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Canal-boat Children.[1]

By Ethel M. Springer.

REPORTS of unfavorable conditions among children living on canal boats in England,[2] and rumors that unfavorable conditions also existed among children living on waterways in the United States, led the Federal Children's Bureau to make an inquiry into the situation in this country. Through preliminary correspondence it was learned that probably the only canals upon which any number of families lived upon barges were the Chesapeake and Ohio Canal in Maryland, the Lehigh and the Delaware Division Canals in Pennsylvania, and the canal system in New York State.

A field inquiry was therefore made by the bureau during the year 1921 along the canals in Maryland and New York State, a similar study of the situation on the Pennsylvania canals being undertaken simultaneously by the Pennsylvania Public Education and Child Labor Association. The findings of these inquiries indicate that while the number of children living on canal boats in this country is small, the conditions under which they are living and working present unusually serious problems. School attendance is difficult, hours of work are excessively long, doctors are inaccessible, and proper recreation is lacking.

Canal operation in the United States began early in the nineteenth century and reached the height of its activity about 1870. With the extended development of railroads, however, came a decline in the importance of canal transportation. In 1908, when the last comprehensive report on the subject was issued by the Government, 45 canals were listed as in operation and 54 as abandoned. Despite this fact, considerable attention has been given during the last decade to the development of inland waterways. In 1918 New York State opened the new State Barge Canal, having greater depth and width than the old Erie Canal which it supersedes, and modern locks capable of use by large steam-towed vessels. Gradually the canals which were constructed with so little width and depth that only small mule-drawn boats could use them have been abandoned, until now the only important canals on which mules are used are the Chesapeake and Ohio Canal and the Lehigh Canals.

In all, 354 children were found living on canal boats during the year of the study. The canals surveyed include both old and new systems and illustrate strikingly the differences and the similarities between them. On all canals the fact that the inherent nature of the work necessitates long periods away from a home on shore

[1] Report of a study made by the Industrial Division of the Children's Bureau, U. S. Department of Labor.
[2] Canal Boat Children, by Robert J. Parr, National Society for the Prevention of Cruelty to Children, London, 1910; National Society for the Prevention of Cruelty to Children, Annual Report for 1920–21, London; Great Britain, Ministry of Health, Departmental Committee on Living-in on Canal Boats, Report. * * * London, 1921.

is an impelling motive to boatmen to take their wives and children with them. On the Chesapeake and Ohio Canal the large majority of the captains had their wives and children with them; on the Lehigh and the Delaware Division Canals, probably because of the small size of the boat cabins, the captains usually took with them only those children who could assist in the work; on the New York canals, as on the Chesapeake and Ohio, the majority of the captains had their wives and their children with them, but because of the arrangement of the boats in fleets, there were few captains compared with the number of boats operated and consequently fewer children. The principal difference between life on the old and on the new canals, so far as the children are concerned, lies in the fact that on the older canals child labor is profitable and practically indispensable while on the newer canals there is little place for it. Except for this decrease in the work of children the newer canals have most of the evils of the old. On the new canals, to be sure, boats are being constructed with larger cabins and better sanitary arrangements, but under both systems there are the same conditions in regard to irregular school attendance, improper medical care, inadequate recreation, and exhausting hours of labor for those children who work.

While the bureau's study did not include vessels other than canal boats it can safely be assumed that similar conditions exist for children living on other types of watercraft.[3]

Chesapeake and Ohio Canal.

THE Chesapeake and Ohio Canal extends from Washington, D. C., to Cumberland, Md., along the eastern bank of the Potomac River, a distance of 185 miles, with an ascent of 609 feet which is overcome by means of 75 locks.[4] The canal varies in width at the surface from 55 to 65 feet and at the bottom from 30 to 42 feet and has a depth of 6 feet throughout. The open season lasts approximately nine months, from early March till December. During the winter months it is customary to drain the canal to prevent damage which might be caused by freezing.

The principal cargo has always been bituminous coal mined in the mountains about Cumberland, which is transported to Georgetown. Boatmen said that they averaged two round trips a month, the distance from Cumberland to Georgetown being covered in from six to eight days, and the return trip in from four to six days.

Practically all the traffic at the time of the study was conducted by one company which owned the boats and employed captains to operate them. The policy of this company was to give preference to married men on the ground that a married man is steadier in his job than a single man, and that the presence of his wife and children on a boat raises the moral tone. For the year 1920, the company reported that all but 7 of the 66 captains on its pay roll were married men.

[3] During the course of the investigation, the attention of the bureau was called to the fact that children were living on river and harbor boats, especially in New York Harbor, and it was also reported that children sometimes lived with their parents on coastwise freight vessels. See also MONTHLY LABOR REVIEW, July, 1918: "New York harbor employees," by Benjamin M. Squires.

[4] The number of locks has varied during the history of the canal from 75 to 81.

Of the 59 captains who were married, 41 were found who had their children with them during the season studied. The number of children found accompanying their families was 135 (70 boys and 65 girls); of these, 48 were under 7 years of age. In addition to these children there were found on canal boats 7 boys who were employed as deck hands by captains to whom they were not related. One of these boys was 11 years of age, four were 14, one was 15, and one 16 years of age. It is known that not all the families were located and interviewed and it is probable that the number of independent child workers found is still less indicative of the actual number on the canal boats, inasmuch as they were even more difficult to locate than families.

