaners and dyers	Proposed business competition between workers and master cleaners' organization.	do	Nov. 4		2,500	150
[96] Truck drivers, Cleveland, Ohio	Controversy	Draymen and drivers	Interpretation of contract relative to wages.	Adjusted. Commissioner's decision as arbitrator accepted.	Oct. 1	Nov. 7	6	900
Veterans' hospital, North Chicago, Ill.	Strike	Building mechanics	Nonunion labor	Pending	Nov. 11		300	
Atlantic & Pacific Tea Co., Philadelphia, Pa.	Lockout	Drivers	Membership in teamsters' union.	do	Nov. 12		(1)	
Express and truck drivers, Newark, N. J.	Strike	do	Asked \$3 per week increase; 8-hour day.	Adjusted. Allowed 8-hour day and time and half for overtime.	do	Nov. 29	225	75
Reading Iron Co., Reading, Pa.	do	Steel workers	Objection to Bedaux system of computing wages.	Adjusted. Returned without discrimination; committee will arrange terms.	do	do	700	20
Restaurant workers, South Chicago, Ill.	do	Restaurant workers	Renewal of agreement	Unable to adjust	May 8	Nov. 6		200
P. J. Walker, contractor, Los Angeles and Pasadena, Calif.	do	Bricklayers	Nonunion labor employed	Pending	Nov. 8		75	200
Shell Building, P. J. Walker, contractor, San Francisco, Calif.	do	do	Sympathy with bricklayers on strike in Los Angeles and other California cities.	Adjusted. Returned by order of international union.	Nov. 13	Nov. 19	40	200
Berkshire Spinning Co., Anthony, R. I.	do	Weavers	Cleaners discharged. Weavers requested to do their own cleaning.	Adjusted. Compromise settlement	Nov. 2	Nov. 21	160	340
Kelly Contracting Co., Philadelphia, Pa.	do	Truck drivers	Working conditions	Pending	Nov. 14		50	14
Hill Metal & Roofing Co., Allentown, Pa.	do	Sheet-metal workers	Renewal of contract; wages	do	Oct. 16		17	2

Remington Typewriter Co., Iilon, N. Y.	Threatened strike.	Machinists and metal polishers.	Dispute relative to union shop conditions.	.....do.....	Nov. 20		244	2,000
Frankford Elevated Railroad, Philadelphia, Pa.	Strike.....	Painters.....	Nonunion men employed as scrapers.	Unclassified. Union scrapers employed before arrival of commissioner.	Nov. 18	Nov. 18	150	300
Union Steel Casting Co., Pittsburgh, Pa.	.....do.....	Metal chippers.....	Working conditions.....	Unclassified. Nearly all workers returned.	.....do.....	Nov. 22	65	-----
Barrymore-Wilton Rug Co., Philadelphia, Pa.	.....do.....	Rug weavers.....	Wages cut of 15 to 20 per cent	Adjusted. 10 per cent restored to night shift; 3 to 5 per cent restored to other classes.	.....do.....	Nov. 27	150	100
Denbigh Hall Apartments, Wilmington, Del.	.....do.....	Painters.....	Objection to action of foreman relative to clearance cards.	Adjusted. Satisfactorily arranged.....	Nov. 17	Nov. 30	20	-----
Compressed-air and subway workers, New York City.	.....do.....	Underground workers.	Asked \$10 per day for drillers; \$6.50 for common laborers; 8-hour day.	Pending.....	Nov. 13		800	20,000
Millinery workers, Chicago, Ill.	Lockout.....	Millinery workers.....	Dispute relative to open or closed shop.	.....do.....	Nov. 15		1,500	-----
Hudson Coal Co., Parsons, Pa.	Strike.....	Miners.....	Payment of union dues.....	Adjusted. Strike called off and operations resumed.	.....do.....	Nov. 20	415	10
West Park Silk Mill, Scranton, Pa.	.....do.....	Textile workers	Alleged discharges for union affiliation.	Adjusted. Day workers did not strike. Others returned.	Nov. 19	Nov. 27	15	-----
William B. Kessler, Hammonton, N. J.	.....do.....	Clothing workers.....	Asked recognition of Amalgamated Clothing Workers' Union.	Unclassified. Recognition granted before commissioner's arrival.	Nov. 12	Nov. 16	550	-----
Commission merchants, Newark, N. J.	.....do.....	Teamsters.....	Owners violated agreement	Pending.....	Nov. 21		50	-----
Total.....							8,739	24,651

¹ Not reported.

Work of United States Board of Mediation, 1928-29

THE United States Board of Mediation was established by the railway labor act of May 20, 1926, as an independent Government agency to handle labor disputes which the carriers and their employees had been unable to settle. The annual report of the board for the fiscal year ended June 30, 1929, shows that in this period the board acted upon 129 cases. Forty-six were settled through mediation, 10 were submitted to arbitration, 37 were withdrawn through mediation, 6 were withdrawn without mediation consideration, and 30 were closed by action of the board. Nine of the ten cases submitted to arbitration had been concluded by the end of the year. Up to June 30, 1929, 428 cases involving rates of pay, rules, and working conditions had been submitted to the board and 385 had been settled. Of the 43 cases which remained unsettled, 41 had been assigned for mediation.

During the year the board received 37 applications for its services in the adjustment of grievances which had not been decided by the appropriate adjustment boards by which they had been considered. Of 69 such cases which had been received by the board since its creation, 45 had been disposed of in the year ended June 30, 1929.

The accompanying table shows the number of cases handled during the year for each specified class of workers, and the number of workers involved.

MEDIATION AND ARBITRATION CASES, AND NUMBER OF WORKERS INVOLVED, UNDER RAILWAY LABOR ACT, JULY 1, 1928, TO JUNE 30, 1929

Class of employees	Number of cases	Number of employees involved	Class of employees	Number of cases	Number of employees involved
Automobile mechanics.....	1	500	Marine employees.....	1	150
Brakemen.....	3	479	Marine engineers.....	1	265
Clerical workers.....	22	163,734	Masters, mates, and pilots.....	4	765
Conductors.....	1	197	Pullman porters.....	1	10,865
Conductors, dining-car.....	1	103	Shop laborers.....	1	1,000
Cooks, waiters, and pantrymen.....	1	1,100	Shopmen.....	8	24,704
Dock laborers.....	1	160	Signalmen.....	10	1,402
Electrical workers.....	1	418	Station, tower, and telegraph service.....	14	8,210
Engine service.....	2	485	Steam and electrical engineers.....	1	10
Engine and train service.....	4	336	Talleymen, truck loaders, and truckmen.....	1	100
Engine, train, and yard service.....	2	550	Teamsters and chauffeurs.....	2	475
Express workers.....	4	4,200	Track laborers.....	1	2,765
Hill trainmen.....	1	300	Train dispatchers.....	17	1,349
Lighter captains.....	8	1,200	Train service.....	4	46,423
Longshoremen.....	1	100	Yardmasters.....	2	152
Machinists and helpers.....	1	31			
Maintenance of way employees.....	7	48,104			

The favorable influence of the railway labor act in establishing better industrial relations on the railroads of the country is pointed out by the board in the following statement, quoted from its report:

It is the opinion of the Board of Mediation that the industrial relations between the employees and carriers comprehended in the railway labor act are marked by manifestations of good feeling, respect, and interest on the part of all those connected therewith. The common aim appears to be a desire to work out problems on the basis of promptness and fairness. There seems to be no outstanding

evidence of the injection of industrial or commercial politics in the transaction of business between employees and employers so far as our board through its participation is able to observe.

Many of the questions arising are, of course, difficult of settlement, but this is not unlike situations noticeable in commercial transactions generally. Whereas employees and carriers may have appeared in the past to consider industrial relations on railroads as a thing apart from relations in other industrial lines and so impossible of comparability, there are abundant evidences to-day of the recognition of underlying principles, human and economic, which should and do bear on such relationship in railroads as well as elsewhere.

Every commercial activity has its own peculiar and specific characteristics and problems. Such have to be adjusted ultimately with a recognition of the particular features of each and every commercial line of endeavor, whether the industry affected is textile, mechanical, mercantile, or connected with transportation. In each succeeding year of the three years during which the railway labor act has been in force the Board of Mediation has noticed a constant and cumulative broadening of viewpoint as reflected by those representing the interests of employees and employers who come under the administration of the law.

We feel that there is substantial warrant for an acknowledgment of a fulfillment in large measure up to this time of the prophecies and assurances made by the proponents of the railway labor act in their utterances to the public and to the Congress of the United States as affecting the consideration and passage of the Watson-Parker bill, i. e., the railway labor act. Never in the history of our country has railway transportation been more harmoniously performed and conducted than now and never before so efficiently in the interest of everybody.

CARE OF THE AGED

Care of the Aged in the United States

THE care of superannuates by means of either pensions or homes for the aged forms the subject of a report just issued by the Bureau of Labor Statistics as Bulletin No. 489.¹

Homes for Aged

THE bureau obtained data regarding 1,037 homes which are caring for old people. These included 9 homes for soldiers or sailors, operated by the Federal Government, 46 homes run by individual States, 102 supported by fraternal organizations, 444 maintained by religious organizations, 38 run by organizations of various sorts, 33 run by groups of particular nationalities, 5 trade-union homes, and 360 homes supported by the philanthropy of individual citizens of the community or by money left under the terms of a will. These 1,037 homes for which data were obtained were caring for 68,659 persons, at an annual cost of \$26,306,477.

On the basis of the homes reporting it is estimated that homes for the aged in this country have facilities for caring for some 80,000 persons. This number does not include persons cared for in almshouses, a study of which in 1923 and 1924 showed a resident population therein of 85,889 and an annual disbursement of \$28,740,535.

Although most of the data were gathered by correspondence, personal visits were made to 151 homes.

The study showed that, in general, homes for the aged are most numerous in industrial sections and least numerous in the agricultural parts of the country. Some of the homes have been in existence a long time. Three were found which were established more than 100 years ago, and more than a fifth of the total number have been in existence half a century or more.

Not everyone is eligible to these homes: 59 take only men, 328 take only women, 39 take individuals of both sexes, and 608 take both sexes and married couples as well. Also, membership in the group which is supporting the home is often a requisite. Thus, the homes of trade-unions and fraternal organizations take only members of the organization; church homes usually require membership in the denomination. Residence requirements are common among the homes supported by contributions from the community. In cases where the home is supported by the proceeds of a legacy, the applicant must fill the membership requirements laid down in the will of the founder. Age requirements are also common, 60 and 65 years being the most usual ages below which admission is denied.

¹ Preliminary data from this study have been given in previous issues of the Labor Review during 1929 as follows: March (pp. 1 and 12), April (pp. 1 and 7), May (p. 92), July (p. 1), August (p. 10), and September (p. 1).

In most instances the home contracts, for a flat sum, usually of \$300 or \$500, to care for the inmate for the remainder of his life, whether this be 1 year or 20 years. For this sum the resident receives board, lodging, and laundry, in the majority of cases nursing and medical care, in some instances an allowance for "pin money," and also in some cases burial in the home's burial plot.

Each incoming resident is accepted on probation for a period of from three to six months. At the end of that time, if still acceptable, the inmate becomes a life member of the home. If, however, the applicant is found not to be congenial, or is a trouble maker, or is for any other reason considered undesirable, he is dismissed and his entrance fee returned, minus a small weekly charge for board and room during the period of probation.

Once accepted, the inmate becomes eligible to all the privileges of the home. All life residents are treated alike regardless of the amount turned over to the home at time of admission, the only exception being that those who had property in excess of the admission fee often receive interest on the excess.

The guests are usually free to go and come as they please during the day, though for safety's sake they are often required to return by a fixed time at night. Some of the homes have specified days and hours for the reception of visitors but most of them are very lenient in this respect. It is also a general practice to permit guests to go away for extended visits to friends and relatives, their places being reserved for them during their absence.

The homes are usually run by a board of directors which has full powers, in most cases through committees. Actual management is in the hands of the matron, and she holds the most important position in the home, from the point of view of the inmates. It was found that, as a group, the matrons were of a type above the average, being in a number of cases women of superior ability. The exceptions were so infrequent as to be noticeable for that very reason. Study of the homes leads to the conclusion that while the existence of a good, live house committee of the board of directors is very important, to a very much greater degree the success of the home and the happiness of the residents depend upon the personality and ability of the matron. The physical and mental well-being of the residents are in her hands. It was therefore interesting to find that in the great majority of the homes visited the matron had succeeded in making the scene of her endeavors a real home.

Old-Age Pensions

EARLIER studies of the bureau have dealt with the subjects of retirement systems for public employees (Federal, State, and municipal employees, teachers, policemen, firemen, etc.), and pension plans for employees in private industry. Summary data concerning these were included in the present report, as well as new data on public old-age pensions in the United States, and on pension plans for ministers of various denominations.

There are in this country many systems of retirement for superannuates. Members of the military services of the United States receive pensions from the Federal Government, and employees

in the United States Civil Service have a contributory annuity system of retirement. In six States private citizens who are in need may receive an old-age pension, and State and municipal employees are quite generally provided for by retirement systems. Teachers form a class of public employees widely provided for, as also do police and firemen. Also, teachers in universities and colleges may benefit under the retirement fund of the Carnegie Institution.

Certain private agencies have made provision for their aged employees. Pensions for superannuated clergymen are increasingly prevalent. Many private industrial employers, including the large railroads of the country, have adopted retirement plans of some sort. Even a few of the fraternal organizations and a small number of the trade-unions have pension plans.

To receive the annuity or pension, a certain age (usually 60 to 70 years) must have been reached, and a certain period of service or membership (generally from 25 to 30 years) in the organization is also required.

Retirement plans may be either contributory or noncontributory on the part of the beneficiary. The Federal military pensions are noncontributory, but the cost of the retirement system for Federal employees has been largely borne by the employees themselves. Eight² of the 10 States which provide old-age pensions for citizens who are in need have systems by which the adoption of the plan is optional with the individual counties and the whole cost is borne by them. In the other two instances, the State bears part of the cost (one-third in Wisconsin and one-half in California). All but 7 of the approximately 70 State and city retirement systems for public employees (including teachers, police, firemen, and others) require contributions from the employees. This is true also of the Carnegie Teachers' Insurance and Annuity Association plan. The cost of the trade-union pension plans is, of course, borne entirely by the membership, sometimes through the medium of a per capita tax for this particular purpose, sometimes from the general funds of the union, and sometimes (in those cases in which membership in the pension plan is optional) only by the members of the pension system. Industrial pension plans are divided as between the contributory and noncontributory types.

Under the pension plans studied by the Bureau of Labor Statistics annuities were being paid to 550,751 persons, of whom 468,471 were receiving Federal pensions, 15,555 were receiving pensions from individual States, 28,895 from municipalities, 922 from the Carnegie teachers' retirement fund, 11,306 from labor organizations, 14,806 from religious denominations, 152 from fraternal organizations, and 10,644 from private employers. Altogether the amounts spent for annuities in one year by these agencies was \$286,098,304.

² Colorado, Kentucky, Maryland, Minnesota, Montana, Nevada, Utah, and Wyoming.

Trade-Union Action on Old-Age Pensions in 1929

THE subject of provision for aged members by means of homes or old-age pensions continues to be of interest to labor organizations. Up to the close of 1928, 11 international unions had adopted an old-age pension plan for their members, while several others had some sort of old-age benefit.

The American Federation of Labor in its recent convention recommended the enactment of State old-age pension laws which would provide for a pension commission in every county and at least \$300 per annum for beneficiaries, the age of applicants to be set at 65. Trade-unions were, however, urged to be cautious in setting up their own systems of pensions, because of the great and increasing cost.

The subject of care of aged members came up in the convention of the Wood, Wire, and Metal Lathers' International Union, held in September, 1929. The pension as well as the advisability of establishing a home for superannuated members, had previously been the subject of study by the executive board of the organization. The board recommended to the congress that the pension be adopted, to be paid at the rate of \$1 per day to incapacitated members 65 years of age and over who had been in continuous good standing in the union for 25 years. The establishment of a home was thought to be impracticable at present, because of the cost.

The convention, however, rejected the plan submitted to it and voted that the whole matter should be submitted, by referendum vote, to the membership. It directed that the referendum be carried out during the month of December, 1929, all returns to be in by January 15, 1930, and that the pension plan if carried, go into effect not later than April 1, 1930.¹

Old-Age and Invalidity Insurance for Journalists in Yugoslavia

THE act of September 25, 1926, which came into effect on January 1, 1927, established a benefit fund for the insurance of journalists against old age and disability for work.²

The act applies to all persons permanently employed on newspapers as editors, reporters, or draftsmen and for whom such work constitutes the principal means of subsistence.

Contributions

THE employee's contributions to the benefit fund are based upon the years of service under the benefit scheme and are as follows: 2 per cent of the monthly salary for those with 1 to 10 years' service, 3 per cent for those with 10 to 20 years' service, and 4 per cent for those with 20 to 30 years' service; the maximum salary taken into account for the purpose of insurance is 5,000 dinars³ (\$90). This contribution is deducted from the salary each month. The newspaper proprietor contributes a similar amount for each journalist employed

¹ Wood, Wire and Metal Lathers' International Union. Proceedings of the sixteenth convention, held at St. Louis, Mo., September, 1929, pp. 57, 58, 154-161.

² International Labor Office, Legislative Series, 1926, SCS. 1.

³ Exchange rate of dinar in October, 1929=1.8 cents (at par, 19.3 cents).

by him, a month in advance; he is thus responsible for the contributions of both the journalist and himself. An annual subsidy is made to the fund by the State.

Until January 1, 1932, the contributions and subsidy are being utilized to constitute an inalienable capital sum, into which the following are also being paid: The benefit funds of the Yugoslavic Journalists' Association and a certain amount of its annual net income, all endowments, donations, and gifts to the insurance fund, the profits from entertainments organized by journalists or other persons for the benefit of the fund, and the interest on the inalienable capital.

Benefits

FULL benefits will not be paid until after the expiration of the 5-year transitional period, January 1, 1932, even in cases where the journalist has completed 30 years' service as a journalist. If a journalist is obliged during this period to leave his occupation on account of serious illness and to retire or accept an invalidity grant, he will receive, up to 1932, not to exceed 1,200 dinars (\$21.60) a month; in case of his death during this period, his widow and children receive not to exceed 800 dinars (\$14.40) a month.

Superannuation benefits.—On the expiration of 10 years' employment as a journalist, under the insurance scheme, the insured is entitled to a benefit equal to 40 per cent of the salary on which he has made contributions to the insurance fund, the sum of 5,000 dinars (\$90) being taken as the maximum amount for the purpose of insurance. Thereafter, for each additional year of service the benefit is to be increased by 3 per cent of the salary so that after 30 years' service he receives the maximum benefit, not to exceed 5,000 dinars (\$90). The full benefit is to be calculated on the average salary during the last 10 years of service preceding retirement, except in cases in which the salary has remained unchanged during the last five years, in which case the insured is entitled to a full benefit of the same amount.

A journalist may retire after 30 years' service in journalistic employment, his twenty-fourth birthday being reckoned as the initial date, but he is not compelled to do so. He receives no benefit before his retirement.

Incalidity benefits.—For invalidity during the first 10 years of service the benefits are based upon the degree of disability for work, the payments amounting to one-third, two-thirds, or the whole amount of the salary received on the initial date of the disability. For invalidity during the tenth to the thirtieth year of service, the benefit likewise varies according to the degree of disability for work, but in addition the insured receives half the benefit to which he is entitled by reason of his length of service and the amount of his salary. For total disability incurred during the course of the employment, the journalist is entitled to an invalidity grant equal to his full salary, up to the amount of 5,000 dinars (\$90), as are also the dependents of a journalist who dies in the performance of his duties, irrespective of the length of his membership in the insurance fund.

Benefits for dependents.—A married beneficiary receives a supplementary grant of 20 per cent of the benefit in respect of his wife and 5 per cent in respect of each child.

The widow of a journalist still in employment at the time of his death receives a benefit equal to the retirement allowance to which he would have been entitled and each of his children receives an amount equal to 5 per cent of such benefit. The widow of a journalist who was receiving benefit is entitled to one-half of his benefit, and his children to 5 per cent of such benefit until they attain the age of 21 years, unless other provision is made for them earlier. A widow loses her right to benefit on remarriage, but in commutation thereof receives a sum equal to three times the annual benefit to which she would have been entitled if she had not remarried. The children continue to receive the supplementary grant even if their mother remarries.

Administration

THE journalists' insurance fund is an independent organization under the supervision of the Ministry of Social Affairs. It is managed by a committee consisting of three members of the Yugoslavic Journalists' Association, three members of the Newspaper Proprietors' Association, and a representative of the Ministry of Social Affairs; a member of the Yugoslav Skupshtina (Parliament), elected by the committee, will act as chairman. The conduct of the business is intrusted to a director appointed by the committee.

LABOR AGREEMENTS, AWARDS, AND DECISIONS

Awards and Decisions

Railway Clerks on New York, Chicago & St. Louis Railroad

ON June 8, 1929, the New York, Chicago & St. Louis Railroad Co. and the employees in clerical and station service of the Nickel Plate district and Lake Erie & Western district, members of the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, entered into an agreement in conformity with the provisions of the railway labor act to submit their wage dispute to the decision of a board of arbitration.

The employees had requested a flat increase of 8 cents per hour for all classes of employees affected.

The board of arbitration consisting of A. D. Peters, selected by the carrier; H. F. Baldwin, selected by the employees; and Arthur M. Millard, appointed by the United States Board of Mediation, made its award on November 13, 1929. On the basis of pay in effect October 31, 1929, the rates of certain groups of employees under the Interstate Commerce Commission are increased as follows:

Employees in—	Per cent of increase
Group 8-----	6
Group 9-----	4
Group 10-----	5½
Groups 11, 13, 14, 18, 33, 86, 100, and 101-----	5
Groups 105 and 106-----	6

The award continues:

6. No change is to be made in the rates of pay for the classes of employees represented in this hearing coming within groups other than as above designated.

7. It is understood that the percentage rates of increases provided for in this award shall be applied to all piecework and tonnage rates in effect on October 31, 1929.

8. The provisions of this award shall become effective on November 1, 1929, and shall continue in force for a period of 1 year from the effective date thereof, and thereafter be subject to 30 days' notice by or to the carrier, party of the first part.

Agreements

Collective Agreements in France in 1928

THE number of the collective labor agreements reported to the French Labor Bureau in 1928 is given in the Bulletin du Ministère du Travail for April-June, 1929 (pp. 147, 148). The agreements, of which there were 99, were divided among the different industries as follows: Agriculture, 13; food, 6; building, 11; wood and

furniture, 7; hides and skins, 1; polygraphic industries, 11; metal works and mechanical construction, 6; mines and quarries, 2; stone and earth, 6; chemicals, 3; textiles and clothing, 14; transportation and warehousing, 15; and miscellaneous, 4.

The information furnished the labor office in regard to the circumstances giving rise to the agreements was incomplete, but in 44 cases it was stated the agreements were concluded as the result of a strike. The intervention of a third party was required in 54 cases, or more than half of the agreements. In four of these cases the Ministry of Labor appointed mediators, 24 cases were settled by labor inspectors, and the remainder by justices of the peace, prefects, mayors, etc.

Forty-four of the agreements were between trade-unions and employers' associations, and 24 between union workers and employers or groups of employers not belonging to an association. The majority of the agreements did not fix the duration of the agreement but provided that notice should be given of intention to break it. Of the agreements which specified the time during which they were to remain in effect, one each had a duration of 6, 8, and 9 months, 11 were to last 1 year, 3 for 2 years, 2 for 3 years, and 1 for 5 years.

In 22 cases the agreements specified the method of application of the 8-hour day; 63 established a minimum wage; 12, hourly wage rates and production bonuses; 15, overtime rates; 6, traveling expenses; 6, family allowances; 5 each, regulation of vacations and notification of dismissal; 6, apprenticeship; and 1, night work. Twenty agreements established bonuses varying according to the official cost-of-living figures and 10 agreements established joint commissions for the settlement of any disputes arising from application of the agreement.

HOUSING

Building Permits in Principal Cities, November, 1929

DATA are shown below for building permits issued during November in 285 cities of the United States having a population of 25,000 and over. Comparative figures for October are also given. This information is obtained from the local building officials in the different cities. The States of New Jersey, New York, Massachusetts, Illinois, and Pennsylvania, through their departments of labor, are cooperating in this work.

The cost figures as shown in these tables are for the cost of the buildings only. No land costs are included. Permits are issued only for buildings to be erected in the corporate limits of each city.

Table 1 shows the total estimated cost of new residential buildings, new nonresidential buildings, total building operations (including alterations and repairs), and families provided for in new buildings, by districts, as shown by permits issued, together with the percentage of increase or decrease in November as compared with October.

TABLE 1.—ESTIMATED COST OF NEW RESIDENTIAL BUILDINGS, NEW NONRESIDENTIAL BUILDINGS, AND TOTAL BUILDING OPERATIONS IN CITIES OF THE UNITED STATES HAVING A POPULATION OF 25,000 OR OVER, BY GEOGRAPHICAL DIVISIONS

Geographical division	New residential buildings				New nonresidential buildings, estimated cost		Total construction (including alterations and repairs), estimated cost	
	Estimated cost		Families provided for in new dwelling houses		October, 1929	November, 1929	October, 1929	November, 1929
	October, 1929	November, 1929	October, 1929	November, 1929				
New England.....	\$7,408,950	\$4,999,860	797	709	\$7,280,162	\$3,644,963	\$18,332,665	\$10,674,991
Middle Atlantic.....	25,374,951	19,797,531	2,875	2,840	41,945,605	40,946,215	77,900,417	74,181,288
East North Central.....	19,661,592	12,617,795	3,498	2,293	32,996,317	26,773,715	61,585,141	43,197,808
West North Central.....	2,680,195	1,910,075	742	539	1,993,519	2,448,675	6,623,841	5,991,742
South Atlantic.....	3,505,689	2,603,917	710	595	5,658,832	2,662,304	11,906,193	7,499,336
South Central.....	2,427,549	1,598,509	850	614	3,520,278	2,098,017	6,858,439	4,362,387
Mountain and Pacific.....	9,559,861	7,790,490	2,813	2,279	9,658,814	7,036,491	22,336,825	17,350,448
Total.....	70,618,787	51,318,177	12,285	9,869	103,053,527	85,610,380	205,543,521	163,258,000
Per cent of change.....	-----	-27.3	-----	-19.7	-----	-16.9	-----	-20.6

In the 285 cities from which reports were received for both October and November there was a decrease of 20.6 per cent in indicated expenditures. The estimated cost of the buildings for which permits were issued in these cities in October was \$205,543,521, compared with \$163,258,000 in November. Residential buildings decreased 27.3 per cent in estimated expenditures, comparing November

permits with October permits, and new nonresidential buildings decreased 16.9 per cent.

Families to be provided for in the new dwellings for which permits were issued decreased 19.7 per cent, comparing November with October. In these 285 cities 12,285 family units are provided in the new buildings for which permits were issued in October and 9,869 family units in the new buildings for which permits were issued in November.

Table 2 shows the estimated cost of new residential buildings, new nonresidential buildings, total building operations (including alteration and repairs), and the number of families provided for in new dwellings in each of the 285 cities from which reports were received for both October and November.

Totals and percentages of increase or decrease in expenditures for each class of building and in the number of families provided for are shown by geographical divisions.

Reports were received for both October and November from 48 cities in New England, 66 cities in the Middle Atlantic States, 69 cities in the East North Central States, 23 cities in the West North Central States, 31 cities in the South Atlantic States, 20 cities in the South Central States, and 28 cities in the Mountain and Pacific States.

New England States

PERMITS issued in the New England States during November indicate a falling off of 41.8 per cent in estimated expenditures for all building operations as compared with permits issued during October. Indicated expenditures for both new residential buildings and new nonresidential buildings decreased, comparing November with October. The decrease in the former class of building was 32.5 per cent and in the latter 49.9 per cent. The number of new family dwelling units as provided for by permits issued in November decreased 11.1 per cent as compared with those issued in October. There was a decrease in indicated expenditures for total building operations in Boston, but increases in both Hartford and Providence.

Reports were received from all New England cities except Bangor, Me.

Middle Atlantic States

IN THE Middle Atlantic States more building was projected as compared with October than in any other division. There was a decrease in this division of only 4.8 per cent in total building operations, comparing November with October. New residential building decreased 22 per cent, new nonresidential building 2.4 per cent, and families provided for 1.2 per cent.

There was an increase in building operations in two boroughs of greater New York and a decrease in three boroughs. The increases occurred in Brooklyn and the Bronx, and the decreases in Manhattan, Queens, and Richmond. Philadelphia and Pittsburgh both showed slight increases in indicated expenditures for building operations.

No reports were received from Chester, Harrisburg, Lebanon, Reading, or Wilkes-Barre, Pa.

East North Central States

As in the New England and Middle Atlantic division, the East North Central Division showed decreases for all classes of building operations and in families provided for in November as compared with October.

The decrease in indicated expenditures for total building operations was 29.9 per cent; in new residential building operations 35.8 per cent; and in new nonresidential building operations 18.9 per cent. New family housing units decreased 34.5 per cent, according to permits issued in November as compared with those issued in October.

Large decreases in indicated expenditures were shown in Chicago, Cleveland, Detroit, and Cincinnati.

No reports were received from Anderson, Fort Wayne, and South Bend, Ind.; Battle Creek, Mich.; Lorain and Zanesville, Ohio.

West North Central States

IN THE West North Central division there was a decrease of 28.7 per cent in indicated expenditures for new residential buildings, but an increase of 22.8 per cent in indicated expenditures for new nonresidential buildings, comparing November permits with October permits. Total building operations declined 9.5 per cent and families provided for 27.4 per cent.

Increases were shown in total building operations in St. Louis, St. Paul, and Minneapolis.

Kansas City, Mo., was the only city in this district failing to report.

South Atlantic States

DECREASE in indicated expenditures for building operations in the South Atlantic division, comparing November permits with October permits, were as follows: New residential buildings, 25.7 per cent; new nonresidential buildings, 53 per cent; total building operations, 37 per cent; family housing units, 16.2 per cent.

There were large decreases in Washington, Richmond, and Atlanta. Baltimore showed an increase, in comparing November with October estimated expenditures.

No reports were received from Pensacola, Fla., Augusta and Savannah, Ga.; Wilmington, N. C.; and Spartanburg, S. C.

South Central States

THE South Central division showed decreases in indicated expenditures in each class of building operations and for families provided for. Permits issued during November indicate an expenditure of 36.4 per cent less in total building operations than the October permits indicated in this district. The November permits issued for new residential buildings show a decrease of 34.2 per cent compared with the October permits. New nonresidential buildings decreased 40.4 per cent in estimated expenditures, comparing November with October. During the same period there was a decrease of 27.8 per cent in families provided for in new buildings.

There was a decline in the estimated cost of all building operations according to permits issued in New Orleans, Dallas, Tulsa, Fort Worth, and San Antonio.

No reports were received from Fort Smith and Little Rock, Ark.; Covington and Louisville, Ky.; Baton Rouge, La.; Oklahoma City and Okmulgee, Okla.; Chattanooga and Nashville, Tenn.; El Paso, Galveston, Houston, and Laredo, Tex.

Mountain and Pacific States

THERE was a decrease of 18.5 per cent in new residential building in the Mountain and Pacific division, comparing November with October. Families provided for decreased 19 per cent. New non-residential buildings showed a decrease of 27.2 per cent, and the total of all buildings for which permits were issued decreased 22.3 per cent.

Decreases were shown in practically all the cities of this district. Permits issued in Berkeley and Seattle, however, indicate a slight increase in total expenditure for all building operations, comparing November with October.

Schedules were received from all of the 28 cities in this district which have a population of 25,000 or over.

TABLE 2.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1929

New England States

City and State	New residential buildings				New nonresidential buildings, estimated cost		Total buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings		October, 1929	November, 1929	October, 1929	November, 1929
	October, 1929	November, 1929	October, 1929	November, 1929				
Connecticut:								
Bridgeport.....	\$88,400	\$116,600	22	26	\$15,219	\$225,155	\$204,133	\$413,500
Greenwich.....	900,000	345,500	41	19	90,635	89,380	1,023,870	483,385
Hartford.....	40,400	173,100	4	15	51,794	935,843	425,613	1,274,608
Meriden.....	82,000	43,250	10	8	18,610	11,185	112,015	107,290
New Britain.....	86,800	57,500	12	10	19,015	11,560	131,660	96,541
New Haven.....	33,500	940,000	7	7	3,096,400	367,250	3,376,255	1,345,675
New London.....	51,000	50,500	5	5	304,300	14,200	359,910	82,775
Norwalk.....	75,000	96,500	13	14	70,300	31,500	176,330	144,525
Stamford.....	110,000	89,700	16	12	102,790	228,445	252,940	342,720
Waterbury.....	97,000	61,000	15	12	48,800	91,900	217,950	173,900
Maine:								
Lewiston.....	19,000	6,000	3	1	1,800	3,500	30,300	9,500
Portland.....	84,200	50,700	17	11	111,439	7,775	267,141	149,335
Massachusetts:								
Boston.....	859,500	382,300	113	86	1,115,430	209,680	3,054,558	952,358
Brookton.....	63,000	35,800	10	6	40,015	6,755	132,645	58,370
Brookline.....	442,500	88,000	14	6	18,175	24,520	498,300	136,385
Cambridge.....	1,533,500	47,000	6	2	48,430	41,590	1,746,367	133,545
Chelsea.....	0	0	0	0	77,950	11,500	97,020	14,020
Chicopee.....	20,000	6,500	5	2	35,650	57,100	68,350	67,750
Everett.....	17,000	11,000	5	3	205,125	13,300	271,325	34,000
Fall River.....	34,400	0	9	0	13,625	12,050	57,635	18,815
Fitchburg.....	15,500	6,500	2	1	9,745	3,750	28,550	10,775
Haverhill.....	22,700	6,500	7	2	6,445	6,795	51,525	25,095
Holyoke.....	45,400	0	6	0	6,500	1,100	138,675	26,970
Lawrence.....	19,500	8,000	7	2	16,275	2,750	138,340	21,700
Lowell.....	15,300	4,400	4	1	5,185	8,615	35,795	22,180
Lynn.....	79,000	65,900	17	13	51,860	8,960	211,630	103,370

TABLE 2.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1929—Continued

New England States—Continued

City and State	New residential buildings				New nonresidential buildings, estimated cost		Total buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings					
	October, 1929	November, 1929	October, 1929	November, 1929	October, 1929	November, 1929	October, 1929	November, 1929
Massachusetts—Con.								
Malden	\$41,000	\$78,000	8	24	\$43,253	\$75,555	\$141,506	\$160,655
Medford	102,500	108,600	23	18	40,790	22,525	150,690	149,255
New Bedford	0	0	0	0	10,775	108,775	53,225	122,525
Newton	421,000	300,500	40	29	103,187	60,340	568,627	408,863
Pittsfield	112,500	119,500	18	23	56,350	15,375	181,205	185,550
Quincy	211,800	182,900	18	48	24,855	26,140	163,382	219,353
Revere	21,200	17,500	7	4	2,825	1,600	49,780	30,700
Salem	25,800	72,500	6	18	19,970	15,040	133,595	133,295
Somerville	20,000	22,000	4	5	12,595	15,735	45,778	81,965
Springfield	50,300	151,400	11	32	64,520	304,450	226,405	509,495
Taunton	18,000	7,000	4	2	50,391	15,055	87,246	31,740
Waltham	123,800	29,000	30	5	118,250	22,510	259,400	60,960
Watertown	112,000	82,500	23	18	9,600	16,550	128,050	138,100
Worcester	210,000	167,050	42	24	264,834	100,925	642,919	394,825
New Hampshire:								
Manchester	33,350	23,250	8	6	9,117	9,485	54,619	43,786
Rhode Island:								
Central Falls	31,500	43,200	10	15	9,450	4,575	102,550	48,025
Cranston	242,700	150,400	54	35	53,538	14,965	306,388	173,565
East Providence	145,500	54,800	27	11	47,635	157,400	213,608	223,907
Newport	312,000	115,000	4	3	237,000	6,800	557,550	128,460
Pawtucket	102,800	117,600	26	28	56,350	62,130	186,975	184,255
Providence	327,600	457,400	62	96	419,250	145,950	934,000	958,200
Woonsocket	9,000	7,500	2	1	7,860	16,925	36,335	38,125
Total	7,408,950	4,999,860	797	709	7,280,162	3,644,963	18,332,665	10,674,991
Per cent of change		-32.5		-11.1		-49.9		-41.8

Middle Atlantic States

New Jersey:								
Atlantic City	\$1,353,185	\$40,000	13	0	\$29,500	\$36,700	\$1,480,191	\$258,994
Bayonne	4,000	12,500	1	3	296,300	9,650	308,150	31,450
Bloomfield	56,700	94,000	12	19	159,925	18,000	223,185	114,000
Camden	74,700	77,700	20	36	68,470	72,455	271,091	248,118
Clifton	156,000	130,200	36	24	57,430	19,650	227,665	153,500
East Orange	354,500	28,500	75	5	25,820	153,245	421,284	202,525
Elizabeth	166,000	81,000	33	14	38,200	252,000	204,200	333,000
Hoboken	0	0	0	0	0	0	20,666	53,065
Irvington	67,000	28,000	14	6	15,910	12,840	101,425	51,190
Jersey City	240,500	25,000	55	3	256,390	193,815	613,990	244,915
Kearny	51,500	87,000	12	22	14,735	37,950	69,784	128,485
Montclair	94,500	43,000	8	4	41,296	12,343	157,261	90,603
Newark	314,100	107,120	55	13	346,407	2,191,735	1,063,125	2,978,184
New Brunswick	* 37,800	260,000	7	6	13,700	9,800	75,915	280,975
Orange	80,000	225,000	5	54	11,925	4,850	134,075	256,858
Passaic	38,000	343,500	5	3	1,705,725	37,700	1,777,887	407,989
Paterson	261,600	66,550	77	18	110,749	44,182	479,794	169,637
Perth Amboy	15,500	12,500	4	2	109,370	94,123	165,220	134,048
Plainfield	131,000	36,188	15	6	5,300	5,600	174,758	65,246
Trenton	14,500	14,500	3	3	77,728	65,728	121,486	121,786
Union City	121,000	6,500	42	2	38,700	0	181,155	25,100
West New York	11,000	9,550	2	2	46,500	10,900	69,140	59,965
New York:								
Albany	325,000	118,000	25	14	147,450	12,607	552,240	235,859
Amsterdam	40,000	15,200	4	2	6,800	12,200	49,300	28,900
Auburn	29,000	23,700	5	6	9,600	183,560	59,745	214,240
Binghamton	115,300	27,700	17	8	210,198	41,598	364,104	104,882
Buffalo	469,500	448,000	114	129	1,754,258	766,710	2,315,023	1,357,805
Elmira	0	31,100	0	5	32,950	4,555	44,154	43,972
Jamestown	76,650	35,000	18	8	54,810	104,700	197,770	149,155
Kingston	127,400	9,200	4	4	5,540	5,850	291,575	28,080

TABLE 2.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1929—Continued

Middle Atlantic States—Continued

City and State	New residential buildings				New nonresidential buildings, estimated cost		Total buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings		October, 1929	November, 1929	October, 1929	November, 1929
	October, 1929	November, 1929	October, 1929	November, 1929				
New York—Contd.								
Mount Vernon	\$169,000	\$35,000	16	1	\$130,225	\$39,200	\$833,400	\$92,250
Newburgh	12,000	6,000	2	1	21,050	62,850	39,050	81,050
New Rochelle	176,500	156,400	15	11	368,019	64,393	656,544	259,478
New York City								
Bronx	996,100	924,500	188	200	951,375	5,656,770	2,311,920	6,901,080
Brooklyn	3,453,950	977,100	420	197	2,471,985	7,056,745	6,841,765	8,862,685
Manhattan	9,093,000	9,125,000	362	765	19,465,950	11,323,965	31,216,015	28,293,825
Queens	1,929,500	2,409,050	405	601	1,616,353	1,688,949	5,340,473	4,416,004
Richmond	497,200	196,300	68	38	1,149,560	107,030	1,734,682	363,114
Niagara Falls	300,000	47,800	30	12	477,671	163,606	877,001	256,629
Poughkeepsie	120,550	11,500	8	2	1,100	59,150	167,170	72,900
Rochester	212,725	399,200	32	18	642,479	182,250	986,799	698,805
Schenectady	200,300	72,500	26	15	34,500	62,800	256,050	171,525
Syracuse	216,600	334,300	46	67	272,960	109,645	615,865	777,835
Troy	64,300	38,500	10	7	4,919	60,050	95,422	135,749
Utica	47,300	80,000	8	12	35,100	88,300	244,600	272,000
Watertown	23,700	3,500	6	1	9,675	75,745	44,959	105,757
White Plains	126,000	104,000	12	11	100,375	188,200	256,345	325,375
Yonkers	185,800	628,500	35	80	183,820	509,888	444,864	1,371,063
Pennsylvania:								
Allentown	155,500	95,500	25	17	46,525	117,900	242,797	234,699
Altoona	46,450	47,400	10	10	31,804	14,973	116,700	74,847
Bethlehem	40,500	3,500	6	1	366,275	11,410	462,235	17,205
Butler	16,000	5,000	5	1	104,900	2,750	122,100	10,950
Easton	34,050	8,600	5	1	7,648	6,800	59,323	21,077
Erie	140,350	145,750	23	58	134,155	40,150	300,505	207,035
Hazleton	12,500	0	1	0	7,420	2,687	26,757	9,463
Johnstown	31,100	15,300	5	2	12,050	36,510	102,815	82,935
Lancaster	139,000	30,000	30	6	8,250	3,575	188,410	67,825
McKeesport	130,100	77,800	18	10	30,810	6,195	187,347	94,750
New Castle	43,300	24,300	7	5	143,760	4,855	189,255	32,595
Norristown	20,000	61,000	4	11	14,380	25,819	61,740	142,651
Philadelphia	1,062,000	578,300	230	122	6,380,520	6,669,250	7,929,060	7,967,315
Pittsburgh	655,600	569,000	106	103	603,392	1,908,657	2,047,677	2,755,452
Scranton	40,075	21,550	10	5	93,805	140,425	438,372	176,225
Wilkinsport	47,375	36,000	7	6	8,000	3,150	62,400	73,160
Williamsport	75,091	80,675	6	19	8,848	15,427	94,663	137,256
York	35,500	12,500	7	3	13,811	21,100	89,979	45,798
Total	25,374,951	19,797,531	2,875	2,840	41,945,605	40,946,215	77,900,417	74,181,288
Per cent of change.		-22.0		-1.2		-2.4		-4.8

East North Central States

Illinois:								
Alton	\$34,872	\$10,000	8	4	\$19,165	\$175	\$85,809	\$17,575
Aurora	66,200	30,935	13	8	25,670	210,754	124,374	254,050
Belleville	55,400	50,000	13	11	144,215	87,375	205,665	137,375
Bloomington	66,000	82,000	10	9	50,500	5,300	127,500	87,300
Chicago	7,175,400	4,184,800	856	555	15,945,850	12,291,250	23,629,030	16,760,680
Cicero	51,000	154,200	7	21	54,420	7,710	119,930	167,075
Danville	40,300	12,600	9	3	97,750	64,000	146,050	84,100
Decatur	166,800	25,800	19	5	154,515	513,610	339,315	559,210
East St. Louis	89,800	64,700	27	19	123,110	17,475	231,185	85,061
Elgin	25,160	16,450	6	3	70,405	25,950	113,818	58,320
Evanston	268,000	91,000	20	8	35,750	39,000	371,000	167,500
Joliet	64,500	19,000	9	3	297,100	464,000	399,700	508,700
Moline	74,000	51,500	14	9	18,405	576,945	115,185	644,239
Oak Park	98,000	74,500	13	5	13,955	8,550	118,105	92,775
Peoria	182,600	368,960	38	32	423,130	20,060	605,730	415,275
Quincy	89,700	25,800	19	4	7,710	46,300	101,210	88,725
Rockford	254,800	142,500	70	42	48,985	45,500	359,460	235,910
Rock Island	44,400	94,300	16	39	11,155	120,629	441,044	326,418
Springfield	69,600	58,800	15	15	8,594	146,485	119,929	221,176

TABLE 2.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1929—Continued

East North Central States—Continued

City and State	New residential buildings				New nonresidential buildings, estimated cost		Total buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings		October, 1929	November, 1929	October, 1929	November, 1929
	October, 1929	November, 1929	October, 1929	November, 1929				
Indiana:								
Elkhart.....	\$35,250	\$15,100	11	4	\$34,493	\$3,515	\$95,759	\$34,121
Evansville.....	76,900	28,400	21	11	154,205	221,360	251,302	265,885
Gary.....	41,000	83,500	11	14	50,550	56,425	152,250	159,600
Hammond.....	80,000	72,000	18	15	131,100	185,300	301,500	299,300
Indianapolis.....	630,875	242,300	138	66	384,051	140,664	1,139,072	501,544
Kokomo.....	34,300	0	8	0	25,930	144,215	64,261	147,520
Marion.....	8,000	28,000	2	4	25,000	82,000	30,000	117,000
Muncie.....	15,317	11,621	7	4	20,035	20,340	69,242	51,962
Richmond.....	37,050	18,500	10	5	8,200	21,546	49,870	46,690
Terre Haute.....	35,500	18,500	4	3	15,590	2,060	59,070	22,876
Michigan:								
Bay City.....	16,500	14,000	1	5	3,760	32,500	41,410	64,736
Detroit.....	3,141,975	1,973,188	698	445	1,556,368	1,639,836	6,767,971	4,880,017
Flint.....	691,788	238,126	165	63	1,319,415	226,309	2,130,293	511,570
Grand Rapids.....	146,600	123,100	39	26	300,645	82,070	604,370	254,705
Hamtramck.....	6,000	27,000	2	6	5,925	16,675	38,550	43,675
Highland Park.....	0	0	0	0	73,340	49,090	99,790	64,145
Jackson.....	90,250	80,500	27	20	32,403	103,762	139,091	189,102
Kalamazoo.....	37,900	23,700	10	7	245,075	94,115	306,844	137,506
Lansing.....	103,100	97,900	26	21	745,295	921,118	995,195	1,033,848
Muskegon.....	40,200	42,950	14	13	39,590	141,770	119,523	196,005
Pontiac.....	109,575	51,700	37	20	556,210	63,931	723,895	124,786
Port Huron.....	3,600	3,000	2	1	2,000	132,000	7,550	135,550
Saginaw.....	133,750	92,480	29	8	18,688	157,811	181,463	277,329
Ohio:								
Akron.....	386,650	227,400	82	39	700,914	2,909,569	1,147,769	3,155,864
Ashtabula.....	0	13,000	0	2	35,955	2,285	41,010	19,185
Canton.....	168,650	129,100	31	12	71,548	9,172	258,233	157,897
Cincinnati.....	1,023,145	617,600	178	83	2,717,840	310,510	4,051,595	1,105,430
Cleveland.....	849,500	575,000	119	119	2,161,775	975,800	5,645,125	1,805,300
Columbus.....	316,100	237,900	60	37	820,700	282,150	1,316,250	562,700
Dayton.....	25,200	56,100	7	17	496,011	95,917	1,006,620	210,517
East Cleveland.....	0	192,000	0	15	128,047	15,300	157,642	216,335
Hamilton.....	42,750	50,550	10	15	509,894	3,475	581,728	57,360
Lakewood.....	50,500	61,600	12	7	10,560	437,770	71,775	505,805
Lima.....	4,200	0	2	0	3,300	2,055	20,150	9,250
Mansfield.....	52,200	94,900	11	12	2,725	0	63,525	103,650
Marion.....	10,100	3,000	4	1	7,500	22,055	17,600	25,255
Newark.....	34,400	14,000	11	5	11,375	11,510	49,050	28,485
Portsmouth.....	5,900	7,500	4	2	12,800	9,125	23,700	17,325
Springfield.....	22,400	12,400	8	7	4,330	12,625	34,980	36,830
Stuebenville.....	43,400	40,700	14	11	17,700	2,550	65,050	44,900
Toledo.....	189,400	92,950	55	25	535,421	377,190	915,646	520,120
Warren.....	155,350	39,400	47	13	138,165	56,725	328,905	98,415
Youngstown.....	(1)	² 1,355,800	(1)	² 36	(1)	² 125,615	(1)	² 1,493,335
Wisconsin:								
Fond du Lac.....	13,700	27,000	3	3	7,705	5,120	36,380	33,270
Green Bay.....	86,300	48,100	16	18	41,720	27,000	137,843	90,080
Kenosha.....	112,135	118,985	19	22	48,925	110,162	178,445	268,713
Milwaukee.....	1,164,600	623,000	232	159	787,206	1,819,735	2,320,848	2,918,297
Oshkosh.....	22,000	28,200	22	9	31,574	9,185	56,175	41,819
Racine.....	348,950	283,200	65	66	106,944	30,810	493,471	336,430
Sheboygan.....	72,700	58,000	17	11	27,111	4,360	118,815	69,970
Superior.....	29,900	122,800	7	27	272,320	2,080	324,889	287,670
Total.....	19,661,592	12,617,795	3,498	2,293	32,996,317	26,773,715	61,585,141	43,197,808
Per cent of change.....		-35.8		-34.5		-18.9		-29.9

¹ Not reported.² Not included in total.