Boat Work.

The operation of canal boats is an occupation handed down from father to son. Said one mother: "The children are brought up on the boat and don't know nothin' else, and that is the only reason they take up 'boating.'[5] Boys work for their fathers until they are big enough to get a boat of their own, and it's always easy to get a boat." Several men complained that they knew "nothing else" and realized that their children would have the same disadvantage. Most of the fathers had begun boating before they were 13 years of age; but since the majority had begun by helping their own fathers they did not become "captains" at an especially early age, many of them not until they were 25 years or over. Four men, however, had become captains before they were 16. The mother of one of these had died when he was 12 years of age, leaving $2,100 in cash to each of 14 children. The boy boated for one season with an older brother, receiving as compensation for the season's work, an overcoat, a "made" (as distinguished from homemade) suit of clothes, and $7.50. When he was 14 he bought his own boat and team of mules and became an independent captain. During the first season he saved $700 and "lived like a lord." He began with practically no education, and though he had been a captain for 54 years he had never learned to read and write. Several of his sons became boatmen and at the time of the study a 16-year-old grandson was boating with him.

All the captains included in the study were native white. Seven were illiterate. Their wives also were all native white. Five of them were illiterate. One captain, who had begun boating with his father when he was 5 years of age, said that altogether he had gone to school only 29 months. By the time he reached the fourth grade the children of his own age had long since completed the grammar grades and he was ashamed to go into classes with younger boys and girls. He seemed to regret his own lack of education and said that when his little girl was old enough to go to school he should stop boating.

Operation of boats.—The operation of the old-fashioned canal boat used on the Chesapeake and Ohio Canal consists in driving the mules and in steering the boat. The mules are harnessed tandem to two long ropes or "lines" attached to the bow of the boat. From two to five mules are used by "spells," two or three mules being stabled in the fore cabin at rest while the others draw. The boat hands take

[5] "Boating" is the term used by workers on canal and other boats to designate their life and occupation.

turns at driving, either walking beside the mules or riding the leader. Although the captains usually do some of the driving, especially if the boat travels at night, they consider it a child's job during the day. In dry weather the towpath, which is level except at the approaches to the locks, is well beaten down and easy to walk on, but in summer the work is wearisome and hot. In wet weather the path is muddy and slippery, and consequently shoes and clothing get very hard wear. One captain considered himself the best father on the canal because he provided his boys with rubber boots.

Steering the boat is accomplished by means of the "stick" located on the quarter-deck at the stern of the boat. This controls the rudder or "paddle," and may be guided by the pilot standing or sitting against it. As there is practically no current to change the direction of the boat, the operation is very simple and the mother of the family often steers while doing household tasks that permit. A young child can steer a light boat, as the stick moves easily, but to steer loaded boats requires strength. The only complications in steering occur at the locks or when other canal boats are passed.

Locks are 15 feet wide and approximately 100 feet long. The usual method of opening and shutting them is by pushing heavy beams which extend from the swinging gates on each side. At the time of the study the lock tenders were mostly old men who were assisted by the women and children of their families; the boat workers, however, frequently helped to operate the locks as it is sometimes necessary for several persons to brace themselves against the beams of the gates. (See Fig. 3.) Boats approach the locks so slowly that the steersman has ample time to fit the boat into the lock. Careful calculation, however, is required as the locks are only one foot wider than the boats. (See Fig. 4.) A severe jolt against the wall of the lock has been known to sink a boat. When the boat is in the lock, the boatmen untie the mules and make the boat fast by wrapping ropes around heavy posts which are driven deep into the ground near the lock wall. After a lock is filled or emptied the boatmen pull in their ropes and steer the boat through. If another boat is waiting to enter a lock as one leaves it, great care must be exercised by the steersmen of both boats.

Hours of boat work.—Hours of travel on the canal were practically continuous. Fifteen hours a day was the minimum reported by any of the boat families; 18 was the number of hours most frequently reported; and several families stated they worked longer. One family had operated its boat without taking any intervals for rest. "It never rains, snows, or blows for a boatman, and a boatman never has no Sundays," explained one father. "We don't know it's Sunday," said another, "till we see some folks along the way, dressed up and a-goin' to Sunday school." One captain and his wife who reported working 15 hours a day employed no crew but depended on the assistance of two children, a girl 14 years of age and a boy of 5. The girl did almost all the driving, usually riding muleback, and the parents steered. The little boy helped with the driving, but did not drive for more than a mile or two at a time. The boat was kept moving until the girl could drive no longer, then the boat was tied up for the night. "We'd boat longer hours if the driver felt like it," said the father.

FIG. 1.—LOCK WITH SWINGING GATES.