TABLE 2.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1929—Continued

West North Central States

City and State	New residential buildings				New nonresidential buildings, estimated cost		Total buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings		October, 1929	November, 1929	October, 1929	November, 1929
	October, 1929	November, 1929	October, 1929	November, 1929				
Iowa:								
Burlington.....	\$24,500	\$2,400	7	1	\$7,775	\$15,650	\$35,163	\$18,150
Cedar Rapids.....	18,550	28,800	6	7	162,500	20,665	209,813	72,323
Council Bluffs.....	21,000	10,000	6	3	13,600	5,500	61,600	24,800
Davenport.....	90,700	49,400	19	12	170,095	29,160	283,085	89,875
Des Moines.....	142,800	51,000	25	12	46,137	131,582	205,408	253,947
Dubuque.....	27,950	3,000	10	1	105,890	1,255	146,283	15,431
Ottumwa.....	24,000	0	4	0	7,000	0	31,000	5,000
Sioux City.....	44,400	41,700	14	14	27,360	147,895	117,510	190,895
Waterloo.....	60,500	26,000	22	8	33,460	7,075	105,160	44,225
Kansas:								
Hutchinson.....	61,805	38,200	22	11	6,605	447,735	68,750	489,240
Kansas City.....	32,100	43,100	16	16	15,198	117,865	55,203	167,465
Topeka.....	71,800	21,700	14	6	75,605	23,114	188,525	49,989
Wichita.....	375,275	172,350	147	64	80,540	50,543	509,145	253,999
Minnesota:								
Duluth.....	50,800	28,000	9	7	109,570	6,795	187,418	96,382
Springfield.....	472,595	481,235	122	116	225,330	320,760	1,028,725	1,298,215
St. Paul.....	293,070	233,640	59	41	119,534	484,458	625,662	787,205
Missouri:								
Joplin.....	33,000	12,000	8	6	29,625	3,000	73,030	17,000
Springfield.....	66,650	72,100	22	21	29,725	27,335	140,000	112,110
St. Joseph.....	17,200	13,900	8	7	18,575	8,520	41,630	30,607
St. Louis.....	473,500	420,500	138	119	249,677	457,483	1,221,403	1,432,749
Nebraska:								
Lincoln.....	105,500	42,200	16	17	228,738	59,420	351,573	109,570
Omaha.....	105,000	84,850	29	40	63,280	27,915	702,555	341,115
South Dakota:								
Sioux Falls.....	67,500	34,000	19	10	167,700	54,950	235,200	91,450
Total.....	2,680,195	1,910,075	742	539	1,993,519	2,448,675	6,623,841	5,991,742
Per cent of change.....		-28.7		-27.4		+22.8		-9.5

South Atlantic States

Delaware:								
Wilmington.....	\$279,500	\$101,500	18	23	\$83,630	\$40,825	\$985,608	\$192,004
District of Columbia:								
Washington.....	1,025,950	623,300	156	61	1,802,529	260,395	3,036,234	987,240
Florida:								
Jacksonville.....	62,350	79,900	23	37	140,180	42,745	264,440	165,850
Miami.....	40,650	35,000	6	8	172,525	255,000	335,957	378,617
St. Petersburg.....	15,100	23,400	5	4	69,700	12,300	109,600	56,100
Tampa.....	14,000	15,800	9	9	24,770	2,485	99,045	41,200
Georgia:								
Atlanta.....	306,400	88,273	76	37	533,885	119,375	909,744	258,548
Columbus.....	18,675	43,625	10	42	17,610	34,285	45,380	81,850
Macon.....	48,800	1,705	3	4	9,300	14,900	103,001	67,786
Maryland:								
Baltimore.....	856,000	939,000	180	200	1,058,700	572,900	2,684,400	2,694,000
Cumberland.....	7,500	10,300	2	3	10,286	3,518	23,515	15,693
Hagerstown.....	17,500	24,400	5	5	4,220	2,510	23,720	27,060
North Carolina:								
Asheville.....	2,500	17,150	1	2	7,345	8,830	38,660	37,490
Charlotte.....	136,750	130,108	44	36	13,765	16,560	209,777	208,173
Durham.....	105,850	28,500	10	10	1,800	33,462	150,452	63,212
Greensboro.....	35,800	60,019	17	11	32,585	587,217	81,829	656,791
Winston-Salem.....	63,720	25,000	17	9	802,575	10,645	884,022	50,695
South Carolina:								
Charleston.....	53,700	8,000	15	5	16,040	6,850	95,864	49,920
Columbia.....	25,900	51,100	11	15	135,500	3,600	179,265	70,960
Greenville.....	33,085	69,650	9	14	16,890	63,400	58,093	137,960

TABLE 2.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1929—Continued

South Atlantic States—Continued

City and State	New residential buildings				New nonresidential buildings, estimated cost		Total buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings		October, 1929	November, 1929	October, 1929	November, 1929
	October, 1929	November, 1929	October, 1929	November, 1929				
Virginia:								
Lynchburg.....	\$28,050	\$32,130	6	6	\$20,440	\$2,125	\$59,148	\$37,915
Newport News...	6,950	9,800	6	3	1,707	2,174	25,028	21,485
Norfolk.....	24,900	16,200	8	5	68,938	169,355	178,118	196,600
Petersburg.....	12,675	18,300	3	6	166,785	6,250	183,010	29,745
Portsmouth.....	9,900	2,000	2	2	11,650	750	40,588	9,915
Richmond.....	69,575	66,900	15	12	246,859	127,243	543,186	287,069
Roanoke.....	82,009	21,607	18	6	32,609	46,860	151,228	75,140
West Virginia:								
Charleston.....	74,200	20,100	25	7	73,627	25,425	234,942	56,825
Clarksburg.....	0	4,400	0	3	25,605	15,340	31,230	22,675
Huntington.....	26,000	9,000	6	3	40,700	156,330	66,700	165,330
Wheeling.....	21,700	27,300	4	7	16,077	18,650	74,409	353,488
Total.....	3,505,689	2,603,917	710	595	5,658,832	2,662,304	11,906,193	7,499,336
Per cent of change.....		-25.7		-16.2		-53.0		-37.0

South Central States

Alabama:								
Mobile.....	\$33,929	\$19,800	20	5	\$3,500	\$9,900	\$54,285	\$54,800
Montgomery.....	35,250	47,900	28	39	77,350	31,700	143,198	123,090
Kentucky:								
Lexington.....	80,200	46,500	17	4	55,245	6,250	140,920	70,685
Newport.....	6,600	0	3	0	400	2,400	7,000	3,800
Paducah.....	23,650	11,300	9	5	1,750	5,450	27,650	16,750
Louisiana:								
New Orleans.....	99,747	78,900	33	21	146,850	121,616	362,917	277,492
Shreveport.....	107,887	33,086	47	28	20,250	77,391	186,179	182,155
Oklahoma:								
Muskogee.....	8,400	3,300	4	2	64,482	690	77,407	6,000
Tulsa.....	430,425	225,525	96	59	150,903	348,545	610,590	604,975
Tennessee:								
Knoxville.....	69,861	101,625	30	24	38,220	86,880	116,878	207,486
Memphis.....	273,780	230,100	66	69	112,515	39,390	507,681	343,491
Texas:								
Austin.....	138,995	36,125	55	28	54,310	38,788	197,908	85,788
Beaumont.....	73,100	40,080	32	18	38,371	122,665	167,107	186,701
Dallas.....	130,848	112,440	61	32	1,362,308	313,240	1,650,105	526,042
Fort Worth.....	216,962	135,100	83	48	849,413	736,515	1,125,722	914,835
Port Arthur.....	78,668	32,600	38	18	27,710	11,010	229,326	51,401
San Antonio.....	403,730	394,245	179	203	99,635	77,620	594,830	565,150
Waco.....	58,867	48,533	13	7	251,866	38,037	321,526	93,004
Wichita Falls.....	156,650	1,350	36	4	165,200	29,930	337,210	48,652
Total.....	2,427,549	1,598,509	850	614	3,520,278	2,098,017	6,858,439	4,362,387
Per cent of change.....		-34.2		-27.8		-40.4		-36.4

TABLE 2.—ESTIMATED COST OF BUILDINGS FOR WHICH PERMITS WERE ISSUED IN PRINCIPAL CITIES, OCTOBER AND NOVEMBER, 1929—Continued

Mountain and Pacific States

City and State	New residential buildings				New nonresidential buildings, estimated cost		Total buildings, estimated cost	
	Estimated cost		Families provided for in new dwellings		October, 1929	November, 1929	October, 1929	November, 1929
	October, 1929	November, 1929	October, 1929	November, 1929				
Arizona:								
Phoenix.....	\$142,384	\$123,415	69	49	\$128,720	\$24,715	\$320,834	\$155,730
Tucson.....	73,442	32,600	21	17	52,070	41,590	163,455	80,150
California:								
Alameda.....	66,700	33,900	21	8	4,596	2,317	81,525	48,579
Berkeley.....	105,525	179,550	38	63	71,224	34,600	234,897	280,689
Fresno.....	74,100	65,950	18	18	53,078	16,281	195,325	121,135
Long Beach.....	874,250	423,050	339	127	434,735	565,985	1,357,045	1,045,205
Los Angeles.....	3,365,812	2,783,050	1,116	884	3,908,655	2,828,872	8,193,199	6,679,288
Oakland.....	744,941	470,150	132	152	561,306	229,489	1,454,645	773,437
Pasadena.....	368,995	101,825	39	19	182,439	63,626	667,899	220,251
Sacramento.....	337,830	317,900	89	65	43,175	20,895	457,962	381,240
San Diego.....	296,460	224,050	70	57	170,055	498,335	531,990	794,629
San Francisco.....	685,302	1,459,500	167	285	1,316,093	772,925	2,424,001	2,469,017
San Jose.....	135,800	60,700	36	16	17,155	52,400	185,785	126,710
Stockton.....	25,500	5,450	15	10	22,545	11,175	105,898	37,335
Vallejo.....	18,750	4,780	6	3	9,900	30,433	35,544	45,442
Colorado:								
Colorado Springs..	9,000	5,000	5	1	15,290	8,800	38,290	50,465
Denver.....	402,950	178,000	122	48	386,150	252,300	1,000,450	547,150
Pueblo.....	28,400	17,700	8	7	7,240	200,852	97,262	238,988
Montana:								
Butte.....	1,800	0	1	0	930	36,800	18,420	46,349
Great Falls.....	82,000	53,200	29	15	84,685	27,651	178,350	96,266
Oregon:								
Portland.....	532,400	369,500	130	154	880,400	286,120	1,615,585	895,695
Utah:								
Ogden.....	11,500	12,000	4	5	5,300	74,650	61,400	142,350
Salt Lake City....	287,200	119,300	86	34	49,802	57,105	378,502	205,675
Washington:								
Bellingham.....	23,300	6,300	11	6	21,655	11,500	58,085	25,030
Everett.....	19,800	8,750	7	6	444,540	22,495	509,245	40,605
Seattle.....	686,450	609,520	189	188	303,730	506,135	1,228,070	1,245,150
Spokane.....	112,270	67,350	28	23	396,421	30,140	559,427	130,603
Tacoma.....	47,000	58,000	19	19	86,925	328,305	183,735	427,285
Total.....	9,559,861	7,790,490	2,813	2,279	9,658,814	7,036,491	22,336,825	17,350,448
Per cent of change.....		-18.5		-19.0		-27.2		-22.3

WAGES AND HOURS OF LABOR

Salaries in the Police Departments of Principal Cities

IN August, 1929, the Bureau of Labor Statistics sent questionnaires to the police departments of all cities in the United States having a population of 100,000 or over according to the latest census estimate, asking for data as to the salaries of the employees, by occupation and by grade. All but two of the cities made a report.¹ As the police departments of some of the cities have more complete organizations than others, the occupations and official titles reported show considerable variation.

Salaries reported by the month have been brought to an equivalent yearly basis by taking twelve times the monthly rate; weekly salaries have been multiplied by 52½; and daily wage rates have been multiplied by 365 when there was no indication of less than full-time employment. In a few cases hourly rates only were reported, and in such cases the equivalent annual rates could not be computed since no data were given as to the hours worked per day.

The data are presented in the following table, which is divided into three sections (A, B, and C), each relating to a certain group of occupations. Each city was requested to report for all occupations in the department, and it is believed that fairly complete data were obtained for the more important occupations shown in sections A and B; it is evident, however, that the occupations shown in section C were not fully reported by all cities.

Section A contains the population of each city, the salaries of the superintendent or chief, secretary to the chief, chief clerk or secretary, property clerk or storekeeper, chief of detectives, and the number and salaries of assistant or deputy chiefs, inspectors, captains, lieutenants, sergeants, and patrolmen. In nearly all the cities included in the study the population figures are estimates made by the United States Census Bureau for the year 1928. In the case of cities for which no estimates were made for 1928, the latest figures published by the Census Bureau are given.

Some cities have several grades of patrolmen, based upon length of service. Thus, Albany, N. Y., reported three grades of patrolmen; the first-year men receive \$1,700 per year, then they automatically pass to the next grade and serve their second year at \$1,800, and after having completed their second year they enter the highest grade, which pays \$1,900 per year. While promotions are generally based on length of service, there are a few cities which require mental and physical tests and these are noted in the table. Patrolmen are often detailed to other positions, especially in the smaller cities. These details also are noted when such are reported.

Section B contains the number and salaries of mounted police, motor police, traffic police, park police, captains of detectives, lieutenants of detectives, detective sergeants, detectives, policewomen, and matrons.

Section C contains all of the occupations reported not included in sections A and B.

¹ Data for the fire departments of these cities were given in the December, 1929, issue of the Labor Review (pp. 124).

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER

Section A

City and	Population, 1928, estimated by Census Bureau	Salary of—					Assistant or deputy chiefs		Inspectors		Captains		Lieutenants		Sergeants		Patrolmen			
		Superintendent or chief	Secretary to chief	Chief clerk or secretary	Property clerk or store-keeper	Chief of detectives	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Classification	
Akron, Ohio	¹ 208,435	\$4,500		\$3,000		\$2,898				4	\$2,898	6	\$2,400	10	\$2,268	120	\$2,079	(2).		
															12	2,016	(2).			
															3	1,953	(2).			
															15	1,800	(2).			
Albany, N. Y.	120,400	4,000			(9)		1	\$3,000		8	2,400	14	2,200	26	2,100	169	1,900	After 2 years.		
															8	1,800	Second year.			
															52	1,700	First year.			
Atlanta, Ga.	255,100	5,000	\$3,066			\$4,200	1	3,066		4	2,592	3	2,448	15	2,376	230	2,100	After 3 years.		
																10	2,088	Third year.		
																31	2,016	Second year.		
																1	1,944	First year.		
Baltimore, Md.	830,400	⁸ 10,000 ⁷ 5,750	⁶ 5,175 3,450						3	\$5,175	7	4,186	10	3,289	22	2,781	46	2,392	After 30 years.	
											3	4,095	9	3,218	37	2,720	63	2,340	After 25 years.	
											2	4,004	8	3,146	29	2,660	51	2,288	After 20 years.	
											1	3,913	7	3,075	47	2,599	90	2,236	After 15 years.	
													1	3,003	24	2,539	114	2,184	After 10 years.	
															7	2,479	620	2,132	After 5 years.	
																	278	2,080	3d to 5th years.	
																	1	1,999	(2).	
																	59	1,950	Second year.	
Birmingham, Ala.	222,400	5,000	2,400		\$2,400	2,920			1	2,865	12	2,220				3	2,220	51	1,820	First year.
																		89	1,920	After 3 years.
																		22	1,860	Third year.
																		17	1,800	Second year.
																		40	1,740	First year.
Boston, Mass.	799,200	⁸ 8,000 7,000	(9)	(9)	3,500		1	4,525	26	2,700	28	4,000	3	2,725	2	2,525	983	2,100	After 5 years.	
							1	4,500							42	2,700	172	2,500	56	2,000
							7	4,300										192	1,900	Fourth year.
																		157	1,800	Third year.
																		96	1,700	Second year.
																		141	1,600	First year.
Bridgeport, Conn.	¹ 143,555	5,500					1	3,750			6	3,300	15	3,000	31	2,700	193	2,300	After 1 year.	
																	4	2,200	First year.	

Footnotes on page 126.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section A—Continued

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City and State	Population, 1928, estimated by Census Bureau	Salary of—					Assistant or deputy chiefs		Inspectors		Captains		Lieutenants		Sergeants		Patrolmen		
		Superintendent or chief	Secretary to chief	Chief clerk or secretary	Property clerk or store-keeper	Chief of detectives	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Classification
Buffalo, N. Y.	555,800	\$7,000	\$3,030	-----	\$3,600	\$4,500	¹¹ 2	\$5,000	2	\$4,500	31	\$3,030	70	\$2,550	-----	-----	834	\$2,250	After 1 year.
Cambridge, Mass.	125,800	4,500	(¹²)	(¹²)	(¹²)	¹³ 3,000	-----	-----	-----	-----	9	3,000	10	2,750	14	\$2,550	18	1,950	First year.
Camden, N. J. ¹⁴	135,400	4,000	2,040	\$2,400	-----	-----	-----	-----	-----	-----	2	3,200	-----	-----	15	2,220	182	2,190	After 2 years.
Canton, Ohio	116,800	3,250	-----	-----	-----	-----	-----	-----	-----	-----	5	2,700	-----	-----	3	2,250	15	1,983	Second year.
Chicago, Ill.	3,157,400	10,000	-----	5,220	2,480	5,300	¹¹ 7	7,500	1	4,300	50	4,000	140	3,200	599	2,900	2,721	2,500	After 2 years.
Cincinnati, Ohio.	413,700	6,000	-----	2,700	2,340	3,300	1	4,000	¹⁵ 3	2,700	-----	-----	-----	-----	-----	-----	243	2,260	Second year.
Cleveland, Ohio.	1,010,300	6,440	-----	3,543	-----	¹³ 4,416	1	3,700	¹⁶ 2	3,200	-----	-----	-----	-----	-----	-----	748	2,140	First year.
Columbus, Ohio.	299,000	3,720	-----	2,580	1,920	2,520	1	-----	¹⁷ 8	3,300	3	3,000	32	2,400	37	2,200	286	1,860	After 3 years.
Dallas, Tex. ¹⁸	217,800	5,030	2,760	¹⁹ 2,130	-----	3,420	1	3,360	-----	-----	-----	-----	-----	-----	-----	-----	39	1,740	Third year.
									8	4,416	20	3,543	61	2,746	126	2,614	76	1,620	Second year.
									8	3,783	20	3,543	61	2,746	126	2,614	68	1,500	First year.
									0	-----	-----	-----	-----	-----	-----	-----	0	2,200	After 3 years.
									48	2,070	-----	-----	-----	-----	-----	-----	48	2,070	Third year.
									6	1,800	-----	-----	-----	-----	-----	-----	6	1,800	Second year.
									275	1,920	4	2,520	3	2,340	4	2,220	275	1,920	After 2 years.
									21	1,860	2	2,400	-----	-----	-----	-----	21	1,860	Second year.
									27	1,800	1	2,250	-----	-----	-----	-----	27	1,800	First year.
									5	1,860	1	2,220	-----	-----	-----	-----	5	1,860	After 25 years.
									7	1,830	2	2,190	-----	-----	-----	-----	7	1,830	After 20 years.
									14	1,800	5	2,010	-----	-----	-----	-----	14	1,800	After 15 years.
									19	1,770	1	2,160	-----	-----	-----	-----	19	1,770	After 10 years.
									39	1,740	-----	-----	-----	-----	-----	-----	39	1,740	After 1 year.
									5	1,620	-----	-----	-----	-----	-----	-----	5	1,620	Fourth 3 months.
									5	1,560	-----	-----	-----	-----	-----	-----	5	1,560	Third 3 months.
									3	1,500	-----	-----	-----	-----	-----	-----	3	1,500	Second 3 months.
									5	1,380	-----	-----	-----	-----	-----	-----	5	1,380	First 3 months.

Dayton, Ohio	184,500	4,000		2,040	1,920	¹³ 3,300		2	3,000	4	2,520		17	2,280	141	1,920	After 1 year.		
															4	1,860	Second 6 months.		
															30	1,860	First 6 months.		
Denver, Colo.	284,200	4,200	2,160		1,920		1	3,000	1	2,700	6	2,700			234	1,920	After 3 years.		
															29	1,860	Third year.		
															22	1,800	Second year.		
															25	1,740	First year.		
Des Moines, Iowa	151,900	3,220	1,620	2,220		¹³ 2,460	1	2,460	1	2,460	2	2,220	3	2,100	6	2,040	After 1 year.		
									²⁰ 1	2,460					74	1,920	First year.		
									²¹ 3	5,000	6	3,480	83	2,960	157	2,710	First 6 months.		
Detroit, Mich.	1,378,900	⁵ 8,000 ⁶ 7,500	⁶ 4,000	5,000	2,520 2,400	5,500 ²² 5,000	1	6,000	⁴⁰	4,000					0	1,740	First year.		
															596	2,000	First 6 months.		
															100	2,100	Second 6 months.		
															2,500	2,520	After 1 year.		
Duluth, Minn.	116,800	3,900		2,600	1,500	2,700			2	2,220	1	2,700	4	2,220	11	2,100	After 4 years.		
									2	2,040	2	2,280					Fourth year.		
															5	1,800	Third year.		
															5	1,740	Second year.		
															4	1,440	First year.		
El Paso, Tex.	117,800	4,200	2,040				1	2,520			4	2,160			4	1,920	After 3 years.		
															4	1,680	Third year.		
															4	1,620	Second year.		
															6	1,560	First year.		
Erie, Pa.	¹ 102,053	3,350		1,980					²³ 4	2,100	1	2,430	2	2,160	2	2,040	After 5 years.		
															3	1,860	Fifth year.		
															3	1,800	Fourth year.		
															3	1,740	Third year.		
															2	1,680	Second year.		
															11	1,620	First year.		
Fall River, Mass.	134,300	4,000	1,278	2,500			1	3,150	7	2,400	4	2,700	10	2,400	6	2,250	146	²⁴ 2,008	
Flint, Mich.	148,800	5,100	2,700		1,920				3	3,300	1	3,500	4	2,460	12	2,340	29	²⁴ 1,643	
															47	2,160	After 18 months.		
															7	2,040	Third 6 months.		
															3	1,920	Second 6 months.		
															5	1,800	First 6 months.		
Fort Wayne, Ind.	105,300	3,060	1,500								1	2,640	2	2,340	9	1,920	106	1,800	
Fort Worth, Tex.	170,600	3,600	1,800								4	2,400	4	2,160	11	1,800	(²)	(²)	(²).
Grand Rapids, Mich.	164,200	4,000	1,300			¹³ 2,400			1	2,400	4	2,200	5	2,056	12	1,975	111	1,825	
															20	2,040	(²⁵).		
															26	1,551	(²⁵).		
Hartford, Conn.	172,300	5,500	2,000	3,200	2,525		1	4,000			6	3,050	5	2,950	22	2,500	200	²⁴ 2,219	
															38	2,099	²⁴ 2,099	After 2 years.	
															70		⁽²⁶⁾	First 2 years.	
															50		(²⁵)	(²⁷).	
Houston, Tex.	¹ 138,276	4,000	2,340				1	2,700			4	2,220	1	1,920	10	1,890	140	1,470	
															13	1,410	After 18 months.		
															13	1,350	Third 6 months.		
															12	1,290	Second 6 months.		
Indianapolis, Ind.	382,100	4,800	2,693	(¹²)		3,600	³⁰ 1	3,400			4	2,693	10	2,493	35	2,293	246	2,026	
																			First 6 months.

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SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section A—Continued

[1921]

City and State	Population, 1928, estimated by Census Bureau	Salary of—					Assistant or deputy chiefs		Inspectors		Captains		Lieutenants		Sergeants		Patrolmen		
		Superintendent or chief	Secretary to chief	Chief clerk or secretary	Property clerk or store-keeper	Chief of detectives	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Classification
Jacksonville, Fla.	140,700	\$4,800	-----	\$2,582	\$2,281	¹⁸ \$3,391	-----	-----	-----	-----	1	\$3,391	4	²⁴ \$2,646	7	²⁴ \$2,373	18	²⁴ \$2,109	After 15 years.
Jersey City, N. J.	324,700	6,000	-----	4,400	2,900	¹³ 5,100	1	\$5,500	3	\$5,100	12	4,100	40	3,200	15	3,000	703	2,500	After 10 years.
Kansas City, Kans.	118,300	3,600	\$2,400	-----	-----	2,800	-----	-----	-----	2	2,800	-----	-----	-----	12	2,160	46	²⁴ 2,008	After 5 years.
Kansas City, Mo.	391,000	5,000	2,400	2,100	2,400	¹³ 4,200	-----	-----	⁸⁰ 1	1,800	7	3,000	2	2,400	37	2,100	38	²⁴ 1,916	First 5 years.
Knoxville, Tenn.	105,400	3,300	1,800	2,400	-----	2,640	-----	-----	1	1,800	4	2,244	-----	-----	-----	-----	3	1,980	4 years and over.
Long Beach, Calif.	110,700	4,500	2,700	2,700	2,700	-----	1	3,600	-----	-----	1	3,300	2	3,000	11	2,700	202	2,150	Under 4 years.
Los Angeles, Calif.	¹ 576,673	6,000	⁶ 3,600	3,600	-----	³³ 3,900	1	5,400	-----	-----	16	3,600	32	3,000	141	2,700	53	1,980	(³¹)
Lowell, Mass.	³⁴ 110,296	3,500	-----	-----	-----	-----	1	3,165	-----	-----	2	2,865	7	2,615	8	2,465	83	1,800	After 6 months.
Lynn, Mass.	105,500	3,250	-----	-----	-----	-----	1	2,850	9	2,250	3	2,650	-----	-----	9	2,250	349	1,680	After 10 years.
Memphis, Tenn.	190,200	5,000	-----	3,300	-----	¹³ 4,800	-----	-----	³⁸ 2	3,900	2	2,700	3	2,400	10	2,100	30	1,500	After 6 months. ³²
Miami, Fla.	156,700	5,000	-----	-----	2,400	3,360	-----	-----	-----	-----	3	3,120	3	2,760	7	2,520	6	1,920	Reserves.

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Milwaukee, Wis.	544,200	6,000	2,940		2,100				1	3,600	10	2,820	7	2,670	59	2,320	14	1,920	Second 6 months.	
									36	3,460					22	2,160	5	1,800	First 6 months.	
															493	2,040	93	1,980	After 2 years.	
															102	1,920	25	1,800	Second year.	
Minneapolis, Minn.	455,900	5,000	2,400	3,000	2,400		1	3,600			8	2,400	22	2,280	24	2,160	212	2,040	After 2 years.	
															25	1,920	14	1,800	Second year.	
															116	1,920			First year.	
Nashville, Tenn.	139,600	4,200	1,920						2	3,000			4	2,760	10	2,220				
Newark, N. J.	473,600	6,000		3,900	2,780		2	5,000			9	4,000	44	3,200	70	3,000	512	2,500	After 3 years.	
New Bedford, Mass.	119,539	3,850	2,002				2	3,517	7	2,931	7	2,931	8	2,509	9	2,208	196	2,008	Third year. ³²	
New Haven, Conn.	187,900	6,000	1,200	2,400			1	3,500	1	2,509	8	3,000			26	2,500	252	2,108	After 3 years.	
															9	1,962	27	1,916	Third year. ³²	
															30	1,871	0	1,825	Second year. ³²	
															0	1,825	0	1,824	Second 6 months. ³²	
															412	1,824	0	1,704	First 6 months. ³²	
New Orleans, La.	429,400	6,000	3,699	3,699	3,699	1	3,924	1	2,949	37	1	3,924			16	2,574	0	1,524	After 2 years.	
			2,949	2,724						24	5,400	100	4,500	564	3,500	988	3,000	8,330	Second year.	
New York, N. Y.	6,017,500	78,000			5,400	8	5,800	24	5,000	86	22	5,000	25	3,850			0	1,524	After 5 years.	
															331	2,100	1,018	2,040	(Fifth) Second half.	
															1,943	1,920	3,021	1,769	(year) First half.	
															119	1,890	36	1,740	Fourth year.	
Norfolk, Va.	184,200	4,000	1,980	2,400	2,200	13	2,820		88	1	2,820	4	2,520		30	2,190	119	1,890	First 3 years.	
																	36	1,740	Third year.	
																	44	1,620	After 2 years.	
Oakland, Calif.	274,100	5,400	3,000	2,760	2,640						3	3,600	7	3,000	31	2,640	246	2,400	After 2 years.	
																	20	2,280	Second year.	
																	23	2,160	First year. ³⁰	
Oklahoma City, Okla. ⁴⁰	104,080	3,600		2,280		1	3,000				4	2,280	1	2,160	7	1,980	25	1,920		
																	44	1,800	(41).	
																	5	900	(42).	
Omaha, Nebr.	222,800	4,500	2,160		2,160	13	3,360				7	2,640	3	2,520	21	2,400	57	2,160	After 3 years.	
																	13	2,040	Third year.	
																	14	1,920	Second year.	
																	11	1,800	First year.	
Paterson, N. J.	144,900	4,200	2,940								4	3,200	9	2,800	27	2,500	71	2,300	After 4 years.	
																	9	2,200	Fourth year.	
																	6	2,100	Third year.	
																	29	2,000	Second year.	
																	15	1,900	First year.	
Philadelphia, Pa.	2,064,200	5,500	2,600	3,000		13	3,500	2	4,000		60	2,550			204	2,250	3,709	24	2,008	
																	136	24	1,825	After 2 years.
																	798	24	1,643	Second year.
																	57	1,400	First year.	
																	25	1,400	Second grade.	
Pittsburgh, Pa.	673,800	5,000	2,750			13	3,300	1	3,600	6	3,000	6	2,700	47	2,460	46	2,160	88	1,800	
										38	1	3,000					25	1,800	First year.	
																	88	1,920	Second year.	
																	486	2,040	Third year.	

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WAGES AND HOURS OF LABOR

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SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section A—Continued

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City and State	Popula- tion, 1928, esti- mated by Census Bureau	Salary of—					Assistant or deputy chiefs		Inspectors		Captains		Lieutenants		Sergeants		Patrolmen		
		Super- intend- ent or chief	Secre- tary to chief	Chief clerk or sec- retary	Prop- erty clerk or store- keeper	Chief of detec- tives	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Classification
Portland, Oreg.	1 258, 288	\$4, 800	-----	\$3, 000	¹² \$2, 616	¹³ \$3, 744	-----	-----	36	\$2, 640	8	\$3, 000	12	\$2, 640	25	\$2, 496	171	\$2, 232	After 30 months.
																	16	2, 160	Fifth 6 months.
																	3	2, 100	Fourth 6 months.
																	15	2, 040	Third 6 months.
																	0	1, 980	Second 6 months.
																	0	1, 920	First 6 months.
Providence, R. I.	286, 300	5, 200	\$1, 820	1, 976	-----	-----	1	\$4, 160	⁷ 1	3, 640	9	3, 003	11	2, 500	37	2, 318	281	2, 099	After 3 years.
										¹ 3, 003							36	2, 008	After 18 months.
										¹³ 2, 500							14	1, 916	Next 6 months.
																	41	1, 825	First year.
Reading, Pa....	115, 400	2, 400	-----	1, 560	-----	-----	-----	-----	-----	-----	1	2, 100	2	1, 860	13	1, 800	71	1, 680	After 3 years.
																	9	1, 620	Third year.
																	10	1, 560	Second year.
																	19	1, 440	First year.
Richmond, Va..	194, 400	4, 000	1, 800	2, 196	-----	-----	-----	-----	-----	-----	4	2, 520	42	2, 100	18	1, 980	153	1, 800	After 3 years.
																	13	1, 680	Third year.
																	35	1, 560	First 2 years.
																	236	2, 100	After 1 year.
Rochester, N. Y.	328, 200	4, 935	1, 700	-----	2, 100	-----	1	3, 675	2	3, 150	8	2, 835	8	2, 625	22	2, 415	29	1, 785	First year.
St. Louis, Mo..	848, 100	6, 500	2, 800	2, 400	2, 100	4, 500	1	4, 500	1	4, 000	18	3, 420	31	3, 000	135	2, 600	1, 400	2, 160	
St. Paul, Minn.	1 234, 698	4, 000	2, 475	-----	-----	-----	1	3, 255	⁴⁴ 1	2, 400	5	2, 400	5	2, 088	25	1, 968	177	1, 838	(43)
									⁴⁵ 1	2, 400							29	1, 785	First year.
									⁴⁶ 1	1, 968									
Salt Lake City, Utah.	138, 000	3, 600	2, 040	-----	1, 920	2, 840	-----	-----	-----	-----	3	2, 240	1	2, 100	7	1, 980	77	1, 860	
																	6	1, 740	(41)
																	3	1, 620	(41)
San Antonio, Tex.	318, 100	3, 600	1, 800	2, 280	1, 800	-----	-----	-----	⁴⁷ 1	1, 620	1	2, 700	3	1, 800	62	1, 500			
San Diego, Calif.	119, 700	5, 000	2, 280	2, 100	2, 400	-----	1	3, 600	-----	-----	4	2, 400	-----	-----	-----	-----	-----	-----	-----
											1	3, 000	6	2, 640	9	2, 460	52	2, 200	After 3 years.
																	7	2, 100	Third year.
																	18	1, 980	Second year.
																	17	1, 860	First year.
San Francisco,	585, 300	7, 200	⁴⁸ 2, 400	3, 600	3, 600	-----	-----	-----	3	2, 760	15	3, 600	41	3, 000	84	2, 640	965	2, 400	
		⁴⁹ 1, 200	-----	3, 600	-----	-----													

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Scranton, Pa.	144,700	3,000	1,500							3	2,400	4	2,220	14	2,120	62	2,040	After 2 years.	
																10	1,920	Second year.	
																12	1,800	First year.	
Seattle, Wash.	383,200	6,000	2,160	2,640		3,420		1	3,420	8	3,000	10	2,640	33	2,400	386	2,160	After 38 months.	
																52	2,040	Next year. ⁵⁰	
																27	1,980	Next year. ⁵⁰	
																22	1,920	First 14 months. ⁵⁰	
Spokane, Wash.	109,100	3,180	2,058			1,872		1	2,190	3	2,190			9	1,800	48	1,800	After 2 years.	
																5	1,692	Second year.	
																22	1,512	First year.	
Springfield, Mass.	149,800	5,000		1,950			2	3,522		4	2,701	5	2,500	23	2,336	177	2,190	After 2 years.	
																24	2,081	Second year.	
																19	1,953	First year.	
																36	1,679	Reserves.	
Syracuse, N. Y.	199,300	4,900		2,440			1	3,140		7	2,470	4	2,290	20	2,140	189	2,040	After 4 years.	
																31	1,980	Fourth year.	
																48	1,920	Third year.	
																2	1,860	Second year.	
																48	1,800	First year.	
Tacoma, Wash.	110,500	3,000								3	2,460	1	2,400	8	2,160	51	2,040	After 2 years.	
																9	1,920	Second year.	
																12	1,800	First year.	
Tampa, Fla.	113,400	4,500	2,700	2,700	2,100	¹³ 2,700	1	3,300								44	2,088	After 3 years.	
																51	2,016	Third year.	
																31	1,944	Second year.	
																13	1,872	First year.	
Toledo, Ohio.	313,200	4,200	3,090			¹³ 3,390			1	3,390	4	3,090	7	2,880	20	2,730	334	2,400	After 2 years.
									³⁸ 1	3,390						0	2,160	Second year.	
																0	1,920	First year.	
Trenton, N. J.	139,000	4,400	2,600	2,600						4	3,600	9	2,800	9	2,650	99	2,400	After 5 years.	
																2	2,300	Fifth year.	
																6	2,200	Fourth year.	
																16	2,100	Third year.	
																21	2,000	Second year.	
																8	1,950	First year.	
Tulsa, Okla.	170,500	3,600	1,980			2,220				5	2,220			7	2,100	34	1,800		
Utica, N. Y.	104,200	3,700	2,360	2,000	2,000					1	2,600	3	2,400	13	2,200	92	2,000	After 3 years.	
																3	1,850	Third year.	
																0	1,700	Second year.	
																16	1,550	First year. ⁵¹	
Washington, D. C.	552,000	6,200		3,700	(⁵²)		1	3,812	2	3,562	15	3,000	22	2,700	7	2,400	864	2,100	After 2 years.
Wilmington, Del.	128,500	⁵³ 4,500	(⁵³)	(⁵³)	(⁵³)					4	2,604	2	2,304	13	2,100	81	1,752		
Worcester, Mass.	197,600	5,000	(⁵⁴)	2,190			2	3,750		6	3,250	11	2,750	21	2,550	265	2,190	After 1 year.	
																20	1,916	First year.	

Footnotes on page 126.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section A—Continued

City and State	Popula- tion, 1923, esti- mated by Census Bureau	Salary of—					Assistant or deputy chiefs		Inspectors		Captains		Lientenants		Sergeants		Patrolmen		
		Super- intend- ent or chief	Secre- tary to chief	Chief clerk or sec- retary	Prop- erty clerk or store- keeper	Chief of detec- tives	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Num- ber	Salary	Classification
Yonkers, N. Y.	121, 300	\$5, 500								5	\$3, 800	16	\$3, 300	18	\$2, 800	219	\$2, 500	After 3 years.	
																17	2, 300	Third year.	
																3	2, 100	Second year.	
																3	1, 940	First year.	
Youngstown, Ohio.	174, 200	4, 000	\$2, 280			1	\$3, 000			3	2, 460			7	2, 220	92	2, 040	After 1 year.	
																12	1, 800	First year.	

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¹ Census of 1920.
² Not reported.
³ Lieutenant acts.
⁴ And assistant chief of police.
⁵ Police commissioner.
⁶ Secretary to commissioner.
⁷ Chief inspector.
⁸ Served as clerk and later appointed patrolman.
⁹ Captain acts.
¹⁰ Patrolmen are furnished free equipment valued at \$145, with yearly replacements of about \$50.
¹¹ Deputy commissioners.
¹² Sergeant acts.
¹³ Inspector of detectives.
¹⁴ Men are allowed \$50 per year for uniforms.
¹⁵ Inspectors of personnel.
¹⁶ Assistant identification inspectors.
¹⁷ District superintendents.
¹⁸ Men are allowed \$25 per year for clothing.
¹⁹ 2 secretaries to detective division.
²⁰ Inspector of liquor and vice.
²¹ District inspectors.
²² Deputy chief of detectives.
²³ Roundsmen.
²⁴ 365 times daily rate.
²⁵ Promoted on mental and physical tests.
²⁶ \$5.59 per day.
²⁷ Supernumeraries relief and extra service men. After 180 days of actual service go to second class. Wait for vacancies to become regular patrolmen.

²⁸ \$5.26 per day.
²⁹ Major.
³⁰ Inspector of insane.
³¹ Promotions to this grade are made for exceptionally good police work.
³² And a good record.
³³ 2 inspectors of detectives at this rate.
³⁴ State census for 1925.
³⁵ Deputy inspector of detectives.
³⁶ Deputy inspectors.
³⁷ Senior captain.
³⁸ Inspector of traffic.
³⁹ On probation one year, then promoted if physically fit.
⁴⁰ Census estimate for 1924.
⁴¹ Promoted for seniority and efficiency.
⁴² Officers on pension or reserve.
⁴³ Promoted on seniority and efficiency after 6 months when vacancy occurs.
⁴⁴ Inspector of pawnshops.
⁴⁵ Inspector of licenses.
⁴⁶ Inspector of school police.
⁴⁷ Inspector of amusements.
⁴⁸ Confidential secretary to commissioners.
⁴⁹ 4 commissioners at this rate.
⁵⁰ Must have efficiency rating of 85 per cent for promotion.
⁵¹ Promotions are made on January 1 following one year's service.
⁵² Chief clerk acts.
⁵³ Superintendent of public safety.
⁵⁴ Police officer detailed.
⁵⁵ Including 13 detective inspectors.

Section B

City and State	Mounted police		Motor police		Traffic police		Park police		Captain of detectives		Lieutenant of detectives		Detective sergeants		Detectives		Police women		Matrons	
	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary
Akron, Ohio			1	18			1	35							1	\$2,400			1	\$1,380
Albany, N. Y.			16	\$1,900	13	\$1,900	4	\$1,598							1	2,400			1	1,200
Atlanta, Ga.	4	\$2,100	24	2,100	20	2,100														
Baltimore, Md.									1	\$4,680	4	3,289	1	\$2,781	1	2,236	3	2,236		
											11	3,218	3	2,720	3	2,184	2	2,184		
											5	3,146	1	2,660	14	2,132				
											7	2,599	5	2,080						
											5	3,075								
													12	2,539	1	1,950				
														4	2,479	1	1,820			
Birmingham, Ala.			26	1,920	18	1,920									32	2,220	4	1,920		
Boston, Mass.	14	2,100	33	2,100	214	2,100	24	2,100					9	2,500			5	2,100		
	3	1,800	7	2,000	15	2,000	5	1,800												
	2	1,600	13	1,900	62	1,900	2	1,700												
			8	1,800	26	1,800	4	1,600												
			5	1,700	8	1,700														
			1	1,600																
Bridgeport, Conn.									1	3,300	3	3,000	24	2,700						
Buffalo, N. Y.	1	2,250	21	2,250	159	2,250	13	2,250	2	2,030	44	2,490	75	2,370	5	2,100				
Cambridge, Mass.			8	2,100	36	2,190			1	3,000	1	2,750	5	2,550	4	2,190	1	2,190		
Camden, N. J.	8	2,040	20	2,040					1	3,200	19	2,220			19	2,220				
Canton, Ohio			10	2,040					1	2,700			1	2,500	9	2,250				
Chicago, Ill.	102	2,500	1,370	2,500	294	2,500					6	3,900					30	2,500	34	2,500
Cincinnati, Ohio			13	1,980	63	1,860			1	3,000			1	2,500	11	2,300				
			13	1,860										33	2,200					
			13	1,740										2	2,100					
			1	1,620																
Cleveland, Ohio																	13	2,420		
																	1	2,070		
Columbus, Ohio									1	2,280					28	2,040	1	1,920		
Dallas, Tex.	3	1,740	27	1,740	21	1,740			1	2,610	1	2,190	1	2,160	2	1,980				
	6	1,740											1	2,130	5	1,920				
													2	2,100						
															14	1,890				
															23	1,740				

Footnotes on page 130.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section B—Continued

City and State	Mounted police		Motor police		Traffic police		Park police		Captain of detectives		Lieutenant of detectives		Detective sergeants		Detectives		Police women		Matrons	
	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary
Dayton, Ohio			51	\$1,920	17	\$1,920							16	\$2,280	12	\$1,920			2	\$1,033
Denver, Colo.	16	\$1,920	30	1,920	17	1,920	(1)		1	\$2,700					53	2,100	1	\$1,920	3	1,020
Des Moines, Iowa			8	1,920					2	2,220					28	2,040	1	1,740	3	1,800
Detroit, Mich.	31	2,520	194	2,520	173	2,520	6	\$2,520			61	\$2,960	72	2,710	136	2,520	a 5	1,800	12	1,740
																	a 2	1,900	1	1,564
																	a 15	2,100		
																	a 17	2,220		
																	1	1,800		
Duluth, Minn.			5	1,800	5	1,920					1	2,220	5	2,100	5	2,040				
El Paso, Tex.	2	1,740	6	1,740	7	1,740			1	2,460			2	1,980	7	1,800	1	1,680	2	1,740
															4	1,740				
															3	1,680				
Erie, Pa.			12	1,920	10	1,920			1	2,430			8	2,100			1	1,620		
Fall River, Mass.			5	\$ 2,008	11	\$ 2,008			2	2,700							2	\$ 2,008	2	\$ 1,095
Flint, Mich.			34	2,160					1	2,700	1	2,700	5	2,520	22	2,320	1	2,100	2	1,200
Fort Wayne, Ind.									1	2,520			9	2,100						
Fort Worth, Tex.			24	1,860							1	2,160			21	1,860			1	1,500
Grand Rapids, Mich.			15	1,825							10	2,056	1	1,975	2	1,825	2	1,825	1	1,643
Hartford, Conn.			15	\$ 2,219	27	\$ 2,219	3	\$ 2,219	2	3,050	1	2,950	10	2,625	7	\$ 2,219	1	2,000	1	\$ 1,023
			3	\$ 2,099	10	\$ 2,099	2	\$ 2,099												
Houston, Tex.	4	1,800	26	1,890	60	1,470	10	1,470	1	2,700			1	1,890						
Indianapolis, Ind.	9	2,093	87	2,093	66	2,093			1	2,693	3	2,493	55	2,293			14	2,028	3	2,028
Jacksonville, Fla.											2	2,738			20	\$ 2,464	4	\$ 1,916	1	1,200
Jersey City, N. J.	31	2,500	54	2,500	37	2,500			1	4,100	36	3,200	16	3,000	44	2,500	2	2,100		
Kansas City, Kans.			13	2,160											10	2,160			1	2,000
			7	1,980																
			1	1,800	1	1,800	11	8												
			52	1,680	33	1,680														
			2	1,500																
Kansas City, Mo.																				
			1	1,800																
			57	2,700																
			1	2,400																
Knoxville, Tenn.			13	1,800																
Long Beach, Calif.	1	2,400	12	2,400	(1)						2	3,000	11	2,700	(1)	1,980	1	1,800		
Los Angeles, Calif.			57	2,700							116	3,000							3	2,280
																			18	2,400
																			2	2,040
																			1	1,016
Lowell, Mass.			12	\$ 2,190	15	\$ 2,190													2	1,460

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Lynn, Mass.			9	2,000	15	2,000		1	2,650								2	2,000	1	939	
Memphis, Tenn.			15	1,680	21	1,680	25	1,500	3	2,700	3	2,400	24	2,100	6	1,740	1	1,800	1	1,500	
Miami, Fla.			12	2,280	25	2,160	1	1,800					2	2,760	18	2,400			1	720	
Milwaukee, Wis.	4	2,040	48	2,840	116	2,040			1	3,320	2	2,820	7	2,670	55	2,520	2	2,040	10	900	
Minneapolis, Minn.			59	2,040	40	2,040	28	2,040	1	3,300					62	2,400	3	2,040	3	2,040	
Nashville, Tenn.			6	2,260	21	2,260	(11)		7	2,760					26	2,220	1	2,220	2	1,320	
Newark, N. J.	4	2,500	48	2,500	449	2,500			3	4,000	12	3,200	9	3,000	97	2,500	3	2,500	20	1,840	
New Bedford, Mass.			7	2,008	18	2,008							7	2,208		2,008	1	2,008	1	1,303	
New Haven, Conn.			20	2,108	160	2,108			1	3,000					12	2,500	1	2,108	1	1,200	
New Orleans, La.			15	2,574					4	2,574			6	2,500	31	2,199	1	2,400	14	1,374	
New York, N. Y.															275	3,500	86	2,500			
															475	2,700	24	2,100			
																	2	1,920			
																	12	1,769			
Norfolk, Va.			1	12		1	31	5	1,200						21	2,040			2	300	
Oakland, Calif.			1	24		1	44			1	4,200			16	38	2,760			4	1,920	
Oklahoma City, Okla.			12	2,100			8							16	1,980				3	1,520	
							11							9	1,860						
Omaha, Nebr.			40	2,160	17	2,160					3	2,520			43	2,400	2	1,500	1	2,400	
Paterson, N. J.	3	2,300	20	2,300	33	2,300		3	2,300	1	3,200		2	2,620	19	2,420	2	2,000	1	1,400	
Philadelphia, Pa.	120	2,000	60	2,008	450	2,008	(11)		1	2,800	3	2,500	1	2,250	30	2,200			2	1,350	
															50	2,050			24	1,100	
Pittsburgh, Pa.	24	2,040	48	2,040	211	2,040					2	2,700			46	2,400	5	1,416	17	1,278	
															29	2,040					
Portland, Oreg.			30	2,376	45	2,376									10	2,376	7	2,232	3	2,016	
Providence, R. I.	18	2,099	15	2,099	47	2,099									6	2,318	1	2,002	1	1,092	
																			1	1,066	
Reading, Pa.			6	1,680											8	1,800	1	1,440			
Richmond, Va.									1	2,520	1	2,100	20	1,980					2	1,200	
Rochester, N. Y.	6	2,100	30	2,100	28	2,100			1	3,370	1	2,992	8	2,783	20	2,546	2	2,100	4	1,600	
St. Louis, Mo.	(1)		(1)		(1)		(1)		7	3,420	3	3,000	69	2,600	(1)		18	1,800	2	1,380	
																			11	1,320	
St. Paul, Minn.			13	2,378	22	1,898			1	2,772					38	1,968	3	1,608	3	1,517	
			25	2,318					1	2,325											
Salt Lake City, Utah	2	1,960	10	1,960	10	1,960							6	2,040	8	1,980	2	1,620	1	1,020	
San Antonio, Tex.	35	1,800	15	1,800	13	1,680	6	1,500	1	2,700			3	1,800	10	1,860	3	1,620	3	1,620	
			18	1,860	43	1,620									6	1,740					
			20	1,800											23	1,680					
San Diego, Calif.			25	2,460					1	3,000	4	2,640	12	2,460						4	1,800
San Francisco, Calif.									1	5,000			66	2,760			3	2,400	4	2,040	
Scranton, Pa.			14	2,040	26	2,040	2	2,040	1	2,400	1	2,280			10	2,220			3	864	
																			1	500	
Seattle, Wash.	(1)		(1)		(1)		(1)		3	3,000			40	2,400			8	2,160	3	2,160	
Spokane, Wash.	(1)		6	1,800	10	1,800			1	2,316					15	1,932	1	1,452	3	1,452	
Springfield, Mass.			1	220					1	2,847	12	2,500					2	2,190	4	1,100	
Syracuse, N. Y.	(1)		(1)		(1)		(1)		1	2,940			3	2,740	20	2,340	2	2,040	3	1,200	
Tacoma, Wash.	(1)		(1)		(1)		(1)		1	2,520					18	2,160	1	2,040	3	1,620	
Tampa, Fla.															15	2,016	1	1,500			
Toledo, Ohio	(1)		(1)		(1)		(1)		3	3,090					18	2,880	4	2,400	7	1,440	

Footnotes on page 130.

SALARIES OF EMPLOYEES OF THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section B—Continued

City and State	Mounted police		Motor police		Traffic police		Park police		Captain of detectives		Lieutenant of detectives		Detective sergeants		Detectives		Police women		Matrons	
	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary	Number	Salary
Trenton, N. J.			4	\$2,400	34	\$2,400			1	\$3,600	2	\$2,900	5	\$2,800	3	\$2,650	2	\$2,400		
Tulsa, Okla.			9	1,800	22	1,800			1	2,220			1	2,220	40	1,980			2	\$1,800
Utica, N. Y.			7	2,000	30	2,000							1	2,350	10	2,200	1	2,000	1	1,400
Washington, D. C.	25	\$2,550	90	2,220	40	2,100							50	3,000	15	2,340			5	1,440
	⁹ 32	2,160			6	1,900													1	¹⁸ 1,320
					5	1,800														
Wilmington, Del.	2	1,752	16	1,752	6	1,752							2	2,100	13	2,004			3	1,308
Worcester, Mass.					40	2,190			1	3,500	1	2,900	3	2,550			2	2,002	3	1,500
											23	2,750								
Yonkers, N. Y.			19	2,500	23	2,500			1	3,500	1	3,500	2	3,000	12	2,700			3	1,600
Youngstown, Ohio.					27	2,040			1	2,400	1	2,400			12	2,280	3	1,500	1	1,500

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¹ Patrolmen detailed.
² Patrolmen detailed to plain-clothes duty after 5 years' service.
³ Patrolmen detailed to plain-clothes duty after 3 years' service.
⁴ Veteran sergeant.
⁵ Veteran patrolmen.

⁶ Colored.
⁷ Assistant chief of detectives.
⁸ 365 times daily rate.
⁹ Bicycle police.
¹⁰ Plain-clothes officers.
¹¹ Under park board.
¹² And quarters.

¹³ Sergeant.
¹⁴ Salaries range from \$1,740 to \$1,940.
¹⁵ Captain.
¹⁶ Rank as inspectors.
¹⁷ Allowed \$30 per month for mount.
¹⁸ Receives quarters and subsistence.
¹⁹ Service requirements not reported.

WAGES AND HOURS OF LABOR

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Accountants:			Chauffeurs—Continued.		
Cincinnati, Ohio.....	1	\$2,460	Hartford, Conn.....	6	¹ \$2,219
Detroit, Mich.....	1	3,480	Houston, Tex.....	3	1,470
Adding machine:			Kansas City, Kans.....	³ 1	2,160
Detroit, Mich.....	1	1,800	Kansas City, Mo.....	10	1,800
Auto greasers and washers:			Los Angeles, Calif.....	16	1,500
Chicago, Ill.....	1	1,740	Los Angeles, Calif.....	11	2,400
Portland, Oreg.....	6	¹ 2,190	Lowell, Mass.....	1	2,280
Bandmasters:			Lynn, Mass.....	6	¹ 2,190
Dallas, Tex.....	1	2,400	Miami, Fla.....	6	2,000
St. Paul, Minn.....	1	2,088	Minneapolis, Minn.....	2	1,200
Bertillon operators:			Nashville, Tenn.....	31	2,040
Dallas, Tex.....	1	2,280	New Bedford, Mass.....	5	1,800
Grand Rapids, Mich.....	1	2,056	New Haven, Conn.....	2	2,008
New Orleans, La.....	1	3,024	New Haven, Conn.....	² 4	¹ 2,108
Oklahoma City, Okla.....	1	2,280	New Orleans, La.....	22	1,824
Omaha, Nebr.....	1	2,400	Norfolk, Va.....	6	1,890
Pittsburgh, Pa.....	2	2,160	Omaha, Nebr.....	12	2,160
St. Louis, Mo.....	1	2,040	Paterson, N. J.....	8	2,200
St. Paul, Minn.....	3	2,400	Providence, R. I.....	22	1,825
Bertillon operators, assistant:			Richmond, Va.....	9	1,560
Dallas, Tex.....	1	2,130	Rochester, N. Y.....	60	2,100
New Orleans, La.....	1	1,860	St. Louis, Mo.....	57	1,680
New Orleans, La.....	1	2,574	St. Paul, Minn.....	22	1,838
Bindery workers:			San Antonio, Tex.....	6	1,620
Los Angeles, Calif.....	1	960	San Diego, Calif.....	4	1,920
Boiler inspectors:			Scranton, Pa.....	1	2,040
New York, N. Y.....	2	2,500	Spokane, Wash.....	5	1,800
Bookkeepers:			Springfield, Mass.....	² 8	
Chicago, Ill.....	2	2,480	Toledo, Ohio.....	1	1,980
Detroit, Mich.....	1	1,980	Trenton, N. J.....	9	2,400
Los Angeles, Calif.....	1	2,040	Utica, N. Y.....	3	1,600
Bridge patrolmen:			Wilmington, Del.....	² 1	1,752
Pittsburgh, Pa.....	6	1,643	Chauffeur-mechanics:		
Bus inspectors:			Lowell, Mass.....	1	2,465
Portland, Oreg.....	1	2,100	Pittsburgh, Pa.....	3	1,692
Portland, Oreg.....	1	1,800	Chefs:		
Card punching machine operators:			Flint, Mich.....	1	1,800
Chicago, Ill.....	3	1,620	Los Angeles, Calif.....	2	2,040
Detroit, Mich.....	2	1,980	Chemists:		
Los Angeles, Calif.....	2	1,680	Los Angeles, Calif.....	1	2,520
Los Angeles, Calif.....	1	1,440	Cleaners:		
Carpenters:			Boston, Mass.....	15	1,200
Chicago, Ill.....	2	¹ 4,380	Detroit, Mich.....	1	2,520
Detroit, Mich.....	2	2,592	Detroit, Mich.....	7	1,812
Detroit, Mich.....	2	2,520	New Bedford, Mass.....	2	998
Detroit, Mich.....	2	2,400	Pittsburgh, Pa.....	4	1,002
Kansas City, Mo.....	1	1,680	Clerks:		
Los Angeles, Calif.....	2	2,294	Atlanta, Ga.....	1	2,100
Charmman:			Atlanta, Ga.....	6	1,560
Lowell, Mass.....	1	1,564	Baltimore, Md.....	1	2,392
Chauffeurs:			Baltimore, Md.....	1	2,340
Baltimore, Md.....	7	2,288	Boston, Mass.....	1	2,310
Baltimore, Md.....	1	2,236	Boston, Mass.....	3	2,236
Baltimore, Md.....	4	2,184	Boston, Mass.....	7	2,184
Baltimore, Md.....	18	2,132	Boston, Mass.....	15	2,132
Boston, Mass.....	4	2,080	Boston, Mass.....	1	2,080
Boston, Mass.....	2	1,950	Boston, Mass.....	3	1,950
Boston, Mass.....	1	1,820	Boston, Mass.....	1	3,600
Boston, Mass.....	1	1,800	Boston, Mass.....	1	3,500
Boston, Mass.....	1	1,700	Boston, Mass.....	2	2,600
Boston, Mass.....	2	1,600	Boston, Mass.....	1	2,500
Buffalo, N. Y.....	² 6	2,250	Boston, Mass.....	1	2,400
Cambridge, Mass.....	9	2,190	Boston, Mass.....	1	2,300
Duluth, Minn.....	9	1,921	Boston, Mass.....	3	1,950
Erie, Pa.....	2	1,920	Buffalo, N. Y.....	1	1,800
Fall River, Mass.....	3	¹ 2,008	Cambridge, Mass.....	1	1,780
Flint, Mich.....	9	2,160	Duluth, Minn.....	2	1,750
			Erie, Pa.....	1	1,700
			Fall River, Mass.....	1	1,640
			Flint, Mich.....	2	1,400

¹ 365 times daily rate.

² Patrolmen detailed.

³ Sergeant detailed.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C—Continued

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Clerks—Continued.			Clerks—Continued.		
Boston, Mass.—Continued.	1	\$1,300	Milwaukee, Wis.....	2	\$1,920
	1	1,280		3	1,860
	3	1,200		2	1,800
	1	1,000		3	1,680
	2	850	Nashville, Tenn.....	2	1,740
Chicago, Ill.....	2	3,080	Newark, N. J.....	1	2,900
	1	2,960		2	2,500
	2	2,720		2	2,480
	3	2,600		3	2,400
	6	2,480		1	2,260
	1	2,120		3	2,120
	3	2,060		4	1,740
	1	1,620	New Bedford, Mass.....	4	1,480
Cincinnati, Ohio.....	1	2,200	New Orleans, La.....	3	2,724
	4	1,500		1	2,574
	1	1,020		2	2,424
Columbus, Ohio.....	1	2,010		3	2,199
	2	1,830		7	2,124
	2	1,710		10	1,974
Dallas, Tex.....	2	1,860		28	1,899
Dayton, Ohio.....	1	1,800		2	1,742
	2	1,800	Norfolk, Va.....	1	1,480
Detroit, Mich.....	1	2,580		1	1,620
	1	2,460		1	1,560
	1	2,400	Omaha, Nebr.....	1	1,500
	3	2,340	Paterson, N. J.....	1	2,420
	5	2,220	Philadelphia, Pa.....	2	2,200
	1	2,208		3	2,000
	1	2,160		9	1,700
	5	2,124		6	1,600
	2	2,040		43	1,500
	7	1,980		29	1,350
	1	1,920		2	1,200
	5	1,860	Pittsburgh, Pa.....	2	1,800
	1	1,740		1	1,554
	9	1,680		1	1,416
	2	1,560	Portland, Oreg.....	2	2,376
Erie, Pa.....	1	1,920		1	2,160
Fall River, Mass.....	1	2,700		1	1,500
Flint, Mich.....	1	2,320		1	1,380
	1	1,920	Providence, R. I.....	1	1,664
	1	1,800		1	1,274
Grand Rapids, Mich.....	1	1,825		1	1,157
	3	1,643		1	985
Hartford, Conn.....	1	2,200	Richmond, Va.....	3	1,800
	1	1,500	St. Louis, Mo.....	6	1,800
Houston, Tex.....	5	1,920		25	1,680
	2	1,680		57	1,560
	2	1,500		7	1,020
Jacksonville, Fla.....	1	2,282	St. Paul, Minn.....	1	1,838
	1	1,500		1	1,728
Kansas City, Kans.....	1	1,500	San Antonio, Tex.....	2	1,860
Kansas City, Mo.....	1	2,100		3	1,800
	2	1,920	San Diego, Calif.....	3	1,920
	1	1,680	Scranton, Pa.....	1	1,500
	20	1,500	Seattle, Wash.....	3	1,860
	29	1,200	Springfield, Mass.....	1	1,300
	2	1,008		2	1,200
Los Angeles, Calif.....	1	2,280		1	1,150
	4	2,040	Syracuse, N. Y.....	1	2,340
	14	1,920	Tacoma, Wash.....	1	2,040
	3	1,800		2	1,800
	23	1,740	Toledo, Ohio.....	4	2,820
	1	1,680		3	2,730
Lowell, Mass.....	1	1,669		1	1,650
Lynn, Mass.....	2	1,460		1	1,500
	1	1,147	Washington, D. C.....	1	2,100
Memphis, Tenn.....	2	3,000		1	1,860
	3	1,500		1	1,620
Miami, Fla.....	2	1,800		2	1,560

² Patrolmen detailed.
³ Sergeant detailed.

⁴ Captain detailed.
⁵ Lieutenant detailed.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C—Continued

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Clerks—Continued.			Drillmasters—Continued.		
Washington, D. C.—Con...	6	\$1,500	St. Louis, Mo.....	1	\$2,800
	4	1,440	Drivers, chief:		
	1	1,380	Los Angeles, Calif.....	1	3,600
	1	1,320	Electricians:		
Youngstown, Ohio.....	3	1,320	Chicago, Ill.....	3	3,900
Clerk-stenographers:			Detroit, Mich.....	1	3,660
Columbus, Ohio.....	4	1,830		4	3,432
Los Angeles, Calif.....	9	1,680	Fall River, Mass.....	1	2,086
	13	1,560		1	2,008
	67	1,500	Flint, Mich.....	1	2,340
	3	1,260	Grand Rapids, Mich.....	1	2,008
Minneapolis, Minn.....	3	2,040		1	1,852
	11	1,800	Kansas City, Mo.....	1	2,184
Newark, N. J.....	2	2,780	Los Angeles, Calif.....	7	2,503
	1	2,480	San Diego, Calif.....	1	2,280
Philadelphia, Pa.....	1	1,900	Yonkers, N. Y.....	1	3,300
Pittsburgh, Pa.....	3	2,034	Electrician's helpers:		
	1	1,758	Detroit, Mich.....	2	2,344
St. Paul, Minn.....	1	1,848	Elevator operators:		
	1	1,699	Boston, Mass.....	5	1,600
Seattle, Wash.....	15	1,860	Detroit, Mich.....	1	2,520
Toledo, Ohio.....	3	1,500		7	1,860
Trenton, N. J.....	3	2,400		3	1,620
	1	2,000		1	1,500
Washington, D. C.....	2	2,200	Oakland, Calif.....	3	1,920
	1	1,740	Pittsburgh, Pa.....	3	1,416
	1	1,620	Emergency squad:		
	1	1,500	Dallas, Tex.....	18	1,740
Compositors:			Engineers:		
Chicago, Ill.....	2	3,285	Boston, Mass.....	1	2,700
Los Angeles, Calif.....	3	2,451		1	2,150
Minneapolis, Minn.....	1	2,400		1	2,100
Cooks:			Kansas City, Mo.....	1	1,500
Kansas City, Kans.....	1	1,200	Los Angeles, Calif.....	1	1,800
Los Angeles, Calif.....	2	1,877		1	1,680
Los Angeles, Calif.....	1	2,100	Pittsburgh, Pa.....	3	2,920
San Francisco, Calif.....	1	2,220	Engineers, building:		
Seattle, Wash.....	1	1,980	Portland, Oreg.....	1	2,280
Corporals:				4	2,100
Columbus, Ohio.....	28	2,040	Engineer, chief, harbor patrol:		
New Orleans, La.....	48	1,899	Baltimore, Md.....	1	2,014
San Francisco, Calif.....	129	2,580		9 ¹	1,890
Court officers:				9 ¹	1,845
Paterson, N. J.....	4	2,456	Portland, Oreg.....	1	2,400
Pittsburgh, Pa.....	3	2,040		5	2,232
St. Paul, Minn.....	1	1,968	San Francisco, Calif.....	3	2,400
Syracuse, N. Y.....	1	2,240	Engineers, chief operating:		
Custodians:			Chicago, Ill.....	1	5,580
Chicago, Ill.....	1	3,600	Engineers, station:		
Detroit, Mich.....	1	2,460	Chicago, Ill.....	60	1,920
	1	2,340	Engineers, traffic:		
Dog catchers:			Detroit, Mich.....	1	5,000
Chicago, Ill.....	12	2,500	Fingerprint experts:		
	15	2,140	El Paso, Tex.....	1	2,100
	15	2,400		9 ¹	1,980
Detroit, Mich.....	10	2,000	Los Angeles, Calif.....	1	2,520
Domestic attendants, house of detention:			Milwaukee, Wis.....	1	2,100
Washington, D. C.....	1	6 ¹ 1,380	Paterson, N. J.....	1	2,430
	1	6 ¹ 1,200	Portland, Oreg.....	1	2,232
	1	6 ¹ 1,020	San Antonio, Tex.....	2	1,680
	1	6 ¹ 900	Firemen:		
Doormen:			Baltimore, Md.....	2	1,743
Bridgeport, Conn.....	12	2,300		1	1,700
New Orleans, La.....	1	2,124		1	1,260
	140	1,824	Boston, Mass.....	8 ⁸	2,000
Draftsmen:				1	1,800
Detroit, Mich.....	1	2,760		5	1,700
Los Angeles, Calif.....	1	1,860	Columbus, Ohio.....	1	1,920
Drillmasters:				1	1,620
Chicago, Ill.....	1	4,500		1	1,560
Kansas City, Mo.....	1	2,400	Oklahoma City, Okla.....	1	1,800
				1	1,200

⁶ Including 4 part-time workers.⁷ Also quarters and subsistence.⁸ Auto electrician.⁸ Marine.⁹ Assistant.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C—Continued

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Foremen:			Jailers—Continued.		
Kansas City, Mo.-----	3	\$1, 680	Oklahoma City, Okla.-----	1	\$1, 800
Gainewell operators:			12 2	1	1, 500
Dallas, Tex.-----	3	1, 740	4	2, 160	
Garage men:			3	2, 100	
Des Moines, Iowa-----	1	2, 220	Janitors:		
Detroit, Mich.-----	6 1	3, 400	Atlanta, Ga.-----	3	883
Duluth, Minn.-----	1	1, 920	Baltimore, Md.-----	13 1	1, 316
Lowell, Mass.-----	1	2, 465	13 2	1, 289	
Milwaukee, Wis.-----	1	2, 160	13 2	1, 253	
New Bedford, Mass.-----	1	2, 288	13 2	1, 229	
Guards:			13 9	1, 199	
Columbus, Ohio-----	1	1, 800	13 2	1, 170	
Kansas City, Kans.-----	2	1, 980	1	1, 800	
Washington, D. C.-----	4	1, 200	34	1, 600	
Handwriting experts:			46	1, 740	
Los Angeles, Calif.-----	1	2, 820	9	1, 620	
Hostlers:			Detroit, Mich.-----	1	2, 400
Baltimore, Md.-----	1	1, 463	1	2, 304	
2	1, 300		Fall River, Mass.-----	3	1, 538
11 1	628		Flint, Mich.-----	1	1, 200
11 1	614		Indianapolis, Ind.-----	7	1, 190
11 1	601		Jersey City, N. J.-----	13 12	1, 278
11	1, 600		Los Angeles, Calif.-----	2	1, 740
Boston, Mass.-----	16	1, 800	1	1, 440	
Chicago, Ill.-----	3	1, 620	10	1, 500	
16	1, 800		1	1, 664	
3	1, 620		1	1, 200	
16	1, 800		17	1, 460	
16	1, 310		14 8	1, 487	
17	1, 080		1	1, 454	
1	1, 320		3	1, 080	
1	2, 160		1	2, 100	
10	2, 100		3	1, 080	
7	2, 100		12 5	1, 900	
Humane officers:			6	1, 380	
Flint, Mich.-----	1	1, 800	8	1, 320	
Oklahoma City, Okla.-----	1	1, 800	6	1, 200	
Identification bureau, assistants:			7	2, 100	
Duluth, Minn.-----	1	1, 620	7	2, 100	
San Diego, Calif.-----	1	2, 280	Junior safety patrol director:		
Toledo, Ohio.-----	1	3, 300	Detroit, Mich.-----	c 2	2, 280
Identification bureau, chiefs:			c 1	2, 124	
Atlanta, Ga.-----	1	3, 066	1	2, 420	
Baltimore, Md.-----	10 1	3, 510	Paterson, N. J.-----	1	2, 420
Chicago, Ill.-----	1	4, 000	Juvenile bureau attendant:		
Cleveland, Ohio.-----	1	3, 543	Los Angeles, Calif.-----	1	1, 440
Duluth, Minn.-----	1	2, 220	Juvenile officers:		
Kansas City, Kans.-----	1	2, 400	Los Angeles, Calif.-----	9	1, 800
Knoxville, Tenn.-----	1	2, 046	Kennel men:		
Los Angeles, Calif.-----	3 2	2, 700	Chicago, Ill.-----	1	2, 500
Miami, Fla.-----	1	2, 700	Laborers:		
Milwaukee, Wis.-----	1	2, 820	Baltimore, Md.-----	16 1	2, 212
New Haven, Conn.-----	1	2, 850	1	1, 529	
Oakland, Calif.-----	1	3, 192	9	1, 492	
San Antonio, Tex.-----	1	2, 280	6	1, 456	
San Diego, Calif.-----	1	2, 640	1	2, 190	
Toledo, Ohio.-----	1	3, 390	1	1, 825	
Insect exterminators:			1	1, 460	
Chicago, Ill.-----	1	2, 340	2	2, 000	
Investigating assistants:			2	1, 460	
Washington, D. C.-----	1	2, 000	1	1, 430	
Jailers:			10 1	1, 551	
Dallas, Tex.-----	3	1, 740	15	1, 460	
Duluth, Minn.-----	9	1, 920	Life guards:		
El Paso, Tex.-----	1	1, 740	Pittsburgh, Pa.-----	16	d 1, 550
2	1, 680		San Diego, Calif.-----	1	1, 620
1	3, 600		2	1, 380	
3	2, 160		Linemen:		
1	3, 600		Baltimore, Md.-----	1	2, 539
3	2, 160		2	2, 200 ^e	

^b Batteryman.^c Public safety promoters.^d 365 times daily rate—employed June, July, and August.^e 365 times daily rate.^f Sergeants detailed.^g Lieutenant.^h Half rate.ⁱ Assistants.^j Females.^k Janitors and elevator men.^l 52½ cents per hour.^m Foreman.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C—Continued

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Linemen—Continued.			Moving-picture censors:		
Baltimore, Md.—Con.....	2	\$2,100	Chicago, Ill.....	1	\$2,880
	2	2,050		4	2,460
	5	2,000		1	2,160
Boston, Mass.....	1	2,300		2	2,040
	5	2,000	Moving-picture operators:		
Detroit, Mich.....	3	3,540	Chicago, Ill.....	2	4,373
	16	2,940	Multigraph operators:		
Kansas City, Mo.....	3	1,500	Kansas City, Mo.....	1	1,500
Paterson, N. J.....	5	2,300	Los Angeles, Calif.....	1	1,320
Seattle, Wash.....	3	2,400	Night officers:		
	2	1,800	Pittsburgh, Pa.....	1	1,416
Yonkers, N. Y.....	1	2,500	Painters:		
Lineman's helpers:			Boston, Mass.....	1	1,900
Detroit, Mich.....	3	2,325	Chicago, Ill.....	4	4,745
	3	2,172	Detroit, Mich.....	2	3,000
	2	1,944		1	2,625
Linotype operators:				4	2,400
Los Angeles, Calif.....	3	2,659		2	2,000
Machinists:			Duluth, Minn.....	1	1,920
Baltimore, Md.....	18	1,993	Flint, Mich.....	1	2,160
	13	1,732	Los Angeles, Calif.....	2	2,503
Chicago, Ill.....	2	3,900		17	1,620
	2	1,438	New Orleans, La.....	1	1,824
San Diego, Calif.....	1	2,280	Trenton, N. J.....	1	2,620
	1	1,860	Parole officers:		
Masseurs:			Kansas City, Kans.....	1	2,000
Detroit, Mich.....	1	2,000	Patrol drivers:		
Matron, assistant:			Albany, N. Y.....	4	1,520
Akron, Ohio.....	1	1,020	Birmingham, Ala.....	6	1,920
Mechanics:			Dallas, Tex.....	3	1,740
Boston, Mass.....	3	2,100	Miami, Fla.....	2	2,160
Des Moines, Iowa.....	4	1,920	Reading, Pa.....	4	1,560
Detroit, Mich.....	1	2,520	Rochester, N. Y.....	4	2,100
	1	2,304	San Francisco, Calif.....	27	2,400
	7	2,244	Seranton, Pa.....	6	2,040
Duluth, Minn.....	1	2,280	Paymaster, assistant:		
	1	2,040	Detroit, Mich.....	1	2,640
El Paso, Tex.....	1	2,340		1	2,460
Flint, Mich.....	2	2,340	Photographers:		
Miami, Fla.....	3	2,400	Chicago, Ill.....	1	2,760
Minneapolis, Minn.....	6	2,160		1	2,100
New Orleans, La.....	1	1,824	Kansas City, Mo.....	1	1,500
Paterson, N. J.....	15	2,600	Los Angeles, Calif.....	1	2,820
	1	2,300		1	2,700
Reading, Pa.....	2	1,500	Milwaukee, Wis.....	1	2,100
San Antonio, Tex.....	19	2,280	San Francisco, Calif.....	1	2,700
	2	2,100	Seattle, Wash.....	1	2,100
Trenton, N. J.....	15	3,200	Utica, N. Y.....	21	2,000
	2	2,750	Physical director:		
Utica, N. Y.....	1	2,000	New Orleans, La.....	1	2,324
Washington, D. C.....	1	1,680	Physicians:		
	20	1,460	Baltimore, Md.....	1	1,500
	20	1,200		6	1,200
Mechanics, auto:			Detroit, Mich.....	1	3,900
Columbus, Ohio.....	1	1,830		1	3,540
	1	1,770		5	2,920
Dallas, Tex.....	2	2,070		2	1,005
	1	1,860	Milwaukee, Wis.....	5	1,060
Los Angeles, Calif.....	18	2,503	Plumbers:		
Portland, Oreg.....	1	2,103	Chicago, Ill.....	1	4,745
	1	2,100	Detroit, Mich.....	2	3,432
Mechanics' helpers:			Kansas City, Mo.....	1	1,920
Dallas, Tex.....	1	1,380	Policemen, special:		
Indianapolis, Ind.....	1	1,310	Duluth, Minn.....	6	600
Messengers:			El Paso, Tex.....	2	1,200
Detroit, Mich.....	1	1,080	Portland, Oreg.....	1	1,860
Pittsburgh, Pa.....	1	1,536	Poundmasters:		
Washington, D. C.....	1	1,440	Chicago, Ill.....	1	3,200
			Dallas, Tex.....	2	1,740

¹ 365 times daily rate.

² Assistant.

³ Helpers.

¹⁷ Chief.

¹⁸ Master mechanic.

²⁰ Minor mechanic.

²¹ And fingerprint expert.

* Sign painters.

† Part time.

SALARIES OF EMPLOYEES OF THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C—Continued

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Poundmasters—Continued.			Secretary of police, assistant:		
Seattle, Wash.....	1	\$1,920	Cleveland, Ohio.....	1	\$2,746
	12 2	1,500	Secretary of traffic bureau:		
Press feeders:			Paterson, N. J.....	1	2,620
Chicago, Ill.....	1	1,410	Sergeant at arms:		
	1	2,255	Los Angeles, Calif.....	1	3,000
Pressmen:			Signal cablemen:		
Chicago, Ill.....	1	2,842	Detroit, Mich.....	3	2,940
Los Angeles, Calif.....	1	2,346	Signal operators:		
	2	2,190	Boston, Mass.....	6	2,100
Printers:			Los Angeles, Calif.....	1	2,700
Baltimore, Md.....	1	1,690	Miami, Fla.....	2	2,160
Chicago, Ill.....	1	3,285	Pittsburgh, Pa.....	3	2,040
Kansas City, Mo.....	1	1,944		12 3	1,692
Los Angeles, Calif.....	1	3,300	Reading, Pa.....	4	1,560
	22 2	1,140	Signal trouble men:		
	22 1	960	Detroit, Mich.....	8	3,252
Probation officers:			Stable foremen:		
Atlanta, Ga.....	1	2,220	Chicago, Ill.....	1	3,340
	9 1	2,100	Detroit, Mich.....	1	2,040
	23 1	480	New Orleans, La.....	1	1,824
Los Angeles, Calif.....	1	3,000	Statisticians:		
	34 1	2,700	Detroit, Mich.....	1	2,700
	24 1	2,040	Los Angeles, Calif.....	1	3,000
	26 1	1,680	Minneapolis, Minn.....	1	2,160
Process servers:			Steamfitters:		
Miami, Fla.....	2	2,160	Boston, Mass.....	1	1,700
Prohibition officers:			Detroit, Mich.....	1	3,432
Knoxville, Tenn.....	2	1,920	Stenographers:		
	4	1,830	Akron, Ohio.....	5	1,320
Publicity division head:			Baltimore, Md.....	1	2,158
Detroit, Mich.....	1	2,520	Birmingham, Ala.....	3	1,620
Repair men:			Boston, Mass.....	1	3,400
Boston, Mass.....	1	1,900		1	2,000
	1	1,700		1	1,900
Chicago, Ill.....	1	1,824		1	1,600
Indianapolis, Ind.....	4	1,430		1	1,510
Kansas City, Mo.....	2	1,680		1	1,460
Seattle, Wash.....	2	2,040		1	1,400
Repair men, foreman:				2	1,260
Chicago, Ill.....	1	2,580		1	1,160
Seattle, Wash.....	1	2,460	Buffalo, N. Y.....	1	2,760
Scrub women:			Chicago, Ill.....	1	3,200
Boston, Mass.....	2	1,100		1	3,080
Chicago, Ill.....	21	1,260		2	2,720
	1	1,620		1	2,480
Detroit, Mich.....	18	1,320		1	2,360
	1	1,200		3	2,120
Sealers of weights and measures:				12	2,060
Detroit, Mich.....	1	2,760		2	1,980
	1	2,520		5	1,620
	3	2,340	Cincinnati, Ohio.....	1	2,280
	8	2,100		1	2,040
	5	1,980		1	1,560
Grand Rapids, Mich.....	1	2,300	Dayton, Ohio.....	1	1,680
	9 1	1,900		1	1,140
Secretary to commissioner, assistant:				1	1,080
Baltimore, Md.....	1	3,225	Denver, Colo.....	2	1,920
Secretary, assistants to:			Des Moines, Iowa.....	1	1,500
Baltimore, Md.....	1	2,875	Detroit, Mich.....	4	2,820
	2	2,750		2	2,640
	1	2,687		1	2,460
Secretaries to chief of detectives:				3	2,340
Kansas City, Mo.....	1	2,400		1	2,220
Paterson, N. J.....	1	2,620		1	2,160
Secretaries, correspondence:				3	2,100
Los Angeles, Calif.....	2	2,160		4	1,980
Secretary to chief, assistants:				2	1,896
Los Angeles, Calif.....	1	2,400		1	1,860
Milwaukee, Wis.....	2	2,520	Duluth, Minn.....	2	1,680
New Orleans, La.....	1	3,000	El Paso, Tex.....	1	1,380
				1	1,500

⁹ Assistant. ¹² Assistants.

²² Apprentices.

²³ Colored.

²⁴ Female.

²⁵ Female assistant.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C—Continued

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Stenographers—Continued.			Superintendent of machinery:		
Flint, Mich.....	1	\$1,920	Cleveland, Ohio.....	1	\$3,543
Fort Worth, Tex.....	2	1,500	Superintendent of machinery, assistant:		
Houston, Tex.....	1	1,620	Cleveland, Ohio.....	1	2,746
Indianapolis, Ind.....	1	1,500	Superintendent of police tailor shop:		
Long Beach, Calif.....	2	1,380	Cleveland, Ohio.....	1	3,543
Los Angeles, Calif.....	4	1,310	Superintendent, repair shop:		
	1 ²	2,008	Boston, Mass.....	1	2,200
	1	2,220	Superintendent, signal system:		
	2	2,040	Atlanta, Ga.....	1	2,400
	5	1,920	Boston, Mass.....	1	3,350
	2	1,740	Chicago, Ill.....	1	3,080
Memphis, Tenn.....	1	1,800		9 ¹	2,600
Miami, Fla.....	1	1,800	Detroit, Mich.....	1	4,140
Milwaukee, Wis.....	2	2,040	Fall River, Mass.....	1	3,000
New Bedford, Mass.....	1	1,455	Grand Rapids, Mich.....	1	2,874
	1	1,144	New York, N. Y.....	1	5,300
New Haven, Conn.....	1	1,500		9 ¹	3,800
New Orleans, La.....	1	3,000	Portland, Oreg.....	1	2,400
Norfolk, Va.....	1	1,500	Seattle, Wash.....	1	3,600
Oakland, Calif.....	1	1,560	Syracuse, N. Y.....	1	2,540
	1	1,320	Toledo, Ohio.....	1	2,730
Omaha, Neb.....	2	2,160	Surgeons:		
Philadelphia, Pa.....	3	1,800	Chicago, Ill.....	16	2,100
Portland, Oreg.....	1	1,700		2	1,860
	1	1,620	Cleveland, Ohio.....	1	3,687
	1	1,500	Columbus, Ohio.....	2	2,340
	1	1,356	Denver, Colo.....	3	2,160
	1	1,260	Detroit, Mich.....	1	4,740
Providence, R. I.....	6	1,638	Duluth, Minn.....	1	1,260
Rochester, N. Y.....	1	2,000	New Orleans, La.....	1	3,199
	5	1,700	New York, N. Y.....	23	4,790
St. Louis, Mo.....	1	1,800	St. Paul, Minn.....	3	1,608
Salt Lake City, Utah.....	1	1,260	San Diego, Calif.....	26 ¹	3,900
San Francisco, Calif.....	1	3,000		1	1,500
	1	2,760		9 ¹	1,200
	1	1,800		12 ²	600
Spokane, Wash.....	1	1,512	San Francisco, Calif.....	1	2,400
Tampa, Fla.....	2	1,800	Trenton, N. J.....	1	1,200
Toledo, Ohio.....	1	1,320	Washington, D. C.....	27 ⁶	2,500
Tulsa, Okla.....	1	1,800	Yonkers, N. Y.....	1	3,000
Washington, D. C.....	2	2,300	Surgeons, chief:		
Wilmington, Del.....	1	1,476	Chicago, Ill.....	1	3,900
Youngstown, Ohio.....	1	1,380	New York, N. Y.....	1	6,800
Stock cutter:			Switchboard operators:		
Los Angeles, Calif.....	1	1,929	St. Louis, Mo.....	5	1,620
Street markers:				4	1,500
Dallas, Tex.....	1	1,620	Tailors:		
	1	1,500	Boston, Mass.....	1	2,000
	2	1,200	Telephone operators:		
Detroit, Mich.....	2	2,220	Albany, N. Y.....	2 ³	-----
	2	2,100	Atlanta, Ga.....	2	2,100
Supervisor of telephones:				1	1,944
Cleveland, Ohio.....	1	2,746	Baltimore, Md.....	26 ¹	2,236
Supervisor safety school patrol:				26 ⁹	2,184
Trenton, N. J.....	1	2,800		26 ¹¹	2,132
Superintendent of buildings:				26 ⁴	2,080
Boston, Mass.....	1	2,900	Boston, Mass.....	1	1,800
Chicago, Ill.....	1	3,000		2	1,600
New York, N. Y.....	1	5,000	Bridgeport, Conn.....	1	1,200
Trenton, N. J.....	1	2,628	Buffalo, N. Y.....	2 ⁵	2,250
Superintendent of building material:			Cambridge, Mass.....	2 ¹	-----
Detroit, Mich.....	1	3,420	Chicago, Ill.....	2 ¹¹³	2,500
	1	2,820	Columbus, Ohio.....	5	1,680
Superintendent, criminal investigations:				1	1,560
Cleveland, Ohio.....	1	3,784		1	1,380
Superintendent, civil investigations:			Dayton, Ohio.....	2 ³	-----
Cleveland, Ohio.....	1	3,543	Denver, Colo.....	26 ⁶	1,920
			Des Moines, Iowa.....	3	1,500

¹ 365 times daily rate.
² Patrolmen detailed.
⁹ Assistant.
¹² Assistants.

²⁶ Emergency
²⁷ Fire and police.
²⁸ And signal operators.
³ Part time.

SALARIES OF EMPLOYEES IN THE POLICE DEPARTMENTS OF CITIES OF 100,000 OR OVER—Continued

Section C—Continued

Occupation, city, and State	Number in each occupation	Salary per annum	Occupation, city, and State	Number in each occupation	Salary per annum
Telephone operators—Contd.			Traffic chief—Continued.		
Duluth, Minn.....	3	\$1,620	New Orleans, La.....	1	\$3,024
Erie, Pa.....	3	1,920	Paterson, N. J.....	1	3,200
Fall River, Mass.....	2	1,278	St. Paul, Minn.....	1	2,772
Flint, Mich.....	1	1,800	San Francisco, Calif.....	1	4,000
Fort Worth, Tex.....	3	1,620	Traffic chief, assistant:		
Grand Rapids, Mich.....	3	1,643	Cleveland, Ohio.....	1	3,784
Hartford, Conn.....	1	1,669	Erie, Pa.....	1	2,100
Indianapolis, Ind.....	24	1,564	New Orleans, La.....	1	2,724
Jersey City, N. J.....	25	2,093	Paterson, N. J.....	3	2,640
Kansas City, Mo.....	21	1,200		4	2,420
Long Beach, Calif.....	3	1,500	Traffic sign caretaker:		
Los Angeles, Calif.....	13	1,560	Detroit, Mich.....	2	2,100
	4	1,500	Utica, N. Y.....	1	2,200
	35	1,440	Truck drivers:		
Memphis, Tenn.....	1	1,800	Dallas, Tex.....	4	1,740
	5	1,500	Detroit, Mich.....	3	2,400
Miami, Fla.....	2	1,200		1	2,000
Milwaukee, Wis.....	1	2,160		1	1,800
	20	2,040	Turnkeys:		
Minneapolis, Minn.....	6	2,040	El Paso, Tex.....	1	1,500
Newark, N. J.....	5	2,500	Indianapolis, Ind.....	3	2,093
New Bedford, Mass.....	3	2,008	Pittsburgh, Pa.....	14	2,040
New Haven, Conn.....	4	1,100	Reading, Pa.....	3	1,320
New Orleans, La.....	6	1,374	Typists:		
Norfolk, Va.....	3	1,500	Cincinnati, Ohio.....	1	1,800
Omaha, Nebr.....	3	1,800		4	1,320
Philadelphia, Pa.....	23	1,800		1	1,080
Pittsburgh, Pa.....	4	1,206		1	960
Portland, Ore.....	1	1,620	Detroit, Mich.....	1	2,120
	5	1,356		1	1,980
St. Louis, Mo.....	4	1,020		2	1,740
	43	900		1	1,680
San Antonio, Tex.....	3	1,620	Los Angeles, Calif.....	10	1,920
San Diego, Calif.....	4	1,440		2	1,680
San Francisco, Calif.....	6	1,800	Portland, Ore.....	3	1,200
Seattle, Wash.....	3	1,560	Seattle, Wash.....	1	1,560
Spokane, Wash.....	3	1,284	Utility men:		
Springfield, Mass.....	2	1,100	Portland, Ore.....		1,831
Utica, N. Y.....	25	2,000	Veterinarian:		
Washington, D. C.....	3	1,620	New York, N. Y.....	1	4,000
	4	1,560	Wagonmen:		
	1	1,500	Pittsburgh, Pa.....	66	2,040
	3	1,440	Warrant officers:		
Wilmington, Del.....	2	1,752	Dallas, Tex.....	3	1,740
Telephone-switchboard men:			Welfare officers:		
Detroit, Mich.....	1	3,452	Kansas City, Kans.....	1	2,200
Teletype operators:			Oklahoma City, Okla.....	1	1,800
St. Louis, Mo.....	3	1,020	Window cleaners:		
Tinsmiths:			Pittsburgh, Pa.....	2	1,460
Detroit, Mich.....	1	2,592	Wiremen:		
	1	2,520	Detroit, Mich.....	4	3,432
Traffic chief:			Women's police bureau directors:		
Baltimore, Md.....	29	3,289	Cleveland, Ohio.....	1	3,543
	29	3,146	Toledo, Ohio.....	1	2,730
Cleveland, Ohio.....	1	4,416	Women's protective division		
Erie, Pa.....	1	2,430	superintendent:		
Flint, Mich.....	1	2,400	Portland, Ore.....	1	3,000
Indianapolis, Ind.....	1	3,300		1	2,496
			Tacoma, Wash.....	1	2,160

² Patrolmen detailed.³ Assistant.²⁸ And signal operators.²⁹ Sergeants assigned to traffic court.

Recent Changes in Wages and Hours of Labor

INFORMATION received by the bureau regarding recent wage changes is presented below in two distinct groups: Part 1 relates to manufacturing establishments only, the data being reported direct to the bureau by the same establishments that report monthly figures regarding volume of employment; part 2 presents data obtained from new trade agreements and other miscellaneous sources. Effort is made to avoid duplication of data as between parts 1 and 2, but this is not always possible.

Part 1. Wage Changes Reported by Manufacturing Establishments,
November, 1929

FORTY-ONE establishments in 12 industries reported wage-rate increases during the month ending November 15, 1929. These increases averaged 6.5 per cent and affected 2,287 employees, or 22 per cent of all employees in the establishments concerned.

Nine establishments in four industries reported wage-rate decreases during the same period. These decreases averaged 5.9 per cent and affected 543 employees, or 10 per cent of all employees in the establishments concerned.

During the last ten months 408 car shops have reported wage-rate increases made to more than 66,300 employees.

TABLE 1.—WAGE ADJUSTMENTS OCCURRING BETWEEN OCTOBER 15 AND NOVEMBER 15, 1929

Industry	Establishments		Per cent of increase or decrease in wage rates		Employees affected		
	Total number reporting	Number reporting increase or decrease in wage rates	Range	Average	Total number	Per cent of employees	
						In establishments reporting increase or decrease in wage rates	In all establishments reporting
<i>Increases</i>							
Confectionery.....	287	2	7.0-15.0	7.7	33	32	(1)
Ice cream.....	326	1	3.0- 5.0	4.3	20	80	(1)
Baking.....	680	2	4.5- 6.2	5.8	68	8	(1)
Cotton goods.....	485	1	7.0- 8.0	7.2	139	100	(1)
Rayon.....	13	1	10.0	10.0	40	58	(1)
Foundry and machine-shop products.....	1,058	4	5.0- 9.3	6.5	91	7	(1)
Machine tools.....	151	2	5.0- 9.2	7.6	24	6	(1)
Furniture.....	410	2	6.6- 7.0	6.9	74	25	(1)
Printing, book and job.....	379	2	5.0	5.0	26	42	(1)
Printing, newspapers.....	455	8	2.0-10.0	4.0	373	13	(1)
Glass.....	136	3	8.0- 9.3	8.6	102	7	(1)
Car building and repairing, steam-railroad.....	557	13	5.0- 7.5	6.9	1,297	44	1
<i>Decreases</i>							
Ice cream.....	326	2	9.8-10.0	9.9	18	16	(1)
Foundry and machine-shop products.....	1,058	1	5.0	5.0	400	8	(1)
Furniture.....	410	1	10.0	10.0	48	100	(1)
Brick.....	647	5	6.0-10.0	6.8	77	53	(1)

¹ Less than one-half of 1 per cent.

Part 2. Wage Changes Reported by Trade-Unions, Etc., September to December, 1929

THE changes shown in Table 2 cover workers in various trade groups. In the building trades changes ranged from 5 cents per hour for carpenters in Worcester, Mass., and electrical workers in Detroit, Mich., to 25 cents per hour for cement finishers in Kokomo, Ind., the majority receiving 12½ cents per hour increase. In the printing trades varying increases were reported, from 50 cents per week for job compositors in Steubenville, Ohio, to \$4 per week for job compositors in Pittsburgh, Pa., the majority of changes ranging between \$2 and \$3 per week.

TABLE 2.—RECENT UNION WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY

Industry, occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Building trades:					
Carpenters—					
Holdenville, Okla.	Sept. 1	<i>Per hour</i> \$1.00	<i>Per hour</i> \$1.12½	48	44
Worcester, Mass.	Oct. 1	.85	.90	48	44
Cement finishers, Kokomo, Ind.—					
Foremen	Oct. 28	1.00	1.25	(1)	(1)
Workmen .....	.....	.90	1.15	(1)	(1)
Electrical workers—					
Detroit, Mich.	Sept. 1	1.30	1.40	44	44
Mount Vernon, N. Y.	Dec. 2	(1)	(2)	48	45
Salem, Oreg.	Sept. 18	1.00	1.00	44	40
Worcester, Mass.	Sept. 1	1.12½	1.25	44	44
Plasterers—					
Oakland, Calif.	Oct. 1	(1)	(1)	(1)	40
Sheet-metal workers—					
Memphis, Tenn.	Dec. 1	1.25	1.37½	44	44
Steam fitters, Chicago, Ill.	Oct. 1	1.62½	1.70	44	44
Chauffeurs and teamsters:					
Truck drivers, Newark, N. J.					
	Nov. 18	<i>Per week</i> 42.00— 45.00	<i>Per week</i> 42.00— 45.00	54	48
Chauffeurs, Philadelphia, Pa.					
	Oct. 20	<i>Per hour</i> \$0.55	<i>Per hour</i> \$0.65	(1)	3 10
Clothing: Glove cutters, Gloversville, N. Y.—					
Mocha, castor, or reindeer—					
		<i>Per dozen</i>	<i>Per dozen</i>		
Men's	Nov. 2	\$2.15	\$2.30	60	60
Women's	do	2.00	2.15	60	60
Men's washable mochas	do	2.20	2.40	60	60
Women's washable mochas	do	2.05	2.25	60	60
Dipped grain, glacé, all suede, etc.—					
Men's	do	1.95	2.10	60	60
Women's	do	1.80	1.95	60	60
Pigskin—					
Men's	do	2.20	2.35	60	60
Women's	do	2.05	2.20	60	60
Real kid—					
Men's	do	2.15	2.30	60	60
Women's	do	2.10	2.25	60	60
Buckskin—					
Men's oil or alum dressed jacks	do	2.20	2.35	60	60
Men's oil or alum dressed deerskin	do	2.30	2.45	60	60
Women's oil or alum dressed deerskin	do	2.15	2.30	60	60
All buckskins cutting 18 pairs or less of men's one-clasp	do	2.45	2.60	60	60
Grain deer of the venison nature	do	2.20	2.35	60	60
Combination 2-piece glove	do	3.20	3.35	60	60
Boys' gloves—					
Imported or domestic kid or suede	do	1.65	1.75	60	60
Dipped grain leather	do	1.70	1.80	60	60
Mocha	do	1.80	1.90	60	60

¹ Not reported.

² 6 per cent increase.

³ Per day.

TABLE 2.—RECENT UNION WAGE CHANGES, BY INDUSTRY, OCCUPATION, AND LOCALITY—Continued

Industry, occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Clothing: Glove cutters, Gloversville, N. Y.—Con.					
Combination gloves—					
Tilsbury's with fourchettes, etc.	Nov. 2	<i>Per dozen</i> \$1.25	<i>Per dozen</i> \$1.40	60	60
Backs	do	1.05	1.20	60	60
Kid palm, including fourchettes, etc.	do	1.35	1.65	60	60
Mocha palm, including fourchettes, etc.	do	1.40	1.65	60	60
Buck or cabretta palm	do	1.50	1.65	60	60
Furniture:					
Carpet sewers, New York City—					
Apprentices	Oct. 21	<i>Per week</i> \$24.00— 30.60	<i>Per week</i> \$24.00— 30.60	44	40
Journeyman	do	36.00— 42.00	36.00— 42.00		
Sewing-machine operators, New York City					
	Sept. 1	<i>Per hour</i> \$1.00	<i>Per hour</i> \$1.10	40	40
Upholsters, drapery hangers, etc., Washington, D. C.					
	Sept. 3	<i>Per day</i> \$9.20	<i>Per day</i> \$10.55	44	44
Motion-picture operators, actors, and theatrical workers:					
Motion-picture operators, Fresno, Calif.	Sept. 1	<i>Per week</i> \$72.00	<i>Per week</i> \$78.00	36	36
Motion-picture operators, Springfield, Ill.	do	43.00	50.00	(1)	(1)
Musicians, San Antonio, Tex.	do	60.00	62.50	(1)	(1)
Stage hands, Buffalo, N. Y.—					
Carpenters	Sept. 2	57.87	60.87	(1)	(1)
Electricians	do	(1)	55.50	(1)	(1)
Assistant carpenters	do	(1)	55.50	(1)	(1)
Property-men	do	(1)	55.50	(1)	(1)
Flymen	do	(1)	55.50	(1)	(1)
Three regular grips	do	(1)	44.25	(1)	(1)
Assistant property men	do	(1)	30.50	(1)	(1)
All extra men	do	(1)	1 5.00	(1)	(1)
Front lights and bridge operators	do	(1)	1 6.00	(1)	(1)
Sunday performance	do	(1)	1 8.50	(1)	(1)
Printing and publishing:					
Chicago, Ill., job work—					
Compositors, day	Nov. 1	54.00	57.00	(1)	44
Compositors, night	do	58.00	60.00	(1)	44
Machine operators, day	do	55.40	58.40	(1)	44
Machine operators, night	do	59.40	61.40	(1)	44
Machinists, day	do	55.40	58.40	(1)	44
Machinists, night	do	59.40	61.40	(1)	44
Danville, Ill.—					
Newspapers, day	Sept. 30	45.00	46.00	48	48
Newspapers, night	do	47.00	48.00	48	48
Pittsburgh, Pa.—					
Job work, day	Nov. 1	46.00	50.00	44	44
Job work, night	do	49.00	53.00	44	44
Steubenville, Ohio, newspapers—					
Foremen, day	Sept. 1	(1)	55.00	48	48
Compositors, day	do	48.00	50.00	48	48
Machine operators, day	do	(1)	50.00	48	48
Machinist operators, day	do	(1)	51.00	48	48
Foremen, night	do	(1)	58.00	48	48
Compositors, night	do	(1)	53.00	48	48
Machine operators, night	do	(1)	53.00	48	48
Machinist operators, night	do	(1)	54.00	48	48
Steubenville, Ohio, job work—					
Compositors, day	do	44.00	44.50	44	44
Machine operators, day	do	(1)	44.50	44	44
Machinist operators, day	do	(1)	45.50	44	44
Compositors, night	do	(1)	47.50	44	44
Machine operators, night	do	(1)	47.50	44	44
Machinist operators, night	do	(1)	48.50	44	44
Waverly, N. Y., job work—					
Compositors	Nov. 1	30.00	35.00	44	44
Electrotypers—					
Philadelphia, Pa., foundrymen and finishers—					
Day	Oct. 1	57.00	57.00	48	44
Night	do	60.00	65.00	45	44
Pressmen, Cleveland, Ohio—					
Foremen	Sept. 3	<i>Per day</i> \$9.08 ² / ₃	<i>Per day</i> \$9.58 ² / ₃	48	48
Offside color men	do	8.58 ² / ₃	9.08 ² / ₃	48	48
Journeyman	do	8.08 ² / ₃	8.58 ² / ₃	48	48

¹ Not reported.

² Per show.

TABLE 2.—RECENT UNION WAGE CHANGES BY INDUSTRY, OCCUPATION, AND LOCALITY—Continued

Industry, occupation, and locality	Date of change	Rate of wages		Hours per week	
		Before change	After change	Before change	After change
Printing and publishing—Continued.					
Stereotypers, Memphis, Tenn.—					
Journeymen.....	Oct. 1	Per week \$49.00	Per week \$50.00	44	44
Foremen.....	do.	55.00	57.00	44	44
Municipal workers:					
Toledo, Ohio—					
Garage, division of water—					
Foremen.....	Oct. 31	Per month \$200.00	Per month \$225.00	(1)	(1)
Assistant foremen.....	do.	190.00	215.00	(1)	(1)
Auto repair men.....	do.	185.00	210.00	(1)	(1)
Machinist helpers.....	do.	150.00	175.00	(1)	(1)
Filtration plant—					
Machinists.....	do.	185.00	210.00	(1)	(1)
Painters.....	do.	180.00	200.00	(1)	(1)
Truck drivers.....	do.	135.00	155.00	(1)	(1)
Teamsters—					
Double.....	do.	Per week \$30.00	Per week \$34.50	(1)	(1)
Single.....	do.	28.50	32.78	(1)	(1)
Garbage.....	do.	33.00	37.98	(1)	(1)
Garbage, helpers.....	do.	30.00	34.50	(1)	(1)
Miscellaneous: New York City, window cleaners.....	Oct. 1	45.00	48.00	44	44

¹ Not reported.

Wages and Hours of Labor in Ohio Mines and Quarries, 1928

THE following table gives the number of wage earners and office workers in specified wage groups employed in and about coal and fire clay mines and limestone and sandstone quarries in Ohio in the week of greatest employment in the calendar year 1928.¹

NUMBER OF EMPLOYEES RECEIVING EACH CLASSIFIED WEEKLY WAGE IN OHIO MINES AND QUARRIES FOR THE WEEK OF GREATEST EMPLOYMENT DURING 1928

Industry and occupation group	Un-	\$5	\$10	\$12	\$15	\$20	\$25	\$30	\$35	\$40	\$50	Total
	der \$5	and under \$10	and under \$12	and under \$15	and under \$20	and under \$25	and under \$30	and under \$35	and under \$40	and over \$50		
<i>Coal mines</i>												
Wage earners:												
Pick miners.....	21	44	105	458	463	351	163	92	75	17	1,789	
Machine runners and helpers	6	10	21	35	95	210	270	342	319	267	1,575	
Loaders (including drillers and shooters).....	40	110	232	459	1,155	2,533	2,667	2,266	1,315	918	212	11,907
Inside day employees.....	3	35	10	46	232	332	892	1,661	513	362	113	4,199
Outside day employees.....	9	16	21	55	148	497	756	635	322	316	153	2,928
Total.....	52	118	317	686	2,028	3,920	4,876	4,995	2,584	1,990	762	22,398
Office employees:												
Male.....	1	3	1	6	6	18	21	21	27	27	131	
Female.....	3	3	9	1	8	5	7	4	2	1	44	
Total.....	4	6	9	2	14	11	25	25	23	28	28	175
Grand total.....	56	194	326	688	2,042	3,931	4,901	5,020	2,607	2,018	790	22,573

¹ Ohio. Department of Industrial Relations. Division of labor statistics. Report No. 18. Statistics of mines and quarries in Ohio, 1928. Columbus, July 15, 1929.