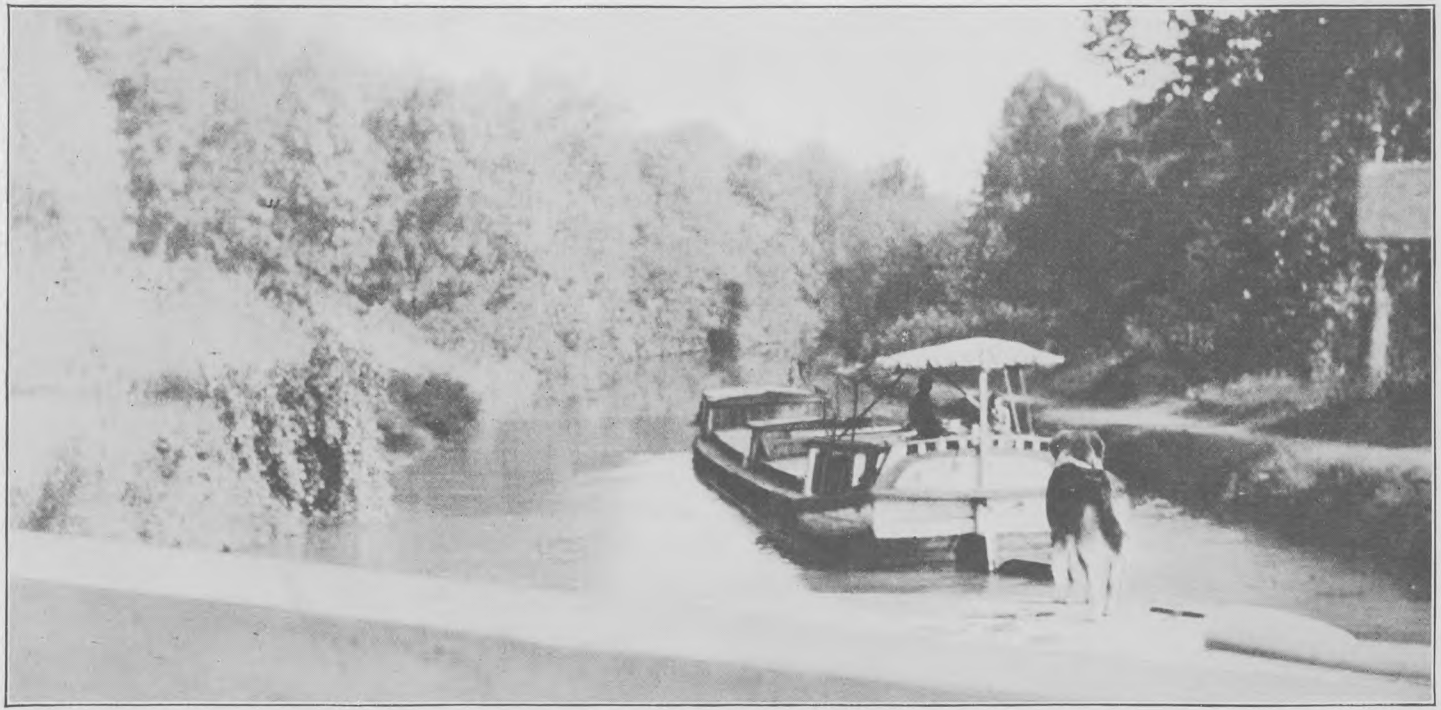

FIG. 2.—CHESAPEAKE & OHIO CANAL, WITH BOAT LEAVING LOCK. TOWPATH ON RIGHT.