NUMBER OF EMPLOYEES RECEIVING EACH CLASSIFIED WEEKLY WAGE IN OHIO MINES AND QUARRIES FOR THE WEEK OF GREATEST EMPLOYMENT DURING 1928—Continued

Industry and occupation group	Under \$5	\$5 and under \$10	\$10 and under \$12	\$12 and under \$15	\$15 and under \$20	\$20 and under \$25	\$25 and under \$30	\$30 and under \$35	\$35 and under \$40	\$40 and under \$50	\$50 and over	Total
<i>Fire-clay mines</i>												
Wage earners:												
Inside employees			4	13	64	243	398	396	173	113	26	1,430
Outside employees				1	26	169	152	62	24	17	8	459
Total			4	14	90	412	550	458	197	130	34	1,889
Office employees:												
Male					1	1	1	1	2	1		7
Female			1	1		1					1	4
Total			1	1	1	2	1	1	2	1	1	11
Grand total			5	15	91	414	551	459	199	131	35	1,900
<i>Limestone quarries</i>												
Wage earners	27	9	30	300	1,821	1,084	724	454	279	118		4,846
Office employees:												
Male	1	1	2	7	6	17	23	21	18	29		125
Female	1	3	3	14	15	10	8	4	2			60
Total	29	13	35	321	1,842	1,111	755	479	299	147		5,031
<i>Sandstone quarries</i>												
Wage earners	7	4	26	113	669	633	205	59	73	83		1,872
Office employees:												
Male			2	1	5	3	1	9	5	9		35
Female	1	1	1	3	4	5	3		1			19
Total	8	5	29	117	678	641	209	68	79	92		1,926

Days in Operation, and Working Hours

Coal mines.—In the calendar year 1928 the average number of days worked by pick miners was 170; by loaders in machine mines, 168; and by employees of stripping machines, 219. According to union agreements, the 8-hour day means eight hours of labor at the usual working place exclusive of time for lunch, and exclusive of time spent in going from the entrance to the mine to the working place and back again. Generally speaking, this provision is applicable to underground pieceworkers and day-wage workers, although some day men have duties outside of the eight hours.

Fire-clay mines.—The days in operation for 112 mines in 1928 are reported as follows:

Days in operation:	Number of mines
Under 100	12
100 and under 150	9
150 and under 200	18
200 and under 250	22
250 and under 300	40
300 and under 314	11

The weekly hours of labor in 62.5 per cent of the 112 fire-clay mines were 48, while nearly 10 per cent of these mines worked less than 48 hours per week.

Limestone and sandstone quarries.—The days in operation and the weekly hours of labor for 122 limestone quarries and 42 sandstone quarries are given below:

DAYS IN OPERATION AND NORMAL HOURS OF LABOR PER WEEK IN LIMESTONE AND SANDSTONE QUARRIES IN OHIO, 1928

Days in operation	Number of quarries		Normal weekly hours	Number of quarries	
	Limestone	Sandstone		Limestone	Sandstone
Under 100.....	18	6	Under 44.....	2	3
100 and under 150.....	23	6	44 and under 48.....	3	8
150 and under 200.....	24	8	48.....	11	5
200 and under 250.....	31	5	Over 48 and under 54.....	4	5
250 and under 300.....	12	11	54 and under 56.....	29	12
300 and under 314.....	9	6	Over 56 and under 60.....	10	4
314 and over.....	5	-----	60.....	61	9
			Over 60 and under 72.....	2	1
Total.....	122	42	Total.....	122	42

Vacations with Pay in France

A BILL to establish vacations with pay for industrial workers has been before the French Parliament since 1926. A survey was made in 1925 by the French Ministry of Labor of the extent to which vacations were granted in industrial and commercial establishments, and owing to the fact that the question is still actively before Parliament, a second survey¹ has recently been made which shows the present status of the movement as well as the progress made since 1925.

The present study shows that in 1928 there were 876 establishments, with a total of 52,760 employees, giving vacations with pay to all or part of their employees, as compared with 628 establishments with an average of 38,466 employees in 1925. The largest number of vacation plans was found in the clothing industry, covering, in 1928, 281 establishments and 5,274 employees, while the next largest group was the food industries (including manufacturing and commerce), with 254 plans and an average of 12,170 employees. The majority of plans were in force in small establishments, however, as only 118 of the 876 establishments employed more than 100 workers. Of this number, 10 employed from 500 to 1,000 workers and 9 more than 1,000 workers.

The length of service required before eligibility for a paid vacation was established was reported by 823 companies. Of this number, 138 granted an annual vacation with pay to all workers without regard to length of service, while 642 required periods of employment varying from 3 months to 2 years and the remaining 43 from 3 to 15 years.

Where the employees work on piece rates the payment is generally based on the average rate for the year or for the last three months, or in some cases the fortnight preceding or following the vacation. It is the practice of some companies to give a special bonus to employees at the time of their departure for their vacation, based on the length

¹ France. Ministère du Travail. Bulletin, April-June, 1929, pp. 121-129.

of service of the employee, on the family responsibilities, or on attendance.

As a result of the growing custom of giving vacations with pay, the workers are beginning to demand vacations as one of the conditions of employment. Thus, in 1926 there were 2 strikes in which the granting of a vacation was among the claims of the strikers, in 1927 there were 4 such cases, and in 1928 there were 24. Fourteen of the strikes in 1928 occurred in the metal trades and in six of these cases the vacation was granted.

Earnings and Hours of Labor of Metal Workers in South Germany, October, 1928

THE Federal Statistical Office of Germany has recently published the result of an investigation of actual earnings and hours of labor of metal workers in south Germany, including Frankfort on the Main, in October, 1928.¹ This is the third installment of the official report on the subject. The first installment covered the metal workers in Berlin² and the second, those in Rhineland-Westphalia.³ The third installment covers 96 establishments with 67,050 workers in 5 trade-agreement districts and 11 localities, which is about one-fourth of the trade-agreement districts, and 58 per cent of the metal workers in the area investigated, excluding young workers.

Nearly one-half (31,876, or 47.6 per cent) of the metal workers investigated were skilled workers, over one-fourth (17,292, or 25.8 per cent) were semiskilled, about one-tenth (6,757, or 10.1 per cent) were male helpers, and 16.5 per cent were female workers.

About two-thirds (62.9 per cent) of the skilled workers were engaged on a piece-rate basis, while 76 per cent of the male helpers worked on a time-rate basis.

ACTUAL EARNINGS OF ADULT METAL WORKERS (MALES OVER 21, FEMALES OVER 18) IN SOUTH GERMANY, INCLUDING FRANKFORT ON THE MAIN, IN OCTOBER, 1928

[Conversion into U. S. currency made on the basis of 1 mark (100 pfennigs) at par=23.8 cents]

Branch of industry and group of workers	Number of workers	Average hours per week		Average rate per hour fixed by collective agreement	Average earnings per hour		Average actual earnings per week
		Including over-time	Over-time		Including over-time	Excluding over-time	
<i>Total, all branches</i>							
Skilled workers, timework.....	10,366	48	2	Cents 20.5	Cents 27.5	Cents 27.1	\$13.19
Skilled workers, piecework.....	21,510	46	1½	22.4	30.8	30.5	14.20
Semiskilled workers, timework.....	6,422	48	2	17.9	22.2	21.8	10.63
Semiskilled workers, piecework.....	10,870	45½	1	20.4	27.6	27.3	12.48
Helpers, timework.....	5,143	48	2	16.5	19.1	18.8	9.16
Helpers, piecework.....	1,614	45	1½	18.9	24.7	24.5	11.10
Females, timework.....	2,922	46½	1½	11.7	13.9	13.9	6.42
Females, piecework.....	8,203	44	½	13.4	17.0	17.0	7.51

¹ Germany. Statistisches Reichsamt. Wirtschaft und Statistik, Nov. 1, 1929, pp. 877-886.

² See Labor Review, August, 1929, pp. 156-158.

³ See Labor Review, November, 1929, pp. 110, 111.

ACTUAL EARNINGS OF ADULT METAL WORKERS (MALES OVER 21, FEMALES OVER 18) IN SOUTH GERMANY, INCLUDING FRANKFORT ON THE MAIN, IN OCTOBER, 1928—Continued.

Branch of industry and group of workers	Number of workers	Average hours per week		Average rate per hour fixed by collective agreement	Average earnings per hour		Average actual earnings per week
		Including over-time	Over-time		Including over-time	Excluding over-time	
<i>Iron and steel goods</i>							
				<i>Cents</i>	<i>Cents</i>	<i>Cents</i>	
Skilled workers, timework	282	49	3	20.0	26.6	26.3	13.02
Skilled workers, piecework	315	45	1½	22.2	28.7	28.3	12.90
Semiskilled workers, timework	259	49	3½	18.0	23.3	22.9	11.45
Semiskilled workers, piecework	562	47½	2¼	20.2	26.0	25.8	12.35
Helpers, timework	223	46	2¾	16.3	19.3	18.8	8.86
Helpers, piecework	269	46¼	2	19.1	26.2	26.0	12.13
Females, timework	44	46¾	2¼	12.0	14.0	13.9	6.57
Females, piecework	164	48¾	2½	13.2	16.0	15.9	7.79
<i>Metal goods</i>							
Skilled workers, timework	588	48	1½	19.5	25.3	25.1	12.14
Skilled workers, piecework	908	46½	¾	22.1	28.1	28.0	13.06
Semiskilled workers, timework	489	49½	2¼	17.0	20.2	20.1	9.99
Semiskilled workers, piecework	706	46¼	1	19.3	23.9	23.9	11.09
Helpers, timework	496	48	1½	15.2	17.1	16.9	8.22
Helpers, piecework	189	46½	¾	17.6	22.4	22.3	10.42
Females, timework	850	47½	2	11.1	12.3	12.2	5.87
Females, piecework	497	45¾	1	12.9	15.5	15.5	7.11
<i>Machine construction</i>							
Skilled workers, timework	2,221	47½	2	20.6	27.4	27.0	13.04
Skilled workers, piecework	6,504	46	1¾	22.4	30.0	29.6	13.85
Semiskilled workers, timework	1,608	48	2½	18.0	21.8	21.3	10.44
Semiskilled workers, piecework	2,634	46	1½	20.2	27.3	26.9	12.56
Helpers, timework	1,442	48	2¾	16.9	19.6	19.1	9.39
Helpers, piecework	231	44½	1¼	18.2	22.3	21.8	9.92
Females, timework	227	45	1½	11.5	12.9	12.8	5.82
Females, piecework	455	46¼	1	12.8	15.2	15.1	6.99
<i>Boiler manufacture</i>							
Skilled workers, timework	486	49½	2¾	20.2	27.5	27.1	13.60
Skilled workers, piecework	1,049	47¾	1¼	22.8	31.3	30.9	15.01
Semiskilled workers, timework	463	49¼	2¾	18.1	21.9	21.4	10.80
Semiskilled workers, piecework	1,129	46¼	1	21.2	29.4	29.2	13.60
Helpers, timework	260	48¾	2¾	16.7	19.8	19.4	9.66
Helpers, piecework	51	47½	2	19.3	23.9	23.7	11.38
Females, timework	27	44½	1	12.0	13.1	12.9	5.84
Females, piecework	136	46½	1	13.1	17.4	17.3	8.12
<i>Steel construction</i>							
Skilled workers, timework	161	49¼	3	20.2	23.7	23.1	11.68
Skilled workers, piecework	197	46½	2	23.1	28.9	28.7	13.42
Semiskilled workers, timework	32	48½	3¼	18.4	20.1	19.4	9.77
Semiskilled workers, piecework	40	52	4¾	19.3	24.5	23.9	12.74
Helpers, timework	69	45½	2¾	16.8	19.3	18.8	8.80
<i>Construction of vehicles and aircraft</i>							
Skilled workers, timework	3,370	46¾	1¼	20.3	27.2	26.9	12.72
Skilled workers, piecework	7,104	45½	1	22.8	31.8	31.6	14.50
Semiskilled workers, timework	1,732	47	1¼	18.0	23.0	22.7	10.78
Semiskilled workers, piecework	2,746	44	¾	20.7	27.9	27.7	12.28
Helpers, timework	1,159	47½	1½	16.3	19.0	18.8	9.04
Helpers, piecework	453	44¾	1¼	19.2	25.1	24.9	11.08
Females, timework	335	42½	½	11.6	14.2	14.2	6.05
Females, piecework	296	42½	0	12.7	18.3	18.3	7.81
<i>Electrotechnical industry</i>							
Skilled workers, timework	2,474	48¾	2½	20.9	28.6	28.1	13.93
Skilled workers, piecework	3,800	46	¾	22.1	30.8	30.5	14.14
Semiskilled workers, timework	1,581	47¾	1½	17.5	21.9	21.5	10.50
Semiskilled workers, piecework	1,895	44¼	½	20.1	27.7	27.4	12.25
Helpers, timework	1,194	47¾	1¼	16.8	19.6	19.3	9.40
Helpers, piecework	327	43	¾	19.5	25.8	25.6	11.09
Females, timework	963	45¾	½	12.2	15.0	15.0	6.87
Females, piecework	4,752	43	¼	13.2	17.2	17.1	7.37

Wages in the Mining Industry in Greece in 1928

THE annual report of the Bureau of Mines¹ of Greece for the year 1928 gives the total number of man-days worked in the mines and quarries and the total amount of wages, from which the following average daily earnings have been computed:

	Cents
Metal mines.....	62.9
Lignite mines.....	48.3
Smelting and refining.....	56.5
Quarries.....	73.0
Total.....	59.6

Wages in Hungary in September, 1929²

THE following table shows average hourly wages offered in the employment offices of Budapest during September of 1928 and 1929:

WAGES PER HOUR IN SPECIFIED OCCUPATIONS

[Exchange rate of pengo=17.4 cents]

Occupation	Average hourly wages during September—			
	1928		1929	
	Pengös	U. S. currency	Pengös	U. S. currency
Tinners.....	0.73	\$0.13	0.77	\$0.13
Joiners.....	.72	.13	.64	.11
Tailors.....	.65	.11	.56	.10
Masons.....	.96	.17	.82	.14
Day laborers.....	.47	.08	.46	.08
Day laborers, female.....	.47	.08	.49	.09
Factory laborers.....	.26	.05	.25	.04

Daily Wages in Tokyo, June, 1929

THE daily wages paid in various occupations in Tokyo in June, 1929, are given in the following table, which reproduces in part a tabulation carried in the June, 1929, issue of the Monthly Report on Current Economic Conditions, published by the Tokyo Chamber of Commerce and Industry (pp. 11 and 12).

¹ Greece. Ministère de l'Économie Nationale. Direction du Service des Mines. Inspection des Mines. Statistique de l'industrie minière de la Grèce pendant l'année 1928.

² Hungary. Központi Statisztikai Hivatal. Magyar Statisztikai Szemle. Budapest, Oct. 10, 1929, p. 1127.

DAILY WAGES IN VARIOUS OCCUPATIONS IN TOKYO, JUNE, 1929

[Conversions into United States currency made on basis of yen=43.9 cents]

Occupation	Daily wage		Occupation	Daily wage	
	Yen	U. S. currency		Yen	U. S. currency
Textile industry:			Food industry—Continued.		
Silk flature reelers, female.....	1.05	\$0.46	Sugar-refinery workers.....	2.39	\$1.05
Cotton spinners, female.....	1.45	.64	Confectionery makers (Japanese cake).....	1.72	.76
Silk throwers, female.....	1.06	.47	Canners.....	1.84	.81
Cotton weavers, female.....	.85	.37	Wearing-apparel industry:		
Silk weavers, female.....	1.59	.70	Tailors.....	2.90	1.27
Hosiery knitters, male.....	2.32	1.02	Shoemakers.....	2.41	1.06
Hosiery knitters, female.....	1.41	.62	Clog makers.....	2.25	.99
Metal industry:			Building industry:		
Lathe workers.....	3.91	1.72	Carpenters.....	3.10	1.36
Finishers.....	4.41	1.94	Plasterers.....	3.67	1.61
Founders.....	4.07	1.79	Stonemasons.....	4.03	1.77
Blacksmiths.....	3.76	1.65	Bricklayers.....	3.57	1.57
Wooden-pattern makers.....	4.67	2.05	Roofing-tile layers.....	3.70	1.62
Stone, glass, and clay products:			Painters.....	3.00	1.32
Cement makers.....	3.02	1.33	Woodworking industry:		
Glass blowers.....	2.50	1.10	Sawyers (machine).....	2.85	1.25
Turners (potter's wheel).....	1.77	.78	Joiners.....	2.75	1.21
Brick makers.....	1.59	.70	Lacquer workers.....	3.00	1.32
Tile makers.....	1.82	.80	Rope workers.....	1.45	.64
Chemical industry:			Mat makers (Tatami).....	3.37	1.48
Drug makers.....	2.01	.88	Printing industry:		
Match makers, male.....	1.65	.72	Type setters.....	3.62	1.59
Match makers, female.....	.85	.37	Bookbinders.....	2.88	1.26
Oil pressers.....	1.91	.84	Day laborers:		
Paper industry:			Stevedores.....	2.96	1.30
Makers of Japanese paper.....	1.50	.66	Day laborers, male.....	2.08	.91
Makers of printing paper.....	1.87	.82	Day laborers, female.....	1.16	.51
Leather industry: Leather makers.....	3.25	1.43	Fishermen.....	2.16	.95
Food industry:			Domestic service:		
Flour-mill workers.....	1.89	.83	Servants, male.....	1.16	.51
Sake makers.....	1.60	.70	Servants, female.....	1.11	.49
Soy makers.....	2.50	1.10			

Wage Rates of Farm Laborers in Spain

A STRIKE of farm laborers was imminent in the rich Antequera section of the Province of Malaga, Spain, at the beginning of the grain harvesting season this year, but was averted by slight wage increases, according to a report from the American consul, Austin C. Brady, at Malaga, Spain, dated August 16, 1929.

The temporary daily wage rates agreed upon are as follows:

Grain harvesters.....	¹ \$0.62	Threshing-floor laborers.....	\$0.40
Threshing-machine laborers.....	.70	Seed collectors.....	.40
Threshing-machine feeders.....	1.02	Hand cultivators.....	.70
Stackers.....	.62	Beet root harvesters.....	.70
Grain beaters.....	.62	Irrigation tenders (day).....	.85
Mowing-machine operators.....	.78	Irrigation tenders (night).....	1.07
Hand reapers.....	.81	Irrigation ditch cleaners.....	.77
Corn cutters.....	.62	Water carriers.....	.70

In addition to the increased pay, an agreement was made by which it was decided that definite wage scales for farm labor were to be drawn up and definite regulations made for such work before September 30, 1929. If the members of the committee of land-owners and workers charged with the preparation of the wage scales and regulations are unable to agree on any details by that date, the differences will be referred to the governor of the Province for settlement.

¹ Conversions into United States Currency made on basis of exchange rate of peseta for August, 1929=14.7 cents.

TREND OF EMPLOYMENT

Summary for November, 1929

EMPLOYMENT decreased 3.1 per cent in November, 1929, as compared with October, and pay-roll totals decreased 6.8 per cent, according to reports made to the Bureau of Labor Statistics.

The industrial groups surveyed, the number of establishments reporting in each group, the number of employees covered, and the total pay rolls for one week, for both October and November, together with the per cent of change in November, are shown in the following summary:

SUMMARY OF EMPLOYMENT AND PAY-ROLL TOTALS, NOVEMBER AND OCTOBER, 1929

Industrial group	Estab-lish-ments	Employment		Per cent of change	Pay roll in one week		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
1. Manufacturing	12,655	3,538,701	3,387,035	-3.6	\$97,420,897	\$89,647,097	-7.0
2. Coal mining	1,464	332,441	334,691	+0.7	10,380,307	9,173,065	-11.6
Anthracite.....	162	120,309	117,996	-1.9	4,667,597	3,506,875	-24.9
Bituminous.....	1,302	212,132	216,695	+2.2	5,712,710	5,666,190	-0.8
3. Metalliferous mining	342	62,432	63,131	+1.1	1,899,527	1,881,714	-0.9
4. Quarrying and non-metallic mining	678	39,543	37,652	-4.8	1,062,444	964,383	-9.2
5. Public utilities	9,568	720,798	717,079	-0.5	21,554,938	21,042,639	-2.4
6. Trade	7,971	305,507	317,267	+3.8	7,748,128	7,875,254	+1.6
Wholesale.....	1,846	65,442	65,464	+	1,990,311	1,973,549	-0.8
Retail.....	6,125	240,065	251,803	+4.9	5,757,817	5,901,705	+2.5
7. Hotels	1,800	152,728	151,775	-0.6	2,586,966	2,575,427	-0.4
8. Canning and preserving	518	55,499	36,863	-33.6	919,375	626,115	-31.9
Total	34,996	5,207,649	5,045,493	-3.1	143,572,582	133,785,694	-6.8

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION							
New England ⁴	2,387	492,366	477,268	-3.1	\$12,612,750	\$11,707,841	-7.2
Middle Atlantic ⁵	6,121	1,484,708	1,465,700	-1.3	44,121,286	41,693,786	-5.5
East North Central ⁶	8,345	1,575,070	1,471,249	-6.6	47,065,419	41,962,650	-10.8
West North Central ⁷	4,046	326,362	320,545	-1.8	8,361,482	8,034,424	-3.9
South Atlantic ⁸	4,252	506,028	502,527	-0.7	10,867,722	10,677,768	-1.7
East South Central ⁹	2,153	223,885	221,068	-1.3	4,552,425	4,327,066	-5.0
West South Central ¹⁰	2,314	188,545	187,464	-0.6	4,484,860	4,285,976	-4.4
Mountain ¹¹	1,319	108,458	108,385	-0.1	3,230,177	3,223,775	-0.2
Pacific ¹²	4,059	302,227	291,287	-3.6	8,276,461	7,872,408	-4.9
All divisions	34,996	5,207,649	5,045,493	-3.1	143,572,582	133,785,694	-6.8

¹ Weighted per cent of change for the combined 54 manufacturing industries repeated from Table 2, p. 153, the remaining per cents of change including total, are unweighted.

² Less than one-tenth of 1 per cent.

³ Cash payments only; see text, p. 164.

⁴ Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

⁵ New Jersey, New York, Pennsylvania.

⁶ Illinois, Indiana, Michigan, Ohio, Wisconsin.

⁷ Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota.

⁸ Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia.

⁹ Alabama, Kentucky, Mississippi, Tennessee.

¹⁰ Arkansas, Louisiana, Oklahoma, Texas.

¹¹ Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming.

¹² California, Oregon, Washington.

The retail trade, bituminous coal, and metalliferous mining groups each showed increased employment in November over October, while wholesale trade showed practically unchanged employment; the four remaining groups reported decreased employment.

Each of the nine geographic divisions showed decreased employment and earnings in November, the greatest declines (6.6 per cent in employment and 10.8 per cent in employees, earnings) occurring in the East North Central division, which is most affected by any change in conditions in the automobile industry. The Pacific division reported a falling off of 3.6 per cent in employment and 4.9 per cent in pay-roll totals and the New England division a decrease of 3.1 per cent in number of employees and a drop of 7.2 per cent in pay-roll totals.

For convenient reference the latest data available relating to all employees, excluding executives and officials, on Class I railroads, drawn from Interstate Commerce Commission reports, are shown in the following statement. These reports are for the months of September and October instead of for October and November, consequently the figures can not be combined with those presented in the foregoing table:

EMPLOYMENT AND PAY-ROLL TOTALS, CLASS I RAILROADS

Industry	Employment		Per cent of change	Amount of pay roll in entire month		Per cent of change
	Sept. 15, 1929	Oct. 15, 1929		September, 1929	October 1929	
Class I railroads.....	1,730,840	1,732,858	+0.1	\$239,975,829	\$255,617,115	+6.5

The total number of employees included in this summary is 6,778,000, whose combined earnings in one week amounted to more than \$193,000,000.

1. Employment in Selected Manufacturing Industries in November, 1929

Comparison of Employment and Pay-Roll Totals in Manufacturing Industries, October and November, 1929

EMPLOYMENT in manufacturing industries decreased 3.6 per cent in November as compared with October, while pay-roll totals decreased 7 per cent. November is customarily a month of declining employment, but the decrease shown in this instance is larger than in any of the preceding years covered by this bureau's survey. Pay-roll totals were further decreased by the observance of armistice day and election day during the period covered by pay rolls reported.

The Bureau of Labor Statistics' weighted index of employment in manufacturing industries for November, 1929, is 94.8 as compared with 98.3 for October, 1929, and 95.4 for November, 1928; the weighted index of pay-roll totals for November is 95.1 as compared with 102.3 for October, 1929, and 96.1 for November, 1928. The monthly average, 1926, equals 100.

Only 2 groups of industries, paper and tobacco, showed increased employment in November, with increases of 0.6 and 1.2 per cent,

respectively. The remaining 10 groups showed decreased employment, the vehicle group decreasing 9.3 per cent, followed by the leather group with a falling off of 4.8 per cent in number of employees. The automobile industry, which in the three preceding years has shown declines of from 8.1 to 9 per cent in employment in November, reported a decrease of 17.3 per cent in number of workers and 22 per cent in pay-roll totals. The automobile-tire industry decreased 13.6 per cent in employment and 17.9 per cent in employees' earnings. Decreases of over 5 per cent in employment were registered in ice cream, sugar, woolen, women's clothing, millinery, cast-iron pipe, stoves, millwork, boots and shoes, brick, and carriages. The iron and steel industry decreased 1.7 per cent, the cotton goods industry 1 per cent, and foundry and machine-shop products 3.4 per cent in employment.

Employment in rayon plants increased slightly, while radio-manufacturing establishments reported a loss of 26.6 per cent in employment and 37.7 per cent in pay-roll totals.

This report represents 12,596 establishments (exclusive of rayon and radio establishments; see note 2, page 152) in 54 of the chief manufacturing industries of the United States. These establishments had in November 3,338,260 employees, whose earnings in one week were \$88,639,037.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1929, BY INDUSTRIES

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	Novem-ber, 1929		October, 1929	November, 1929	
Food and kindred products	1,849	230,367	224,957	(1)	\$5,936,505	\$5,751,362	(1)
Slaughtering and meat pack- ing.....	200	81,155	81,508	+0.4	2,125,153	2,137,922	+0.6
Confectionery.....	287	38,064	36,383	-4.4	692,504	647,261	-6.5
Ice cream.....	326	11,916	10,822	-9.2	385,701	354,008	-8.2
Flour.....	340	16,429	15,972	-2.8	453,940	424,862	-6.4
Baking.....	680	71,488	69,663	-2.6	1,930,749	1,881,123	-2.6
Sugar refining, cane.....	16	11,315	10,609	-6.2	348,458	306,186	-12.1
Textiles and their products	2,174	628,645	616,301	(1)	12,470,375	11,710,947	(1)
Cotton goods.....	485	213,072	210,871	-1.0	3,361,948	3,198,824	-4.9
Hosiery and knit goods.....	347	102,966	102,395	-0.6	2,067,086	2,021,757	-2.2
Silk goods.....	287	66,009	65,098	-1.4	1,401,303	1,314,933	-6.2
Woolen and worsted goods.....	187	64,112	60,902	-5.0	1,454,795	1,297,327	-10.8
Carpets and rugs.....	33	27,764	27,547	-0.8	725,280	713,501	-1.6
Dyeing and finishing textiles.....	111	32,457	31,941	-1.6	807,814	752,807	-6.8
Clothing, men's.....	312	64,362	62,171	-3.4	1,407,725	1,292,046	-8.2
Shirts and collars.....	117	22,023	21,951	-0.3	358,697	357,595	-0.3
Clothing, women's.....	208	23,768	22,224	-6.5	613,898	524,346	-14.6
Millinery and lace goods.....	87	12,112	11,201	-7.5	271,829	237,811	-12.5
Iron and steel and their prod- ucts	1,920	732,579	712,449	(1)	22,935,092	21,348,987	(1)
Iron and steel.....	205	279,025	274,288	-1.7	9,039,410	8,413,387	-6.9
Cast-iron pipe.....	39	11,913	11,113	-6.7	283,845	257,237	-9.4
Structural ironwork.....	174	30,008	29,131	-2.9	935,455	871,994	-6.8
Foundry and machine-shop products.....	1,058	283,471	273,894	-3.4	8,814,585	8,247,323	-6.4
Hardware.....	72	32,573	31,444	-3.5	862,474	812,956	-5.7
Machine tools.....	151	41,789	40,626	-2.8	1,381,050	1,295,285	-6.2
Steam fittings and steam and hot-water heating apparatus.....	104	32,223	32,012	-0.7	977,831	903,923	-7.6
Stoves.....	117	21,577	19,941	-7.6	640,442	546,882	-14.6
Lumber and its products	1,395	247,301	238,110	(1)	5,696,631	5,258,169	(1)
Lumber, sawmills.....	651	144,571	140,522	-2.8	3,086,588	2,917,946	-5.5
Lumber, millwork.....	334	33,155	30,907	-6.8	814,621	711,055	-12.7
Furniture.....	410	69,575	66,681	-4.2	1,795,422	1,629,168	-9.3

¹The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting, for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL MANUFACTURING ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1929, BY INDUSTRIES—Continued

Industry	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (one week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
Leather and its products	441	143,356	136,545	(1)	\$3,282,642	\$2,750,576	(4)
Leather.....	128	27,281	26,743	-2.0	717,431	677,124	-5.6
Boots and shoes.....	313	116,075	109,802	-5.4	2,565,211	2,073,452	-19.2
Paper and printing	1,221	212,177	212,925	(1)	7,245,015	7,202,845	(1)
Paper and pulp.....	209	60,082	59,562	-0.9	1,673,384	1,641,491	-1.9
Paper boxes.....	178	21,070	21,178	+0.5	496,157	490,447	-1.2
Printing, book and job.....	379	44,054	44,977	+2.1	1,532,577	1,533,405	+0.1
Printing, newspapers.....	455	86,971	87,208	+0.3	3,542,897	3,537,502	-0.2
Chemicals and allied products	390	106,369	104,679	(1)	3,206,872	3,129,602	(1)
Chemicals.....	141	39,566	38,632	-2.4	1,120,042	1,101,130	-1.7
Fertilizers.....	175	10,949	10,576	-3.4	208,912	197,131	-5.6
Petroleum refining.....	74	55,854	55,471	-0.7	1,877,918	1,831,341	-2.5
Stone, clay, and glass products	1,010	130,278	126,376	(1)	3,403,998	3,251,121	(1)
Cement.....	110	23,450	22,587	-3.7	697,104	654,336	-6.1
Brick, tile, and terra cotta.....	647	42,047	39,474	-6.1	1,029,949	951,561	-7.6
Pottery.....	117	19,830	20,113	+1.4	501,205	497,010	-0.8
Glass.....	136	44,951	44,202	-1.7	1,175,640	1,148,214	-2.3
Metal products, other than iron and steel	224	53,654	52,123	(1)	1,457,553	1,299,208	(1)
Stamped and enameled ware.....	71	17,837	17,884	+0.3	427,296	384,721	-10.0
Brass, bronze, and copper products.....	153	35,817	34,239	-4.4	1,030,257	914,487	-11.2
Tobacco products	237	65,021	65,842	(1)	1,111,842	1,110,553	(1)
Chewing and smoking tobacco and snuff.....	26	8,227	8,438	+2.6	139,110	131,101	-5.8
Cigars and cigarettes.....	211	56,794	57,404	+1.1	972,732	979,452	+0.7
Vehicles for land transportation	1,263	561,767	492,292	(1)	18,331,665	15,413,118	(1)
Automobiles.....	215	392,141	324,451	-17.3	12,941,283	10,088,110	-22.0
Carriages and wagons.....	51	1,543	1,399	-9.3	34,857	31,127	-10.7
Car building and repairing, electric-railroad.....	440	28,828	28,903	+0.3	907,603	900,893	-0.7
Car building and repairing, steam-railroad.....	557	139,255	137,539	-1.2	4,447,922	4,392,988	-1.2
Miscellaneous industries	531	427,187	404,436	(1)	12,342,807	11,420,609	(1)
Agricultural implements.....	82	27,828	28,120	+1.0	816,042	804,063	-1.5
Electrical machinery, apparatus, and supplies.....	190	228,017	220,583	-3.3	6,977,368	6,616,919	-5.2
Pianos and organs.....	69	7,136	7,160	+0.3	227,029	221,047	-2.6
Rubber boots and shoes.....	12	18,556	17,749	-4.3	458,529	439,295	-4.2
Automobile tires.....	36	49,986	43,200	-13.6	1,418,848	1,165,556	-17.9
Shipbuilding.....	83	37,134	38,849	+4.6	1,123,001	1,165,669	+3.8
Rayon ¹	13	21,199	21,358	+0.8	453,491	467,290	+3.0
Radio ²	46	37,331	27,417	-26.6	868,499	540,770	-37.7
All industries	12,655	3,538,701	3,387,035	(1)	97,420,897	89,647,097	(1)

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION ³	Estab-lish-ments	October, 1929	November, 1929	Per cent of change	October, 1929	November, 1929	Per cent of change
New England.....	1,491	412,227	399,179	-3.2	\$10,356,162	\$9,524,035	-8.0
Middle Atlantic.....	2,904	965,819	944,381	-2.2	28,270,695	27,054,588	-4.3
East North Central.....	3,124	1,194,980	1,094,906	-8.4	36,467,531	31,679,915	-13.1
West North Central.....	1,137	183,502	178,539	-2.7	4,767,869	4,515,817	-5.3
South Atlantic.....	1,616	352,013	349,372	-0.8	7,091,857	6,929,586	-2.3
East South Central.....	632	137,404	134,238	-2.3	2,664,660	2,505,249	-6.0
West South Central.....	724	113,507	111,490	-1.8	2,725,874	2,557,158	-6.2
Mountain.....	229	33,842	33,881	+0.1	958,451	943,008	-1.6
Pacific.....	798	145,407	141,049	-3.0	4,117,898	3,938,271	-4.4
All divisions	12,655	3,538,701	3,387,035	(1)	97,420,897	89,647,097	(1)

¹ The per cent of change has not been computed for the reason that the figures in the preceding columns are unweighted and refer only to the establishments reporting, for the weighted per cent of change, wherein proper allowance is made for the relative importance of the several industries, so that the figures may represent all establishments of the country in the industries here represented, see Table 2.

² The rayon industry was surveyed for the first time for the January-February comparison, and the radio industry for the March-April comparison, and, since the data for computing relative numbers are not yet available, these industries are not included in the bureau's indexes of employment and pay-roll totals. The total figures for all manufacturing industries given in the text, p. 150, do not include rayon or radio.

³ See footnotes 4 to 12, p. 149.

TABLE 2.—PER CENT OF CHANGE, OCTOBER TO NOVEMBER, 1929—12 GROUPS OF MANUFACTURING INDUSTRIES AND TOTAL OF ALL INDUSTRIES

[Computed from the index numbers of each group, which are obtained by weighting the index numbers of the several industries of the group, by the number of employees, or wages paid, in the industries]

Group	Per cent of change, October to November, 1929		Group	Per cent of change, October to November, 1929	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products.....	-2.5	-3.1	Stone, clay, and glass products.	-3.2	-4.6
Textiles and their products.....	-2.4	-7.4	Metal products, other than iron and steel.....	-3.0	-10.9
Iron and steel and their prod- ucts.....	-2.9	-6.9	Tobacco products.....	+1.2	+0.1
Lumber and its products.....	-3.7	-7.9	Vehicles for land transportation.	-9.3	-11.8
Leather and its products.....	-4.8	-16.0	Miscellaneous industries.....	-3.7	-5.7
Paper and printing.....	+0.6	-0.5	All industries.....	-3.6	-7.0
Chemicals and allied products.....	-1.8	-2.3			

Comparison of Employment and Pay-Roll Totals in Manufacturing Industries in November, 1929, and November, 1928

THE LEVEL of employment in manufacturing industries in November, 1929, was 0.6 per cent lower than in November, 1928, and employees' earnings were 1.0 per cent lower. This is the first month since September, 1928, that employment has fallen below the level of the same month of the preceding year, while pay-roll totals were lower than the level of the same month of the preceding year for the first time since August, 1928.

Five of the 12 groups of industries and 23 of the 54 industries had more employees at the end of the 12-month period than at the beginning, the outstanding increases having been in shipbuilding, electrical machinery, petroleum refining, and machine tools. The greatest decreases in employment over the year interval were registered in automobiles, which showed a drop of 23.1 per cent; automobile tires, which decreased 20.9 per cent, and in pianos, millwork, and cement.

Five of the nine geographic divisions made gains in employment over this year period, while four divisions showed decreased employment, the largest decrease (5.9 per cent) occurring in the East North Central division.

TABLE 3.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1929, WITH NOVEMBER, 1928

[The per cents of change for each of the 12 groups of industries and for the total of all industries are weighted in the same manner as are the per cents of change in Table 2]

Industry	Per cent of change November, 1929, compared with November, 1928		Industry	Per cent of change November, 1929, compared with November, 1928	
	Number on pay roll	Amount of pay roll		Number on pay roll	Amount of pay roll
Food and kindred products.	-0.5	+0.4	Paper and printing—Contd.		
Slaughtering and meat packing.....	+0.9	+1.1	Printing, book and job.....	+4.5	+7.4
Confectionery.....	-2.1	-0.9	Printing, newspapers.....	+3.5	+5.6
Ice cream.....	-1.4	-0.4	Chemicals and allied products		
Flour.....	(1)	+1.2	Chemicals.....	+6.9	+7.4
Baking.....	+0.1	+1.3	Fertilizers.....	+0.3	+0.9
Sugar refining, cane.....	-5.3	-6.6	Petroleum refining.....	-0.3	-4.0
				+18.9	+17.8
Textiles and their products.	-1.4	-4.0	Stone, clay, and glass products		
Cotton goods.....	-3.3	-7.0	Cement.....	-3.6	-6.4
Hosiery and knit goods.....	+7.3	+10.1	Brick, tile, and terra cotta.....	-10.0	-9.1
Silk goods.....	-0.2	-2.2	Pottery.....	-6.9	-9.6
Woolen and worsted goods.....	-6.2	-10.1	Glass.....	-1.3	+1.4
Carpets and rugs.....	+3.2	+4.9		+5.0	+0.9
Dyeing and finishing textiles.....	-1.1	-9.6	Metal products, other than iron and steel.		
Clothing, men's.....	+1.2	-3.7	Stamped and enameled ware.....	(1)	-10.4
Shirts and collars.....	+0.2	-0.1	Brass, bronze, and copper products.....	-6.1	-14.9
Clothing, women's.....	-4.8	-4.7	Tobacco products.		
Millinery and lace goods.....	-3.9	-9.6	Chewing and smoking tobacco and snuff.....	-3.0	+0.3
			Cigars and cigarettes.....	-5.9	-5.0
Iron and steel and their products.	+1.9	-0.5		-2.5	+0.7
Iron and steel.....	-0.9	-5.4	Vehicles for land transportation.		
Cast-iron pipe.....	-2.4	-1.1	Automobiles.....	-10.1	-8.9
Structural ironwork.....	+5.4	+1.1	Carriages and wagons.....	-23.1	-26.4
Foundry and machine-shop products.....	+5.9	+5.9	Car building and repairing, electric-railroad.....	-5.2	-4.3
Hardware.....	-3.0	-5.8	Car building and repairing, steam-railroad.....	+0.5	+1.2
Machine tools.....	+15.6	+9.4		+3.6	+10.4
Steam fittings and steam and hot-water heating apparatus.....	-1.1	-2.0	Miscellaneous industries.		
Stoves.....	-2.7	-7.2	Agricultural implements.....	+15.9	+17.4
			Electrical machinery, apparatus, and supplies.....	-0.4	-4.2
Lumber and its products.	-4.1	-5.0	Pianos and organs.....	+21.6	+21.9
Lumber, sawmills.....	-4.9	-4.6	Rubber boots and shoes.....	-17.1	-20.0
Lumber, millwork.....	-12.8	-15.1	Automobile tires.....	-4.7	-1.2
Furniture.....	+1.5	-2.4	Shipbuilding.....	-20.9	-29.0
				+34.3	+42.3
Leather and its products.	+5.5	+3.2	All industries.....	-0.6	-1.0
Leather.....	+3.6	+8.1			
Boots and shoes.....	+6.3	+3.6			
Paper and printing.	+2.5	+4.9			
Paper and pulp.....	+0.5	+1.9			
Paper boxes.....	+2.7	+0.9			

RECAPITULATION BY GEOGRAPHIC DIVISIONS

GEOGRAPHIC DIVISION ²			GEOGRAPHIC DIVISION—contd.		
New England.....	-1.6	-3.5	West South Central.....	+6.0	+9.1
Middle Atlantic.....	+3.4	+4.1	Mountain.....	+1.6	+2.7
East North Central.....	-5.9	-10.8	Pacific.....	-1.0	-0.1
West North Central.....	+2.2	+6.1	All divisions.....	- .6	-1.0
South Atlantic.....	-0.3	+0.6			
East South Central.....	+0.7	-0.4			

¹ No change.² See footnotes 4 to 12, p. 149.

Per Capita Earnings in Manufacturing Industries in November, 1929

PER CAPITA EARNINGS of employees in the combined 54 manufacturing industries in November, 1929, were 3.7 per cent lower than in October, 1929, and 0.4 per cent lower than in November, 1928.

TABLE 4.—COMPARISON OF PER CAPITA EARNINGS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1929, WITH OCTOBER, 1929, AND NOVEMBER, 1928

Industry	Per cent of change November, 1929, compared with—		Industry	Per cent of change November, 1929, compared with—	
	October, 1929	Novem- ber, 1928		October, 1929	Novem- ber, 1928
Ice cream.....	+1.1	+1.2	Pianos and organs.....	-3.0	-3.7
Chemicals.....	+0.7	+0.6	Foundry and machine-shop products.....	-3.2	+0.1
Rubber boots and shoes.....	+0.2	+3.6	Machine tools.....	-3.5	-5.3
Slaughtering and meat packing.....	+0.2	+0.4	Flour.....	-3.7	+1.0
Car building and repairing, steam-railroad.....	(1)	+6.4	Leather.....	-3.7	+4.1
Shirts and collars.....	(1)	+0.1	Cotton goods.....	-3.9	-3.8
Baking.....	-(2)	+1.3	Structural ironwork.....	-4.0	-4.3
Cigars and cigarettes.....	-0.4	+3.4	Automobile tires.....	-4.9	-10.3
Printing, newspapers.....	-0.4	+2.2	Silk goods.....	-4.9	-1.8
Glass.....	-0.7	-4.1	Clothing, men's.....	-5.0	-4.9
Carpets and rugs.....	-0.8	+1.8	Dyeing and finishing textiles.....	-5.3	-8.6
Shipbuilding.....	-0.8	+5.8	Furniture.....	-5.3	-3.9
Car building and repairing, electric-railroad.....	-1.0	+0.5	Iron and steel.....	-5.3	-4.3
Paper and pulp.....	-1.0	+1.5	Millinery and lace goods.....	-5.4	-5.8
Carriages and wagons.....	-1.5	+1.4	Automobiles.....	-5.8	-4.5
Brick, tile, and terra cotta.....	-1.6	-2.9	Woolen and worsted goods.....	-6.1	-4.3
Hosiery and knit goods.....	-1.7	+2.5	Lumber, millwork.....	-6.3	-2.9
Paper boxes.....	-1.7	-1.9	Sugar refining, cane.....	-6.3	-1.1
Petroleum refining.....	-1.8	-0.8	Steam fittings and steam and hot-water heating apparatus.....	-7.0	-1.4
Electrical machinery, appara- tus, and supplies.....	-2.0	+0.2	Brass, bronze, and copper prod- ucts.....	-7.1	-0.1
Printing, book and job.....	-2.0	+3.1	Stoves.....	-7.6	-4.5
Confectionery.....	-2.2	+1.1	Chewing and smoking tobacco and snuff.....	-8.1	+1.1
Fertilizers.....	-2.3	-3.2	Clothing, women's.....	-8.7	+0.1
Pottery.....	-2.3	+2.4	Stamped and enameled ware.....	-10.2	-10.3
Hardware.....	-2.4	-3.0	Boots and shoes.....	-11.6	-2.6
Agricultural implements.....	-2.5	-4.1			
Cement.....	-2.6	+0.8	All industries.....	-3.7	-0.4
Lumber, sawmills.....	-2.7	+0.5			
Cast-iron pipe.....	-2.9	+1.5			

¹ No change.² Less than one-tenth of 1 per cent.

Indexes of Employment and Pay-Roll Totals in Manufacturing Industries

INDEX NUMBERS for November, 1928, and for September, October, and November, 1929, showing relatively the variation in number of persons employed and in pay-roll totals in each of the 54 manufacturing industries surveyed by the Bureau of Labor Statistics, together with general indexes for the combined 12 groups of industries, appear in Table 5.

TABLE 5.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1928, AND SEPTEMBER, OCTOBER, AND NOVEMBER, 1929

[Monthly average, 1926=100]

Industry	Employment				Pay-roll totals			
	1928	1929			1928	1929		
	November	September	October	November	November	September	October	November
General index	95.4	99.3	98.3	94.8	96.1	102.6	102.3	95.1
Food and kindred products	101.9	102.1	104.0	101.4	102.3	105.3	106.0	102.7
Slaughtering and meat packing.....	100.9	100.6	101.4	101.8	103.3	104.2	103.8	104.4
Confectionery.....	108.4	99.8	111.0	106.1	106.4	102.0	112.7	105.4
Ice cream.....	83.5	102.5	90.6	82.3	84.0	103.3	91.2	83.7
Flour.....	103.5	106.4	106.5	103.5	104.2	115.0	112.6	105.4
Baking.....	102.4	104.4	105.2	102.5	103.0	106.5	107.1	104.3
Sugar refining, cane.....	95.9	89.5	96.8	90.8	96.9	92.1	103.0	90.5
Textiles and their products	97.2	97.1	98.2	95.8	96.5	97.8	100.0	92.6
Cotton goods.....	97.0	94.0	94.8	93.8	96.3	91.2	94.2	89.6
Hosiery and knit goods.....	95.6	100.6	103.2	102.6	101.0	106.3	113.7	111.2
Silk goods.....	96.9	98.1	98.1	96.7	97.6	100.6	101.8	95.5
Woolen and worsted goods.....	99.8	97.4	98.5	93.6	99.9	98.1	100.7	89.8
Carpets and rugs.....	104.9	103.8	109.1	108.3	101.7	99.2	108.4	106.7
Dyeing and finishing textiles.....	101.9	100.8	102.4	100.8	106.7	100.0	103.5	96.5
Clothing, men's.....	89.0	95.3	93.3	90.1	81.3	92.0	85.2	78.3
Shirts and collars.....	94.1	93.9	94.6	94.3	94.4	91.5	94.6	94.3
Clothing, women's.....	106.2	102.8	108.1	101.1	102.9	108.7	114.9	98.1
Millinery and lace goods.....	88.7	94.0	92.2	85.2	86.6	93.2	89.5	78.3
Iron and steel and their products	94.8	100.7	99.5	96.6	97.7	104.2	104.4	97.2
Iron and steel.....	93.1	96.3	93.9	92.3	97.6	101.7	99.1	92.3
Cast-iron pipe.....	75.9	81.8	79.4	74.1	73.5	83.3	80.3	72.7
Structural ironwork.....	98.5	107.7	106.9	103.8	104.3	112.1	113.1	105.4
Foundry and machine-shop products.....	95.6	105.7	104.7	101.2	96.8	108.1	109.5	102.5
Hardware.....	91.5	92.2	92.0	88.8	94.3	93.4	94.2	88.8
Machine tools.....	114.2	134.9	135.8	132.0	125.6	143.9	146.5	137.4
Steam fittings and steam and hot-water heating apparatus.....	79.4	77.2	79.1	78.5	78.1	78.2	82.8	76.5
Stoves.....	95.2	97.1	100.2	92.6	94.2	93.4	102.3	87.4
Lumber and its products	90.0	91.4	89.6	86.3	92.0	94.9	94.9	87.4
Lumber, sawmills.....	88.1	89.0	86.2	83.8	89.7	92.6	90.6	85.6
Lumber, millwork.....	85.4	84.1	79.9	74.5	85.2	85.8	82.8	72.3
Furniture.....	98.4	102.1	104.3	99.9	103.6	105.6	111.5	101.1
Leather and its products	88.6	98.4	98.2	93.5	78.6	100.7	96.6	81.1
Leather.....	90.9	95.3	96.2	94.2	87.8	97.6	100.6	94.9
Boots and shoes.....	87.8	99.2	98.7	93.3	74.5	101.6	95.5	77.2
Paper and printing	101.2	102.9	103.1	103.7	103.4	107.7	109.1	108.5
Paper and pulp.....	95.5	96.2	96.9	96.0	97.0	98.5	100.7	98.8
Paper boxes.....	101.4	99.0	103.6	104.1	111.2	108.0	113.5	112.2
Printing, book and job.....	99.5	105.6	101.9	104.0	99.4	108.3	106.7	106.8
Printing, newspapers.....	107.4	108.9	110.9	111.2	110.2	113.9	116.6	116.4
Chemicals and allied products	94.4	101.6	102.8	100.9	97.2	105.2	106.9	104.4
Chemicals.....	102.7	103.6	105.6	103.0	106.8	106.0	109.6	107.8
Fertilizers.....	88.9	90.9	91.7	88.6	91.0	92.3	92.6	87.4
Petroleum refining.....	86.1	102.7	103.2	102.4	88.4	106.6	106.7	104.1
Stone, clay, and glass products	89.2	90.5	88.8	86.0	90.6	89.6	88.9	84.8
Cement.....	86.6	84.2	80.9	77.9	85.4	87.3	82.6	77.6
Brick, tile, and terra cotta.....	84.3	87.3	83.6	78.5	82.5	82.4	80.7	74.6
Pottery.....	96.6	92.7	94.0	95.3	92.5	91.1	94.5	93.8
Glass.....	92.0	97.4	98.3	96.6	98.5	100.6	101.7	99.4
Metal products, other than iron and steel	97.8	96.2	96.3	93.4	106.2	100.6	102.3	91.1
Stamped and enameled ware.....	90.6	89.7	90.3	90.6	94.0	89.3	93.6	84.2
Brass, bronze, and copper products.....	100.8	99.3	99.1	94.7	110.2	105.1	105.7	93.8
Tobacco products	101.2	95.9	97.0	98.2	99.3	98.6	99.5	99.6
Chewing and smoking tobacco and snuff.....	93.7	89.3	85.9	88.2	88.7	86.8	89.5	84.3
Cigars and cigarettes.....	102.1	96.7	98.4	99.5	100.7	100.0	100.7	101.4

TABLE 5.—INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, NOVEMBER, 1928, AND SEPTEMBER, OCTOBER, AND NOVEMBER, 1929—Continued

[Monthly average, 1926=100]

Industry	Employment				Pay-roll totals			
	1928		1929		1928		1929	
	November	September	October	November	November	September	October	November
Vehicles for land transportation								
Automobiles	95.5	99.9	94.7	85.9	97.5	104.8	100.7	88.8
Carriages and wagons	111.5	115.7	103.7	85.7	111.4	117.0	105.1	82.0
Car building and repairing, electric-railroad	80.6	85.0	84.2	76.4	86.7	92.2	92.9	83.0
Car building and repairing, steam-railroad	92.2	91.5	92.4	92.7	93.4	93.3	95.1	94.5
Miscellaneous industries	82.7	86.5	86.8	85.7	86.5	93.2	96.7	95.5
Agricultural implements	94.0	114.7	113.1	108.9	91.9	115.1	114.4	107.9
Electrical machinery, apparatus, and supplies	111.7	109.2	110.1	111.2	116.0	108.1	112.8	111.1
Pianos and organs	100.6	127.3	126.5	122.3	101.6	130.8	130.6	123.8
Rubber boots and shoes	80.6	65.4	66.6	66.8	83.1	63.6	68.3	66.5
Automobile tires	104.0	103.3	103.5	99.1	104.3	109.0	107.5	103.0
Shipbuilding	103.9	102.3	95.1	82.2	102.1	92.9	88.3	72.5
	82.6	105.8	106.0	110.9	80.2	110.6	109.9	114.1

Table 6 shows the general index of employment in manufacturing industries and the general index of pay-roll totals, by months, from January, 1923, to November, 1929.

Following Table 6 is a chart which represents the 54 industries combined and shows, by months, the course of pay-roll totals as well as the course of employment. It includes the years 1926 and 1927, as well as 1928, and January, February, March, April, May, June, July, August, September, October, and November, 1929.

TABLE 6.—GENERAL INDEXES OF EMPLOYMENT AND PAY-ROLL TOTALS IN MANUFACTURING INDUSTRIES, JANUARY, 1923, TO NOVEMBER, 1929

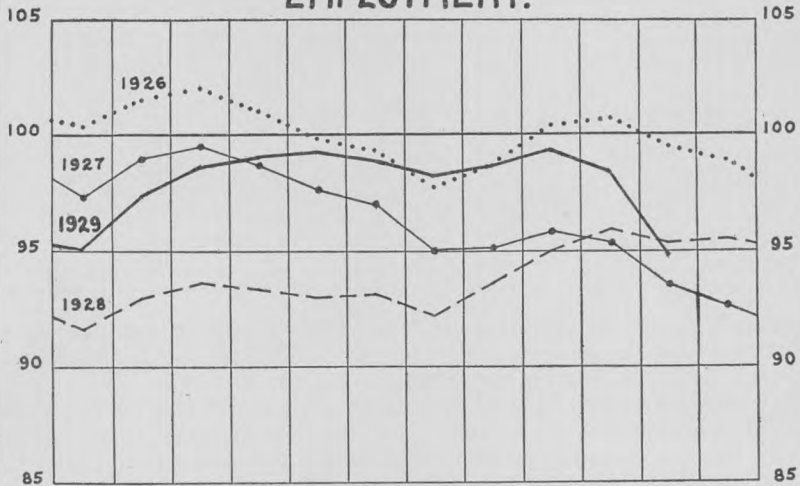
[Monthly average, 1926=100]

Month	Employment							Pay-roll totals						
	1923	1924	1925	1926	1927	1928	1929	1923	1924	1925	1926	1927	1928	1929
January	106.6	103.8	97.9	100.4	97.3	91.6	95.2	95.8	98.6	93.9	98.0	94.9	89.6	94.5
February	108.4	105.1	99.7	101.5	99.0	93.0	97.4	99.4	103.8	99.3	102.2	100.6	93.9	101.8
March	110.8	104.9	100.4	102.0	99.5	93.7	98.6	104.7	103.3	100.8	103.4	102.0	95.2	103.9
April	110.8	102.8	100.2	101.0	98.6	93.3	99.1	105.7	101.1	98.3	101.5	100.8	93.8	104.6
May	110.8	98.8	98.9	99.8	97.6	93.0	99.2	109.4	96.5	98.5	99.8	99.8	94.1	104.8
June	110.9	95.6	98.0	99.3	97.0	93.1	98.8	109.3	90.8	95.7	99.7	97.4	94.2	102.8
July	109.2	92.3	97.2	97.7	95.0	92.2	98.2	104.3	84.3	93.5	95.2	93.0	91.2	98.2
August	108.5	92.5	97.8	98.7	95.1	93.6	98.6	103.7	87.2	95.4	98.7	95.0	94.2	102.1
September	108.6	94.3	98.9	100.3	95.8	95.0	99.3	104.4	89.8	94.4	99.3	94.1	95.4	102.6
October	108.1	95.6	100.4	100.7	95.3	95.9	98.3	106.8	92.4	100.4	102.9	95.2	99.0	102.3
November	107.4	95.5	100.7	99.5	93.5	95.4	94.8	105.4	91.4	100.4	99.6	91.6	96.1	95.1
December	105.4	97.3	100.8	98.9	92.6	95.5	---	103.2	95.7	101.6	99.8	93.2	97.7	---
Average	108.8	98.2	99.2	100.0	96.4	93.8	98.0	104.3	94.6	97.7	100.0	96.5	94.5	101.2

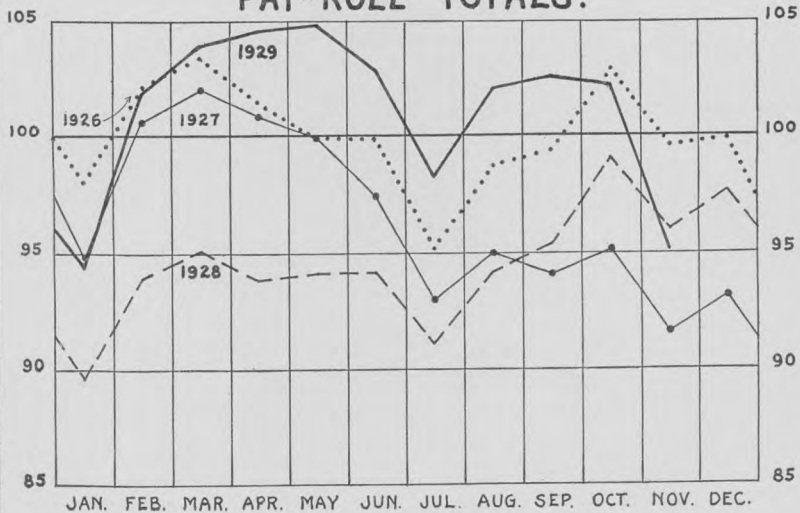
¹ Average for 11 months.

MANUFACTURING INDUSTRIES.
MONTHLY INDEXES, 1926-1929.
 MONTHLY AVERAGE 1926 = 100.

EMPLOYMENT.



PAY-ROLL TOTALS.



Force Employed and Time Worked in Manufacturing Industries in November, 1929

TEN THOUSAND FIVE HUNDRED AND FORTY-ONE establishments in the 54 manufacturing industries reported as to force employed in November, 1929, and as to working time of employees. Thirty-eight per cent of the establishments had a full normal force of employees, 61 per cent were working with reduced forces, and 1 per cent were idle; employees in 79 per cent of the establishments were working full time, and employees in 20 per cent were working part time.

The establishments in operation had an average of 89 per cent of a full normal force of employees who were working an average of 97 per cent of full time, these percentages indicating a decrease of 3 per cent in average force with a decrease of 1 per cent in average working time as compared with October.

TABLE 7.—PROPORTION OF FULL NORMAL FORCE EMPLOYED IN MANUFACTURING INDUSTRIES IN NOVEMBER, 1929, AND PROPORTION OF FULL TIME WORKED BY EMPLOYEES

Industry	Establishments reporting		Operating establishments only					
			Per cent of establishments in which employees worked—		Average per cent of full time worked by employees in establishments operating	Per cent of establishments operating with—		Average per cent of full normal force employed in establishments operating
			Full time	Part time		Full normal force	Part normal force	
Food and kindred products	1,577	1	89	11	98	38	61	90
Slaughtering and meat packing.....	153		92	8	100	48	52	91
Confectionery.....	246	(1)	76	23	96	29	70	87
Ice cream.....	248	2	88	10	99	11	87	67
Flour.....	304	(1)	83	17	97	38	62	91
Baking.....	613	(1)	97	3	100	51	49	97
Sugar refining, cane.....	13		62	38	93	15	85	80
Textiles and their products	1,775	1	76	23	95	41	58	89
Cotton goods.....	440	1	70	28	94	38	60	86
Hosiery and knit goods.....	304		86	14	93	46	54	97
Silk goods.....	253	2	81	17	96	47	51	91
Woolen and worsted goods.....	169	1	70	29	94	30	69	82
Carpets and rugs.....	25		80	20	96	44	56	104
Dyeing and finishing.....	103		53	47	91	35	65	87
Clothing, men's.....	213	2	74	25	96	46	52	84
Shirts and collars.....	85	1	85	14	99	58	41	105
Clothing, women's.....	117	1	82	17	96	33	66	88
Millinery and lace goods.....	66		77	23	96	26	74	79
Iron and steel and their products	1,708	(1)	70	29	95	39	60	90
Iron and steel.....	166	4	62	34	93	23	68	86
Cast-iron pipe.....	33	3	33	64	75	6	91	72
Structural ironwork.....	153		84	16	99	43	57	96
Foundry and machine-shop products.....	954	(1)	71	29	95	38	62	91
Hardware.....	55		69	31	95	35	65	87
Machine tools.....	142		90	10	99	68	32	126
Steam fittings and steam and hot-water heating apparatus.....	101		58	42	93	36	64	83
Stoves.....	104		57	43	90	38	62	94
Lumber and its products	1,234	1	73	27	96	32	68	84
Lumber, sawmills.....	586	1	72	27	96	30	69	83
Lumber, millwork.....	290		66	34	94	20	80	70
Furniture.....	358	(1)	80	20	98	44	56	95
Leather and its products	388	(1)	71	28	93	47	53	94
Leather.....	116		83	17	97	41	59	86
Boots and shoes.....	272	(1)	67	33	91	50	50	96

¹ Less than one-half of 1 per cent.

TABLE 7.—PROPORTION OF FULL NORMAL FORCE EMPLOYED IN MANUFACTURING INDUSTRIES IN NOVEMBER, 1929, AND PROPORTION OF FULL TIME WORKED BY EMPLOYEES—Continued

Industry	Establishments reporting		Operating establishments only					
			Per cent of establishments in which employees worked—		Average per cent of full time worked by employees in establishments operating	Per cent of establishments operating with—		Average per cent of full normal force employed in establishments operating
			Full time	Part time		Full normal force	Part normal force	
Paper and printing	923	(1)	92	8	99	56	44	100
Paper and pulp.....	172	1	87	13	98	42	57	94
Paper boxes.....	149	-----	90	10	99	56	44	99
Printing, book and job.....	307	-----	91	9	99	49	51	105
Printing, newspapers.....	295	-----	98	2	100	70	30	104
Chemicals and allied products	261	-----	87	13	98	21	79	82
Chemicals.....	89	-----	93	7	98	39	61	97
Fertilizers.....	136	-----	79	21	97	6	94	52
Petroleum refining.....	36	-----	100	-----	100	31	69	88
Stone, clay, and glass products	827	3	83	13	98	25	71	84
Cement.....	93	-----	94	6	99	22	78	79
Brick, tile, and terra cotta.....	523	5	81	15	97	19	76	79
Pottery.....	100	1	77	22	96	39	60	95
Glass.....	111	1	93	6	100	44	55	91
Metal products, other than iron and steel	188	-----	74	26	96	37	63	90
Stamped and enameled ware.....	56	-----	79	21	96	45	55	90
Brass, bronze, and copper products.....	132	-----	73	27	96	34	66	90
Tobacco products	202	2	66	32	95	46	52	100
Chewing and smoking tobacco and snuff.....	23	-----	57	43	94	48	52	90
Cigars and cigarettes.....	179	2	67	31	95	45	53	102
Vehicles for land transportation	1,086	(1)	81	19	97	28	72	81
Automobiles.....	157	-----	56	44	90	27	73	77
Carriages and wagons.....	47	2	57	40	93	15	83	55
Car building and repairing, electric-railroad.....	369	-----	85	15	99	43	57	92
Car building and repairing, steam-railroad.....	513	-----	87	13	99	19	81	85
Miscellaneous industries	372	1	74	25	97	44	55	95
Agricultural implements.....	69	3	70	28	97	30	67	102
Electrical machinery, apparatus, and supplies.....	145	-----	77	23	97	54	46	104
Pianos and organs.....	52	-----	73	27	96	29	71	83
Rubber boots and shoes.....	8	13	63	25	97	63	25	95
Automobile tires.....	34	-----	47	53	90	18	82	83
Shipbuilding.....	64	2	89	9	99	56	42	83
All industries	10,541	1	79	20	97	38	61	89

¹ Less than one-half of 1 per cent.

2. Employment in Coal Mining in November, 1929

EMPLOYMENT in coal mining—anthracite and bituminous combined—showed an increase of 0.7 per cent while pay-roll totals decreased 11.6 per cent. The pronounced decrease in earnings in November was due largely to the observance of armistice day, election day, and some church celebrations which occurred during the period covered by the pay rolls reported.

The 1,464 mines reported had in November 334,691 employees whose earnings in one week were \$9,173,065.

Anthracite

IN ANTHRACITE MINING in November there was a decrease of 1.9 per cent in employment and a decrease of 24.9 per cent in pay-roll totals.

All anthracite mines reported are in Pennsylvania—the Middle Atlantic geographic division. The details for October and November are shown in Table 1.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL ANTHRACITE MINES IN OCTOBER AND NOVEMBER, 1929

Geographic division	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
Middle Atlantic ¹	162	120,309	117,996	-1.9	\$4,667,597	\$3,506,875	-24.9

¹ See footnote 5, p. 149.

Bituminous Coal

EMPLOYMENT in bituminous coal mining increased 2.2 per cent in November as compared with October, while pay-roll totals decreased 0.8 per cent, as shown by reports from 1,302 mines in which there were in November 216,695 employees whose combined earnings in one week were \$5,666,190.

Substantial increases in employment were shown in each geographic division for which bituminous mining is reported, and increased earnings were reported in four divisions. In the remaining four divisions, the greatest decrease in earnings (8.8 per cent) was shown in the East North Central division.

Details for each geographic division except the New England division, for which no coal mining is reported, are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL BITUMINOUS COAL MINES IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....							
Middle Atlantic.....	408	64,161	65,583	+1.9	\$1,720,952	\$1,737,606	+1.0
East North Central.....	182	31,486	32,040	+1.8	908,244	828,446	-8.8
West North Central.....	53	5,260	5,495	+4.5	135,069	132,027	-2.3
South Atlantic.....	294	49,082	49,882	+1.6	1,288,994	1,319,694	+2.4
East South Central.....	215	42,163	43,203	+2.5	962,484	915,606	-4.9
West South Central.....	32	2,884	3,177	+10.2	73,085	84,163	+15.2
Mountain.....	106	15,459	15,859	+2.6	561,082	588,747	+4.9
Pacific.....	12	1,637	1,656	+1.2	62,800	59,901	-4.6
All divisions.....	1,302	212,132	216,695	+2.2	5,712,710	5,666,190	-0.8

¹ See footnotes 4 to 12, p. 149.

3. Employment in Metalliferous Mining in November, 1929

METALLIFEROUS mines in November showed an increase in employment of 1.1 per cent, while pay-roll totals decreased 0.9 per cent. The 342 mines covered had in November 63,131 employees whose combined earnings in one week were \$1,881,714.

Details for each geographic division from which metalliferous mining is reported are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **METALLIFEROUS MINES** IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Mines	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....							
Middle Atlantic.....	6	983	980	-0.3	\$28,566	\$27,355	-4.2
East North Central.....	48	13,191	13,281	+0.7	364,411	365,676	+0.3
West North Central.....	56	8,507	8,278	-2.7	255,107	238,576	-6.5
South Atlantic.....							
East South Central.....	12	3,927	3,932	+0.1	84,344	85,286	+1.1
West South Central.....	70	4,493	4,814	+7.1	123,908	121,217	-2.2
Mountain.....	133	29,595	30,091	+1.7	985,857	985,664	-(?)
Pacific.....	17	1,736	1,755	+1.1	57,334	57,940	+1.1
All divisions.....	342	62,432	63,131	+1.1	1,899,527	1,881,714	-0.9

¹ See footnotes 4 to 12, p. 149.

² Less than one-tenth of 1 per cent.

4. Employment in Quarrying and Nonmetallic Mining in November, 1929

EMPLOYMENT and pay-roll totals in this industrial group as a whole decreased 4.8 per cent and 9.2 per cent, respectively, in November as compared with October. The 678 establishments covered reported 37,652 employees whose combined earnings in one week were \$964,383.

Details for each geographic division are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **QUARRIES AND NONMETALLIC MINES** IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....	105	5,851	5,449	-6.9	\$178,434	\$159,620	-10.5
Middle Atlantic.....	97	6,821	6,722	-1.5	203,446	191,865	-5.7
East North Central.....	207	11,455	10,403	-9.2	356,824	302,698	-15.2
West North Central.....	68	3,077	2,787	-9.4	76,975	70,333	-8.6
South Atlantic.....	96	6,267	6,233	-0.5	112,210	*106,975	-4.7
East South Central.....	47	2,886	2,858	-1.0	50,642	44,728	-11.7
West South Central.....	29	2,142	2,142	(?)	54,352	56,708	+4.3
Mountain.....	7	74	87	+17.6	1,779	1,961	+10.2
Pacific.....	22	970	971	+0.1	27,782	29,495	+6.2
All divisions.....	678	39,543	37,652	-4.8	1,062,444	964,383	-9.2

¹ See footnotes 4 to 12, p. 149.

² No change.

5. Employment in Public Utilities in November, 1929

PUBLIC UTILITY companies reported a decrease of 0.5 per cent in employment in November as compared with October and decreased pay-roll totals of 2.4 per cent. The 9,568 establishments reporting had in November 717,079 employees, whose combined earnings in one week were \$21,042,639.

Details for each geographic division are shown in the following table:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **PUBLIC UTILITIES** ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....	393	43,264	42,613	-1.5	\$1,414,360	\$1,394,926	-1.4
Middle Atlantic.....	1,500	211,571	211,688	+0.1	6,629,520	6,540,322	-1.3
East North Central.....	1,704	185,500	184,124	-0.7	5,741,617	5,590,184	-2.6
West North Central.....	1,618	76,075	75,864	-0.3	2,079,090	2,028,515	-2.4
South Atlantic.....	835	56,042	54,977	-1.9	1,547,742	1,502,759	-2.9
East South Central.....	726	22,057	21,848	-0.9	525,694	508,851	-3.2
West South Central.....	1,032	42,871	43,047	+0.4	1,068,106	1,027,855	-3.8
Mountain.....	577	17,667	17,707	+0.2	484,663	478,556	-1.3
Pacific.....	1,183	65,751	65,211	-0.8	2,064,146	1,970,671	-4.5
All divisions.....	9,568	720,798	717,079	-0.5	21,554,938	21,042,639	-2.4

¹ See footnotes 4 to 12, p. 149.

6. Employment in Wholesale and Retail Trade in November, 1929

EMPLOYMENT in 7,971 establishments—wholesale and retail trade combined—showed a gain of 3.8 per cent in November as compared with October, and a gain of 1.6 per cent in pay-roll totals. These establishments had in November 317,267 employees whose combined earnings in one week were \$7,875,254.

Wholesale Trade

EMPLOYMENT in wholesale trade alone remained practically unchanged in November as compared with October, while pay-roll totals decreased 0.8 per cent. The 1,846 establishments reporting had in November 65,464 employees and pay-roll totals of \$1,973,549.

Details for each geographic division are shown in Table 1.

TABLE 1.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **WHOLESALE TRADE** ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....	157	3,768	3,783	+0.4	\$107,201	\$106,673	-0.5
Middle Atlantic.....	323	10,141	10,277	+1.3	318,447	322,143	+1.2
East North Central.....	249	14,532	14,282	-1.7	442,749	437,397	-1.2
West North Central.....	217	12,660	12,741	+0.6	362,198	360,256	-0.5
South Atlantic.....	273	4,341	4,468	+2.9	126,075	126,884	+0.6
East South Central.....	65	1,977	1,966	-0.6	56,844	56,632	-0.4
West South Central.....	203	5,676	5,589	-1.5	164,000	157,624	-3.9
Mountain.....	65	1,753	1,728	-1.4	58,678	57,281	-2.4
Pacific.....	294	10,594	10,630	+0.3	354,119	348,659	-1.5
All divisions.....	1,846	65,442	65,464	+(²)	1,990,311	1,973,549	-0.8

¹ See footnotes 4 to 12, p. 149.

² Less than one-tenth of 1 per cent.

Retail Trade

EMPLOYMENT in retail trade in November continued the upward seasonal trend which began in September.

Eight of the nine geographic divisions showed increased employment while all divisions showed increased pay-roll totals. The Middle Atlantic and the New England divisions reported increases in employment of 12.4 and 9.5 per cent, respectively; the West North Central division alone showed a slight decrease in number of workers.

The 6,125 establishments from which reports were received had in November 251,803 employees whose earnings in one week were \$5,901,705.

Details by geographic divisions are shown in Table 2.

TABLE 2.—COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL RETAIL TRADE ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Estab-lish-ments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....	90	13,268	14,527	+9.5	\$332,590	\$341,931	+2.8
Middle Atlantic.....	319	47,462	53,331	+12.4	1,244,173	1,311,929	+5.4
East North Central.....	2,362	81,272	82,845	+1.9	2,039,345	2,048,688	+0.5
West North Central.....	654	22,182	22,085	-0.4	463,909	468,877	+1.1
South Atlantic.....	906	20,495	21,898	+6.8	455,419	468,676	+2.9
East South Central.....	366	6,207	6,253	+0.7	121,239	124,511	+2.7
West South Central.....	109	8,346	8,596	+3.0	161,857	165,462	+2.2
Mountain.....	71	3,594	3,684	+2.5	70,126	72,187	+2.9
Pacific.....	1,248	37,239	38,584	+3.6	869,168	899,444	+3.5
All divisions.....	6,125	240,065	251,803	+4.9	5,757,817	5,901,705	+2.5

¹ See footnotes 4 to 12, p. 149.

7. Employment in Hotels in November, 1929

EMPLOYMENT in hotels decreased 0.6 per cent in November as compared with October and pay-roll totals decreased 0.4 per cent. The South Atlantic and South Central divisions reported increased employment in preparation of the opening of southern resort hotels, and the two West Central divisions also reported gains in number of employees. The remaining five divisions showed decreases in employment, the largest of which (7.9 per cent) occurred in the New England division.

Per capita earnings, obtained by dividing the total number of employees into the total amount of pay roll, should not be interpreted as being the entire earnings of hotel employees. The pay-roll totals here reported are cash payments only, with no regard to the value of board or room furnished employees, and of course no satisfactory estimate can be made of additional recompense in the way of tips. The additions to the money wages granted vary greatly, not only among localities but among hotels in one locality and among employees in one hotel. Some employees are furnished board and room, others are given board only for one, two, or three meals, while the division of tips is made in many ways.

Per capita earnings are further reduced by the considerable amount of part-time employment in hotels caused by conventions and banquets or other functions.

The details for each geographic division are shown in the table following:

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **HOTELS** IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Hotels	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....	116	10,512	9,685	-7.9	\$166,602	\$153,852	-7.7
Middle Atlantic.....	335	45,664	45,217	-1.0	814,236	802,137	-1.5
East North Central.....	338	34,603	34,473	-0.4	618,532	622,151	+0.6
West North Central.....	210	13,532	13,680	+1.1	198,667	202,514	+1.9
South Atlantic.....	176	12,722	13,036	+2.5	192,912	195,703	+1.4
East South Central.....	64	5,739	5,915	+3.1	76,329	78,159	+2.4
West South Central.....	105	8,230	8,426	+2.4	110,358	114,202	+3.5
Mountain.....	103	3,906	3,793	-2.9	67,633	64,275	-5.0
Pacific.....	353	17,820	17,550	-1.5	341,697	342,434	+0.2
All divisions.....	1,800	152,728	151,775	-0.6	2,586,966	2,575,427	-0.4

¹ See footnotes 4 to 12, p. 149.

8. Employment in Canning and Preserving in November, 1929

THE usual late fall decreases in the canning and preserving industry continued in November, each geographic division reporting large decreases in both employment and pay roll. A falling off of 33.6 per cent in number of employees and 31.9 per cent in earnings for the industry as a whole was shown in November.

Reports were received from 518 establishments having in November 36,863 employees with pay-roll totals of \$626,115.

The details for each geographic division are shown in the table following.

COMPARISON OF EMPLOYMENT AND PAY-ROLL TOTALS IN IDENTICAL **CANNING AND PRESERVING** ESTABLISHMENTS IN OCTOBER AND NOVEMBER, 1929

Geographic division ¹	Establishments	Number on pay roll		Per cent of change	Amount of pay roll (1 week)		Per cent of change
		October, 1929	November, 1929		October, 1929	November, 1929	
New England.....	35	3,476	2,032	-41.5	\$57,401	\$26,804	-53.3
Middle Atlantic.....	67	11,777	9,725	-17.4	223,754	198,596	-11.2
East North Central.....	131	8,051	4,895	-39.2	126,166	88,395	-29.9
West North Central.....	33	1,567	1,076	-31.3	22,598	17,509	-22.5
South Atlantic.....	56	5,066	2,461	-47.5	52,522	27,491	-47.7
East South Central.....	26	1,325	855	-43.9	10,189	8,044	-21.1
West South Central.....	10	396	183	-43.8	3,320	1,587	-52.2
Mountain.....	28	2,568	1,555	-39.4	41,908	32,096	-23.4
Pacific.....	132	21,073	13,881	-34.1	381,517	225,593	-40.9
All divisions.....	518	55,499	36,863	-33.6	919,375	626,115	-31.9

¹ See footnotes 4 to 12, p. 149.

Employment on Class I Steam Railroads in the United States

THE monthly trend of employment from January, 1923, to October, 1929, on Class I railroads—that is, all roads having operating revenues of \$1,000,000 or over—is shown by the index numbers published in Table 1. These index numbers are constructed from monthly reports of the Interstate Commerce Commission, using the monthly average for 1926 as 100.

TABLE 1.—INDEX OF EMPLOYMENT ON CLASS I STEAM RAILROADS IN THE UNITED STATES, JANUARY, 1923, TO OCTOBER, 1929

[Monthly average, 1926=100]

Month	1923	1924	1925	1926	1927	1928	1929
January.....	98.3	96.9	95.6	95.8	95.5	89.3	88.2
February.....	98.6	97.0	95.4	96.0	95.3	89.0	88.9
March.....	100.5	97.4	95.2	96.7	95.8	89.9	90.1
April.....	102.0	98.9	96.6	98.9	97.4	91.7	92.2
May.....	105.0	99.2	97.8	100.2	99.4	94.5	94.9
June.....	107.1	98.0	98.6	101.6	100.9	95.9	96.1
July.....	108.2	98.1	99.4	102.9	101.0	95.6	96.6
August.....	109.4	99.0	99.7	102.7	99.5	95.7	97.4
September.....	107.8	99.7	99.9	102.8	99.1	95.3	96.8
October.....	107.3	100.8	100.7	103.4	98.9	95.3	96.9
November.....	105.2	99.0	99.1	101.2	95.7	92.9	-----
December.....	99.4	96.0	97.1	98.2	91.9	89.7	-----
Average.....	104.1	98.3	97.9	100.0	97.5	92.9	193.8

¹ Average for 10 months.

Table 2 shows the total number of employees on the 15th day each of October, 1928, and September and October, 1929, and pay-roll totals for the entire month of each month considered.

In these tabulations data for the occupational group reported as "executives, officials, and staff assistants" are omitted.

TABLE 2.—EMPLOYMENT AND EARNINGS OF RAILROAD EMPLOYEES—OCTOBER, 1928, AND SEPTEMBER AND OCTOBER, 1929

[From monthly reports of Interstate Commerce Commission. As data for only the more important occupations are shown separately, the group totals are not the sum of the items under the respective groups]

Occupation	Number of employees at middle of month			Total earnings		
	October, 1928	September, 1929	October, 1929	October, 1928	September, 1929	October, 1929
Professional, clerical, and general	271,639	272,427	272,941	\$40,050,604	\$39,363,958	\$40,709,515
Clerks.....	155,876	154,600	155,147	21,968,354	21,106,291	22,085,797
Stenographers and typists.....	24,617	24,850	24,818	3,238,176	3,193,815	3,292,332
Maintenance of way and structures	428,802	462,241	452,681	41,725,293	42,214,702	44,182,951
Laborers, extra gang and work train.....	69,543	87,306	81,638	5,763,648	6,750,927	6,707,698
Laborers, track and roadway section.....	222,863	232,462	228,267	17,171,642	16,390,390	17,441,311
Maintenance of equipment and stores	459,512	454,628	458,844	64,378,254	61,951,080	67,407,210
Carmen.....	101,313	100,115	101,585	16,206,075	15,645,676	17,221,723
Machinists.....	55,255	54,318	54,836	9,332,469	8,915,507	9,851,455
Skilled trades helpers.....	100,844	101,408	102,243	12,076,028	11,882,283	13,035,641
Laborers (shops, engine houses, power plants, and stores).....	37,700	36,909	37,383	3,704,820	3,502,330	3,722,157
Common laborers (shops, engine houses, power plants, and stores).....	52,450	52,421	52,634	4,523,663	4,152,445	4,555,917
Transportation, other than train, engine, and yard	201,641	199,430	200,489	26,111,229	24,949,515	26,128,121
Station agents.....	29,729	29,335	29,253	4,858,529	4,611,218	4,821,716
Telegraphers, telephoners, and towermen.....	23,472	23,309	23,351	3,722,700	3,585,440	3,731,051
Truckers (stations, warehouses, and platforms).....	36,920	35,166	36,849	3,752,076	3,359,200	3,766,873
Crossing and bridge flagmen and gatemen.....	20,995	20,672	20,470	1,626,232	1,596,378	1,595,565
Transportation (yard masters, switch tenders, and hostlers)	22,100	21,860	21,945	429,695	4,320,331	4,406,704
Transportation, train and engine	323,902	320,254	325,958	71,825,123	67,176,243	72,782,614
Road conductors.....	36,661	36,309	36,689	9,332,925	8,975,789	9,604,812
Road brakemen and flagmen.....	73,157	71,427	72,221	13,845,762	13,040,228	14,123,331
Yard brakemen and yard helpers.....	53,797	53,880	55,542	10,638,575	9,811,474	10,800,526
Road engineers and motormen.....	43,595	42,897	43,434	13,040,992	12,108,676	13,028,731
Road fireman and helpers.....	44,056	43,290	43,693	9,629,269	8,912,909	9,583,407
All employees.....	1,707,596	1,730,840	1,732,858	248,520,198	239,975,829	255,617,115

Changes in Employment and Pay Rolls in Various States

THE following data as to changes in employment and pay rolls have been compiled from reports received from the various State labor offices:

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES

Monthly period

State, and industry group	Per cent of change, September to October, 1929		State, and industry group	Per cent of change, October to November, 1929	
	Employment	Pay roll		Employment	Pay roll
Illinois			Maryland—Continued		
Stone, clay, and glass products.....	-1.9	+5.0	Metal products, other than iron and steel.....	-4.4	-10.8
Metals, machinery, and conveyances.....	- .5	+2.8	Tobacco products.....	+ .4	+ .6
Wood products.....	+2.0	+5.4	Machinery (not including transportation equipment).....	+ .5	-2.7
Furs and leather goods.....	-2.5	- .7	Musical instruments.....	-3.5	-7.9
Chemicals, oils, paints, etc.....	-2.2	+1.9	Transportation equipment.....	-21.5	-25.0
Printing and paper goods.....	-2.8	+ .4	Car building and repairing.....	-1.4	+ .6
Textiles.....	+3.0	+6.1	Miscellaneous.....	+1.4	+5.8
Clothing and millinery.....	-3.4	-15.6	All manufacturing.....	-2.2	-3.7
Food, beverages, and tobacco.....	-8.1	-4.3	Retail department stores.....	+9.0	+7.1
Miscellaneous.....	-7.8	-6.4	Wholesale establishments.....	+ .4	+ .4
All manufacturing.....	-1.9	+ .8	Public utilities.....	+ .5	+5.7
Trade, wholesale and retail.....	+3.5	+1.0	Coal mines.....	+ .7	+3.7
Services.....	+ .8	-7.8	Hotels.....	+6.8	-8.8
Public utilities.....	- .5	-1.6	Quarries.....	-6.2	-3.5
Coal mining.....	+5.1	+34.5			
Building and contracting.....	+10.0	+18.7			
All nonmanufacturing.....	+1.3	+2.6			
All industries.....	- .8	+1.5			
	October to November, 1929			September, 1929	October, 1929
Iowa			Massachusetts		
Food and kindred products.....	-4.4	-----	Boots and shoes.....	71.3	69.3
Textiles.....	+1.1	-----	Bread and other bakery products.....	110.9	109.8
Iron and steel works.....	-2.5	-----	Cars and general shop construction and repairs, steam railroads.....	69.9	70.5
Lumber products.....	-7.5	-----	Clothing, men's and women's.....	88.8	89.7
Leather products.....	+4.6	-----	Confectionery.....	96.2	99.0
Paper products, printing, and publishing.....	+ .7	-----	Cotton goods.....	55.5	54.7
Patent medicines, chemicals, and compounds.....	.0	-----	Dyeing and finishing textiles.....	99.4	101.7
Stone and clay products.....	-1.9	-----	Electrical machinery, apparatus and supplies.....	109.7	109.2
Tobacco and cigars.....	+2.5	-----	Foundry and machine-shop products.....	73.9	75.3
Railway-car shops.....	-1.1	-----	Furniture.....	107.3	112.6
Various industries.....	-1.7	-----	Hosiery and knit goods.....	71.9	75.3
All industries.....	-2.6	-----	Jewelry.....	105.8	111.7
Maryland			Leather, tanned, curried and finished.....	88.4	89.7
Food products.....	-3.6	-4.9	Paper and wood pulp.....	93.1	94.7
Textiles.....	+ .7	+4.4	Printing and publishing.....	111.4	114.5
Iron and steel, and their products.....	-4.3	-7.8	Rubber footwear.....	98.0	97.8
Lumber and its products.....	- .1	- .2	Rubber goods, tires, and tubes.....	81.9	80.2
Leather and its products.....	-6.3	-28.1	Silk goods.....	89.6	91.2
Rubber tires.....	-12.1	+9.3	Textile machinery and parts.....	59.1	59.0
Paper and printing.....	-1.6	-2.9	Woolen and worsted goods.....	79.1	78.1
Chemicals and allied products.....	-4.9	-10.0	All industries.....	79.8	79.6
Stone, clay, and glass products.....	+6.9	+1.7			

PER CENT OF CHANGE IN EMPLOYMENT AND PAY ROLLS IN SPECIFIED STATES—
Continued

Monthly period—Continued

State, and industry group	Per cent of change, September to October, 1929		State, and industry group	Per cent of change, September to October, 1929	
	Employment	Pay roll		Employment	Pay roll
Wisconsin			Wisconsin—Continued		
<i>Manual</i>			<i>Manual—Continued</i>		
Logging.....	+11.7	-15.2	Construction:		
Mining:			Building.....	+5.8	-0.1
Lead and zinc.....	-2.5	+4.8	Highway.....	-7.9	+4.2
Iron.....	-1.6	+15.5	Railroad.....	-9.3	-3.2
Stone crushing and quarrying.....	-2.6	+8	Marine dredging, sewer digging.....	-42.7	-47.3
Manufacturing:			Communication:		
Stone and allied industries.....	-1.9	+2.7	Steam railways.....	+6	-5
Metal.....	+1.3	+10.5	Electric railways.....	+4.9	+10.8
Wood.....	+2.4	+9.1	Express, telephone, and telegraph.....	+8.9	+1.8
Rubber.....	-3.3	+2.9	Light and power.....	-9	+4.3
Leather.....	-3	+4.9	Wholesale trade.....	-1.4	-1.2
Paper.....	+1	+4.4	Hotels and restaurants.....	-2.7	
Textiles.....	+2.9	+3.7	Laundering, cleaning, and dyeing.....	-3.6	-1.9
Foods.....	-6.3	-2.4	<i>Nonmanual</i>		
Printing and publishing.....	+8	+1.4	Construction.....	.0	+3
Chemicals (including soap, glue, and explosives).....	-1.7	+9.0	Communication.....	.0	.0
All manufacturing.....	+4	+6.9	Wholesale trade.....	-7.7	-6.3
			Retail trade—sales force only.....	+4.0	+1.3
			Miscellaneous professional services.....	-4	+1.2

Yearly period

State, and industry group	Per cent of change, October, 1928, to October, 1929		State, and industry group	Employment—index numbers (1927=100)	
	Employment	Pay roll		October, 1928	October, 1929
California			Illinois		
Stone, clay, and glass products.....	+0.8	+3.2	Stone, clay, and glass products.....	120.2	89.3
Metals, machinery, and conveyances.....	+12.6	+16.1	Metals, machinery, and conveyances.....	109.7	115.4
Wood manufactures.....	-8.3	-4.0	Wood products.....	79.1	77.6
Leather and rubber goods.....	-14.8	-23.5	Furs and leather goods.....	103.9	104.6
Chemicals, oils, paints, etc.....	+3.6	+6.5	Chemicals, oils, paints, etc.....	124.9	99.9
Printing and paper goods.....	+8.0	+6.6	Printing and paper goods.....	116.5	99.2
Textiles.....	-1.8	-.4	Textiles.....	101.6	101.4
Clothing, millinery, and laundering.....	+5.3	+5.5	Clothing and millinery.....	61.9	78.9
Foods, beverages, and tobacco.....	+1.2	+2.6	Foods, beverages, and tobacco.....	90.7	96.2
Water, light, and power.....	+15.8	+19.4	All manufacturing.....	95.9	103.8
Miscellaneous.....	+36.3	+43.0	Trade, wholesale and retail.....	68.6	90.6
All industries.....	+4.4	+7.3	Public utilities.....	139.2	106.9
			Coal mining.....	60.8	79.1
			Building and contracting.....	140.4	93.4
			All industries.....	102.0	102.5

Unemployment Among Organized Building-Trades Workers in Massachusetts

DATA on unemployment among organized building-trades workers in Massachusetts, issued by the State Department of Labor and Industries, show an increase on October 1 over several preceding months. On October 1 there were 14.9 per cent of the membership unemployed as compared with 12.9, 12.4, and 12.0 per cent, respectively, at the beginning of July, August, and September. The figure for October 1, 1928, was 17.2 per cent.

The highest percentage of unemployment occurred among the lathers (28.1) and the bricklayers, masons, and plasterers (23.0) and the lowest percentage among the electrical workers (3.3) and sheet-metal workers (4.7). The figures for the other occupations ranged from 10.1 per cent to 18.3 per cent.

The following table shows the percentage of unemployment among organized building-trades workers in Massachusetts, by cause, from January 3, 1928, to October 1, 1929.

PER CENT OF ORGANIZED BUILDING-TRADES WORKERS UNEMPLOYED IN MASSACHUSETTS ON SPECIFIED DATES, JANUARY 3, 1928, TO OCTOBER 1, 1929, BY CAUSE

Date	Cause of unemployment					
	Lack of work or materials	Strike or lockout	Sickness, accident, or old age	Unfavorable weather	Other reasons	All causes
1928						
Jan. 3.....	20.8	0.8	2.1	3.4	0.2	27.3
Feb. 1.....	27.4	.1	1.7	.2	(1)	29.4
Mar. 1.....	28.9	.2	1.7	3.4	(1)	34.1
Apr. 2.....	26.9	.2	1.7	.1	(1)	28.9
May 1.....	22.2	.2	1.4	.1	.2	24.1
June 1.....	16.9	4.0	1.6	.3	.1	22.9
July 2.....	12.8	.1	1.4	.2		14.6
Aug. 1.....	11.3	.2	1.5	.1		13.2
Sept. 4.....	14.1	.1	1.6	(1)	.1	15.8
Oct. 1.....	15.3	(1)	1.8	.1	(1)	17.2
Nov. 1.....	17.8	.1	1.9	.1	.2	20.1
Dec. 3.....	21.6	(1)	1.9	.2	(1)	23.7
1929						
Jan. 2.....	24.7	.2	2.5	.1		27.5
Feb. 1.....	31.1	.1	2.8	.3		34.3
Mar. 1.....	23.9	(1)	2.8	.2		32.9
Apr. 1.....	24.2	.9	2.7	.1		27.9
May 1.....	18.5	(1)	2.7	.3		21.5
June 3.....	12.7	.3	2.4	.1	(1)	15.5
July 1.....	10.4	.1	2.4	(1)		12.9
Aug. 1.....	10.1		2.3	(1)		12.4
Sept. 3.....	9.6	(1)	2.3	.1		12.0
Oct. 1.....	12.1	.4	2.4	(1)		14.9

¹ Less than one-tenth of 1 per cent.

WHOLESALE AND RETAIL PRICES

Retail Prices of Food in the United States

THE following tables are compiled from monthly reports of actual selling prices¹ received by the Bureau of Labor Statistics from retail dealers.

Table 1 shows for the United States retail prices of food November 15, 1928, October 15 and November 15, 1929, as well as the percentage changes in the year and in the month. For example the retail price per pound of potatoes was 2.2 cents on November 15, 1928; and 3.8 cents on October 15 and November 15, 1929. These figures show an increase of 73 per cent in the year and no change in the month.

The cost of various articles of food combined shows an increase of 1.6 per cent November 15, 1929, as compared with November 15, 1928, and a decrease of 0.46 per cent November 15, 1929, as compared with October 15, 1929.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1929, COMPARED WITH OCTOBER 15, 1929, AND NOVEMBER 15, 1928

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Unit	Average retail prices on—			Per cent of increase (+) or decrease (–) Nov. 15, 1929, compared with—	
		Nov. 15, 1928	Oct. 15, 1929	Nov. 15, 1929	Nov. 15, 1928	Oct. 15, 1929
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Sirloin steak	Pound	49.1	50.3	49.3	+0.4	–2
Round steak	do	43.4	44.5	43.8	+1	–2
Rib roast	do	36.3	37.0	36.3	0	–2
Chuck roast	do	29.7	30.0	29.4	–1	–2
Plate beef	do	20.8	21.0	20.8	0	–1
Pork chops	do	35.7	38.9	35.8	+0.3	–8
Bacon, sliced	do	44.5	43.7	43.0	–3	–2
Ham, sliced	do	54.6	55.1	53.9	–1	–2
Lamb	do	38.0	38.5	37.9	–0.3	–2
Hens	do	38.0	38.4	37.7	–1	–2
Salmon, canned, red	do	32.3	31.9	31.9	–1	0
Milk, fresh	Quart	14.3	14.4	14.4	+1	0
Milk, evaporated	16-oz. can	11.4	10.6	10.5	–8	–1
Butter	Pound	58.3	55.7	53.5	–8	–4
Oleomargarine (all butter substitutes)	do	27.6	27.0	26.9	–3	–0.4
Cheese	do	38.5	37.9	37.8	–2	–0.3
Lard	do	19.1	18.3	18.0	–6	–2
Vegetable lard substitute	do	24.8	24.7	24.6	–1	–0.4
Eggs, strictly fresh	Dozen	59.3	58.0	63.3	+7	+9
Bread	Pound	9.1	8.9	8.9	–2	0
Flour	do	5.1	5.2	5.2	+2	0
Corn meal	do	5.3	5.3	5.4	+2	+2
Rolled oats	do	8.9	8.8	8.8	–1	0
Corn flakes	8-oz. pkg	9.5	9.5	9.5	0	0
Wheat cereal	28-oz. pkg	25.5	25.5	25.5	0	0

¹ In addition to monthly retail prices of food and coal, the bureau publishes periodically the prices of gas and electricity for household use in each of 51 cities. At present this information is being collected in June and December of each year.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE NOVEMBER 15, 1929, COMPARED WITH OCTOBER 15, 1929, AND NOVEMBER 15, 1928.—Continued

Article	Unit	Average retail prices on—			Per cent of increase (+) or decrease (-) Nov. 15, 1929, compared with—	
		Nov. 15, 1928	Oct. 15, 1929	Nov. 15, 1929	Nov. 15, 1928	Oct. 15, 1929
		<i>Cents</i>	<i>Cents</i>	<i>Cents</i>		
Macaroni.....	Pound.....	19.7	19.7	19.7	0	0
Rice.....	do.....	9.8	9.7	9.7	-1	0
Beans, navy.....	do.....	12.5	14.2	13.7	+10	-4
Potatoes.....	do.....	2.2	3.8	3.8	+73	0
Onions.....	do.....	6.5	5.3	5.0	-23	-6
Cabbage.....	do.....	4.3	4.5	4.2	-2	-7
Beans, baked.....	No. 2 can.....	11.7	11.7	11.7	0	0
Corn, canned.....	do.....	15.9	15.8	15.7	-1	-1
Peas, canned.....	do.....	16.7	16.7	16.6	-1	-1
Tomatoes, canned.....	do.....	11.9	12.6	12.6	+6	0
Sugar.....	Pound.....	6.8	6.7	6.7	-1	0
Tea.....	do.....	77.4	77.6	77.5	+0.1	-0.1
Coffee.....	do.....	49.7	49.1	48.3	-3	-2
Prunes.....	do.....	14.0	17.1	17.9	+28	+5
Raisins.....	do.....	12.0	12.2	12.4	+3	+2
Bananas.....	Dozen.....	33.7	32.4	32.7	-3	+1
Oranges.....	do.....	56.5	44.9	43.0	-24	-4
Weighted food index.....	.....	.....	.....	.....	+1.6	-0.46

Table 2 shows for the United States average retail prices of specified food articles on November 15, 1913, and on November 15 of each year from 1923 to 1929, together with percentage changes in November of each of these specified years, compared with November, 1913. For example, the retail price per pound of butter was 38.7 cents in November, 1913; 58.9 cents in November, 1923; 48.9 cents in November, 1924; 59.7 cents in November, 1925; 55.7 cents in November, 1926; 56.4 cents in November, 1927; 58.3 cents in November, 1928; and 53.5 cents in November, 1929.

As compared with November, 1913, these figures show increases of 52 per cent in November, 1923; 26 per cent in November, 1924; 54 per cent in November, 1925; 44 per cent in November, 1926; 46 per cent in November, 1927; 51 per cent in November, 1928; and 38 per cent in November, 1929.

The cost of the various articles of food combined showed an increase of 52.3 per cent in November, 1929, as compared with November, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE NOVEMBER 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH NOVEMBER 15, 1913

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers]

Article	Average retail price on Nov. 15								Per cent of increase Nov. 15 of each specified year compared with Nov. 15, 1913							
	1913	1923	1924	1925	1926	1927	1928	1929	1923	1924	1925	1926	1927	1928	1929	
	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>	<i>Cts.</i>								
Sirloin steak...pound...	25.4	38.9	38.7	40.3	40.9	43.5	49.1	49.3	53	52	59	61	71	93	94	
Round steak...do...	22.8	33.1	32.9	34.4	35.5	37.8	43.4	43.8	45	44	51	56	66	90	92	
Rib roast...do...	19.8	28.3	28.2	29.5	30.2	31.9	36.3	36.3	43	42	49	53	61	83	83	
Chuck roast...do...	16.3	20.4	20.4	21.6	22.7	24.5	29.7	29.4	25	25	33	39	50	82	80	
Plate beef...do...	12.4	13.0	13.2	14.1	14.7	16.2	20.8	20.8	5	6	14	19	31	68	68	
Pork chops...do...	21.5	28.9	31.6	37.5	39.3	36.3	35.7	35.8	34	47	74	83	69	66	67	
Bacon, sliced...do...	27.2	38.5	40.1	49.2	51.0	46.3	44.5	43.0	42	47	81	88	70	64	58	
Ham, sliced...do...	26.9	45.5	47.0	53.5	58.4	53.0	54.6	53.9	69	75	99	117	97	103	100	
Lamb, leg of...do...	18.5	35.8	35.4	38.4	37.9	37.6	38.0	37.9	94	91	108	105	103	105	105	
Hens...do...	20.6	33.7	34.5	35.8	37.1	35.6	38.0	37.7	64	67	74	80	73	84	83	
Salmon, canned, red																
pound...	31.4	31.7	36.4	34.7	34.8	32.3	31.9									
Milk, fresh...quart...	9.1	14.3	13.8	14.3	14.1	14.2	14.3	14.4	57	52	57	55	56	57	58	
Milk, evaporated																
16-ounce can...	12.2	11.0	11.6	11.4	11.5	11.4	10.5									
Butter...pound...	38.7	58.9	48.9	59.7	55.7	56.4	58.3	53.5	52	26	54	44	46	51	38	
Oleomargarine (all butter substitutes)																
pound...	29.2	30.2	31.2	30.1	27.9	27.6	26.9									
Cheese...do...	22.5	37.7	34.7	37.4	36.9	38.6	38.5	37.8	68	54	66	64	72	71	68	
Lard...do...	15.9	18.9	22.4	23.3	21.1	19.5	19.1	18.0	19	41	47	33	23	20	13	
Vegetable lard substitute...pound...	23.7	25.5	25.8	25.6	25.1	24.8	24.6									
Eggs, strictly fresh																
dozen...	49.7	66.3	68.1	69.4	66.0	61.7	59.3	63.3	37	40	33	24	19	27	29	
Bread...pound...	5.6	8.7	8.9	9.4	9.4	9.3	9.1	8.9	55	59	68	68	66	63	59	
Flour...do...	3.3	4.6	5.4	6.0	5.7	5.4	5.1	5.2	39	64	82	73	64	55	58	
Corn meal...do...	3.1	4.4	5.1	5.3	5.1	5.2	5.3	5.4	42	65	71	65	68	71	74	
Rolled oats...do...		8.8	9.1	9.2	9.1	9.0	8.9	8.8								
Corn flakes																
8-ounce package...	9.7	10.7	11.0	10.9	9.7	9.5	9.5									
Wheat cereal																
28-ounce package...	24.3	24.4	25.2	25.4	25.5	25.5	25.5									
Macaroni...pound...	19.7	19.6	20.5	20.1	20.0	19.7	19.7									
Rice...do...	8.7	9.7	10.5	11.4	11.3	10.4	9.8	9.7	11	21	31	30	20	13	11	
Beans, navy...do...	10.5	10.1	9.9	9.3	9.5	12.5	13.7									
Potatoes...do...	1.8	2.6	2.2	5.2	4.0	3.0	2.2	3.8	44	22	189	122	67	22	111	
Onions...do...		6.3	5.1	5.7	5.0	4.8	6.5	5.0								
Cabbage...do...		3.9	3.7	4.2	4.0	3.7	4.3	4.2								
Beans, baked																
No. 2 can...	12.9	12.6	12.3	11.7	11.5	11.7	11.7									
Corn, canned...do...	15.6	16.6	17.1	16.3	15.7	15.9	15.7									
Peas, canned...do...	17.7	18.3	18.1	17.3	16.6	16.7	16.6									
Tomatoes, canned																
do...	12.9	13.6	12.9	12.1	11.8	11.9	12.6									
Sugar, granulated																
pound...	5.4	10.3	8.8	6.6	7.1	7.2	6.8	6.7	91	63	22	31	33	26	24	
Tea...do...	54.5	70.4	73.5	75.7	77.1	77.5	77.4	77.5	29	35	39	41	42	42	42	
Coffee...do...	29.8	37.8	49.0	51.2	50.8	47.8	49.7	48.3	27	64	72	70	60	67	62	
Prunes...do...		18.0	17.2	17.2	16.5	14.1	14.0	17.9								
Raisins...do...		16.4	14.8	14.2	14.6	13.8	12.0	12.4								
Bananas...dozen...		38.3	37.3	34.7	34.9	34.4	33.7	32.7								
Oranges...do...		49.0	48.9	65.5	55.1	53.2	56.5	43.0								
All articles combined ¹									44.0	43.1	59.3	54.2	49.1	50.0	52.3	

¹ Beginning with January, 1921, index numbers showing the trend in the retail cost of food have been composed of the articles shown in Tables 1 and 2, weighted according to the consumption of the average family. From January, 1913, to December, 1920, the index numbers included the following articles: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, lard, hens, flour, corn meal, eggs, butter, milk, bread, potatoes, sugar, cheese, rice, coffee, and tea.