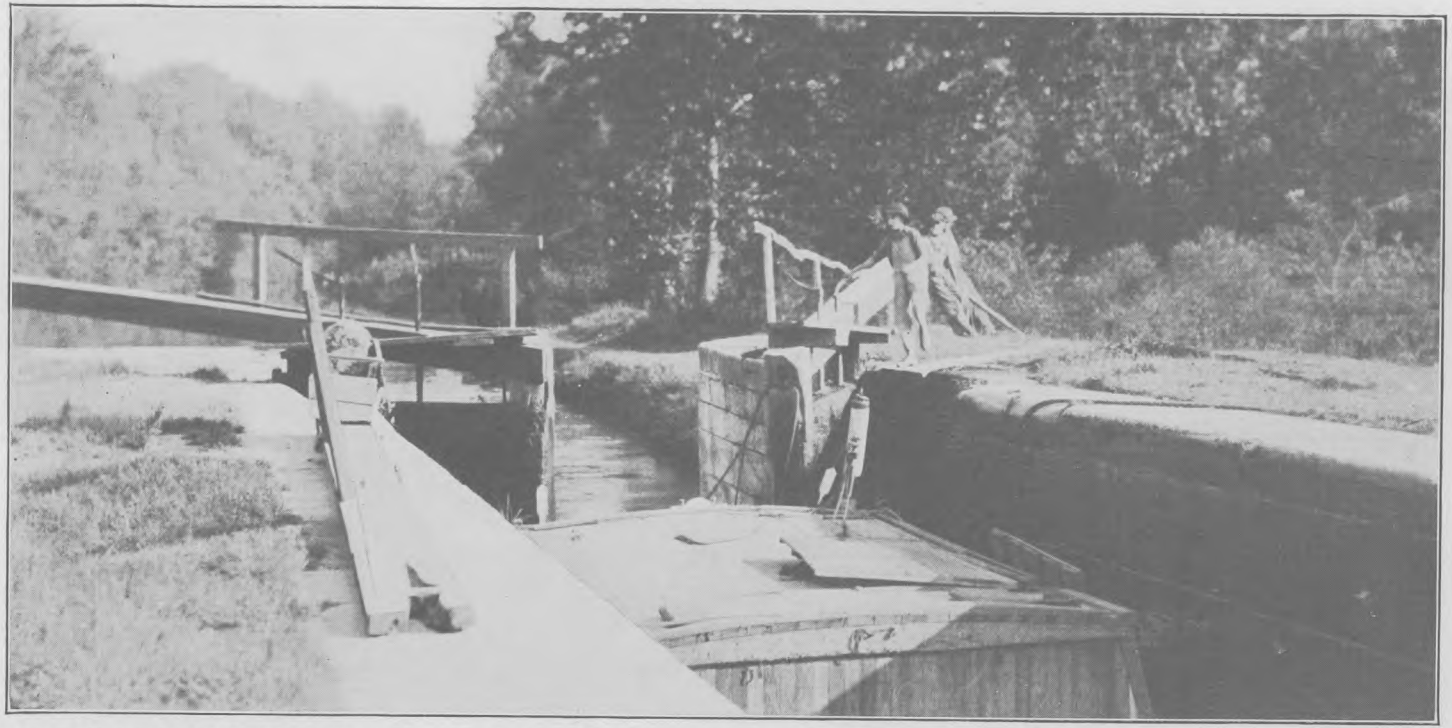

FIG. 3.—CAPTAIN AND TWO BOY HELPERS OPENING LOCK GATES. BOAT HAS BEEN LOWERED AND IS READY TO LEAVE LOCK.

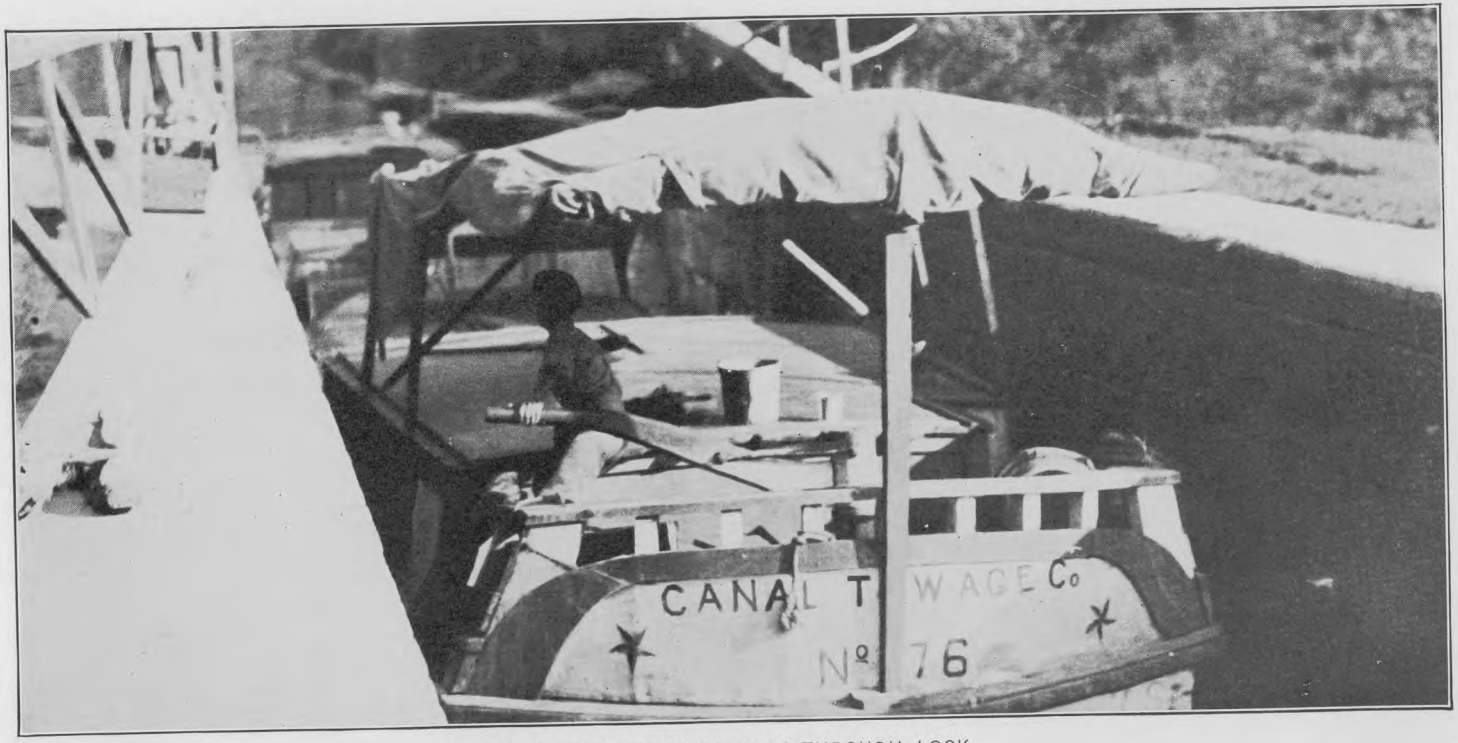

FIG. 4.—BOY STEERING BOAT THROUGH LOCK.

Boat work done by children.—Only the limitations of their physical strength prevented children on this canal from performing all operations connected with handling canal boats. Consequently when they reported that they had done boat work it meant that they had assisted in all parts of the work. The older children, of course, bore heavier burdens than the younger.

CHILDREN BOATING ON CHESAPEAKE AND OHIO CANAL, 1920, CLASSIFIED BY AGE AND NUMBER OF SEASONS WORKED.

Age.	Number who had done boat work each specified number of seasons.												Number who had done no boat work.	Total.
	1	2	3	4	5	6	7	8	9	10 or more.	Not reported.	Total.		
5 years or under	3	....	....	....	....	....	....	....	....	.....	.....	3	38	41
6 years	3	1	....	....	....	....	....	....	....	.....	.....	4	3	7
7 years	2	2	1	....	....	....	....	....	....	.....	1	6	1	7
8 years	1	2	....	1	....	....	....	....	....	.....	.....	4	1	5
9 years	3	....	3	....	1	....	....	....	....	.....	1	8	2	10
10 years	1	1	1	2	1	1	....	....	....	.....	.....	7	.....	7
11 years	2	3	1	1	....	2	....	....	....	.....	1	10	1	11
12 years	....	3	2	....	1	1	1	....	....	.....	1	9	1	10
13 years	....	2	2	....	2	1	....	1	....	.....	1	9	.....	9
14 years	1	5	1	3	2	1	....	1	....	.....	1	15	1	16
15 years	2	....	2	1	1	....	....	1	....	2	.....	9	.....	9
16 years	....	1	1	....	1	1	....	1	1	.....	1	7	.....	7
17 years	....	....	....	....	....	1	....	1	....	1	.....	3	.....	3
Total	18	20	14	8	9	8	1	5	1	3	7	94	48	142

As the above table shows, 94 children, or all except 7 of those over 6 years of age, were found assisting in the work. Twenty-one of the children had begun to help when they were not more than 6 years of age, and 8 of these had begun when not more than 5. The following stories illustrate the life of the boat children.

One of the boating households consisted of four persons—the captain and his assistant "deck hand," the captain's wife, and their 11-year-old daughter. The child had been driving, steering, and doing housework about the boat for "several years," but she did not like boating and got very lonely. Her father said that she could do anything the "hand" could do, but he felt it necessary to hire a man because, as he put it, "you have to rest once in a while." "The women and children are as good as the men," he said. "If it weren't for the children the canal wouldn't run a day." The girl's school attendance for the year 1920–21 had been 89 days out of 177, or 50 per cent of the school term.

An 11-year-old boy who had been helping his father since he was 6 years old had become his father's "right-hand man." This boy was one of a family of seven children, two older than he, one a girl of 7, and the others under 6 years of age. "A boat is a poor place for little children," said the father, "for all they can do is to go in and out of the cabin." The four older children were accustomed to helping with the boat work, but the father depended especially on the 11-year-old boy. He could do any sort of work and often drove for long hours, and even well into the night. His school attendance in 1920–21 was only 93 days out of a possible 178. The father him-

self commented on this poor record and said that while he regretted it he was obliged to "boat" his children as he could not afford with his large family to hire extra help.

One 17-year-old girl boasted that she had been working on canal boats for 12 seasons. The mother of this girl had had 17 children, 8 of whom were living. Of the 9 children who had died, 8 had died in infancy. The 2 oldest living children had married and left home. The remaining 6 children, including the 17-year-old girl, 2 boys who were 15 and 12 years of age, respectively, and 3 girls, aged 11, 6, and 2, traveled with their parents on the canal. All except the youngest were regular boat hands, having begun to work when 6 years of age. The mother stated that for many years it had not been necessary for them to employ a crew as they had plenty of their "own hands." During the season selected for study their boat had traveled 19 hours a day 7 days a week. While the 6-year-old girl was allowed to go to bed at 8 and presumably had lighter duties than the others, the 4 older children worked on shifts all day long, snatching a nap now and then. They went to bed at 10 p. m. and had to be up and ready to start again at 3 a. m. The oldest girl had stopped school on completing the fourth grade. The 4 other children who had been in school during 1920–21 had records which showed attendance varying from 29 per cent to 73 per cent of the term. The 15-year-old boy, with an attendance record of 29.6 per cent, had just completed the fourth grade and was not planning to return to school in the fall.

Earnings.

Earnings of fathers.—Reports of earnings showed rather low incomes as compared with the general run of wages in other industries. Captains were paid per ton per trip, receiving about $75 or $80 for a trip. Captains who needed more assistance than members of the family could render paid the wages of "deck hands" out of their own income, usually $12 to $20 a trip, although young boys got less, sometimes receiving clothing in lieu of wages or part of wages. While half the captains included in this study had paid helpers, the majority of the families having four or more children did not hire crews. Many of the captains said that without the assistance of their children they could not have made both ends meet.