Table 3 shows the trend in the retail cost of three important groups of food commodities, viz, cereals, meats, and dairy products, by years, from 1913 to 1928, and by months for 1927, 1928, and 1929. The articles within these groups are as follows:

Cereals: Bread, flour, corn meal, rice, rolled oats, corn flakes, wheat cereal, and macaroni.

Meats: Sirloin steak, round steak, rib roast, chuck roast, plate beef, pork chops, bacon, ham, hens, and leg of lamb.

Dairy products: Butter, cheese, fresh milk, and evaporated milk.

TABLE 3.—INDEX NUMBERS OF RETAIL COST OF CEREALS, MEATS, AND DAIRY PRODUCTS FOR THE UNITED STATES, 1913 TO NOVEMBER, 1929

[Average cost in 1913=100.0]

Year and month	Cereals	Meats	Dairy products	Year and month	Cereals	Meats	Dairy products
1913: Average for year....	100.0	100.0	100.0	1928: Average for year....	167.2	179.2	150.0
1914: Average for year....	106.7	103.4	97.1	January.....	168.0	168.3	152.2
1915: Average for year....	121.6	99.6	96.1	February.....	168.0	167.8	150.7
1916: Average for year....	126.8	108.2	103.2	March.....	166.8	167.1	150.7
1917: Average for year....	186.5	137.0	127.6	April.....	167.2	170.3	147.8
1918: Average for year....	194.3	172.8	153.4	May.....	168.3	175.4	147.3
1919: Average for year....	198.0	184.2	176.6	June.....	169.8	177.7	146.1
1920: Average for year....	232.1	185.7	185.1	July.....	169.3	184.4	147.1
1921: Average for year....	179.8	158.1	149.5	August.....	168.2	189.5	148.3
1922: Average for year....	159.3	150.3	135.9	September.....	166.7	195.8	151.2
1923: Average for year....	156.9	149.0	147.6	October.....	165.9	188.9	151.1
1924: Average for year....	160.4	150.2	142.8	November.....	165.3	184.9	152.5
1925: Average for year....	176.2	163.0	147.1	December.....	164.2	179.1	153.5
1926: Average for year....	175.5	171.3	145.5	1929:			
1927: Average for year....	170.7	169.9	148.7	January.....	164.1	180.9	151.9
January.....	172.8	168.1	151.4	February.....	164.1	180.3	152.6
February.....	172.7	167.6	151.8	March.....	164.1	182.8	152.4
March.....	172.1	168.5	152.2	April.....	164.1	187.5	148.9
April.....	171.7	170.6	150.8	May.....	163.5	191.2	147.5
May.....	171.6	170.7	145.3	June.....	163.0	192.4	146.8
June.....	170.7	168.3	143.7	July.....	163.5	195.9	146.8
July.....	170.6	169.3	143.9	August.....	164.7	196.0	147.1
August.....	171.2	171.0	144.5	September.....	165.2	194.2	148.1
September.....	170.6	173.0	146.6	October.....	163.5	189.2	149.3
October.....	170.5	173.7	149.4	November.....	163.6	184.2	147.0
November.....	169.8	169.9	150.2				
December.....	168.6	168.1	152.8				

Index Numbers of Retail Prices of Food in the United States

IN TABLE 4 index numbers are given which show the changes in the retail prices of specified food articles, by years for 1913 and 1920 to 1928,² and by months for 1928 through November, 1929. These index numbers, or relative prices, are based on the year 1913 as 100 and are computed by dividing the average price of each commodity for each month and each year by the average price of that commodity for 1913. These figures must be used with caution. For example, the relative price of sirloin steak for the year 1928 was 188.2, which means that the average money price for the year 1928 was 88.2 per cent higher than the average money price for the year 1913. As compared with the relative price, 167.7, in 1927, the figures for 1928 show an increase of 20½ points, but an increase of 12.2 per cent in the year.

In the last column of Table 4 are given index numbers showing changes in the retail cost of all articles of food combined. Since January, 1921, these index numbers have been computed from the average prices of the articles of food shown in Tables 1 and 2, weighted according to the average family consumption in 1918. (See March, 1921, issue, p. 25.) Although previous to January, 1921, the number of food articles has varied, these index numbers have been so com-

² For index numbers of each month, January, 1913, to December, 1927, see Bulletin No. 396, pp. 44 to 61; Bulletin No. 418, pp. 38 to 51; Bulletin No. 445, pp. 36 to 49; and Bulletin No. 464, pp. 36 to 49.

puted as to be strictly comparable for the entire period. The index numbers based on the average for the year 1913 as 100 are 160.5 for October, 1929, and 159.7 for November, 1929.

The curve shown in the accompanying chart pictures more readily to the eye the changes in the cost of the food budget than do the index numbers given in the table.

TREND OF RETAIL PRICES OF FOOD

[1926=100]

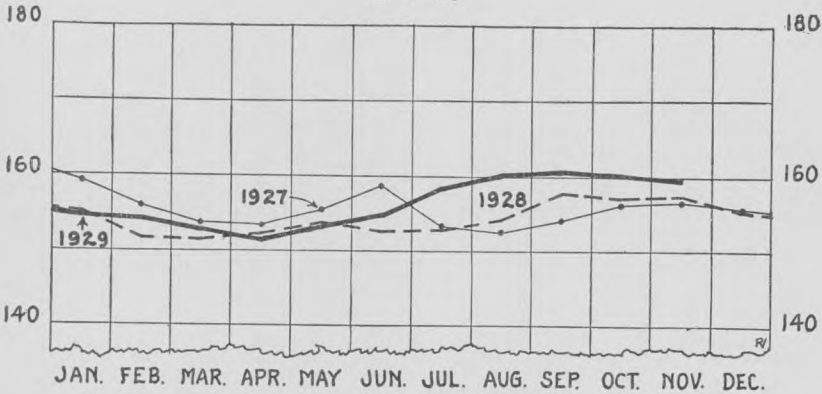


TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920 TO 1928, AND BY MONTHS, JANUARY, 1928, TO NOVEMBER, 1929

[Average for year 1913=100.0]

Year and month	Sirloin steak	Round steak	Rib roast	Chuck roast	Plate beef	Pork chops	Bacon	Ham	Hens	Milk	Butter	Cheese
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920	172.1	177.1	167.7	163.8	151.2	201.4	193.7	206.3	209.9	187.6	183.0	188.2
1921	152.8	154.3	147.0	132.5	118.2	166.2	158.2	181.4	186.4	164.0	135.0	153.9
1922	147.2	144.8	139.4	123.1	105.8	157.1	147.4	181.4	169.0	147.2	125.1	148.9
1923	153.9	150.2	143.4	126.3	106.6	144.8	144.8	169.1	164.3	155.1	144.7	167.0
1924	155.9	151.6	145.5	130.0	109.1	146.7	139.6	168.4	165.7	155.1	135.0	159.7
1925	159.8	155.6	149.5	135.0	114.1	174.3	173.0	195.5	171.8	157.3	143.1	166.1
1926	162.6	159.6	153.0	140.6	120.7	188.1	186.3	213.4	182.2	157.3	138.6	165.6
1927	167.7	166.4	158.1	148.1	127.3	175.2	174.8	204.5	173.2	158.4	145.2	170.1
1928	188.2	188.3	176.8	174.4	157.0	165.7	163.0	196.7	175.6	159.6	147.5	174.2
1928: January	174.8	173.1	165.2	158.8	142.1	149.0	165.2	192.2	172.8	160.7	150.9	177.4
February	176.4	174.4	167.2	160.6	144.6	140.5	161.9	190.3	174.6	160.7	147.0	177.4
March	176.8	175.3	167.2	161.3	146.3	136.2	159.3	187.7	174.6	159.6	149.6	174.2
April	178.3	177.6	168.7	163.1	147.9	149.0	158.9	188.1	177.0	158.4	143.9	172.9
May	181.5	181.2	172.2	166.3	150.4	168.6	159.6	190.3	177.0	158.4	142.6	172.4
June	186.6	186.5	175.3	172.5	152.9	165.7	160.0	192.2	174.2	137.3	140.7	172.4
July	195.7	196.9	181.8	180.6	157.9	177.6	162.6	198.5	172.3	158.4	141.8	173.3
August	200.8	202.2	184.8	185.0	162.0	190.0	165.9	204.5	172.8	158.4	144.7	173.8
September	203.9	205.4	188.9	190.0	170.2	211.0	168.1	208.2	177.9	159.6	150.4	175.1
October	198.0	200.0	185.9	188.8	171.9	179.0	167.8	206.7	177.9	159.6	150.1	175.6
November	193.3	194.6	183.3	185.6	171.9	170.0	164.8	203.0	178.4	160.7	152.2	174.2
December	189.8	191.5	180.3	181.9	168.6	149.0	160.4	198.5	177.9	160.7	154.8	174.2
1929: January	190.6	191.0	180.8	181.3	170.2	153.8	159.3	200.0	184.0	160.7	150.7	173.8
February	188.2	188.8	178.8	179.4	167.8	157.1	158.2	199.6	186.4	160.7	152.7	172.9
March	188.6	189.2	179.3	180.0	167.8	167.6	158.9	201.9	190.1	160.7	152.5	172.4
April	192.9	194.6	183.8	184.4	170.2	176.7	160.4	203.3	196.2	159.6	145.7	172.4
May	198.4	201.3	187.9	190.0	174.4	179.5	160.7	204.8	198.1	159.6	142.3	171.9
June	201.6	205.4	189.9	191.9	176.0	179.0	162.2	205.6	193.9	159.6	140.5	171.9
July	206.7	210.8	192.9	195.6	177.7	188.1	164.1	209.7	187.3	160.7	139.4	171.5
August	206.3	210.8	191.9	194.4	176.0	192.4	165.6	211.2	185.0	160.7	140.5	171.0
September	202.8	206.7	189.4	191.9	175.2	193.8	164.4	209.7	184.0	160.7	143.1	171.9
October	198.0	199.6	186.9	187.5	173.6	185.2	161.9	204.8	180.3	161.8	145.4	171.5
November	194.1	196.4	183.3	183.8	171.9	170.5	159.3	200.4	177.0	161.8	139.7	171.0

TABLE 4.—INDEX NUMBERS OF RETAIL PRICES OF PRINCIPAL ARTICLES OF FOOD BY YEARS, 1913, 1920 TO 1928, AND BY MONTHS, JANUARY, 1928, TO NOVEMBER, 1929—Continued

Year and month	Lard	Eggs	Bread	Flour	Corn meal	Rice	Pota-toes	Sugar	Tea	Coffee	All arti-cles ¹
1913.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1920.....	186.7	197.4	205.4	245.5	216.7	200.0	370.6	352.7	134.7	157.7	203.4
1921.....	113.9	147.5	176.8	175.8	150.0	109.2	182.4	145.5	128.1	121.8	153.3
1922.....	107.6	128.7	155.4	154.5	130.0	109.2	164.7	132.7	125.2	121.1	141.6
1923.....	112.0	134.8	155.4	152.4	136.7	109.2	170.6	183.6	127.8	126.5	146.2
1924.....	120.3	138.6	157.1	148.5	156.7	116.1	158.8	167.3	131.4	145.3	145.9
1925.....	147.5	151.0	167.9	184.8	180.0	127.6	211.8	130.9	138.8	172.8	157.4
1926.....	138.6	149.6	167.9	181.8	170.0	133.3	288.2	125.5	141.0	171.1	160.6
1927.....	122.2	131.0	166.1	166.7	173.3	123.0	223.5	132.7	142.5	162.1	155.4
1928.....	117.7	134.5	162.5	163.6	176.7	114.9	158.8	129.1	142.3	165.1	154.3
1928: January.....	119.6	162.0	164.3	160.6	173.3	117.2	176.5	129.1	142.3	162.8	155.1
February.....	115.8	124.9	164.3	160.6	173.3	117.2	176.5	129.1	142.1	163.1	151.6
March.....	112.7	107.2	162.5	160.6	173.3	116.1	200.0	129.1	142.3	163.8	151.4
April.....	112.7	103.8	162.5	163.6	176.7	114.9	205.9	129.1	141.9	164.1	152.1
May.....	114.6	108.7	162.5	169.7	176.7	114.9	194.1	130.9	141.9	164.4	153.8
June.....	115.2	112.5	164.3	172.7	176.7	113.8	170.6	132.7	142.1	165.1	152.6
July.....	116.5	120.6	164.3	169.7	176.7	114.9	135.3	132.7	142.3	165.1	152.8
August.....	118.4	130.4	164.3	163.6	176.7	113.8	129.4	129.1	142.3	165.8	154.2
September.....	122.2	146.1	162.5	160.6	176.7	114.9	129.4	127.3	142.3	166.1	157.8
October.....	123.4	157.4	162.5	157.6	176.7	113.8	129.4	125.5	142.5	166.4	156.8
November.....	120.9	171.9	162.5	154.5	176.7	112.6	129.4	123.6	142.3	166.8	157.3
December.....	118.4	169.3	160.7	154.5	176.7	113.8	129.4	121.8	142.1	166.8	155.8
1929: January.....	117.1	146.7	160.7	154.5	176.7	112.6	135.3	121.8	142.5	166.1	154.6
February.....	116.5	142.3	160.7	154.5	176.7	112.6	135.3	120.0	142.6	166.1	154.4
March.....	116.5	122.0	160.7	154.5	176.7	112.6	135.3	118.2	142.6	166.4	153.0
April.....	117.1	106.4	160.7	154.5	176.7	112.6	135.3	116.4	142.6	166.4	151.6
May.....	116.5	112.2	160.7	151.5	176.7	111.5	158.8	116.4	142.6	166.1	153.3
June.....	115.8	120.0	160.7	148.5	176.7	111.5	182.4	116.4	142.5	165.8	154.8
July.....	115.8	127.8	160.7	151.5	176.7	111.5	229.4	116.4	142.3	165.8	158.5
August.....	116.5	140.0	160.7	157.6	176.7	112.6	235.3	120.0	142.5	165.4	160.2
September.....	117.1	153.6	160.7	160.6	176.7	111.5	229.4	121.8	142.6	165.1	160.8
October.....	115.8	168.1	158.9	157.6	176.7	111.5	223.5	121.8	142.6	164.8	160.5
November.....	113.9	183.5	158.9	157.6	180.0	111.5	223.5	121.8	142.5	162.1	159.7

¹ 22 articles in 1913-1920; 43 articles in 1921-1929.

WHOLESALE AND RETAIL PRICES

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TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929

[Exact comparison of prices in different cities can not be made for some articles, particularly meats and vegetables, owing to differences in trade practices]

Article	Atlanta, Ga.			Baltimore, Md.			Birmingham, Ala.			Boston, Mass.			Bridgeport, Conn.		
	1928		1929	1928		1929	1928		1929	1928		1929	1928		1929
	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15
Sirloin steak... pound	Cts. 49.1	Cts. 50.7	Cts. 48.8	Cts. 45.7	Cts. 48.0	Cts. 46.2	Cts. 50.2	Cts. 51.0	Cts. 50.8	Cts. 76.2	Cts. 76.5	Cts. 73.5	Cts. 57.5	Cts. 59.5	Cts. 58.5
Round steak... do	44.1	45.0	43.8	42.1	44.6	43.0	42.6	44.0	43.3	60.6	60.7	59.3	52.5	53.0	53.0
Rib roast... do	36.1	37.5	36.6	36.2	36.2	35.5	34.5	36.9	36.3	44.8	43.4	42.4	43.1	43.5	41.0
Chuck roast... do	30.2	31.2	29.4	28.5	29.8	29.0	28.7	29.9	29.3	34.4	34.9	33.9	36.4	36.7	35.5
Plate beef... do	19.6	20.6	21.0	21.2	21.7	21.0	18.6	20.3	20.1	23.3	22.5	23.1	17.9	17.2	16.5
Pork chops... do	33.9	36.4	35.0	33.4	38.2	33.4	34.1	36.1	34.4	38.3	42.3	38.6	37.8	40.5	36.9
Bacon, sliced... do	42.5	39.5	39.2	39.1	40.2	38.8	43.9	41.8	40.0	43.0	42.2	41.1	49.8	46.9	47.6
Ham, sliced... do	56.3	56.8	55.0	55.9	56.8	54.6	53.3	55.0	54.7	59.6	57.7	57.8	57.9	57.5	57.3
Lamb, leg of... do	39.1	41.9	41.1	36.3	37.7	37.2	42.4	41.7	42.8	38.8	38.2	38.0	38.1	39.1	38.4
Hens... do	36.9	38.7	36.7	40.3	40.1	39.4	34.5	35.3	35.4	48.1	48.1	40.4	41.5	41.4	40.9
Salmon, canned, red															
..... pound	34.8	33.9	33.3	28.9	28.6	28.4	33.8	33.3	31.6	31.3	31.2	32.0	31.0	30.7	30.9
Milk, fresh... quart	16.5	16.5	17.0	14.0	14.0	14.0	18.7	16.7	17.0	15.8	15.8	15.8	16.0	17.0	17.0
Milk, evaporated															
..... 16-ounce can	13.8	12.3	11.6	11.1	10.2	10.1	12.1	11.5	11.2	11.7	11.0	11.1	11.6	10.8	10.6
Butter... pound	59.4	57.2	55.8	60.5	58.5	57.3	59.1	57.0	56.0	59.3	56.9	55.0	58.5	55.8	54.6
Oleomargarine (all butter substitutes)															
..... pound	28.4	29.2	28.8	27.6	26.6	26.9	31.6	30.7	30.7	29.3	29.0	29.2	25.2	25.8	27.0
Cheese... do	36.9	35.9	35.1	37.1	36.5	35.7	38.2	36.2	36.1	40.6	40.0	40.2	43.4	43.5	42.1
Lard... do	18.9	18.2	17.3	17.6	17.0	16.3	18.7	18.2	17.4	18.9	18.2	17.9	18.2	17.4	16.5
Vegetable lard substitute... pound	22.2	22.5	21.1	22.3	23.3	23.3	19.8	21.5	22.0	25.5	25.3	26.1	25.4	25.4	25.4
Eggs, strictly fresh															
..... dozen	54.1	54.2	58.2	59.0	57.1	62.7	51.5	53.0	63.5	81.5	78.2	83.6	83.7	74.8	80.5
Bread... pound	10.8	10.2	10.1	8.6	8.5	8.5	9.9	9.9	9.8	8.6	8.8	8.8	8.8	8.8	8.8
Flour... do	6.7	6.4	6.2	4.7	5.1	4.9	6.5	6.3	6.2	5.4	5.7	5.6	5.2	5.5	5.3
Corn meal... do	4.4	4.5	4.2	4.2	4.1	4.0	4.1	4.1	4.1	7.0	6.5	7.0	7.2	7.0	7.1
Rolled oats... do	9.5	9.5	9.5	8.0	8.2	8.1	9.9	9.7	9.5	9.0	8.5	8.6	8.4	8.2	8.2
Corn flakes															
..... 8-ounce package	9.8	9.8	9.8	8.6	8.8	8.9	9.8	9.8	9.4	9.4	9.3	9.3	9.5	9.3	9.2
Wheat cereal															
..... 20-ounce package	26.7	27.2	27.5	24.2	24.4	24.3	27.2	27.1	27.1	25.0	25.0	25.2	24.3	24.1	24.5
Macaroni... pound	21.8	21.4	20.9	18.9	18.8	18.9	18.3	18.1	18.4	21.3	21.4	21.8	22.3	22.0	21.1
Rice... do	9.5	9.7	9.4	8.7	9.1	9.1	9.4	8.9	9.1	10.8	10.5	11.0	10.9	10.1	9.7
Beans, navy... do	14.1	15.6	15.5	12.1	14.1	13.3	13.1	15.3	15.3	12.1	13.6	13.3	12.3	14.5	14.3
Potatoes... do	3.5	4.8	4.4	1.7	4.1	3.9	3.4	4.6	4.5	2.0	3.6	3.7	1.9	3.3	3.4
Onions... do	8.6	7.5	7.5	6.6	5.5	5.3	7.3	6.7	6.4	7.4	5.1	4.9	6.9	4.7	4.7
Cabbage... do	5.0	5.0	4.8	4.1	4.2	3.9	5.1	4.9	4.7	5.1	5.4	5.0	5.1	4.9	4.6
Beans, baked															
..... No. 2 can	11.8	11.6	11.2	10.8	10.9	10.9	11.7	11.5	11.2	12.7	12.6	12.5	11.6	11.9	11.6
Corn, canned... do	17.9	17.9	17.4	16.2	17.0	17.2	16.9	17.1	16.3	17.6	17.4	17.8	19.2	17.8	17.6
Peas, canned... do	20.9	19.2	18.7	14.7	15.1	14.8	19.5	19.2	18.6	19.8	19.8	20.1	20.6	18.9	17.7
Tomatoes, canned															
..... No. 2 can	11.7	12.3	11.7	10.8	10.6	10.6	10.7	11.8	11.6	13.0	13.5	14.1	13.6	14.3	13.9
Sugar... pound	7.4	7.2	7.3	5.8	6.1	5.9	7.1	7.0	6.9	6.8	6.4	6.5	6.7	6.6	6.6
Tea... do	106.4	103.4	103.4	73.0	73.2	73.8	97.8	94.4	94.3	72.5	74.5	77.5	61.0	57.2	56.4
Coffee... do	52.2	51.1	49.4	44.9	45.3	44.3	51.5	51.9	50.8	53.8	52.4	52.4	47.7	47.2	44.7
Prunes... do	15.2	19.1	18.5	11.7	16.0	16.4	16.2	19.8	20.3	13.6	16.3	17.4	15.3	16.0	17.7
Raisins... do	13.2	14.4	14.3	10.8	11.0	11.1	13.0	13.2	13.0	11.3	11.1	11.5	12.5	12.3	12.5
Bananas... dozen	28.9	28.3	27.5	24.0	24.7	23.9	37.7	35.7	35.6	44.2	39.0	39.0	34.2	31.3	31.0
Oranges... do	36.7	37.5	32.6	50.4	43.0	42.3	48.7	44.0	39.2	61.9	53.9	46.7	69.5	55.2	52.8

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Buffalo, N. Y.			Butte, Mont.			Charleston, S. C.			Chicago, Ill.			Cincinnati, Ohio		
	1929			1929			1929			1929			1929		
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak.....pound	Cts. 47.5	Cts. 51.2	Cts. 50.2	Cts. 35.9	Cts. 38.1	Cts. 35.7	Cts. 36.2	Cts. 38.5	Cts. 38.8	Cts. 55.6	Cts. 53.4	Cts. 54.6	Cts. 45.4	Cts. 46.9	Cts. 45.5
Round steak.....do	41.0	43.9	42.8	33.8	35.0	34.5	34.6	38.1	38.5	45.8	46.4	45.8	42.3	43.7	43.2
Rib roast.....do	35.5	36.8	36.6	31.9	31.0	31.0	29.1	31.9	32.2	41.3	41.0	41.3	37.0	37.8	37.6
Chuck roast.....do	30.7	31.5	31.6	25.0	26.0	26.0	25.2	25.3	25.3	34.8	34.3	34.5	28.4	29.2	28.8
Plate beef.....do	19.9	20.3	20.2	17.7	17.5	17.0	18.2	20.4	20.7	20.6	21.0	21.4	21.9	22.5	22.5
Pork chops.....do	37.7	42.0	37.8	35.0	38.9	35.9	35.0	35.2	35.0	35.0	38.6	34.3	32.2	38.9	33.4
Bacon, sliced.....do	41.2	40.9	40.5	50.4	48.8	47.9	37.8	39.3	38.9	47.7	48.9	48.4	40.4	38.8	39.9
Ham, sliced.....do	52.9	54.3	53.1	55.0	56.7	55.4	47.1	48.5	48.2	55.6	55.1	55.8	53.9	54.8	53.0
Lamb, leg of.....do	33.4	34.6	33.7	36.7	37.7	37.3	44.0	43.0	42.0	38.0	38.0	38.4	38.8	39.4	39.4
Hens.....do	38.8	38.5	38.1	31.9	32.9	32.6	37.7	37.4	38.0	39.2	39.6	37.6	38.4	38.4	38.2
Salmon, canned, red.....pound	30.7	29.7	29.7	32.0	30.9	31.3	29.2	29.7	29.7	34.6	32.8	33.1	31.3	29.7	29.5
Milk, fresh.....quart	14.0	14.0	14.0	14.0	14.0	14.0	18.7	19.0	19.0	14.0	14.0	14.0	14.0	14.0	14.0
Milk, evaporated.....do	11.1	10.2	10.1	10.8	10.4	10.4	11.8	10.1	10.0	11.3	10.4	10.2	11.3	10.6	10.5
Butter.....pound	58.9	55.8	53.1	56.4	55.7	55.5	56.2	53.7	52.3	57.0	53.5	50.9	60.0	57.2	54.2
Oleomargarine (all butter substitutes).....pound	27.7	26.2	25.9	-----	-----	-----	28.9	27.9	27.3	26.9	26.4	26.2	28.9	27.6	27.8
Cheese.....do	39.8	38.9	39.0	38.2	36.1	36.1	35.2	34.8	34.7	43.8	42.0	42.0	39.8	38.1	38.5
Lard.....do	18.1	17.3	16.9	22.0	21.0	20.9	18.9	18.9	18.8	19.3	18.2	18.1	18.4	17.8	17.2
Vegetable lard substitute.....pound	25.5	24.7	24.5	30.6	30.9	31.0	21.7	20.8	20.9	26.1	25.6	25.6	25.6	26.2	26.2
Eggs, strictly fresh.....dozen	62.5	62.2	67.6	57.5	60.0	61.6	56.5	53.7	57.1	58.6	56.9	63.6	57.9	55.7	66.3
Bread.....pound	8.7	8.3	8.3	9.8	9.8	9.8	11.0	11.0	11.0	9.9	9.7	9.7	8.5	8.7	8.7
Flour.....do	4.6	4.9	4.7	4.9	5.0	5.0	6.7	6.5	6.5	4.5	4.6	4.7	5.5	5.5	5.4
Corn meal.....do	5.1	4.9	5.1	6.4	6.4	6.1	4.0	4.1	4.0	7.0	6.2	6.4	4.6	4.8	4.8
Roll'd oats.....do	8.8	8.7	8.7	7.6	8.1	7.8	9.2	9.3	9.3	8.4	8.1	8.1	9.0	9.0	9.0
Cornflakes.....do	9.2	9.1	9.0	10.5	10.3	10.3	9.9	10.0	10.0	9.3	8.9	9.1	9.6	9.5	9.6
Wheat cereal.....do	24.9	24.8	24.8	28.1	28.1	28.4	25.4	25.2	25.2	25.3	24.3	24.3	24.9	24.9	24.8
Macaroni.....pound	21.2	21.3	20.8	19.9	19.9	19.9	18.7	19.2	19.2	18.9	18.3	18.6	18.5	18.6	18.8
Rice.....do	9.4	8.8	8.8	11.1	11.0	11.0	6.8	6.8	6.7	10.4	10.5	10.6	9.5	9.9	10.0
Beans, navy.....do	12.1	14.4	13.6	11.5	13.3	13.1	14.3	15.3	15.1	12.4	13.9	13.4	12.5	13.5	12.6
Potatoes.....do	1.9	3.2	3.2	1.5	3.7	3.3	2.6	4.2	4.3	2.1	3.7	3.7	2.3	4.0	4.1
Onion.....do	6.8	6.1	5.4	5.8	4.5	4.3	7.2	6.5	5.6	6.4	5.3	5.3	6.3	5.4	5.3
Cabbage.....do	3.8	4.1	3.7	3.5	4.6	4.7	5.3	5.0	4.8	4.3	4.9	4.8	4.4	4.8	4.4
Beans, baked.....do	10.5	10.3	10.2	13.7	13.7	13.7	10.2	10.8	10.6	13.1	12.4	12.4	11.2	11.5	11.4
Corn, canned.....do	15.8	15.6	15.6	15.0	14.3	14.3	14.2	14.6	14.4	15.5	15.3	15.3	15.5	15.5	15.5
Peas, canned.....do	16.0	15.7	15.4	13.8	14.3	14.3	16.2	15.9	15.8	17.0	16.3	16.3	16.6	16.7	16.5
Tomatoes, canned.....do	12.4	13.7	13.9	12.8	12.4	12.4	10.2	10.1	10.1	13.8	13.5	13.4	12.7	13.5	13.1
Sugar.....pound	6.3	6.4	6.3	8.0	7.7	7.6	6.4	6.5	6.4	6.7	6.5	6.5	7.2	7.1	6.9
Tea.....do	68.1	67.9	68.1	82.6	82.2	82.9	82.4	81.2	81.2	69.2	68.2	68.2	80.0	80.2	80.2
Coffee.....do	47.6	47.6	46.7	55.5	55.0	54.0	46.9	46.9	46.4	47.6	47.1	46.1	46.3	45.1	44.5
Prunes.....do	13.9	17.3	17.7	14.5	15.7	17.3	12.2	17.0	17.8	15.4	17.7	19.0	14.2	18.4	18.2
Raisins.....do	11.5	12.0	12.3	13.8	13.4	13.2	10.2	10.6	11.6	12.2	11.7	12.0	12.4	12.1	12.4
Bananas.....dozen	40.9	41.1	42.1	13.0	14.3	13.9	27.5	26.3	27.8	38.9	38.3	39.4	40.6	37.5	36.4
Oranges.....do	61.5	44.5	47.7	61.2	49.3	48.3	27.9	35.7	33.6	58.4	51.2	49.0	52.7	50.2	47.0

¹ Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Cleveland, Ohio			Columbus, Ohio			Dallas, Tex.			Denver, Colo.			Detroit, Mich.		
	1929			1929			1929			1929			1929		
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak.....pound	45.3	47.5	46.5	48.6	49.9	48.3	44.5	47.7	46.9	40.7	42.1	38.9	51.0	52.1	50.3
Round steak.....do	40.4	41.9	40.8	43.2	45.2	44.0	40.7	45.6	45.6	37.2	37.4	35.5	42.8	43.3	41.9
Rib roast.....do	33.5	34.5	33.9	38.7	40.0	38.2	36.4	36.6	37.3	30.4	30.1	29.5	37.4	38.1	38.3
Chuck roast.....do	30.3	30.9	30.2	33.0	32.2	31.5	31.4	30.5	30.3	26.2	26.1	24.9	30.5	30.4	30.3
Plate beef.....do	20.2	20.7	21.4	22.8	23.6	23.7	24.0	24.6	24.6	17.3	17.1	16.9	19.8	20.7	20.6
Pork chops.....do	34.6	38.4	33.2	33.5	36.9	34.0	37.7	38.2	37.5	34.3	38.4	34.6	37.3	40.6	37.2
Bacon, sliced.....do	42.5	41.6	40.5	44.8	45.2	44.4	47.1	41.4	41.5	43.0	42.2	40.7	46.0	43.5	43.5
Ham, sliced.....do	55.3	55.3	53.3	53.3	53.6	52.7	57.7	57.1	55.4	53.3	53.2	59.7	58.8	58.2	
Lamb, leg of.....do	36.3	36.9	35.8	43.7	45.8	44.2	45.6	43.6	43.7	34.7	36.1	34.8	39.2	37.5	36.9
Hens.....do	38.9	38.6	36.5	38.5	39.2	40.0	35.1	34.2	33.4	31.5	31.3	29.8	39.5	40.0	38.0
Salmon, canned, red.....pound	31.8	32.4	32.1	35.0	32.9	32.8	34.7	34.1	33.5	32.7	33.2	32.7	30.3	31.4	31.6
Milk, fresh.....quart	13.7	12.0	12.0	12.0	12.0	12.0	13.0	13.0	13.0	12.0	12.0	12.0	14.0	14.0	14.0
Milk, evaporated.....16-ounce can	11.2	10.3	10.1	11.5	10.6	10.5	13.9	12.7	12.7	10.7	9.9	9.9	11.1	10.3	10.5
Butter.....pound	60.5	57.1	54.3	58.2	54.6	51.3	58.8	56.0	53.3	53.5	49.3	47.0	58.5	54.8	51.3
Oleomargarine (all butter substitutes) .....pound	28.5	28.4	28.1	27.4	26.5	26.8	28.7	28.8	27.8	25.0	24.5	24.1	26.4	24.7	25.3
Cheese.....do	39.4	40.3	40.7	36.9	37.2	37.2	38.2	37.8	36.6	39.5	39.0	38.9	38.9	39.3	39.4
Lard.....do	20.2	19.4	19.3	17.2	15.7	15.1	20.9	21.3	21.7	19.3	18.4	18.3	18.9	17.9	17.6
Vegetable lard substi- tute.....pound	26.4	26.3	26.3	27.8	26.7	26.2	23.3	22.0	21.1	21.1	20.9	20.2	26.3	25.8	25.6
Eggs, strictly fresh.....dozen	62.6	61.9	69.1	51.2	51.8	58.0	53.8	52.3	55.6	56.8	53.3	57.8	59.3	57.3	61.7
Bread.....pound	7.8	7.8	7.8	7.8	7.7	9.3	9.3	8.9	8.9	7.7	7.6	7.6	8.2	8.1	8.1
Flour.....do	5.2	5.3	5.2	5.1	4.9	4.9	5.3	5.2	5.2	4.0	3.9	3.9	4.6	4.9	4.9
Corn meal.....do	5.4	5.7	5.4	4.2	4.2	4.2	4.6	4.6	4.3	4.5	4.6	4.6	6.0	6.1	6.2
Rolled oats.....do	9.0	8.7	8.9	9.3	9.3	9.0	10.1	10.0	9.8	7.6	7.6	7.5	9.1	9.2	9.1
Corn flakes.....8-ounce package	9.8	9.6	9.6	9.6	10.2	10.0	10.1	9.9	9.8	9.5	9.5	9.5	9.4	9.6	9.5
Wheat cereal.....28-ounce package	25.8	25.3	25.3	26.7	26.6	26.5	27.6	27.2	27.0	24.6	24.6	24.6	25.9	26.3	26.4
Macaroni.....pound	20.6	20.3	20.4	20.4	20.0	20.0	20.7	21.2	20.5	19.8	19.4	19.4	21.2	20.9	21.1
Rice.....do	9.5	10.5	10.4	11.0	11.1	10.9	11.9	11.0	10.8	9.1	8.9	8.7	11.1	10.5	10.6
Beans, navy.....do	12.3	14.7	14.3	12.5	13.6	13.2	13.3	15.3	14.9	11.7	13.1	12.4	12.2	13.6	12.6
Potatoes.....do	2.2	3.9	3.7	2.0	3.7	3.7	4.3	5.2	5.3	1.7	3.0	3.2	1.5	3.3	3.2
Onions.....do	6.6	4.6	4.1	6.8	5.5	5.0	7.6	7.3	6.8	4.8	4.4	4.2	6.3	4.0	4.0
Cabbage.....do	4.4	4.6	4.0	4.4	4.5	4.3	5.5	5.9	5.4	2.8	3.5	3.8	3.3	3.7	3.6
Beans, baked.....No. 2 can	12.0	11.8	11.7	11.8	10.9	10.9	12.6	13.2	12.5	11.5	11.6	11.5	11.9	11.1	11.5
Corn, canned.....do	16.4	16.5	16.3	14.3	14.1	14.1	18.4	17.8	17.0	13.7	14.1	14.3	15.8	14.7	15.2
Peas, canned.....do	16.8	17.2	17.0	14.8	15.3	15.1	22.5	22.0	21.7	14.9	15.3	15.6	16.2	15.3	15.7
Tomatoes, canned.....No. 2 can	13.5	14.5	14.3	12.8	13.2	13.2	12.3	13.5	13.1	11.6	12.9	12.8	12.6	12.4	12.2
Sugar.....pound	7.2	7.2	7.2	7.4	7.2	7.2	7.5	7.2	7.0	7.4	7.4	7.2	7.0	7.0	6.9
Tea.....do	80.7	82.5	81.7	86.5	85.6	85.6	104.8	103.8	100.5	70.0	68.7	68.7	74.3	72.1	72.1
Coffee.....do	51.6	51.2	49.5	49.6	49.0	48.7	59.4	58.5	57.4	50.1	50.1	49.6	48.8	48.5	47.6
Prunes.....do	13.9	17.4	18.4	16.2	16.5	17.3	17.2	20.1	19.8	14.3	19.6	19.7	14.5	17.4	19.1
Raisins.....do	12.3	12.3	12.4	11.3	12.5	12.5	14.4	13.6	13.3	10.8	12.1	12.7	11.8	12.3	12.6
Bananas.....dozen	2 9.9	2 9.7	2 9.8	38.0	36.3	38.8	34.0	33.3	33.3	21.0	21.1	21.6	36.0	35.0	34.0
Oranges.....do	58.1	56.4	50.0	56.6	48.6	46.0	60.8	45.9	41.5	61.1	37.2	35.8	68.5	46.3	44.3

² Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Fall River, Mass.			Houston, Tex.			Indianapolis, Ind.			Jacksonville, Fla.			Kansas City, Mo.		
	1929			1929			1929			1929			1929		
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak.....pound..	70.3 ²	72.6	71.8	38.9	42.7	40.0	46.9	49.5	48.5	39.1	41.8	40.2	47.5	48.8	48.4
Round steak.....do.....	56.5	57.5	56.0	38.2	41.5	39.6	44.4	47.6	46.3	34.6	36.8	35.5	42.1	44.3	43.3
Rib roast.....do.....	39.8	39.7	39.1	30.2	33.1	30.8	34.9	34.7	34.3	30.3	32.5	32.1	33.3	35.7	34.6
Chuck roast.....do.....	29.9	32.0	31.6	24.9	26.3	25.0	30.8	31.7	30.9	23.9	26.0	25.7	27.5	28.4	28.2
Plate beef.....do.....	18.8	17.8	18.4	21.2	22.7	22.5	22.1	21.5	20.9	15.3	17.4	17.2	20.3	20.5	20.7
Pork chops.....do.....	36.2	39.9	35.3	34.4	36.4	35.9	33.6	38.0	35.1	30.9	33.5	31.6	33.6	38.0	35.0
Bacon, sliced.....do.....	42.0	38.6	38.2	41.8	40.0	40.6	42.4	40.9	40.0	40.0	37.2	37.7	43.0	43.0	42.2
Ham, sliced.....do.....	52.6	55.1	52.4	49.1	51.5	50.8	55.6	56.2	53.2	48.6	49.1	48.6	51.3	51.6	50.5
Lamb, leg of.....do.....	41.5	43.6	42.4	32.2	37.1	32.9	40.4	41.7	40.8	38.0	37.5	36.7	33.7	35.1	36.0
Hens.....do.....	44.0	46.3	45.4	37.0	39.0	37.2	41.3	41.6	40.6	35.9	36.2	36.0	33.8	34.3	33.7
Salmon, canned.....do.....	34.4	33.0	33.5	31.0	30.2	30.2	33.6	34.9	33.6	31.9	30.0	29.1	31.4	35.3	35.3
Milk, fresh.....quart.....	14.7	15.0	15.0	15.2	15.0	15.0	13.0	12.0	12.0	20.3	20.3	20.3	13.0	13.0	13.0
Milk, evaporated.....do.....	12.6	11.8	11.5	11.4	10.1	9.8	10.5	10.0	10.1	11.7	10.2	10.1	11.2	10.3	10.2
Butter.....pound.....	57.3	56.4	54.1	56.6	54.2	52.7	58.0	55.6	53.8	56.9	57.2	52.8	56.6	53.3	49.7
Oleomargarine (all butter substitutes).....pound.....	27.4	27.0	26.5	24.6	25.5	25.4	28.6	28.4	27.9	30.1	28.1	27.3	25.3	25.0	24.9
Cheese.....do.....	41.8	41.6	41.7	33.7	33.2	33.4	42.9	40.8	40.4	43.1	33.9	33.9	36.8	37.8	37.8
Lard.....do.....	18.6	17.4	17.3	19.8	20.9	20.3	17.4	16.6	15.8	19.3	18.2	18.1	18.9	18.1	17.7
Vegetable lard substitute.....pound.....	26.9	26.9	26.4	16.5	16.5	16.3	26.9	26.8	26.8	21.7	21.8	21.8	26.4	25.9	25.8
Eggs, strictly fresh.....dozen.....	80.7	75.8	78.9	45.4	47.1	54.3	51.6	54.4	58.7	66.0	58.5	61.7	49.4	47.0	54.8
Bread.....pound.....	8.8	8.3	8.3	8.0	8.2	8.2	7.9	8.0	8.0	10.1	10.0	10.2	9.6	9.2	9.3
Flour.....do.....	5.6	5.6	5.6	4.9	4.9	4.9	5.2	5.2	5.1	6.0	6.0	5.9	4.8	4.9	4.8
Corn meal.....do.....	7.1	6.7	6.7	4.3	4.3	4.4	4.1	4.6	4.4	4.3	4.2	4.2	5.3	5.3	5.4
Rolled oats.....do.....	9.5	9.4	9.4	8.5	8.5	8.3	8.2	8.8	8.8	8.8	9.4	9.2	8.9	9.2	9.2
Corn flakes.....do.....	9.8	9.7	9.7	8.9	8.9	8.9	8.9	9.3	9.5	9.6	9.5	9.6	9.7	9.7	9.6
Wheat cereal.....do.....	25.0	24.8	24.6	25.2	25.3	24.9	26.0	25.3	25.3	24.7	25.1	25.1	27.1	27.2	27.5
Macaroni.....pound.....	23.7	23.3	24.5	18.5	18.1	18.1	18.8	18.7	18.7	18.8	18.4	19.0	20.0	20.0	19.8
Rice.....do.....	10.8	10.8	10.7	7.0	7.3	7.3	10.9	10.4	10.1	7.4	7.3	7.1	9.3	9.8	9.7
Beans, navy.....do.....	12.6	13.8	13.5	12.3	14.7	14.4	12.8	13.8	12.5	13.2	14.7	14.1	12.7	14.6	13.3
Potatoes.....do.....	1.9	3.7	3.6	3.6	5.0	5.0	1.8	3.9	3.6	3.0	4.4	4.3	1.6	3.8	3.8
Onions.....do.....	7.6	4.9	4.7	6.7	5.2	4.8	6.4	5.5	5.6	7.9	6.8	6.0	7.4	7.0	6.1
Cabbage.....do.....	5.8	5.0	4.7	4.8	5.9	5.1	4.2	4.8	4.6	4.7	4.5	4.4	3.8	4.4	4.1
Beans, baked.....do.....	12.6	12.5	12.6	10.9	10.7	10.7	10.3	11.1	11.0	10.8	10.5	10.5	12.3	12.6	12.4
Corn, canned.....do.....	16.5	16.4	16.4	14.4	14.5	13.9	14.0	14.1	14.6	18.0	17.0	17.2	14.8	15.5	15.3
Peas, canned.....do.....	19.1	18.4	18.4	14.8	15.5	15.3	14.8	15.0	14.8	17.2	18.8	18.3	14.9	16.6	16.6
Tomatoes, canned.....do.....	12.5	12.7	12.6	9.9	10.6	10.3	12.6	14.2	13.9	11.1	9.7	9.7	11.3	12.8	12.8
Sugar.....pound.....	6.8	6.4	6.4	6.7	6.6	6.6	7.2	7.2	7.0	6.6	6.8	7.2	7.1	7.0	7.0
Tea.....do.....	58.8	59.1	59.1	85.7	86.4	87.4	83.9	89.8	89.8	97.4	95.7	95.7	92.4	90.3	89.6
Coffee.....do.....	50.6	50.1	49.5	44.4	44.2	43.5	47.9	48.1	48.4	48.3	47.2	46.7	52.6	51.5	50.5
Prunes.....do.....	14.1	14.7	17.0	13.0	16.7	17.3	16.5	20.8	21.3	15.2	16.5	17.5	13.9	19.8	21.0
Raisins.....do.....	12.8	12.1	12.9	10.8	10.7	10.6	13.8	14.0	14.2	12.7	12.4	12.7	12.4	13.5	13.4
Bananas.....dozen.....	9.3	8.7	9.0	27.1	25.4	26.1	29.5	30.6	31.3	31.7	27.5	27.5	210.9	210.6	210.7
Oranges.....do.....	49.8	46.6	43.2	51.9	34.1	32.8	52.2	45.2	42.0	29.2	45.0	33.7	64.3	38.6	36.1

² Per pound.³ The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Little Rock, Ark.			Los Angeles, Calif.			Louisville, Ky.			Manchester, N. H.			Memphis, Tenn.		
	1928		1929	1928		1929	1928		1929	1928		1929	1928		1929
	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15	Nov. 15,	Oct. 15	Nov. 15
Sirloin steak	44.1	47.2	46.7	45.1	46.8	45.6	42.9	45.0	43.6	63.1	64.9	63.3	48.7	48.9	48.2
Round steak	39.6	44.0	44.6	38.5	38.7	38.2	38.3	40.5	39.1	53.8	53.0	51.3	45.9	45.1	44.8
Rib roast	35.6	37.8	36.7	35.9	35.4	35.2	31.8	34.2	32.7	34.2	35.4	33.6	35.1	34.4	34.7
Chuck roast	28.5	30.9	29.6	27.9	27.3	27.1	26.7	27.3	26.3	30.2	30.6	28.8	28.9	28.8	29.2
Plate beef	21.3	24.8	22.6	20.8	18.1	18.4	21.7	22.2	21.8	22.2	22.3	21.1	22.4	22.5	22.4
Pork chops	33.4	34.8	34.5	42.8	43.6	42.9	31.3	35.4	30.9	35.8	39.4	34.7	32.9	34.5	33.6
Bacon, sliced	44.4	45.2	44.7	51.7	51.4	49.9	44.6	43.5	42.5	38.5	37.3	37.0	36.4	36.0	35.1
Ham, sliced	52.9	51.5	51.0	69.1	68.4	66.9	50.4	49.5	49.1	47.4	47.2	45.4	52.5	53.9	52.6
Lamb, leg of	39.4	40.8	39.0	38.0	37.6	37.2	38.4	38.3	37.0	37.3	38.8	37.5	36.0	39.6	37.6
Hens	31.0	31.4	31.0	47.1	45.6	45.7	37.3	37.1	37.3	42.1	43.6	43.2	33.7	34.5	34.4
Salmon, canned, red	32.6	31.6	35.3	29.9	30.7	30.0	30.5	30.7	30.3	30.2	30.3	30.8	33.4	34.4	34.4
Milk, fresh	14.0	15.0	15.0	15.0	15.0	15.0	13.0	13.0	13.0	15.0	15.0	15.0	15.0	15.0	15.0
Milk, evaporated	11.8	11.2	11.1	10.0	9.8	9.8	11.8	10.7	10.6	12.7	12.1	12.0	11.5	10.5	10.6
Butter	56.1	54.9	54.2	58.6	57.6	56.8	59.2	56.2	54.8	59.1	56.1	53.8	57.7	54.5	53.8
Oleomargarine (all butter substitutes)	27.1	25.1	24.9	25.6	24.1	23.8	27.6	25.9	25.6	27.1	27.0	27.0	24.4	26.3	25.0
Cheese	36.8	35.3	36.4	38.4	38.7	38.3	38.0	37.2	36.7	39.1	38.4	38.4	35.8	35.2	35.2
Lard	20.1	19.5	19.0	20.9	19.2	19.2	18.7	17.8	17.2	18.3	17.9	17.5	16.4	15.5	15.1
Vegetable lard substitute	20.9	21.0	21.1	24.1	24.3	23.7	26.9	26.2	26.2	26.2	26.1	26.0	21.7	22.1	22.0
Eggs, strictly fresh	48.5	50.8	55.3	59.9	58.8	58.9	49.5	51.3	61.0	69.9	70.8	77.5	47.1	46.4	50.8
Bread	9.3	9.5	9.5	8.6	8.5	8.5	9.2	9.3	9.3	8.7	8.1	8.1	9.5	9.2	9.2
Flour	6.0	5.9	5.9	4.9	4.9	4.8	6.1	6.0	5.7	5.0	5.3	5.3	6.0	5.9	5.9
Corn meal	4.1	4.2	4.3	5.9	5.7	5.7	4.0	4.0	4.2	5.3	5.4	5.5	3.8	4.0	4.0
Rolled oats	10.6	10.6	10.5	9.9	10.0	9.8	8.7	8.4	8.4	8.6	8.4	8.3	8.9	8.9	8.8
Corn flakes	9.8	9.8	9.8	9.4	9.4	9.5	9.4	9.5	9.5	9.1	9.1	9.3	9.8	9.7	9.7
Wheat cereal	27.3	27.3	27.3	25.0	25.1	25.2	26.5	27.3	26.5	25.4	25.6	25.6	25.5	25.8	25.8
Macaroni	20.3	20.3	20.1	18.1	17.9	17.8	18.8	18.4	18.7	23.2	23.2	23.4	19.5	19.4	19.1
Rice	7.7	8.8	8.0	10.1	9.6	9.5	10.6	10.0	10.1	9.0	8.8	8.8	8.3	8.7	9.1
Beans, navy	13.1	15.0	14.2	12.1	13.3	13.1	12.8	14.2	12.7	12.2	13.9	13.4	12.4	13.8	13.5
Potatoes	2.9	4.3	4.1	2.5	4.1	3.9	2.1	3.9	3.7	1.6	3.2	3.3	3.0	4.0	4.1
Onions	7.6	6.4	5.5	5.5	4.4	4.3	7.1	5.6	5.0	6.8	5.1	4.8	6.3	5.3	5.1
Cabbage	4.8	5.3	4.5	5.3	4.8	4.5	4.4	4.3	4.6	4.4	4.0	4.0	3.8	4.1	3.8
Beans, baked	11.6	12.3	12.3	11.3	11.8	11.9	11.2	11.3	11.4	13.2	13.7	14.0	11.3	11.8	11.6
Corn, canned	15.8	16.8	16.5	16.0	15.5	15.0	15.1	15.0	15.2	16.0	16.4	16.2	14.4	14.7	14.7
Peas, canned	18.3	18.2	17.7	17.1	16.7	16.4	15.5	15.1	15.0	17.2	17.6	17.5	15.0	15.7	15.7
Tomatoes, canned	10.4	13.5	13.3	14.9	14.9	14.6	11.0	11.4	11.4	12.4	12.9	12.5	9.9	11.1	10.9
Sugar	7.4	7.4	7.4	6.4	6.4	6.3	7.4	7.3	7.3	6.8	6.9	7.0	6.8	6.8	6.8
Tea	104.9	107.5	103.4	74.9	73.6	72.2	93.8	92.0	91.2	65.6	63.4	60.8	97.6	95.6	95.2
Coffee	54.6	54.1	53.9	54.0	53.2	52.4	51.6	49.8	48.7	51.6	50.4	49.9	48.9	48.3	48.3
Prunes	15.0	18.3	18.6	13.0	18.8	18.7	16.0	17.1	17.9	13.1	15.5	16.3	14.1	15.1	16.0
Raisins	14.0	14.2	14.3	10.2	11.2	10.9	12.1	12.5	13.1	11.7	11.3	11.2	13.2	12.5	13.5
Bananas	2 9.1	2 9.3	2 9.5	2 9.3	2 8.9	2 9.5	2 10.1	2 9.9	2 9.9	2 9.2	2 7.4	2 8.9	2 8.7	2 8.3	2 8.5
Oranges	58.0	43.8	43.0	53.0	47.4	49.4	45.9	40.8	40.6	58.3	47.6	46.6	40.5	37.3	39.2