In addition to the wages of hired hands, the boat captain had to meet the expense of certain equipment and repairs. The "fall board" or gangplank over which the mules were led from the boat to shore had to be replaced frequently; the price of a new board was about $16. Troughs for the mules ranging in cost from $2.50 to $4.50 were supplied by some captains. Every man was expected to furnish oil for his "bow lamp," the expense varying with the number of hours that the boat was operated after dark. This expenditure averaged about $10 per season. Some men were obliged to replace the stakes for tying up the boat at night. In every instance the boat was furnished by the company and certain necessary articles of equipment were usually provided, such as mules, feed, harness, and "lines." A few boatmen owned their mules, but in such cases the company furnished feed and made the captain a cash allowance for every trip on which his mules were used.

During 1920 most of the captains received less than $1,250 from boat work. About two-thirds supplemented such earnings either by winter employment or by incidental work during the season. For example, one man owned towing mules which he hired out; other captains secured small loads of incidental freight consisting of general merchandise, farm products, or shipments for the pleasure parks or summer camps. On the revenue from this incidental freight the company collected from the captains a toll of 7 cents on the dollar.

The one captain who had made more than $1,850 during the season of 1920 was a man who was somewhat in debt at the beginning of the season. With his wife and six children and one deck hand he undertook to operate two boats. The mother and father each took charge of one boat, keeping the vessels as close together as possible. The boats practically never stopped and every member of the family except the two youngest children, 3 and 5 years of age, had a definite schedule of duties. During the season they made 13½ trips with one boat and 14 with the other. (The largest number of trips made by any one boat on the canal that season was 18½.)

Earnings of children.—In six instances the children who "boated" with their families received pay for their work. One father had paid his 13-year-old son $5 a trip; another father had given his son, aged 17, $15 per trip. Two boys, 9 and 12 years of age, living under the guardianship of their older brother, had each received $8 per trip. Two other boys, 11 and 16 years of age, working for their stepfather, received, respectively, $7 and $12 per trip.

The seven boys who worked as regular boat hands independently of their families reported wages ranging from $5 to $15 a trip, three being paid $10 a trip. Except in the case of one boy, these wages were below the average paid to deck hands on the canal. None of these boys, except possibly one concerning whom complete information was not given, received clothing in addition to wages. All, of course, were fed and housed.

The total earnings for the children who received cash wages for boat work during the season of 1920 ranged from $35 to $247.50, the highest amount having been received by one of the boys who was paid by his own father. Only six reported any employment other than boating. Two of these boys had worked in "factories," two in tanneries, one as a laborer for a building contractor, and one girl as a domestic.

Living Conditions.

The average size of the cabins on the boats of the Chesapeake and Ohio Canal was 10 by 12 feet. All cabins had two bunks, one set into the inner wall of the main cabin and the other located in the so-called stateroom, which was partitioned off from the main cabin by a diagonal wall. (See Fig. 5.) These bunks were 36 inches wide, sufficient space for one person but ordinarily occupied by two. In addition to the cabin bunks, the feed box extending across the deck at the center of the boat was ordinarily used for sleeping purposes. This box was 4 feet wide and 4 feet high, and with blankets spread over the hay and other feed it provided a fairly comfortable bed, used in some cases by the deck hands and occasionally by the children. Often in hot weather the floor of the deck was used as a bed,

but some mothers stated that they were afraid to let the children sleep away from the cabin.

In spite of the narrowness of the berths, the cabins were ordinarily regarded by the families as providing sleeping space for four persons. To these may be added two places in the feed box, making a maximum accommodation of six places. Of the 41 families visited, however, 10 had from 7 to 10 members, and 19, almost half, had more than 4 persons. Possibly the most distressing instance of congestion existed in a family of 9. The mother said she made a bed for the children on the floor, but "when you get seven down there, there ain't room left to walk around without stepping on them." The floors of the cabins were frequently left bare, although 14 families reported linoleum coverings. One family stated that it was impossible to use any sort of covering as the floors leaked and were always damp.

The accompanying plan shows that the stove occupied a place in the main cabin near the steps to the deck. Coal was ordinarily burned in these stoves and in several instances the family reported that the fire was kept through the night. One mother spoke of the heat of the cabin as being almost unendurable. Practically every boat was provided with a heavy canvas awning and in pleasant weather the boat family spent most of the day on deck. (See Fig. 6.)

Water for drinking and for cooking purposes was secured from springs along the canal and stored in barrels or kegs; for washing, the canal water was used. In no instance had it been piped into the cabin as in some of the boats on New York canals. Toilet facilities were entirely lacking. Cabin windows were not screened and in some places, especially at terminals, the families were troubled by flies. Most families complained of mosquitoes.

Food supplies could be secured at any town along the canal; but the families agreed it was better to "stock up" at Georgetown, as the stores in the smaller places charged much higher rates. No family reported the regular use of fresh milk. Most families reported that they could get milk at the locks or at farm houses, but not for daily use. None of them had refrigerators, though many were in the habit of getting small pieces of ice to cool drinking water.

Five captains lived the year round on their boats, one having lived on his boat for 18 years. All the other families visited maintained homes on land. The dwellings were chiefly small detached wooden houses, some being built of logs. None of them had modern conveniences in the way of inside plumbing. Nearly all, however, were located in or near towns along the canal within one mile of schools.