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.
² Per pound.
⁴ No. 2½ can.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Milwaukee, Wis.			Minneapolis, Minn.			Mobile, Ala.			Newark, N. J.			New Haven, Conn.		
	1929			1929			1929			1929			1929		
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak.....pound	Cts. 44.9	Cts. 47.0	Cts. 45.8	Cts. 41.6	Cts. 43.0	Cts. 42.6	Cts. 42.8	Cts. 44.1	Cts. 43.9	Cts. 54.8	Cts. 53.7	Cts. 52.6	Cts. 64.1	Cts. 65.0	Cts. 63.5
Round steak.....do	40.4	43.4	41.6	36.6	39.0	38.6	42.0	42.3	41.7	52.5	50.3	49.8	53.7	55.2	53.8
Rib roast.....do	33.6	33.6	32.9	31.6	34.2	33.7	32.2	34.8	33.9	41.3	40.3	40.4	42.8	43.1	42.6
Chuck roast.....do	31.3	31.9	30.9	27.7	29.6	28.6	26.7	28.8	28.3	33.3	32.3	33.2	35.4	34.7	34.4
Plate beef.....do	20.4	19.9	19.4	18.3	19.1	19.0	22.4	21.3	21.1	20.5	19.2	18.9	20.2	19.9	18.6
Pork chops.....do	33.8	37.5	32.1	35.8	37.1	34.8	36.1	36.3	31.9	37.9	39.4	36.4	37.5	41.1	37.6
Bacon, sliced.....do	44.8	44.3	43.7	47.0	46.2	45.5	43.3	39.5	39.0	44.6	43.3	43.0	46.0	46.0	45.6
Ham, sliced.....do	50.8	50.0	49.1	52.8	52.8	51.6	50.9	48.9	50.0	55.6	55.6	53.8	60.5	61.0	59.3
Lamb, leg of.....do	38.5	38.8	37.7	33.6	34.2	33.7	43.3	44.0	44.2	39.3	39.0	38.2	39.3	40.4	39.7
Hens.....do	34.0	32.9	32.0	33.9	34.5	33.3	33.0	35.0	35.8	39.4	40.0	39.0	42.1	43.7	42.6
Salmon, canned, red.....pound	33.0	35.2	35.0	35.3	34.6	35.5	31.6	30.8	30.4	30.1	28.7	29.3	33.5	32.0	32.1
Milk, fresh.....quart	11.0	12.0	12.0	12.0	12.0	12.0	18.0	18.0	18.0	16.0	16.0	16.0	16.0	17.0	17.0
Milk, evaporated.....16-ounce can	11.1	10.5	10.4	11.7	11.1	10.8	11.3	10.1	10.2	11.0	10.4	10.2	12.0	11.5	11.5
Butter.....pound	56.6	53.3	49.7	56.0	52.8	49.3	57.9	55.0	53.8	60.4	57.3	54.8	57.9	56.4	56.1
Oleomargarine (all butter substitutes).....pound	26.7	26.6	26.5	26.4	25.3	25.7	30.6	27.1	27.2	30.0	30.9	30.9	29.1	28.3	29.1
Cheese.....do	37.6	36.7	36.6	37.1	38.3	37.0	36.6	34.7	34.2	40.6	41.5	41.3	41.6	41.6	41.6
Lard.....do	19.3	18.4	18.3	19.7	19.1	18.6	18.3	18.4	17.4	19.9	19.1	19.0	19.2	19.0	18.9
Vegetable lard substitute.....pound	26.3	26.6	26.6	26.7	26.6	26.3	20.0	19.9	18.8	25.5	24.9	24.8	25.9	25.4	25.4
Eggs, strictly fresh.....dozen	56.6	50.5	58.2	46.4	47.4	57.1	53.0	48.6	51.6	69.9	71.2	73.7	80.7	76.2	79.5
Bread.....pound	8.7	8.5	8.4	8.9	8.9	8.8	10.1	9.9	9.9	9.1	9.0	9.0	9.0	8.6	8.6
Flour.....do	4.4	4.7	4.6	4.6	5.0	4.9	6.0	5.8	5.7	4.8	5.2	5.0	5.2	5.4	5.3
Corn meal.....do	5.8	6.2	6.2	5.6	5.8	5.7	4.0	4.0	3.9	6.7	6.5	6.5	6.8	6.9	6.9
Rolled oats.....do	8.1	8.1	8.1	7.8	7.9	8.0	8.5	8.1	8.1	8.1	8.6	8.6	9.3	9.2	9.1
Corn flakes.....do	9.2	9.4	9.4	9.6	9.7	9.4	9.2	8.9	8.8	8.8	8.9	8.9	10.0	10.0	10.0
Wheat cereal.....28-ounce package	24.6	24.9	24.7	25.4	24.9	25.1	25.0	25.0	24.3	24.6	26.6	26.6	24.8	24.3	24.4
Macaroni.....pound	17.7	17.7	17.6	18.0	18.1	17.8	21.3	20.9	20.6	21.5	21.3	21.3	22.4	22.1	22.0
Rice.....do	10.3	9.9	10.2	9.3	10.2	10.1	8.4	7.9	7.5	9.5	9.3	9.6	10.4	10.2	10.3
Beans, navy.....do	12.9	14.1	13.5	13.3	14.4	14.0	12.2	14.5	14.4	13.1	15.2	14.9	11.9	14.1	13.9
Potatoes.....do	1.5	3.4	3.3	1.3	3.0	3.0	3.0	4.2	4.3	2.3	4.1	4.0	2.1	3.8	3.8
Onions.....do	5.6	5.0	4.7	5.6	5.0	5.0	6.3	4.8	4.4	7.2	5.0	5.4	6.8	5.7	5.5
Cabbage.....do	3.1	4.0	3.7	2.6	4.0	3.4	4.8	4.9	4.4	5.1	4.8	4.5	5.2	5.8	5.4
Beans, baked.....No. 2 can	11.6	11.2	11.1	12.0	12.5	12.1	10.5	11.0	10.6	11.0	10.8	10.7	11.9	12.3	12.3
Corn, canned.....do	16.2	16.2	16.2	14.8	14.8	14.9	14.8	14.2	14.4	16.9	16.1	15.1	18.1	18.5	18.5
Peas, canned.....do	15.9	15.8	15.8	15.0	15.0	15.3	15.9	15.6	15.4	17.1	16.7	16.7	21.1	21.0	20.6
Tomatoes, canned.....No. 2 can	13.2	14.1	14.1	12.8	14.0	14.2	10.3	11.1	10.9	10.8	11.1	11.2	13.3	14.3	14.3
Sugar.....pound	6.5	6.6	6.6	6.9	7.0	6.8	6.9	6.7	6.5	6.4	6.4	6.4	6.7	6.8	6.8
Tea.....do	68.8	70.0	68.5	68.9	68.8	69.3	80.8	78.6	78.6	57.8	57.9	58.2	60.3	59.1	59.1
Coffee.....do	45.0	46.2	45.9	53.8	53.5	52.0	48.8	47.9	48.0	49.3	48.6	47.7	51.9	50.5	49.8
Prunes.....do	13.7	16.9	18.5	15.1	17.9	18.7	12.8	13.5	15.9	13.3	16.5	17.4	14.4	16.3	17.1
Raisins.....do	12.6	12.7	12.7	12.3	12.9	12.9	10.7	11.1	11.3	11.8	11.7	11.4	12.9	12.7	12.6
Bananas.....dozen	29.7	29.6	29.7	10.6	10.4	10.4	11.3	24.2	21.0	19.0	36.3	36.3	38.8	34.1	33.7
Oranges.....do	64.3	44.9	45.9	61.3	40.5	39.7	48.4	35.9	33.0	60.9	61.5	51.5	67.1	62.5	53.7

² Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	New Orleans, La.			New York, N. Y.			Norfolk, Va.			Omaha, Nebr.			Peoria, Ill.		
	1929			1929			1929			1929			1929		
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak... pound	43.3	44.5	45.3	53.9	54.0	52.7	47.2	48.8	47.1	46.9	47.9	45.5	39.7	41.4	40.9
Round steak... do	38.6	40.2	40.3	50.9	50.6	49.8	41.5	42.9	41.1	44.1	44.7	43.8	38.8	41.2	40.3
Rib roast... do	35.5	37.6	37.0	44.9	43.6	42.7	39.0	38.1	40.0	32.4	34.0	33.6	31.3	31.3	30.4
Chuck roast... do	25.7	27.0	27.1	31.4	31.4	30.7	28.1	28.9	25.6	29.3	30.0	28.8	27.9	28.2	27.8
Plate beef... do	22.5	23.2	23.1	26.4	25.8	25.4	20.9	21.1	21.1	18.7	19.8	19.1	19.7	19.2	19.3
Pork chops... do	36.3	37.8	35.3	39.9	41.0	38.3	32.9	37.4	34.8	34.8	36.6	33.6	31.9	33.8	32.4
Bacon, sliced... do	44.4	43.5	42.7	46.4	45.1	44.8	42.8	40.8	41.8	45.2	45.3	44.0	43.8	43.6	42.7
Ham, sliced... do	51.5	53.6	52.5	58.8	58.4	57.3	47.2	46.0	45.6	53.4	53.4	51.8	49.2	50.9	49.1
Lamb, leg of... do	38.4	38.7	38.5	37.3	36.9	36.6	40.3	39.2	40.8	36.8	37.0	36.5	38.5	42.1	42.1
Hens... do	37.1	39.4	37.5	39.8	40.0	39.2	38.0	38.6	39.6	32.0	33.2	31.8	34.4	34.4	33.0
Salmon, canned, red	35.9	35.0	35.2	30.8	31.2	31.2	35.4	33.0	33.3	34.1	33.9	34.1	33.8	32.7	32.5
Milk, fresh... quart	14.0	14.0	14.0	16.0	16.0	16.0	18.0	18.0	18.0	11.3	11.3	11.3	13.0	13.0	13.0
Milk, evaporated															
16-ounce can	11.0	10.1	10.0	10.9	10.2	10.3	11.5	10.3	10.4	11.4	10.3	10.3	11.2	10.1	10.0
1-pint can	58.6	57.5	55.6	59.4	57.1	53.5	60.6	57.9	56.8	54.1	50.3	47.3	54.4	50.5	47.3
Butter															
16-ounce can	28.6	28.1	27.9	28.5	27.9	28.5	26.1	26.6	26.3	26.8	26.0	26.0	28.0	27.5	27.5
Cheese	38.9	36.8	36.8	41.3	41.0	41.1	35.0	35.3	35.1	36.4	35.4	35.8	35.6	35.6	35.8
Lard	18.7	17.9	18.3	20.1	19.3	18.8	18.8	18.0	17.6	20.3	19.3	18.8	18.8	18.0	18.1
Vegetable lard substitute															
1-pint can	20.3	20.4	20.3	25.7	25.6	25.4	21.7	21.1	21.7	25.2	25.6	25.1	27.6	27.0	27.9
Eggs, strictly fresh															
1-dozen	47.6	50.9	55.1	74.5	72.0	75.6	62.9	57.4	63.3	42.8	44.8	50.6	49.8	48.8	57.4
Bread	8.9	8.9	8.8	8.6	8.7	8.7	9.9	9.3	9.3	9.6	9.2	9.2	10.0	10.0	10.0
Flour	6.6	6.6	6.6	4.8	5.1	5.0	5.4	5.5	5.5	4.4	4.3	4.3	4.7	4.9	4.9
Corn meal	4.3	4.3	4.1	6.6	6.6	6.7	4.7	4.7	4.7	4.6	4.7	4.7	4.9	4.9	5.0
Rollled oats	8.6	8.6	8.6	8.5	8.7	8.7	8.8	8.6	8.6	10.3	9.7	9.5	8.6	8.6	8.6
Cornflakes															
8-ounce package	9.6	9.6	9.4	8.9	9.0	9.0	9.7	9.7	9.6	10.1	9.8	9.8	9.9	9.5	9.5
Wheat cereal															
28-ounce package	24.6	24.9	24.9	24.6	24.3	24.2	24.9	24.9	24.9	27.6	27.9	27.6	25.8	25.7	25.7
Macaroni	10.5	11.2	11.2	20.7	20.7	20.5	19.0	19.1	19.1	21.1	21.0	20.8	18.8	18.7	18.7
Rice	8.5	8.6	8.8	9.7	9.6	9.5	10.7	10.0	10.2	10.9	10.2	10.0	10.0	9.2	9.2
Beans, navy	11.4	13.5	13.2	13.2	15.1	15.3	12.3	13.8	13.5	13.3	13.8	13.4	12.4	13.6	13.4
Potatoes	3.1	4.2	4.3	2.5	4.4	4.2	2.1	4.5	4.5	1.5	2.9	3.1	1.6	3.5	3.4
Onions	5.3	4.4	4.4	6.6	5.7	5.4	7.0	5.4	5.2	6.1	5.0	4.9	7.1	5.9	5.9
Cabbage	4.7	4.3	4.4	4.7	5.0	4.9	4.7	5.0	4.8	3.6	4.6	4.5	4.2	4.1	4.1
Beans, baked															
No. 2 can	11.1	11.0	11.2	11.6	11.6	11.5	10.7	10.4	10.0	13.1	13.4	13.1	10.2	10.2	10.3
Corn, canned	15.6	15.6	15.5	14.7	14.8	15.1	14.7	14.8	14.8	15.7	15.8	15.8	14.8	14.1	13.9
Peas, canned	16.4	15.9	15.9	15.1	15.2	15.3	17.7	17.5	17.8	15.5	15.2	14.9	17.5	17.0	17.0
Tomatoes, canned															
No. 2 can	10.9	11.7	11.6	11.7	11.2	11.3	10.1	9.7	9.7	13.4	14.6	14.3	12.4	13.4	13.4
Sugar	6.1	6.1	6.0	6.0	6.1	6.1	6.7	6.5	6.5	7.1	7.0	7.0	7.5	7.4	7.3
Tea	80.9	83.3	83.6	67.2	68.4	68.5	94.7	93.3	93.3	77.0	81.4	80.0	66.0	63.7	64.2
Coffee	35.0	35.6	35.5	45.4	44.6	44.1	51.0	49.4	48.8	53.6	53.6	53.6	49.4	48.4	47.7
Prunes	13.8	17.6	18.9	12.9	16.5	16.9	13.7	14.3	15.7	14.5	17.6	18.4	14.9	18.8	18.6
Raisins	10.2	10.7	11.3	12.0	12.2	12.4	11.8	12.3	12.0	13.3	13.3	13.4	12.1	13.0	13.5
Bananas	17.9	15.0	17.0	39.1	37.0	39.6	32.1	31.7	32.5	11.2	11.1	11.7	9.8	10.0	10.1
Oranges	51.7	45.8	39.6	67.3	59.8	58.8	59.5	48.5	49.8	56.1	35.2	31.9	54.3	40.1	39.3

² Per pound.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Philadelphia, Pa.			Pittsburgh, Pa.			Portland, Me.			Portland, Oreg.		
	1928		1929	1928		1929	1928		1929	1928		1929
	Nov. 15,	Oct. 15		Nov. 15,	Oct. 15		Nov. 15,	Oct. 15		Nov. 15,	Oct. 15		Nov. 15,
Sirloin steak.....pound..	62.8	63.8	63.4	55.6	56.2	53.4	67.5	71.2	70.5	36.2	37.4	37.3
Round steak.....do....	49.0	49.8	50.0	46.9	42.9	45.0	51.2	57.2	53.8	34.6	36.3	35.4
Rib roast.....do....	42.5	43.5	42.2	40.9	40.9	38.5	36.1	37.7	37.8	29.6	30.8	30.5
Chuck roast.....do....	35.4	35.1	33.5	34.8	32.6	31.4	27.7	28.5	28.4	25.2	25.4	25.3
Plate beef.....do....	20.6	19.9	19.1	21.8	20.1	19.6	25.9	26.9	25.6	19.6	20.1	19.3
Pork chops.....do....	37.8	42.3	38.7	36.3	41.6	36.0	38.0	41.6	37.0	34.6	38.6	36.9
Bacon, sliced.....do....	42.7	42.3	42.1	48.3	46.9	46.4	42.0	39.1	38.7	51.6	51.6	51.3
Ham, sliced.....do....	58.4	57.1	55.9	60.5	60.5	57.4	53.8	55.3	51.8	54.7	55.9	54.4
Lamb, leg of.....do....	40.6	40.3	40.1	40.5	41.1	39.8	37.8	38.2	37.8	35.9	34.6	34.3
Hens.....do....	41.9	41.5	39.9	46.2	47.1	46.4	41.9	43.5	42.3	35.3	36.2	36.3
Salmon, canned, red.....do....	29.3	28.8	29.4	30.6	29.8	30.1	30.7	30.4	31.1	32.4	33.0	32.8
Milk, fresh.....quart..	13.0	14.0	14.0	15.0	14.0	14.0	15.0	15.0	15.0	12.0	12.0	12.0
Milk, evaporated.....16-oz. can..	11.3	10.7	10.5	11.0	10.5	10.3	12.3	11.5	11.6	10.1	10.1	10.1
Butter.....pound..	61.8	57.8	55.6	60.8	57.7	54.3	59.5	57.3	55.9	59.2	57.9	55.6
Oleomargarine (all butter substitutes).....pound..	29.5	28.1	28.4	28.5	27.7	27.7	26.9	26.9	25.6	26.1	26.3	25.8
Cheese.....do....	42.8	42.8	42.8	41.9	40.4	40.6	39.5	38.6	38.7	38.5	38.3	38.3
Lard.....do....	18.6	17.5	17.2	19.2	17.9	17.5	18.7	17.8	17.2	19.6	19.0	19.1
Vegetable lard substitute.....pound..	25.2	25.1	25.1	27.8	26.8	27.0	26.0	25.7	25.7	28.4	28.4	28.5
Eggs, strictly fresh.....dozen..	66.4	63.8	69.0	60.6	60.7	64.8	74.8	69.2	75.1	54.4	53.9	57.6
Bread.....pound..	8.3	8.3	8.3	9.0	8.8	8.8	10.1	9.0	8.9	9.3	9.3	9.3
Flour.....do....	4.7	5.0	4.8	4.7	5.1	5.0	5.1	5.3	5.2	4.7	4.9	4.8
Corn meal.....do....	5.2	5.7	5.9	6.0	6.2	6.7	5.3	5.3	5.3	5.6	6.1	6.0
Rolled oats.....do....	8.3	8.2	8.0	9.1	9.0	8.9	7.8	7.6	7.6	10.4	10.0	10.1
Corn flakes.....8-ounce package..	8.9	8.6	8.6	9.8	9.8	9.6	9.4	9.8	9.8	9.6	9.6	9.6
Wheat cereal.....28-ounce package..	25.2	24.8	24.7	24.6	24.9	24.9	25.8	25.8	26.0	26.6	27.0	27.0
Macaroni.....pound..	20.3	20.5	20.6	22.7	22.6	22.6	22.9	23.5	23.5	18.3	18.3	18.5
Rice.....do....	10.5	10.2	10.2	11.1	10.7	10.4	11.1	11.3	11.0	10.2	10.2	10.2
Beans, navy.....do....	11.8	15.2	14.3	12.3	13.9	13.2	12.4	14.7	14.2	12.8	14.0	13.8
Potatoes.....do....	2.2	4.5	4.4	2.0	3.8	3.8	1.8	3.5	3.4	2.1	3.8	3.8
Onions.....do....	6.4	4.7	4.5	7.1	5.7	5.3	6.3	4.6	4.4	5.0	3.7	6.4
Cabbage.....do....	4.9	4.4	4.2	4.5	5.1	4.7	3.6	3.5	3.1	3.8	3.2	3.4
Beans, baked.....No. 2 can..	11.3	10.7	10.6	12.9	12.5	12.3	15.2	15.7	15.5	12.7	13.3	13.3
Corn, canned.....do....	15.4	14.8	14.9	16.3	16.2	16.0	14.4	14.2	14.4	17.9	18.8	18.3
Peas, canned.....do....	15.5	15.5	15.9	17.1	16.8	16.5	18.2	18.1	17.9	17.0	17.3	17.9
Tomatoes, canned.....do....	11.8	12.1	12.4	12.5	13.3	13.4	11.8	13.3	12.5	15.6	15.9	16.1
Sugar.....pound..	6.2	6.1	6.1	7.0	7.0	7.0	6.6	6.6	6.5	6.6	6.9	6.8
Tea.....do....	70.4	73.2	72.8	82.3	86.1	87.8	62.4	61.5	61.5	78.0	77.8	77.8
Coffee.....do....	44.2	43.5	42.8	49.7	49.8	49.3	53.2	52.3	51.9	53.3	53.0	52.0
Prunes.....do....	12.2	15.1	16.2	14.1	17.7	18.6	12.4	15.9	16.7	13.8	14.3	13.7
Raisins.....do....	11.2	11.8	11.8	11.9	12.5	12.7	11.2	11.4	11.3	10.6	12.2	13.0
Bananas.....dozen..	36.2	29.4	29.7	39.6	37.7	37.3	11.0	10.4	10.8	10.5	10.5	11.1
Oranges.....do....	55.2	45.4	45.6	56.4	49.2	44.7	65.3	50.7	51.2	57.9	31.6	31.7

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most other cities included in this report it would be known as "porterhouse" steak.

² Per pound.

⁴ No. 2½ can.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Providence, R. I.			Richmond, Va.			Rochester, N. Y.			St. Louis, Mo.		
	1928		1929	1928		1929	1928		1929	1928		1929
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak.....pound	180.8	81.2	80.0	48.6	51.5	50.1	47.1	49.9	48.4	46.1	46.8	46.3
Round steak.....do	58.2	59.7	59.5	43.5	45.1	44.0	40.7	43.5	42.6	44.3	45.6	44.4
Rib roast.....do	44.8	44.8	44.6	36.9	36.8	36.8	35.5	36.5	36.3	36.5	36.7	37.0
Chuck roast.....do	36.4	36.7	36.5	30.3	30.2	30.2	31.9	32.2	30.7	29.6	29.5	29.3
Plate beef.....do	25.6	27.8	28.3	22.1	23.5	23.0	19.4	19.9	19.4	21.2	21.9	22.1
Pork chops.....do	40.7	43.6	38.6	35.9	38.9	36.1	37.8	43.1	38.2	33.2	36.0	33.1
Bacon, sliced.....do	41.7	41.7	40.6	40.3	40.1	38.9	39.6	38.4	37.8	41.0	41.9	40.6
Ham, sliced.....do	57.3	58.2	55.8	45.7	45.3	42.9	53.0	54.2	52.7	53.2	54.1	54.3
Lamb, leg of.....do	39.8	40.1	39.9	44.4	44.7	44.1	36.5	36.7	35.0	35.9	37.6	37.8
Hens.....do	42.9	42.9	42.7	35.9	35.5	35.6	40.9	41.0	39.9	35.0	35.6	34.9
Salmon, canned, red.....do	32.1	30.8	30.8	33.3	32.1	31.5	31.8	30.8	31.2	32.7	32.5	32.2
Milk, fresh.....quart	15.7	15.8	15.8	14.0	14.0	14.0	13.5	14.0	14.0	13.0	13.0	13.0
Milk, evaporated.....16-ounce can	11.9	11.1	11.1	12.3	11.8	11.8	11.5	10.5	10.5	10.8	9.7	9.6
Butter.....pound	57.3	55.8	54.2	61.7	57.8	54.7	57.7	54.5	52.8	59.9	56.6	54.7
Oleomargarine (all butter substitutes).....pound	26.9	25.1	25.2	29.9	29.5	29.5	28.7	27.3	26.9	27.4	25.8	25.5
Cheese.....do	38.4	38.6	38.8	36.9	36.4	36.1	39.9	38.2	38.2	37.4	35.8	35.8
Lard.....do	18.6	17.6	17.1	18.6	17.7	17.0	18.1	16.8	17.0	16.0	15.1	14.4
Vegetable lard substitutes.....do	26.6	26.0	26.2	25.8	25.4	24.9	26.0	25.9	25.4	25.3	25.5	25.2
Eggs, strictly fresh.....dozen	78.9	76.9	75.6	54.4	51.7	58.0	69.3	64.0	69.1	52.3	49.3	57.1
Bread.....pound	9.0	9.0	9.0	8.7	8.7	8.7	9.1	8.3	8.3	9.4	9.1	9.1
Flour.....do	5.3	5.6	5.5	5.3	5.5	5.3	5.0	5.1	5.1	5.0	5.0	4.9
Corn meal.....do	5.0	5.1	5.1	4.9	4.8	4.8	6.3	5.9	5.9	4.3	4.7	4.6
Rolled oats.....do	9.0	8.8	8.9	8.6	8.7	8.9	9.2	8.6	8.4	8.1	8.0	8.1
Corn flakes.....8-ounce package	9.4	9.3	9.4	9.6	9.6	9.6	9.2	9.1	9.2	9.0	9.4	9.5
Wheat cereal.....28-ounce package	24.8	24.8	24.8	26.0	25.9	25.9	25.7	25.0	25.1	24.7	24.3	24.3
Macaroni.....pound	22.8	23.0	23.0	20.2	20.6	20.6	20.5	19.9	19.9	20.1	19.7	19.7
Rice.....do	10.1	9.8	10.0	11.2	11.0	10.9	8.9	9.1	9.1	10.0	9.7	9.6
Beans, navy.....do	12.9	14.0	13.8	13.3	14.4	13.4	12.1	14.2	13.5	12.3	13.3	13.1
Potatoes.....do	1.8	3.3	3.4	2.4	4.4	4.2	1.5	2.9	3.0	2.0	3.9	4.0
Onions.....do	7.0	5.1	5.2	7.2	5.2	4.2	6.0	5.1	4.2	6.5	5.6	5.4
Cabbage.....do	4.8	5.0	4.6	4.9	4.5	4.3	3.2	3.0	2.7	3.5	3.9	3.8
Beans, baked.....No. 2 can	11.2	11.6	11.6	11.1	11.4	11.4	10.7	11.0	10.8	10.4	10.6	10.4
Corn, canned.....do	17.3	16.6	16.6	15.7	15.4	14.9	16.6	16.0	15.5	15.4	14.9	14.4
Peas, canned.....do	18.3	17.9	17.9	17.8	17.9	18.0	17.7	17.4	17.2	14.7	14.9	14.9
Tomatoes, canned.....do	12.9	13.5	13.0	10.9	11.5	11.5	14.4	15.8	15.4	10.9	12.4	12.2
Sugar.....pound	6.4	6.4	6.3	6.8	6.6	6.6	6.2	6.2	6.2	6.8	6.8	6.8
Tea.....do	60.4	59.8	59.4	91.9	94.5	94.5	72.8	73.9	72.8	75.7	73.1	73.3
Coffee.....do	52.3	52.1	51.1	47.7	48.0	47.1	49.1	45.5	45.1	46.9	46.2	44.7
Prunes.....do	13.5	15.5	16.2	15.1	16.7	18.1	14.4	16.1	18.6	15.0	18.7	19.0
Raisins.....do	12.7	11.7	12.0	11.8	12.1	12.5	12.7	12.4	12.5	11.3	12.3	12.2
Bananas.....dozen	33.6	31.4	32.5	36.4	33.1	33.8	31.5	30.7	31.3	32.3	30.8	31.4
Oranges.....do	61.1	56.3	54.9	48.4	40.5	39.1	64.1	54.0	52.1	49.2	45.3	43.6

¹ The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as "porterhouse" steak.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	St. Paul, Minn.			Salt Lake City, Utah			San Francisco, Calif.			Savannah, Ga.		
	1928		1929	1928		1929	1928		1929	1928		1929
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak.....pound	41.9	43.0	41.4	38.7	39.3	37.9	41.2	40.2	39.8	40.5	42.8	41.1
Round steak.....do	36.6	38.1	36.4	37.7	37.7	36.7	40.1	38.5	38.0	34.5	37.2	36.7
Rib roast.....do	33.7	34.4	33.4	29.6	32.5	31.4	36.9	35.4	35.2	32.3	32.4	32.4
Chuck roast.....do	27.9	28.6	27.8	26.2	26.9	26.2	27.2	24.5	24.5	23.4	25.8	25.2
Plate beef.....do	17.9	18.3	18.3	19.2	20.3	19.4	21.8	19.2	19.3	19.8	21.0	22.3
Pork chops.....do	32.6	35.2	31.2	36.0	40.5	39.5	41.9	42.3	41.5	30.0	32.6	31.7
Bacon, sliced.....do	43.6	42.8	41.6	45.4	45.2	44.5	56.5	56.5	55.8	39.6	38.5	38.0
Ham, sliced.....do	49.7	49.2	46.7	56.3	58.8	56.8	62.8	63.8	62.9	45.4	47.0	45.0
Lamb, leg of.....do	30.6	31.7	30.9	36.8	37.4	36.0	39.7	38.9	38.8	39.0	38.3	37.8
Hens.....do	31.9	33.6	31.9	35.2	35.0	34.8	43.5	42.8	43.5	32.0	36.3	33.4
Salmon, canned, red.....do	36.1	36.8	36.4	33.2	32.2	33.2	28.9	29.8	29.6	33.1	33.1	33.1
Milk, fresh.....quart	12.0	12.0	12.0	10.0	10.0	10.0	14.0	14.0	14.0	17.0	18.0	18.0
Milk, evaporated.....16-ounce can	11.9	11.0	11.0	10.2	10.0	10.0	10.0	9.9	9.9	11.3	10.2	10.1
Butter.....pound	53.8	52.3	49.4	54.2	53.0	51.4	58.8	58.1	58.4	59.4	54.9	52.4
Oleomargarine (all butter substitutes).....pound	24.1	23.5	23.6	25.5	30.3	30.0	25.3	24.9	24.9	30.3	30.6	30.0
Cheese.....do	37.2	35.7	35.5	31.5	29.6	29.8	40.7	41.1	41.1	35.2	33.5	33.0
Lard.....do	19.4	18.8	18.3	21.7	19.9	19.3	23.1	22.5	22.3	18.4	18.5	18.8
Vegetable lard substitute.....do	28.1	27.0	27.3	29.5	29.5	29.5	27.3	27.8	28.3	16.9	15.5	15.2
Eggs, strictly fresh.....dozen	48.0	46.3	50.9	49.9	55.7	58.1	55.5	59.0	59.3	58.6	58.5	59.8
Bread.....pound	9.3	9.3	9.3	9.6	9.6	9.6	9.1	9.3	9.3	10.6	10.6	10.4
Flour.....do	4.7	5.0	5.0	3.7	3.7	3.7	5.4	5.2	5.1	6.5	6.3	6.2
Corn meal.....do	5.1	5.3	5.3	5.9	6.0	6.0	7.3	7.1	7.2	3.7	3.7	3.6
Rolled oats.....do	10.1	9.9	10.0	8.6	8.4	8.4	10.1	9.7	9.8	8.4	8.6	8.6
Corn flakes.....8-ounce package	10.1	10.1	10.0	10.2	9.8	9.7	9.7	9.6	9.7	9.8	9.6	9.6
Wheat cereal.....28-ounce package	26.3	26.0	26.2	25.5	25.4	25.1	25.1	25.4	25.3	24.4	24.1	23.7
Macaroni.....pound	18.6	18.7	18.7	19.7	19.9	19.6	16.3	16.2	16.0	17.8	17.4	17.9
Rice.....do	10.9	10.3	10.4	8.7	9.4	9.4	9.3	9.8	9.8	9.0	8.8	8.7
Beans, navy.....do	13.1	14.5	14.3	10.7	12.4	12.1	11.5	13.8	13.6	13.5	15.4	15.0
Potatoes.....do	1.2	2.7	2.8	1.6	2.6	2.7	2.6	4.3	4.3	2.9	4.3	4.3
Onions.....do	5.7	5.1	4.4	4.4	3.9	3.1	4.9	4.4	4.3	7.3	5.9	5.7
Cabbage.....do	2.8	3.8	3.1	2.9	3.2	3.2	---	---	---	5.1	4.9	4.3
Beans, baked.....No. 2 can	13.6	14.0	13.7	12.2	12.5	12.7	12.9	12.6	12.6	11.8	10.8	10.8
Corn, canned.....do	15.1	15.1	14.9	14.3	13.8	13.8	17.5	17.1	17.3	15.1	15.0	15.1
Peas, canned.....do	14.9	14.9	14.8	14.6	15.0	14.9	18.0	17.9	17.6	16.3	16.6	17.0
Tomatoes, canned.....do	14.4	14.8	14.7	¹ 13.9	¹ 14.1	¹ 13.5	¹ 14.7	¹ 15.9	¹ 16.0	10.0	10.0	9.9
Sugar.....pound	7.0	7.1	7.1	7.2	7.2	7.2	6.3	6.5	6.4	6.6	6.6	6.3
Tea.....do	66.7	72.7	72.7	85.4	84.7	84.7	71.5	74.4	74.1	77.6	81.2	82.5
Coffee.....do	53.4	53.3	52.9	54.3	54.7	55.1	54.3	52.7	52.1	46.8	44.9	44.9
Prunes.....do	14.1	17.5	18.1	13.0	14.8	15.7	11.5	15.0	15.6	13.6	17.8	18.0
Raisins.....do	13.9	13.9	14.2	12.1	12.2	11.8	10.3	10.8	10.9	11.8	11.7	12.5
Bananas.....dozen	² 10.3	² 10.8	² 11.2	² 13.1	² 11.6	² 11.4	30.2	30.0	30.7	30.0	31.0	31.1
Oranges.....do	64.9	40.7	40.4	55.9	36.3	36.2	57.6	35.9	35.3	42.1	39.0	36.3

² Per pound.⁴ No. 2½ can.

TABLE 5.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN 51 CITIES, NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

Article	Scranton, Pa.			Seattle, Wash.			Springfield, Ill.			Washington, D. C.		
	1928		1929	1928		1929	1928		1929	1928		1929
	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15	Nov. 15, 1928	Oct. 15	Nov. 15
Sirloin steak.....pound.....	63.5	64.0	61.2	41.5	43.8	43.4	43.9	41.8	41.3	55.6	56.3	52.9
Round steak.....do.....	52.5	54.6	53.0	37.5	38.9	38.5	42.5	42.3	41.3	48.9	50.1	46.7
Rib roast.....do.....	44.8	42.2	41.7	34.1	34.3	34.4	31.5	32.9	32.1	39.5	39.4	38.1
Chuck roast.....do.....	36.2	35.8	35.6	26.9	26.5	26.7	29.2	28.5	28.7	33.4	33.1	31.5
Plate beef.....do.....	20.6	20.1	20.6	20.9	21.1	20.6	21.6	20.7	20.9	22.1	22.1	19.6
Pork chops.....do.....	38.3	44.3	40.7	37.4	41.2	40.8	31.6	35.5	30.6	36.1	40.4	36.6
Bacon, sliced.....do.....	48.6	47.4	46.9	56.2	54.0	53.1	43.6	42.7	41.6	41.4	43.1	40.1
Ham, sliced.....do.....	59.3	61.7	59.1	60.7	60.0	59.0	50.9	50.5	47.3	58.8	58.3	57.1
Lamb, leg of.....do.....	43.6	44.0	43.6	37.4	36.5	36.6	39.0	40.4	39.4	39.4	39.7	38.1
Hens.....do.....	44.5	44.5	44.3	35.9	35.5	36.3	33.0	34.0	33.7	41.7	41.6	40.3
Salmon, canned, red.....do.....	34.4	33.3	33.2	33.7	33.8	32.8	34.3	34.1	34.0	31.1	30.1	30.6
Milk, fresh.....do.....	13.0	14.0	14.0	12.0	13.0	13.0	14.4	14.4	14.4	15.0	14.8	14.8
Milk, evaporated.....16-ounce can.....	11.9	11.4	11.4	10.3	10.1	10.1	11.9	10.8	10.6	11.9	11.0	11.0
Butter.....pound.....	59.5	56.7	56.0	58.7	56.8	54.4	56.9	53.7	51.7	60.8	57.8	55.7
Oleomargarine (all butter substitutes).....pound.....	26.0	26.8	26.8	25.1	25.0	24.7	28.8	28.1	27.3	27.1	26.5	26.3
Cheese.....do.....	38.8	38.4	38.9	35.7	35.5	35.5	37.2	37.0	36.5	40.8	39.9	39.5
Lard.....do.....	20.1	19.4	19.4	20.3	19.4	19.7	19.3	17.6	17.1	18.1	17.2	16.8
Vegetable lard substitute.....do.....	26.0	26.6	26.4	27.1	26.6	26.5	27.8	27.4	27.4	24.3	24.6	24.6
Eggs, strictly fresh.....dozen.....	68.5	66.8	70.9	53.9	59.0	58.8	49.6	46.9	58.9	64.1	61.7	67.7
Bread.....pound.....	10.0	9.8	9.8	9.6	9.7	9.7	10.0	10.1	10.1	8.9	8.9	8.9
Flour.....do.....	5.5	5.7	5.6	4.7	4.7	4.7	4.8	4.7	4.7	5.5	5.6	5.3
Corn meal.....do.....	7.6	7.6	7.7	5.9	6.2	6.3	4.8	4.8	4.8	5.1	5.0	5.0
Rolled oats.....do.....	9.8	9.9	9.9	8.7	9.6	9.6	10.0	9.5	9.5	9.1	9.0	8.7
Corn flakes.....8-ounce package.....	9.9	9.8	9.8	9.7	9.9	9.8	9.8	9.5	9.5	9.4	9.1	9.1
Wheat cereal.....28-ounce package.....	25.6	25.5	25.5	26.7	26.6	26.4	28.8	27.1	27.1	25.0	24.4	24.4
Macaroni.....pound.....	22.5	22.7	22.5	17.9	17.5	17.0	19.0	18.9	18.5	22.0	21.6	21.6
Rice.....do.....	10.4	9.8	10.1	10.6	10.0	10.1	10.2	10.1	9.9	11.0	10.9	10.7
Beans, navy.....do.....	12.1	14.8	14.1	12.5	14.9	14.1	13.0	13.8	13.4	12.9	13.7	13.3
Potatoes.....do.....	1.8	3.8	3.6	1.7	3.2	3.3	1.6	3.7	3.6	2.6	4.2	3.9
Onions.....do.....	5.9	5.1	4.7	5.5	3.7	3.4	6.8	4.9	4.5	6.7	5.4	5.2
Cabbage.....do.....	4.3	3.9	3.4	3.6	3.5	3.3	3.5	4.3	3.5	4.8	4.4	4.3
Beans, baked.....No. 2 can.....	12.0	12.2	12.2	11.4	12.4	12.4	11.1	11.0	11.0	10.8	10.9	10.6
Corn, canned.....do.....	17.3	16.9	16.8	18.2	17.6	17.0	15.0	14.9	15.0	15.2	15.2	15.6
Peas, canned.....do.....	17.8	17.5	17.8	18.3	18.2	17.7	15.9	15.9	16.1	15.0	16.4	16.6
Tomatoes, canned.....do.....	12.7	13.3	13.3	15.8	16.3	16.2	14.0	14.9	14.4	10.5	10.4	10.5
Sugar.....pound.....	6.8	6.7	6.7	6.6	6.6	6.5	7.4	7.1	7.0	6.4	6.4	6.3
Tea.....do.....	68.1	66.1	65.7	78.0	79.7	78.0	83.5	82.7	83.1	95.2	91.0	90.8
Coffee.....do.....	51.2	49.6	49.4	52.3	51.2	49.5	51.7	51.4	51.6	48.1	46.2	45.2
Prunes.....do.....	14.0	16.6	17.8	12.8	16.5	16.8	14.2	17.3	19.5	14.9	16.6	18.4
Raisins.....do.....	12.4	12.2	12.3	11.2	10.9	11.2	12.3	12.8	12.3	13.2	13.3	13.3
Bananas.....dozen.....	30.4	30.0	28.8	11.0	10.1	10.5	9.6	9.5	9.3	32.5	30.5	30.5
Oranges.....do.....	64.9	49.4	46.9	58.8	35.4	34.0	66.4	45.6	44.5	49.7	46.9	41.3

² Per pound.

⁴ No. 2½ can.

Comparison of Retail Food Costs in 51 Cities

TABLE 6 shows for 39 cities the percentage of increase or decrease in the retail cost of food³ in November, 1929, compared with the average cost in the year 1913, in November, 1928, and October, 1929. 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 family consumption of these articles in each city.⁴

Effort has been made by the bureau each month to have all schedules for each city included in the average prices. For the month of November, 99.2 per cent of all the firms supplying retail prices in the 51 cities sent in a report promptly. The following-named 41 cities had a perfect record; that is, every merchant who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Baltimore, Boston, Bridgeport, Buffalo, Butte, Charleston, S. C., Chicago, Cincinnati, Cleveland, Columbus, Dallas, Denver, Detroit, Fall River, Houston, Indianapolis, Jacksonville, Little Rock, Louisville, Manchester, Memphis, Milwaukee, Minneapolis, Mobile, Newark, New Orleans, New York, Norfolk, Peoria, Pittsburgh, Portland, Me., Providence, Richmond, Rochester, St. Louis, Salt Lake City, San Francisco, Savannah, Scranton, Springfield, Ill., and Washington.

TABLE 6.—PERCENTAGE CHANGE IN THE RETAIL COST OF FOOD IN NOVEMBER, 1929, COMPARED WITH THE COST IN OCTOBER, 1929, NOVEMBER, 1928, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES

City	Percentage increase November, 1929, compared with—		Percent- age decrease Novem- ber, 1929, compared with October, 1929	City	Percentage increase November, 1929, compared with—		Percent- age decrease Novem- ber, 1929, compared with October, 1929
	1913	Novem- ber, 1928			1913	Novem- ber, 1928	
Atlanta.....	60.3	1 1.2	1.9	Minneapolis.....	60.2	4.2	0.4
Baltimore.....	63.6	2.6	1.6	Mobile.....	2.0	2.0	.9
Birmingham.....	62.4	.8	2.1	Newark.....	54.9	1.2	.8
Boston.....	62.6	1.4	2.1	New Haven.....	63.9	1.9	.4
Bridgeport.....		.4	.3	New Orleans.....	58.8	2.0	.3
Buffalo.....	64.7	1.2	.6	New York.....	63.6	1.3	1.0
Butte.....		3.1	1.2	Norfolk.....		1.0	0
Charleston, S. C.....	62.4	2.5	2.1	Omaha.....	51.7	1.8	.4
Chicago.....	70.5	1.8	0.0	Peoria.....		3.2	.2
Cincinnati.....	66.6	3.6	.1	Philadelphia.....	63.9	3.1	.7
Cleveland.....	54.5	.5	1.5	Pittsburgh.....	60.7	0.0	1.2
Columbus.....		2.3	.8	Portland, Me.....		1.1	.8
Dallas.....	57.8	1 1.3	1.0	Portland, Oreg.....	48.4	2.6	.4
Denver.....	42.5	1.2	.7	Providence.....	62.6	.9	1.0
Detroit.....	64.7	1.5	1.0	Richmond.....	64.6	.6	1.3
Fall River.....	58.3	.4	.9	Rochester.....		1.1	.4
Houston.....		2.3	.6	St. Louis.....	63.0	2.9	0
Indianapolis.....	57.6	3.3	1.5	St. Paul.....		2.5	1.0
Jacksonville.....	47.6	1.3	1.2	Salt Lake City.....	39.6	2.5	.6
Kansas City.....	57.1	3.7	.6	San Francisco.....	58.9	2.0	.2
Little Rock.....	54.3	3.0	.6	Savannah.....		.7	1.6
Los Angeles.....	49.7	.5	1.1	Scranton.....	68.8	2.4	.7
Louisville.....	57.0	1.2	.6	Seattle.....	53.3	2.9	.9
Manchester.....	57.5	1.1	.3	Springfield, Ill.....		2.7	.2
Memphis.....	52.3	.5	2.3	Washington.....	65.1	1 1.1	2.1
Milwaukee.....	62.6	3.3	1.2				

¹ Decrease.

² Increase.

³ For list of articles, see note 1, p. 175.

⁴ The consumption figures used from January, 1913, to December, 1920, for each article in each city are given in the Labor Review for November, 1918, pp. 94 and 95. The consumption figures which have been used for each month beginning with January, 1921, are given in the Labor Review for March, 1921, p. 26.

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Retail Prices of Coal in the United States ⁵

THE following table shows the average retail prices of coal on November 15, 1928, and October 15 and November 15, 1929, for the United States and for each of the cities from which retail food prices have been obtained. The prices quoted are for coal delivered to consumers, but do not include charges for storing the coal in cellar or coal bin where an extra handling is necessary.

In addition to the prices for Pennsylvania anthracite, prices are shown for Colorado, Arkansas, and New Mexico anthracite in those cities where these coals form any considerable portion of the sales for household use.

The prices shown for bituminous coal are averages of prices of the several kinds sold for household use.

AVERAGE RETAIL PRICES OF COAL PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929

City, and kind of coal	1928		1929		City, and kind of coal	1928		1929	
	Nov. 15	Oct. 15	Nov. 15	Nov. 15		Nov. 15	Oct. 15	Nov. 15	
United States:									
Pennsylvania anthracite—					Cincinnati, Ohio:				
Stove					Bituminous—				
Average price	\$15.38	\$15.31	\$15.31		Prepared sizes—				
Index (1913=100)	199.1	198.2	198.2		High volatile	\$5.57	\$6.05	\$6.20	
Chestnut					Low volatile	7.79	8.38	8.63	
Average price	\$15.06	\$14.98	\$14.98		Cleveland, Ohio:				
Index (1913=100)	190.3	189.3	189.3		Pennsylvania anthracite—				
Bituminous—					Stove	15.35	15.22	15.22	
Average price	\$9.07	\$8.98	\$9.00		Chestnut	14.97	14.80	14.80	
Index (1913=100)	166.9	165.3	165.6		Bituminous—				
Atlanta, Ga.:					Prepared sizes—				
Bituminous, prepared sizes	\$7.97	\$7.78	\$7.80		High volatile	7.26	7.10	7.05	
Baltimore, Md.:					Low volatile	10.03	9.96	9.97	
Pennsylvania anthracite—					Columbus, Ohio:				
Stove	* 16.00	14.25	14.25		Bituminous—				
Chestnut	* 15.50	13.75	13.75		Prepared sizes—				
Bituminous, run of mine—					High volatile	6.11	6.13	5.95	
High volatile	8.00	7.89	7.82		Low volatile	8.25	8.44	8.31	
Birmingham, Ala.:					Dallas, Tex.:				
Bituminous, prepared sizes	7.64	7.61	7.62		Arkansas anthracite—Egg	15.75	15.50	15.75	
Boston, Mass.:					Bituminous, prepared sizes	13.08	12.83	12.83	
Pennsylvania anthracite—					Denver, Colo.:				
Stove	16.25	16.00	16.00		Colorado anthracite—				
Chestnut	16.00	15.50	15.50		Furnace, 1 and 2 mixed	16.00	14.75	14.75	
Bridgeport, Conn.:					Stove, 3 and 5 mixed	16.00	14.75	14.75	
Pennsylvania anthracite—					Bituminous, prepared sizes	10.57	10.31	10.34	
Stove	15.50	15.50	15.50		Detroit, Mich.:				
Chestnut	15.50	15.50	15.50		Pennsylvania anthracite—				
Buffalo, N. Y.:					Stove	16.00	16.00	16.00	
Pennsylvania anthracite—					Chestnut	15.50	15.50	15.50	
Stove	14.02	13.76	13.77		Bituminous—				
Chestnut	13.54	13.31	13.32		Prepared sizes—				
Butte, Mont.:					High volatile	8.27	8.46	8.39	
Bituminous, prepared sizes	10.93	11.14	11.17		Low volatile	10.16	10.27	10.36	
Charleston, S. C.:					Run of mine—				
Bituminous, prepared sizes	9.67	9.67	9.67		Low volatile	8.00	8.00	8.00	
Chicago, Ill.:					Fall River, Mass.:				
Pennsylvania anthracite—					Pennsylvania anthracite—				
Stove	16.90	16.85	16.85		Stove	16.50	16.50	16.50	
Chestnut	16.45	16.40	16.40		Chestnut	16.25	16.25	16.25	
Bituminous—					Houston, Tex.:				
Prepared sizes—					Bituminous, prepared sizes	13.00	12.20	12.20	
High volatile	8.53	8.42	8.45		Indianapolis, Ind.:				
Low volatile	11.85	12.35	12.35		Bituminous—				
Run of mine—					Prepared sizes—				
Low volatile	8.25	8.25	8.25		High volatile	6.46	6.31	6.20	
					Low volatile	9.00	9.04	9.04	
					Run of mine—				
					Low volatile	7.00	7.25	7.25	

* Per ton of 2,240 pounds.