Opportunities for Education.

According to the parents' statements, 102 children, including all those of compulsory school age or over, had at one time or another attended school. Of the 14 known to have stopped school before the year of the study, one had completed the second grade; 2 had stopped upon the completion of the third grade; 5, of the fourth grade; and 1, of the sixth; 3 had finished the seventh grade; for the remaining 2, the grade attained at the close of the school history was not known. One of these children who had stopped going to school was 11 years

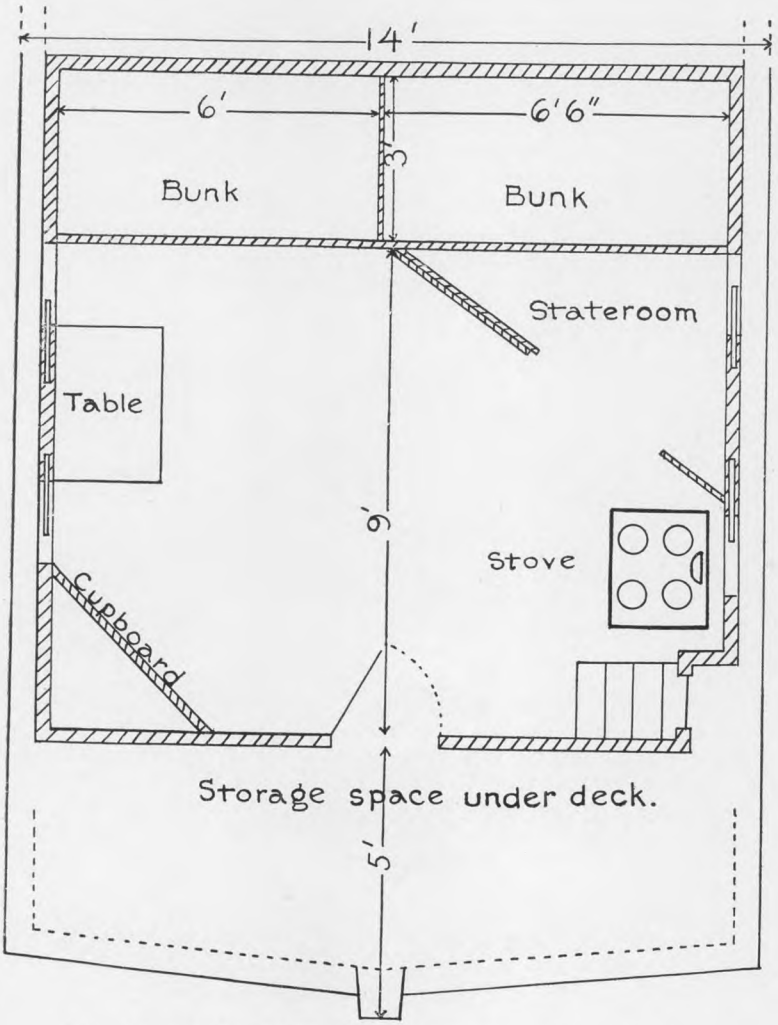

FIG. 5.—PLAN OF CABIN, CHESAPEAKE & OHIO CANAL BOAT.

FIG. 6.—A CANAL BOAT FAMILY.

of age; and one, 13; the others were 14 years of age or over. Over three-fourths of the children 8 years of age or over who had attended school during the year 1920–21 were one or more years retarded; over one-half were two years or more below the normal grade for their age. Every reasonable effort was made by the Children's Bureau agents to secure the attendance records of these children. Of the 52 for whom the actual record was secured, one girl of 7 years had perfect attendance. Seven children, including this girl, had attended 80 per cent or more of the term; 17, three of them girls, had attended less than 50 per cent of the term. Two boys, 9 and 15 years of age, and one girl of 12, had attended less than 10 per cent of the term.

Facilities for Medical Care.

Very little use of the services of doctors had been made by the canal-boat families. A large proportion of them did not regard ordinary illness as an excuse for sending for a physician. "We never need a doctor," said one father. "We just stay sick until we get well." Among nine families who seemed to think it would be easy to get a doctor while boating, four qualified their statement with the remark that it might be necessary to go long distances. Said one of these: "You can always get a doctor in a day." Another said "Easy, if you have the money." In one family that had been obliged to search for a doctor, comment was made on the fact that the shifting of the boat necessitated having different doctors at different places, an unsatisfactory and expensive arrangement. More than half the families reported that it was difficult to get a doctor, and in the mountains at the upper end of the canal, or along the "long levels" it was practically impossible to secure medical assistance. Fifteen of the children were reported to have had serious illnesses during 1920.

Information concerning conditions at the time of their most recent confinements was secured from mothers of children born subsequent to December 31, 1915. Four children had been born on boats and 22 on land. The mothers of two of the babies born on boats had been attended at confinement by physicians. Thirteen of the 22 mothers giving birth to children on land were attended by physicians; 2 were attended by midwives; for the other 7 mothers the facts were not reported. Some children reported as having been born on land had been born at lock houses or in villages where the mother had neither hospital care, friends, nor home conveniences. One mother had had 14 children, all born on boats. She had never had a physician, but always a midwife, and had received no care after delivery. At the time of the study 7 of these children had died.