⁵ 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 NOVEMBER 15, 1928, AND OCTOBER 15 AND NOVEMBER 15, 1929—Continued

City, and kind of coal	1928			1929			
	Nov. 15	Oct. 15	Nov. 15	City, and kind of coal	Nov. 15	Oct. 15	Nov. 15
Jacksonville, Fla.:				Pittsburgh, Pa.:			
Bituminous, prepared sizes	\$12.00	\$13.00	\$14.00	Pennsylvania anthracite—			
Kansas City, Mo.:				Chestnut.....	\$15.00	\$15.00	\$15.00
Arkansas anthracite—				Bituminous, prepared sizes	5.30	5.36	5.29
Furnace.....	12.70	12.45	12.45	Portland, Me.:			
Stove No. 4.....	14.33	13.58	13.58	Pennsylvania anthracite—			
Bituminous, prepared sizes	7.28	7.28	7.23	Stove.....	16.80	16.80	16.80
Little Rock, Ark.:				Chestnut.....	16.80	16.80	16.80
Arkansas anthracite—Egg	13.50	12.50	13.50	Portland, Ore.:			
Bituminous, prepared sizes	9.80	9.55	10.00	Bituminous, prepared sizes	13.15	13.38	13.46
Los Angeles, Calif.:				Providence, R. I.:			
Bituminous, prepared sizes	16.25	16.50	16.50	Pennsylvania anthracite—			
Louisville, Ky.:				Stove.....	216.00	216.00	216.00
Bituminous—				Chestnut.....	216.00	215.94	216.00
Prepared sizes—				Richmond, Va.:			
High volatile.....	6.65	6.66	6.66	Pennsylvania anthracite—			
Low volatile.....	9.25	9.00	9.00	Stove.....	15.00	15.00	15.00
Manchester, N. H.:				Chestnut.....	15.00	15.00	15.00
Pennsylvania anthracite—				Bituminous—			
Stove.....	17.25	17.00	17.00	Prepared sizes—			
Chestnut.....	17.00	17.00	17.00	High volatile.....	8.63	8.38	8.38
Memphis, Tenn.:				Low volatile.....	9.78	9.11	9.11
Bituminous, prepared sizes	7.41	7.37	7.39	Run of mine—			
Milwaukee, Wis.:				Low volatile.....	7.50	7.25	7.25
Pennsylvania anthracite—				Rochester, N. Y.:			
Stove.....	16.30	16.29	16.30	Pennsylvania anthracite—			
Chestnut.....	15.90	15.84	15.85	Stove.....	14.69	14.75	14.75
Bituminous—				Chestnut.....	14.19	14.25	14.25
Prepared sizes—				St. Louis, Mo.:			
High volatile.....	7.80	7.71	7.68	Pennsylvania anthracite—			
Low volatile.....	11.08	10.96	10.99	Stove.....	16.65	16.65	16.65
Minneapolis, Minn.:				Chestnut.....	16.40	16.40	16.40
Pennsylvania anthracite—				Bituminous, prepared sizes	6.21	6.76	6.69
Stove.....	18.28	18.30	18.30	St. Paul, Minn.:			
Chestnut.....	17.90	17.85	17.85	Pennsylvania anthracite—			
Bituminous—				Stove.....	18.30	18.30	18.30
Prepared sizes—				Chestnut.....	17.90	17.85	17.85
High volatile.....	10.94	10.53	10.52	Bituminous—			
Low volatile.....	13.50	13.65	13.65	Prepared sizes—			
Mobile, Ala.:				High volatile.....	10.71	10.28	10.26
Bituminous, prepared sizes	9.69	9.37	9.50	Low volatile.....	13.50	13.65	13.65
Newark, N. J.:				Salt Lake City, Utah:			
Pennsylvania anthracite—				Colorado anthracite—			
Stove.....	14.00	13.95	13.96	Furnace, 1 and 2 mixed....	18.00	18.00	18.00
Chestnut.....	13.50	13.45	13.46	Stove, 3 and 5 mixed.....	18.00	18.00	18.00
New Haven, Conn.:				Bituminous, prepared sizes	8.24	7.93	7.93
Pennsylvania anthracite—				San Francisco, Calif.:			
Stove.....	14.90	14.96	14.96	New Mexico anthracite—			
Chestnut.....	14.90	14.96	14.96	Cerillos egg.....	26.00	26.00	26.00
New Orleans, La.:				Colorado anthracite—			
Bituminous, prepared sizes	10.21	10.64	10.96	Egg.....	25.50	25.50	25.50
New York, N. Y.:				Bituminous, prepared sizes	17.25	17.13	17.13
Pennsylvania anthracite—				Savannah, Ga.:			
Stove.....	14.75	14.54	14.54	Bituminous, prepared sizes	310.62	310.14	310.44
Chestnut.....	14.25	14.04	14.08	Scranton, Pa.:			
Norfolk, Va.:				Pennsylvania anthracite—			
Pennsylvania anthracite—				Stove.....	10.53	10.28	10.28
Stove.....	15.00	14.00	14.00	Chestnut.....	10.33	9.92	9.92
Chestnut.....	15.00	14.00	14.00	Seattle, Wash.:			
Bituminous—				Bituminous, prepared sizes	10.48	10.68	10.68
Prepared sizes—				Springfield, Ill.:			
High volatile.....	7.88	7.38	7.25	Bituminous, prepared sizes	4.24	4.34	4.34
Low volatile.....	10.50	9.00	9.00	Washington, D. C.:			
Run of mine—				Pennsylvania anthracite—			
Low volatile.....	7.00	6.83	6.83	Stove.....	115.63	115.73	115.73
Omaha, Neb.:				Chestnut.....	115.13	115.23	115.23
Bituminous, prepared sizes	9.56	9.67	9.61	Bituminous—			
Peoria, Ill.:				Prepared sizes—			
Bituminous, prepared sizes	6.88	6.67	6.72	High volatile.....	19.25	18.63	18.63
Philadelphia, Pa.:				Low volatile.....	111.42	111.42	111.42
Pennsylvania anthracite—				Run of mine—			
Stove.....	114.57	115.00	115.00	Mixed.....	17.63	17.75	17.75
Chestnut.....	114.11	114.50	114.50				

¹ Per ton of 2,240 pounds.

² The average price of coal delivered in bin is 50 cents higher than here shown. Practically all coal is delivered in bin.

³ All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above price.

Comparison of Retail-Price Changes in the United States and in Foreign Countries

THE principal index numbers of retail prices published by foreign countries have been brought together with those of this bureau in the subjoined table after having been reduced, in most cases, to a common base, namely, prices for July, 1914, equal 100. This base was selected instead of the average for the year 1913, which is used in other tables of index numbers of retail prices compiled by the bureau, because of the fact that in numerous instances satisfactory information for 1913 was not available. Some of the countries shown in the table now publish index numbers of retail prices on the July, 1914, base. In such cases, therefore, the index numbers are reproduced as published. For other countries the index numbers here shown have been obtained by dividing the index for each month specified in the table by the index for July, 1914, or the nearest period thereto as published in the original sources. As stated in the table, the number of articles included in the index numbers for the different countries differs widely. These results, which are designed merely to show price trends and not actual differences in the several countries, should not, therefore, be considered as closely comparable with one another. In certain instances, also, the figures are not absolutely comparable from month to month over the entire period, owing to slight changes in the list of commodities and the localities included on successive dates.

INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND IN OTHER COUNTRIES

Country...	United States	Canada	Belgium	Czecho-slovakia	Denmark	Finland	France (except Paris)	France (Paris)	Germany
Number of localities.	51	60	59	Entire country	100	21	320	1	71
Commodities included...	43 foods	29 foods	56 (foods etc.)	29 foods	Foods	36 foods	13 (11 foods)	13 (11 foods)	Foods
Computing agency.....	Bureau of Labor Statistics	Department of Labor	Ministry of Industry and Labor	Office of Statistics	Government Statistical Department	Central Bureau of Statistics	Ministry of Labor	Ministry of Labor	Federal Statistical Bureau
Base=100..	July, 1914	July, 1914	April, 1914	July, 1914	July, 1914	January-June, 1914	August, 1914	July, 1914	October, 1913-July, 1914
1924									
Jan.....	146	145	480	836	194	1089	-----	376	127
Apr.....	138	137	498	829	-----	1035	-----	380	123
July.....	140	134	493	837	200	1052	-----	360	126
Oct.....	145	139	513	877	-----	1156	-----	383	134
1925									
Jan.....	151	145	521	899	215	1130	-----	408	137
Apr.....	148	142	506	901	-----	1137	-----	409	144
July.....	156	141	509	916	210	1145	-----	421	154
Oct.....	138	147	533	875	-----	1165	-----	433	151
1926									
Jan.....	161	157	527	854	177	1090	¹ 503	480	143
Apr.....	159	153	529	832	-----	1085	¹ 523	503	142
July.....	154	149	637	876	159	1105	¹ 610	574	145
Oct.....	157	147	705	888	-----	1126	¹ 647	624	145
1927									
Jan.....	156	153	755	914	156	1092	-----	592	151
Feb.....	153	151	770	914	-----	1095	586	585	152
Mar.....	150	149	771	915	-----	1086	-----	581	151
Apr.....	150	146	774	923	152	1069	-----	580	150
May.....	152	145	776	931	-----	1058	572	589	151
June.....	155	146	785	949	-----	1072	-----	580	153
July.....	150	147	790	962	153	1102	-----	557	157
Aug.....	149	147	787	919	-----	1159	553	539	160
Sept.....	151	146	794	910	-----	1146	-----	532	151
Oct.....	153	148	804	907	152	1156	-----	520	152
Nov.....	153	149	809	905	-----	1175	526	500	152
Dec.....	153	151	812	913	-----	1171	-----	523	153
1928									
Jan.....	152	151	813	913	152	1126	-----	530	152
Feb.....	148	149	811	910	-----	1112	522	522	151
Mar.....	148	147	806	901	-----	1123	-----	524	151
Apr.....	149	146	807	905	152	1119	-----	532	151
May.....	150	146	805	908	-----	1113	530	546	151
June.....	149	145	811	928	-----	1126	-----	557	152
July.....	150	146	811	943	153	1155	-----	² 111	154
Aug.....	151	149	819	943	-----	1191	536	² 110	156
Sept.....	154	150	825	928	-----	1174	-----	² 111	153
Oct.....	153	152	834	907	146	1183	-----	² 115	152
Nov.....	154	152	845	900	-----	1194	562	² 119	152
Dec.....	152	152	852	905	-----	1186	-----	² 121	153
1929									
Jan.....	151	152	856	900	147	1156	-----	² 122	153
Feb.....	151	150	859	911	-----	1141	576	² 122	156
Mar.....	150	151	862	913	-----	1135	-----	² 123	159
Apr.....	148	148	860	901	150	1118	-----	² 125	154
May.....	150	147	864	906	-----	1104	583	² 127	154
June.....	151	147	867	907	-----	1103	-----	² 127	154
July.....	155	148	874	925	149	1116	-----	² 123	156
Aug.....	157	157	879	900	-----	1131	-----	² 123	155
Sept.....	157	157	889	886	-----	1128	-----	² 122	154

¹ For succeeding month.² In gold.

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WHOLESALE AND RETAIL PRICES

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INDEX NUMBERS OF RETAIL PRICES IN THE UNITED STATES AND IN OTHER COUNTRIES—Continued

Country	Italy	Netherlands (The Hague)	Norway	Sweden	Switzerland	United Kingdom	South Africa	India (Bombay)	Australia	New Zealand
Number of localities	47	1	31	49	33	630	9	1	30	25
Commodities included	20 foods and charcoal	Foods	Foods	50 (43 foods, 7 fuel and light)	Foods	21 foods	24 foods	17 foods	46 foods and groceries	59 foods
Computing agency	Ministry of National Economy	Central Bureau of Statistics	Central Bureau of Statistics	Social Board	Labor Office (revised)	Ministry of Labor	Office of Census and Statistics	Labor Office (revised)	Bureau of Census and Statistics	Census and Statistics Office
Base=100	1913	1921	July, 1914	July, 1914	July, 1914	July, 1914	1914	July, 1914	July, 1914	July, 1914
1924										
Jan	527	³ 82.5	230	163	173	175	120	154	155	150
Apr	527	³ 81.7	240	159	169	167	122	143	150	150
July	538	³ 80.8	248	159	170	162	117	151	148	148
Oct	556	³ 82.3	264	172	174	172	120	156	146	145
1925										
Jan	609	³ 80.2	277	170	172	178	120	152	148	147
Apr	606	³ 86.7	276	170	169	170	124	153	152	149
July	605	³ 81.3	260	169	169	167	120	152	156	151
Oct	645	³ 79.3	228	166	168	172	119	148	157	155
1926										
Jan	658		216	162	165	171	116	151	155	154
Apr	633	³ 76.6	198	158	161	159	119	150	163	151
July	645	³ 80.1	198	156	159	161	117	155	159	149
Oct	662	³ 73.5	191	157	160	163	120	153	153	147
1927										
Jan	629		180	156	158	167	116	155	158	148
Feb	615		177	153	157	164	117	152	153	146
Mar	610	76.3	173	151	156	162	118	152	151	146
Apr	606		169	151	156	155	119	151	151	145
May	599		169	150	156	154	121	150	152	145
June	558	77.0	172	151	157	154	120	151	153	145
July	540		175	151	157	159	119	154	152	144
Aug	532		175	152	157	156	118	155	155	144
Sept	525	76.5	174	156	159	157	117	151	157	143
Oct	530		173	155	159	161	119	148	159	143
Nov	534		171	155	161	163	119	147	157	144
Dec	534	79.5	171	154	160	163	119	149	155	146
1928										
Jan	531		170	153	159	162	119	151	154	147
Feb	529		170	153	158	159	118	146	152	145
Mar	522	81.6	171	154	157	155	118	142	153	145
Apr	522		171	154	156	155	119	140	154	144
May	529		172	155	156	154	120	144	154	146
June	533	79.4	171	157	156	156	118	142	154	147
July	516		173	157	157	157	116	143	152	147
Aug	520		170	156	156	156	115	142	150	147
Sept	526	76.2	164	155	157	156	115	141	150	147
Oct	536		163	153	158	157	115	142	150	149
Nov	555		161	152	158	159	115	144	150	150
Dec	564	75.5	161	151	158	160	115	145	152	152
1929										
Jan	565		158	150	157	159	115	146	161	149
Feb	565		157	151	157	156	115	146	161	148
Mar	571	76.0	158	152	156	157	117	146	160	146
Apr	566		156	150	154	150	118	145	162	147
May	563		156	149	154	149	119	143	160	148
June	564	72.3	156	149	155	147	118	144	161	147
July	558		157	151	155	149	116	145	160	146
Aug			161	151	156	153	115	146	161	146
Sept		74.5	160	151	158	154		146	162	147

³ Second month following.

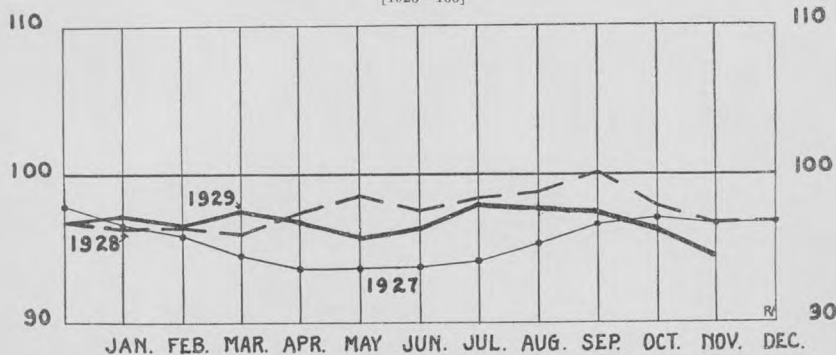
Index Numbers of Wholesale Prices in November, 1929

FURTHER recession of the wholesale price level is shown for November by information collected in leading markets by the Bureau of Labor Statistics of the United States Department of Labor. The bureau's weighted index number, with prices in 1926 as 100, stands at 94.4 for November compared with 96.3 for October, a decrease of nearly 2 per cent. Compared with November, 1928, with an index number of 96.7, a decrease of 2½ per cent, is shown. Based on these figures, the purchasing power of the dollar in November was 105.9 compared with 100 in the year 1926.

Farm products again showed a pronounced price decline, due to decreases for grains, cattle, hogs, sheep and lambs, poultry, cotton, oranges, lemons, flaxseed, hay, onions, potatoes, and wool. Eggs, on the other hand, continued steeply upward.

Among foods there were decreases reported for butter, fresh and cured meats, lard, corn meal, coffee, and sugar. The decrease in the group as a whole was 2½ per cent.

TREND OF WHOLESALE PRICES
[1926=100]



Hides and skins declined sharply from October prices, while leather declined somewhat. Boots and shoes showed no change, with other leather goods slightly lower.

Prices of cotton goods averaged lower than in the preceding month, as did also raw silk, worsted yarn, burlap, manila hemp, jute, and Mexican sisal.

Fuel and lighting materials were mostly stationary in price, with advances in refined fuel oil offset by declines in gasoline.

In the group of metals and metal products there were slight price declines in steel plate, scrap, and sheets, also in pig lead, lead pipe, bar silver, pig tin, and slab zinc. The composite price of automobiles also was somewhat lower than in October.

Among building materials lumber and paint materials declined, while Portland cement advanced slightly. Practically no change was reported for brick, structural steel, and other building materials.

Chemicals and drugs as a whole showed a minor decline.

No change in the price level was reported for the group of house-furnishing goods.

In the group of miscellaneous commodities, there were decreases for cattle feed, crude rubber, and automobile tires, while paper and pulp was stationary.

Raw materials, semimanufactured articles, and finished products, considered as a whole, all were cheaper than in October. Non-agricultural commodities, also, as a group, declined in price.

Of the 550 commodities or price series for which comparable information for October and November was collected, increases were shown in 51 instances and decreases in 196 instances. In 303 instances no change in price was reported.

Comparing prices in November with those of a year ago, as measured by changes in the index numbers, it is seen that hides and leather products, textile products, and fuel and lighting materials were considerably lower, and farm products, foods, and chemicals and drugs were somewhat lower. Minor price increases are shown for metals and metal products, house-furnishing goods, and miscellaneous commodities, no change being recorded for the group of building materials.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS AND SUBGROUPS OF COMMODITIES. (1926=100)

Groups and subgroups	November, 1928	October, 1929	November, 1929	Purchasing power of the dollar November, 1929
All commodities.....	96.7	96.3	94.4	105.9
Farm products.....	101.6	103.9	101.1	98.9
Grains.....	94.6	99.1	94.9	105.4
Livestock and poultry.....	100.6	98.8	93.7	106.7
Other farm products.....	104.8	108.9	108.1	92.5
Foods.....	100.1	101.2	98.8	101.2
Butter, cheese, and milk.....	109.7	106.2	103.7	96.4
Meats.....	108.7	106.7	102.5	97.6
Other foods.....	91.0	95.8	94.5	105.8
Hides and leather products.....	115.5	110.5	108.4	92.3
Hides and skins.....	130.0	117.9	109.3	91.5
Leather.....	118.8	114.2	113.3	88.3
Boots and shoes.....	108.9	106.1	106.1	94.3
Other leather products.....	108.4	106.6	106.1	94.3
Textile products.....	96.1	92.7	91.5	109.3
Cotton goods.....	101.2	99.0	98.1	101.9
Silk and rayon.....	83.7	79.3	77.0	129.9
Woolen and worsted goods.....	99.9	96.2	95.7	104.5
Other textile products.....	85.8	80.0	76.1	131.4
Fuel and lighting.....	84.4	81.7	81.7	122.4
Anthracite coal.....	91.2	91.2	91.2	109.6
Bituminous coal.....	93.6	92.0	92.0	108.7
Coke.....	84.9	84.4	84.4	118.5
Manufactured gas.....	93.5	93.1	(?)	-----
Petroleum products.....	75.5	70.8	70.9	141.0
Metals and metal products.....	101.7	103.6	102.3	97.8
Iron and steel.....	96.1	96.8	96.5	103.6
Nonferrous metals.....	97.9	104.2	102.4	97.7
Agricultural implements.....	98.8	96.1	96.1	104.1
Automobiles.....	108.7	109.9	108.0	92.6
Other metal products.....	96.9	98.6	98.6	101.4
Building materials.....	96.0	97.8	96.0	104.2
Lumber.....	92.7	96.3	92.4	108.2
Brick.....	92.3	90.6	90.5	110.5
Cement.....	94.6	85.6	86.6	115.5
Structural steel.....	97.0	97.0	97.0	103.1
Paint materials.....	88.2	101.1	97.8	102.2
Other building materials.....	105.7	105.6	105.4	94.9
Chemicals and drugs.....	96.0	94.2	94.0	106.4
Chemicals.....	102.3	100.4	100.0	100.0
Drugs and pharmaceuticals.....	70.9	70.7	70.6	141.6
Fertilizer materials.....	94.1	90.1	89.9	111.2
Fertilizers.....	97.6	97.4	97.4	102.7
House-furnishing goods.....	96.4	97.1	97.1	103.0
Furniture.....	95.3	96.7	96.7	103.4
Furnishings.....	97.1	97.4	97.4	102.7
Miscellaneous.....	80.0	81.3	80.1	124.8
Cattle feed.....	137.8	130.4	124.1	80.6
Paper and pulp.....	85.8	87.0	87.9	113.8
Rubber.....	37.9	40.7	34.5	289.9
Automobile tires.....	58.1	55.1	55.0	181.8
Other miscellaneous.....	98.5	108.4	108.6	92.1
Raw materials.....	96.2	97.1	94.8	105.5
Semimanufactured articles.....	96.9	97.9	95.6	104.6
Finished products.....	97.2	95.8	94.2	106.2
Nonagricultural commodities.....	95.4	94.3	92.6	108.0

¹ Data not yet available.

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COST OF LIVING

Living Standards on the Farm

THE 1929 report of the United States Secretary of Agriculture contains a section relating to the standards of living among farmers in the United States. During the past eight years the Department of Agriculture had made several studies of the subject, and the report states that while the data at hand do not "permit a thoroughgoing comparison between farm standards and city standards, much has been learned about the living standards of certain groups of farmers." "It has been demonstrated, for example, that family-living standards are deficient on a large proportion of the small farms in the country. That is an important fact necessitating remedial action, for small farms are relatively more numerous than is commonly supposed. In 1925, when the average number of acres per farm in the United States was 145, 38 per cent of all the farms were under 50 acres and 60 per cent were under 100 acres."

"Family-living standards are of course not low on all small farms. Many small farms devoted to varying types of agriculture produce net incomes equal to the average on larger places. It is nevertheless true that a majority of the small farms in the United States are low-income-producing and low-value farms. Such farms in 1925 were estimated to be worth, for land and buildings, less than \$4,000 on the average. A considerable proportion had a value of \$2,000 or less. Many small farms have poor soil and difficult surface conditions. Probably nearly 40 per cent of the country's farm population lives on small farms of poor and difficult land, on a standard of living far below what is common on large farms.

"Farm families belonging to this low-standard group are numerous in nearly all the States. How to improve their condition is a complex problem involving economic, social, and human factors. It is not primarily a question of tenancy versus ownership, nor a question of cropper cultivation versus cultivation by hired labor, though these elements may be present. Land-tenure conditions as a criterion for high or low standards of living may sometimes be overemphasized at the expense of more important factors. The first step toward improvement must be a correct analysis of the problem.

Side-Line Occupations Off the Farm

"ON MANY small farms only about half the cash income of the farm family comes from the farm business. The remainder is earned by the operator or by members of his family in occupations off the farm. In addition to the cash income obtained from the farm and income obtained in outside occupations, the small farm itself furnishes food,

fuel, housing, etc. But all these sources combined commonly do not provide a satisfactory living. Often the difficulty is increased by the farm operator's pessimism as to the possibility of getting more income from the farm itself. He is not generally as quick to take advantage of scientific methods as is the larger farm operator. Yields per acre, per cow, per hog, or per hen on the small farms of the United States average lower than on the larger farms, whereas in certain European countries the opposite is the case. Too often, moreover, the economic efficiency of the farm family is impaired by lack of adequate opportunities for education, recreation, and the preservation of health.

"Further study of the small-farm problem as a whole is urgently necessary. A rough classification of such farms seems practicable and indicates the application of different remedies in different situations. (1) We may distinguish small farms whose earning power can not be materially increased through soil improvement or improved management. (2) There are numerous small tenant or cropper farms which form parts of a large holding or plantation. Often the soil of such farms can be improved materially and their production increased by efficient centralized supervision. (3) There are many small farms operated by their owners, the soil of which could be materially improved and upon which a better farm practice would bring much better returns. Then there are small farms that furnish a fair living place and some food, fuel, and other necessities, while permitting members of the farm family to work at outside jobs.

Different Remedies Required

"THESE different kinds of small farms obviously call for different means of increasing their power to furnish a satisfactory standard of living. Farm management and marketing methods should be adapted specifically to each type. It should often be possible to encourage the development of rural industries adapted to the part-time employment of the small operator and his family. In certain areas where the economic operation of small farms is impracticable, State agencies should discourage the small farm. On the other hand, it is well to recognize that a place exists for the small farm providing a lower all-round income than the larger farm usually produces, since many families may do better on such small farms than they would anywhere else.

"Effective action to raise living standards on our small farms is necessary, not only in the interest of the farm people immediately concerned, but in the interest of the Nation. These farms are a source of population as well as of food supply. They send their surplus population to the towns and cities. Hence the entire Nation suffers when living conditions on the small farm make it difficult to rear and educate young people adequately there. Not agriculture alone, but our entire national life stands to benefit from whatever may be accomplished toward the establishment of a satisfactory standard of living on the small farms."

Problem of Feeding the Wage Earners in Russia

DURING the last two years the problem of feeding the wage earners in the Soviet Union (U. S. S. R.) has become so acute that a number of attempts have been made to ease the situation through various regulative measures, especially in industrial centers.¹

In November, 1928, the central executive committee of the Communist Party recommended a policy of strict economy in the consumption of cereals. This recommendation was heeded by the Soviet Government, and various measures were applied to conserve the food supply of the population at the beginning of the winter of 1928-29. As the collection of grain was too slow to provide a sufficient supply of bread for the city and town population, efforts were made to reduce the consumption of bread by reducing the baking of bread by 4 or 5 per cent in the cities and towns in December, 1928. This measure, however, failed to produce the expected results. Therefore, at the beginning of 1929 the authorities issued 1,500,000 bread-ration books in Leningrad. In February, 1929, the Moscow Soviet issued regulations to govern the distribution of bread to wage earners' families on presentation of ration books and its sale to other families at higher prices; the ration books were issued on March 15, 1929.

As bread is baked and sold exclusively by the cooperative societies, the distribution of ration books was intrusted to these societies. Nearly 1,000,000 books were issued and the number of inhabitants covered was over 2,000,000. Every wage earner's family was entitled to a ration book.

In the cities and towns the wage earners are divided into two groups, manual workers and brain workers (salaried employees). A manual worker is entitled to a ration of 800 grams (1.76 pounds) of bread a day, and members of his family not engaged in physical labor are entitled to one-half of that amount. In the villages, in the rural districts, manual workers are entitled to three-fourths of that amount. Members of workers' families, members of collective farms, agricultural workers, working peasants, and craftsmen on a small scale in the rural districts are entitled to 300 grams (0.66 pound) each per day; subject to approval of a special local committee, doctors, agronomists, and teachers are entitled to 400 grams (0.88 pound) each per day.

Persons who are not regarded as wage earners and have no vote are not entitled to ration books and can not obtain white bread except at a very high price and after the requirements of the wage earners have been met. Such persons may not buy more than 500 grams (1.10 pounds) at a time.

As a result of such measures, the baking and sale of bread was considerably reduced. The amount of bread sold in Moscow was 763,200 kilograms (1,682,093 pounds) on March 15, 1929; 728,000 kilograms (1,604,512 pounds) on March 16, 1929; 640,000 kilograms (1,410,560 pounds) on March 17, 1929; and 398,400 kilograms (878,074 pounds) on March 18, 1929. The introduction of ration books led to a considerable reduction in the consumption of bread in other large towns, too, and though the grain supply of the State and

¹ Sovetskaia Torgovlia, No. 26, 1929; *Economicheskaiia Zhizn'*, Oct. 8, 1929, *Pravda*, June 27, 1929, quoted by the International Labor Office in *Industrial and Labor Information*, Nov. 18, 1929, pp. 252-255.

cooperative societies was still inadequate to meet the situation, the town population could be supplied with bread without interruption. The average ration varied widely from place to place. In the Moscow area alone the wage earner's ration was 800 grams (1.76 pounds) in June, 1929; at Tula three-fourths, and at Kaluga one-half of that amount.

Sugar is also supplied on a ration basis. The ration per person per month amounted, in Moscow and Leningrad, to 1½ kilograms (3.31 pounds); in other cities and towns to 800 grams (1.76 pounds), and in villages, from 150 to 400 grams (0.33 to 0.88 pound).

Distribution of meat was put on a ration basis in Moscow on September 20, 1929, every manual worker being entitled to 200 grams (0.44 pound) a day and other workers to one-half of that amount. Ten days later the same meat rations were introduced in Leningrad. Eggs and tea also are rationed in Moscow.

The inadequacy of the food supply is explained by the soviet authorities on the ground of a poor harvest in some parts of Russia in 1928 and defects in grain collection and distribution.

The agricultural products for consumption in cities and towns and also for export in some instances are collected by the soviet special agencies from the peasants by various methods. A large part of the grain and other farm produce is purchased at the prices fixed by the Soviet Government and a small part from the soviet and collective farms (called "sovkhozy" and "kolkhozy"). These are large-scale farms organized and run by the soviet authorities. Peasants are either hired or work on shares on these farms.

All the steps so far taken for conservation of food supply appear to be inadequate. In order to increase production the soviet and collective farms are to be rapidly augmented and developed. As regards the peasants, a contract system is to be introduced, by which the producer is given loans and certain privileges, for which he undertakes to cultivate a certain acreage of grain or vegetables, to breed a certain number of cattle, and to hand over the surplus of his produce to the cooperative societies.

As to the general collection of produce, the object is to secure direct deliveries to the agents of the commissariat of trade or the cooperative societies. In exchange the commissariat of trade has proposed to increase the deliveries of manufactured products to the rural districts.

IMMIGRATION AND EMIGRATION

Statistics of Immigration for October, 1929

By J. J. KUNNA, CHIEF STATISTICIAN UNITED STATES BUREAU OF IMMIGRATION

DURING October, 1929, 26,740 immigrant aliens were admitted to the United States, a decrease of 1,280 as compared with the preceding month. The number of emigrant aliens leaving the country in October to make their homes abroad again was 4,907, or 243 less than for the previous month.

The latest figures show an increase in the outward movement of American citizens, practically all of whom were going abroad for a short visit. During the four months from July to October last, 216,086 United States citizens left for foreign shores, as against 195,534 for the corresponding period of last year. The major portion of these were tourists leaving via the port of New York for European points.

The number of immigrant aliens entering this country from July 1 to October 31, 1929, was 97,606, an average of 24,401 a month. Nearly 85 per cent of the arrivals by water came in at New York, 53,745 immigrants being admitted at that port during the four months and 9,550 at the other seaports, while 34,311 entered over the international land borders, 28,078 from Canada and 6,233 from Mexico. Three-fifths, or 58,893, of the immigrants for the same four months settled in the North Atlantic States, New York, with 31,952, receiving nearly a third of the total, but Texas, instead of being in the runner-up position as it was a year ago, has dropped down to the eighth place, receiving but 3,409. This is due to the large decrease in immigration from Mexico, only 6,233 entering across the southern land border during the past four months as compared with 19,011 for the same period a year ago.

About 1 out of every 6 of the immigrant aliens admitted during the four months from July to October last was a skilled worker and about 1 out of every 14 gave his occupation as that of common laborer. While the former maintained the same ratio as for the corresponding period a year ago, there was a proportionately big drop in the latter class. The number recorded this year as skilled workers was 17,002 and as common laborers 6,735, while 10,711 were servants, 6,287 were in the professional or commercial class, 2,906 were farmers, 5,170 were farm laborers, and 2,653 of the miscellaneous classes. Immigrants listed as having no occupation, being mainly women and children, numbered 46,142.

As to the sex of the immigrants for the said four months, the females were somewhat in excess of the males, the numbers being 51,510 and 46,096, respectively; 17,732 were children under 16 years of age and 23,529 were from 16 to 21 years, while the largest group,

or 46,594, ranged in age from 22 to 44 years, and 9,751 were 45 years and over. As to the conjugal condition of these immigrants, 62,810 were recorded as single, 31,231 were recorded as married, and 3,565 as widowed or divorced.

INWARD AND OUTWARD PASSENGER MOVEMENT FROM JULY 1 TO OCTOBER 31, 1929

Period	Inward					Aliens debarred from entering ¹	Outward					Aliens deported from landing ²
	Aliens departed			United States citizens arrived	Total		Aliens departed			United States citizens departed	Total	
	Immigrant	Non-immigrant	Total				Emigrant	Non-emigrant	Total			
July, 1929.....	20,068	15,749	35,817	37,636	73,453	847	5,086	23,084	28,170	56,339	84,509	1,261
August, 1929....	22,778	19,007	41,785	70,783	112,568	802	5,571	23,723	29,294	70,551	99,845	1,411
September, 1929	28,020	28,517	56,537	85,946	142,483	710	5,150	21,398	26,548	49,429	75,977	1,205
October, 1929...	26,740	26,072	52,812	47,757	100,569	659	4,907	19,597	24,504	39,767	64,271	1,600
Total.....	97,606	89,345	186,951	242,122	429,073	3,027	20,714	87,802	108,516	216,086	324,602	5,477

¹ These aliens are not included among arrivals, as they were not permitted to enter the United States.

² These aliens are included among arrivals, as they were not permitted to enter the United States, legally or illegally, and later being deported.

Resolution for Uniformity in Migration Statistics

THE International Statistical Institute which met in Warsaw in August, 1929, adopted a resolution referring to migration statistics which reads as follows: ¹

The various classes of emigrants should be distinguished on a uniform system. In view of the difficulties which are still encountered in most countries in the compilation of statistics of temporary emigration or immigration, it would be wise to consider only permanent immigration or emigration when dealing with migration statistics. It would be very desirable that provisions relating to the registration of persons departing or arriving should, in principle, be uniform. For the compilation of statistics of migration movements, it is desirable to introduce uniform identity cards with a fixed questionnaire. Officials of registration offices should fill up these cards or cause them to be filled up by emigrants and immigrants and send copies of them to the head of the central statistical office of their country. It would be desirable that the national statistical offices should make their compilations in accordance with a uniform program and on the basis of detailed annual tables and abridged monthly tables.

The meeting instructs the reporter to continue his study of the question and to submit another report at the next session, due regard being had to the results which may be achieved by the next migration conference at Geneva.

Activities of the New York State Division of Aliens, 1928

THE division of aliens of the New York State Labor Department expanded its work 91.3 per cent from 1924 to 1928.² Lack of statutory powers and an inadequate staff, however, are a serious handicap to the office in dealing with employers who owe wages. In 1928 the sum of \$36,396.55 was collected in wages, \$250 in connection with exploitations and fraud, and \$425 in lodging-house license fees, a total of \$37,071.55.

¹ International Labor Office. Industrial and Labor Information, Geneva, Oct. 21, 1929, p. 121.

² New York. Department of Labor. Annual report of the industrial commissioner, for the 12 months ended December 31, 1928. Albany, 1929, pp. 216-219.

A tabulation of the work for the calendar year 1928 shows 447 wage cases brought over from 1927, 2,042 new wage cases received, and 1,784 cases closed. In addition there were 8 cases of fraud brought over from 1927, 12 new cases of fraud received, and 3 cases closed. A very substantial number of the cases handled involved less than \$10, and the amounts involved in some complaints were less than \$1. Success is reported in the prosecution of 38 cases in the courts of the State. In addition to its 137 recorded cases in 1928, involving the giving of advice and information, the division has advised employees in bankruptcy matters, has made contacts with receivers in bankruptcy, and has urged early action in such cases.

The investigation of labor camps and dockyards has taken up a great deal of the time of the division's field workers. The serious conditions disclosed indicate that it is imperative that regular investigations, covering every section of New York, should be made.

Immigrant lodging houses throughout the State should also be investigated, in the opinion of the report. The division was instrumental in having one lodging house closed which was unfit for human habitation. Many complaints are made to this agency regarding the exploitation of aliens at docks, piers, railroad terminals, etc. The report states that immigrants are charged exorbitantly for railway and steamship tickets, for transportation to and from terminals, for exchanging their money, for board and lodgings, and for even the smallest service rendered them. Some of the State labor departments have immigration bureaus or divisions for the study of immigration problems. "There is no State in the Union that requires this more than the State of New York," according to the director of its division of aliens, who declares that over 25 per cent of the immigrants landing in this country make New York City their residence. The director recommends the expansion of the present division in order that the alien problem may be competently studied.

PUBLICATIONS RELATING TO LABOR

Official—United States

KENTUCKY.—Bureau of Agriculture, Labor, and Statistics. Department of Labor. *Bulletin No. 35: The elder worker; restricted employment, annuities, relief*, by John Walker Rogers. Louisville, 1929. 45 pp.

Reviews the general situation as regards the older workers in industry, and summarizes the findings of surveys of various agencies. Also gives the results of an inquiry directed to 612 large industrial firms in Kentucky. Of these, 316 returned reports. Of the firms reporting, 10 dismiss workers when they reach the age of 45 years; and 18 refuse to hire new employees who are over that age, while 27 set other age limits. Of those who set a definite age limit for new employees, 14 did so because of the cost of group insurance, 3 because of pension plans, 4 because of increased workmen's compensation cost, and 15 for other reasons. In 171 firms the older employees are shifted to less exacting tasks, but 145 firms make no such provision. Records of age are kept by 153 firms.

The report states that this inquiry "indicates that while in Kentucky the situation has not yet become acute, since Kentucky is not primarily an industrial State where competition is severe, that large numbers of workers are affected. This implies a future threat which may later become acute."

NEW YORK.—Department of Labor. *Annual report of the industrial commissioner for the 12 months ended December 31, 1928*. Albany, 1929. 270 pp.

Brings together the reports of the various bureaus and agencies of the department. The report of the division of aliens is reviewed in this issue.

OHIO.—Department of Industrial Relations. Division of Labor Statistics. *Report No. 17: Union scale of wages and hours of labor in Ohio on May 15, 1929*. Columbus, 1929. 46 pp.

This publication contains data gathered from 16 of the principal cities of the State. The rates of wages and working hours are given for the various occupations in the bakery trades, building trades, metal trades, printing trades, and miscellaneous trades and occupations.

Report No. 18: *Statistics of mines and quarries in Ohio, 1928*. Columbus, 1929. 62 pp.

Data on wages and hours of labor from this publication are given in this issue.

UNITED STATES.—Board of Mediation. *Annual report, for the fiscal year ended June 30, 1929*. Washington, 1929. 48 pp.

Reviewed in this issue.

Bureau of Efficiency. *Annual report for the period from November 1, 1928, to October 31, 1929*. Washington, 1929. 23 pp.

Covers, among other things, the bureau's activities in regard to the introduction of labor-saving devices in several Government departments or offices, the matter of group life insurance for Federal employees, valuation of the proposed retirement scheme for employees of the Panama Canal and of the Panama Railroad Co., continued work in regard to efficiency ratings of Government employees in general, salary survey of positions in the Federal field services, etc.

UNITED STATES.—Department of Agriculture. *Report of the Secretary of Agriculture, 1929.* Washington, 1929. 112 pp.

The section on living standards on the farm is reproduced in this issue of the Labor Review.

— — — *Technical bulletin No. 101: Agricultural survey of Europe: Switzerland, by Asher Hobson.* Washington, 1929. 64 pp., illus.

Contains a review of agricultural conditions in Switzerland. Since, however, agricultural cooperation is an outstanding characteristic of Swiss agriculture, more than half of the report is devoted to the various phases of farmers' cooperation; the data are for the most part as of 1920.

— Department of Labor. *Seventeenth annual report of the Secretary of Labor, for the fiscal year ended June 30, 1929.* Washington, 1929. 105 pp.

Reviewed in this issue.

— — — Bureau of Immigration. *Annual report, fiscal year ended June 30, 1929.* Washington, 1929. 230 pp.

— — — Bureau of Labor Statistics. *Annual report, fiscal year ended June 30, 1929.* Washington, 1929. 31 pp.

— — — — *Bulletin No. 489: Care of aged persons in the United States.* Washington, 1929. 305 pp.; illus.

Preliminary data from this report were given in various issues of the 1929 Labor Review, as follows: March (pp. 1 and 12), April (pp. 1 and 7), May (p. 92), July (p. 1), August (p. 10), and September (p. 1). The present issue contains a general review of the findings of this study.

— — — — *Bulletin No. 497: Wages and hours of labor in the lumber industry in the United States, 1928.* Washington, 1929. 77 pp.

This report was summarized in the Labor Review for December, 1928 (p. 179).

— — — — *Bulletin No. 498: Wages and hours of labor in the boot and shoe industry 1910 to 1928.* Washington, 1929. 95 pp.

Summarized in the Labor Review for December, 1928.

— — — Bureau of Naturalization. *Annual report, fiscal year ended June 30, 1929.* Washington, 1929. 44 pp.

— — — — *Naturalization, citizenship, and expatriation laws. Naturalization regulations.* Washington, July 1, 1929. 116 pp.

— — — Children's Bureau. *Seventeenth annual report, fiscal year ended June 30, 1929.* Washington, 1929. 53 pp.

— — — Women's Bureau. *Eleventh annual report, fiscal year ended June 30, 1929.* Washington, 1929. 27 pp.

The reports of the various bureaus of the Department of Labor for the year ended June 30, 1929, are covered in the review of the Secretary's report in this issue.

— Department of the Interior. Bureau of Education. *Bulletin 1929, No. 21: Industrial education, 1926-1928, by Maris M. Proffitt, specialist in industrial education.* Washington, 1929. 24 pp. (Advance sheets from the biennial survey of education in the United States, 1926-1928.)

Data from this report are published in this issue.

Official—Foreign Countries

AUSTRALIA.—Bureau of Census and Statistics. Tasmania Branch. *Statistics of the State of Tasmania for the year 1927-28.* Hobart, 1929. [Various paging.]

Part V contains figures showing number of various classes of land workers, and Part IX, data on friendly societies.

ESTONIA.—Bureau Central de Statistique. *Annuaire de la statistique agricole, 1928*. Tallinn, 1929. 218 pp. (Tables in Estonian and French.)

This yearbook contains statistical information in regard to agriculture in Estonia in 1928, including wages of farm hands.

GERMANY.—Reichsarbeitsministerium. *Jahresberichte der Gewerbeaufsichtsbeamten und Bergbehörden für das Jahr 1928*. Berlin, 1929. 3 vols.

Contains annual reports of industrial and mining inspection in various German States in 1928, including industrial accidents, diseases, and sanitary and other labor conditions in the establishments of various industries, mining, etc.

— Statistisches Reichsamt. *Statistisches Jahrbuch für das Deutsche Reich, 1929*. Berlin, 1929. [Various paging.] Charts.

Contains statistical information in regard to the German Republic for 1929, including wages, employment, and other labor conditions.

GREAT BRITAIN.—Industrial Health Research Board. *Report No. 57: Further experiments on the use of special spectacles in very fine processes*, by H. C. Weston and S. Adams. London, 1929. 27 pp.

The beneficial effects of the use of special eyeglasses in the relief of eyestrain by persons engaged in very fine work has been shown by previous studies carried out by the Research Board. The present study shows the further improvement which takes place when the glasses provide suitable correction for the strain on the muscles of convergence and accommodation. Of the 28 workers under observation practically all, even those with normal vision, showed an improvement in efficiency.

GREECE.—Ministère de l'Economie Nationale. Direction du Service des Mines. *Inspection des Mines. Statistique de l'industrie minière de la Grèce pendant l'année 1928*. Athens, 1929. 48 pp.

The annual report of the Greek mine inspection service. Data on average daily wages of mining employees, taken from the report, are given in this issue.

ITALY (MILAN).—Ufficio del Lavoro e della Statistica. *Annuario storico-statistico, 1924 e 1925*. Milan [n. d.]. [Various paging.]

The 45th biennial volume of statistics issued by the statistical office of Milan. Among the tables presented are those relating to population, prices, wages and labor, insurance, and cooperation.

NETHERLANDS (AMSTERDAM).—Bureau van Statistiek. *Statistisch Jaarboek der Gemeente Amsterdam, 1928*. Amsterdam, 1929. 341 pp. (In Dutch and French.)

Contains statistical information in regard to the city of Amsterdam, including labor conditions.

POLAND.—Office Central de Statistique. *Annuaire statistique de la République Polonoise, 1929*. Warsaw, 1929. 663 pp.

The yearbook contains statistical information in regard to the Republic of Poland in 1929, including social insurance, unemployment, and other labor conditions.

RUMANIA.—Ministerul Industriei si Comertului. Institutul de Statistica Generala a Statului. *Statistica Minieră a României pe Anul 1928*. Bucharest, 1929. 271 pp.

Contains statistical information in regard to the mining industry, including accidents in the oil industry, which are summarized in this issue.

UNION OF SOUTH AFRICA.—Office of Census and Statistics. *Official year book. Pretoria, 1929. 1196 pp.*

Chapter V of Part I deals with labor and industrial conditions, such as white and native labor and employment, work of employment exchanges, land settlement and colonization schemes, conciliation, labor organizations, apprenticeship, labor legislation, etc. Certain data from this chapter, on labor conditions and on miners' phthisis, are given in this issue of the LABOR REVIEW.

Unofficial

AMERICAN FOUNDRYMEN'S ASSOCIATION. *Transactions, Vol. XXXVII: Proceedings of the thirty-third annual meeting, Chicago, Ill., April 8 to 11, 1929. Chicago, 1929. 751 pp.; diagrams, illus.*

Included in the subjects discussed by speakers at these sessions were the training of apprentices and the training of foremen.

BURTT, HAROLD ERNEST. *Psychology and industrial efficiency. New York, D. Appleton & Co., 1929. 395 pp.; diagrams.*

The author holds that psychology is destined to play an increasingly important part in making the world a better place by aiding not only in getting the right person on the right job but enabling him to do that job in the most effective way.

CHAJES, B. *Grundriss der Berufskunde und Berufshygiene. Berlin, Julius Springer, 1929. 398 pp.*

Contains an outline of occupations and occupational hygiene in Germany.

COMMITTEE ON THE COST OF MEDICAL CARE. *Abstract of Publication No. 3: A survey of statistical data on medical facilities in the United States, by Allon Peebles. Washington, 910 Seventeenth Street NW., 1929. 14 pp.*

This report shows the approximate number of physicians, dentists, nurses, and other groups directly or indirectly engaged in the care of health in the United States, as well as the capacity of the various types of hospitals, and the number of clinics, health centers, and other institutions maintained by public and private organizations. The study shows the unequal distribution of physicians throughout the country and the growing tendency among them to locate in the larger cities.

EDEN, Sir FREDERIC MORTON. *The state of the poor: A history of the laboring classes in England, with parochial reports. (Abridged and edited by A. G. L. Rogers.) London, George Routledge & Sons (Ltd.), 1928. 383 pp.*

FLORENCE, P. SARGANT. *The statistical method in economics and political science: A treatise on the quantitative and institutional approach to social and industrial problems. New York, Harcourt Brace & Co., 1929. 521 pp.*

GUITTON, HENRI. *L'industrie des rubans de soie en France. Paris, Librairie du Recueil Sirey, 1929. 296 pp.; charts.*

A study of the silk-ribbon industry of St.-Étienne and its vicinity, which is the center of this industry in France. The particulars of the technical, economic, and social organization of the ribbon industry are covered and the conditions of its future development discussed.

HUBERT, RENÉ, et LEPROUST, RENÉ. *Les assurances sociales. I: La mise en application (5 avril 1929—5 février 1930). Paris, Librairie Dalloz, 1929. 244 pp.*

The complex provisions of the French social insurance law of April 5, 1928, and the administrative regulations of March 30, 1929, are coordinated and interpreted in this treatise.

MANZER, CHARLES W. *An experimental investigation of rest pauses.* New York, 1927. 84 pp.; charts. (*Archives of Psychology*, No. 90.)

The effect of rest pauses upon muscular work was the subject of experiments in which the persons assisting carried out certain rhythmical muscular movements. The results seemed to show that work with tired muscles is wasteful of muscular energy and that short, frequent rests in the kinds of work studied made for greater efficiency in muscular work than did long, infrequent rests.

MERCER, HENRY C. *Ancient carpenters' tools.* Doylestown, Pa., Bucks County Historical Society, 1929. 328 pp., illus.

This book is a description and discussion of the carpenter's tools as well as those of the lumberman, joiner, and cabinetmaker, which were in use in the eighteenth century. Most of the specimens were collected in the United States, chiefly in Pennsylvania, but they represent "long-existing types of world-wide use, brought thither by the colonists." In fact, according to the author, "a large proportion * * * have remained unchanged in construction since Roman times. Therefore, they are of far more extended industrial interest than the woodworking machines of to-day, which, despite their economic importance, have at most only been with us for about a hundred years."

NATIONAL INDUSTRIAL CONFERENCE BOARD (INC.). *Public education as affecting the adjustment of youth to life.* New York, 247 Park Avenue, 1929. 61 pp.

The major subjects discussed in this volume are: The development of public education and its vital issues, the criticisms and accomplishments of public education methods, proposals for research, and the organization of research into problems of educational adjustment.

PATTERSON, S. HOWARD. *Social aspects of industry.* New York, McGraw-Hill Book Co. (Inc.), 1929. 539 pp.; charts.

Intended as "an introductory survey of a number of social problems of industry," including social unrest, immigration and the supply of labor, wage theories and the course of real wages, standards of living, labor legislation, collective bargaining and labor organizations, personnel administration, profit sharing, cooperation, etc.

PENNSYLVANIA, UNIVERSITY OF. Wharton School of Finance and Commerce. Industrial Research Department. *Research studies V: An examination of earnings in certain standard machine-tool occupations in Philadelphia*, by H. Larue Frain. Philadelphia, 1929. 85 pp.

An examination of earnings in seven standard machine-tool occupations in Philadelphia to determine the relation of certain variable factors to wages. The data on the subject of the relation of length of service to wages, brought out by this study, were given in the Monthly Labor Review for October, 1929, pp. 17-25.

PHILADELPHIA CHAMBER OF COMMERCE. Subcommittee to Industrial Relations Committee. *Report: Program for the regularization of employment and the decrease of unemployment in Philadelphia.* [Philadelphia, 1929.] 40 pp.

PROCTOR, WILLIAM MARTIN. *Vocations: The world's work and its workers.* Boston, Houghton, Mifflin Co., 1929. 382 pp., illus.

The greater part of this volume is devoted to descriptions of various callings by which the gainfully occupied workers in the United States earn their living. The material has been prepared with a view to assisting young persons in the choice of a life career. The book is adapted to the needs of teachers of life-career, vocational civics, or vocational classes.

REGIONAL PLAN OF NEW YORK AND ITS ENVIRONS. *Regional survey, Vol. VII: Neighborhood and community planning. New York, 1929. 363 pp.; plans, diagrams, illus.*

This report contains monographs dealing with the neighborhood unit, sunlight and daylight for urban areas, and problems of planning unbuilt areas.

RUSSELL SAGE FOUNDATION. Library. *Bulletin No. 97: Cooperative housing (supplementary list). New York, 130 East Twenty-second Street, 1929. 4 pp.*

Bibliography on cooperative housing supplementing a former one published as Bulletin No. 73.

SNIDER, JOSEPH LYONS. *Business statistics: A book of cases and materials. New York, McGraw-Hill Book Co. (Inc.), 1929. 524 pp.; charts.*

Includes chapters on prices of commodities and cost of living, and construction of index numbers.

TAYLOR SOCIETY. *Scientific management in American industry. New York, Harper & Bros., 1929. 479 pp.; diagrams, illus.*

TOKYO CHAMBER OF COMMERCE AND INDUSTRY. *Annual statistical report, 1928. Tokyo, 1929. 238 pp.*

In addition to industrial, commercial, and financial statistics, retail and wholesale prices and wages for the city of Tokyo, this volume includes certain statistics concerning the economic conditions in the Empire as a whole.

UNIVERSITY DEBATORS' ANNUAL. *Constructive and rebuttal speeches delivered in debates of American colleges during the college year, 1928-29. New York, H. W. Wilson Co., 1929. 464 pp.*

Debates included the subjects of women in industry and installment buying.

VOCATIONAL SERVICE FOR JUNIORS (NEW YORK CITY). *Five year report, September, 1923-September, 1928. New York, [1928?]. 60 pp.*

WALTERS, Sir J. TUDOR. *The building of twelve thousand houses. London, Ernest Benn (Ltd.), 1927. 38, xcvi pp.; plans, illus.*

An account of the construction of 12,000 houses for workers, by a cooperative organization of large English employers. Includes 97 floor plans of the houses, as well as plates showing the layout of the several communities built.

WEBER, ALFRED. *Theory of the location of industries. Chicago, University of Chicago Press, 1929. 256 pp.; charts. (English edition, with introduction and notes by Carl Joachim Friedrich.)*

Analysis of the factors involved in the location of industries. Contains a chapter on "Labor Orientation," including an analysis of labor costs and of the law of labor orientation.