Accidents to Children.

Numerous accidents had occurred among the boat children. Forty-five children had fallen into the canal more or less frequently; 11 had been kicked by mules; 1 had been burned; 1 cut with an axe; another, dragged by a mule over a lock gate. One mother said that her four children had had many accidents. The oldest had had his nose broken by a kick from a mule. Fortunately the boat was near a town in which he secured hospital treatment. With the

exception of the baby all had fallen into the canal many times, and once when the lock master, by closing the gates too soon, dragged the awning off the deck and the children with it, they were caught between the gate and the boat. In telling about these accidents, the mother seemed to consider them an inevitable part of boating.

Recreation.

Opportunities for recreation were very meager. Several families when asked about their pleasures and recreation, replied that they had none. Nearly all said that their only friends were the other boating families. Some complained that the children got lonely and restless. One father who was musical was teaching his children to sing and to play on the banjo and the mandolin. Some of the children spoke of good times swimming in the canal, especially when they reached the lower levels, or were detained for a number of days at the terminal. Unfortunately at this point, the water of the canal was much polluted; the towpath, which furnished almost the only playground for the children, was littered with manure and refuse, and children were obliged to find play spaces between the mules standing along the path.

The Lehigh and the Delaware Division Canals.[6]

THE history of the Pennsylvania canals shows the same decline in traffic that has occurred on other systems. Expensive constructions undertaken by the State in the early half of the nineteenth century were later bought up by railroads and gradually allowed to go into disuse as steam transportation became more popular. At present only two canals are in operation in Pennsylvania, both under the control of one company. These two, the Lehigh and the Delaware Division Canals, are used in transporting anthracite from Coalport, near Mauch Chunk, to points on the Delaware River. The Lehigh Canal, located along the Lehigh River, extends from Mauch Chunk to Easton; the Delaware Division Canal, supplementing the Lehigh, extends along the Delaware River from Easton to Bristol, the total length of the two canals being 108 miles. The round trip from Mauch Chunk to Easton requires about four days; the trip to Bristol, about eight. The open season for these canals is eight or nine months. The boats used on these canals were smaller than those used on the Chesapeake and Ohio Canal. In fact the cabins on these boats were so small that it was astonishing that any family attempted to keep house in them. The long hours, however, constrained the captains to have living quarters on the boats and, as at least one assistant was necessary for the operation of a vessel, it was not strange that men with families took one or more members of their households with them. Sixteen captains were found who had had children on the canals during the season of 1920—in 13 instances their own or step-children, in one instance a young nephew, and in two others, boys who were not related to them.

[6] The information on which this section is based was secured through the cooperation of the Pennsylvania Public Education and Child Labor Association.

Boat Work.

Earnings of boatmen.—As was the case on the Chesapeake and Ohio Canal the company controlling the canal owned the boats and employed captains to operate them. The captains secured such help as they found necessary. Captains were paid on a ton-mile basis, the rate for carrying one ton of coal from Coalport to Bristol being $1 and the rates for intermediate stations being in proportion to the distance. Each boat carried from 90 to 95 tons.[7] Assistant boatmen were paid by trip or by the day or week. Although the conditions of employment were similar to those on the Chesapeake and Ohio the working expenses of the captains on these canals were heavier. Whereas on the Chesapeake and Ohio Canal the company usually furnished not only the boat but the mules, their feed, harness, and "lines," on the Pennsylvania canals the captains were required to supply the mules and their upkeep. Mules were furnished by the company to those who did not own them, the terms being an installment payment on the purchase of the animals, usually $5 a trip; this was deducted from the captain's pay and at the close of the season interest was charged on the amount remaining unpaid. The captains also had to meet other expenses, such as feed, "lines," and other equipment. Frequently a man's working expenses amounted to one-third or more of his gross receipts.

Earnings from boating alone did not constitute a sufficient income for men with families. Every captain interviewed had had other sources of income; all of them had had some occupation during the winter and some had had positions which they had kept during the entire 12 months. For example, several of the men were lock tenders and by depending on the services of other members of their families they were able to keep these positions while operating boats. Earnings for boat work for the season studied in no case exceeded $1,250. The additional earnings from winter employment raised the general average of the men's earnings for the year between $300 and $400. The largest annual income reported by any captain for the year in question was $1,977. In six families the father's earnings had been supplemented by the wages of other members of the family; in this group the largest family income reported for the year was $2,286.83.

Boat work done by children.—Probably because of the small size of the cabins the fathers usually took with them only those children who could be of service in operating the boat. A total of 33 children were reported by the 16 families as having made canal trips during 1920. Of the 33 children, 25 were boys and 8 were girls. None of the girls had assisted on the boat during the 1920 season, but 21 of the boys had done so. Of the boys who had helped with the boat work, 4 were between 5 and 10 years of age, 6 between 11 and 13 years, and 11 between 14 and 17 years, inclusive.

Although few in number, proportionately more of the children on these canals than on any of the other canals included in the study were violating State laws, inasmuch as Pennsylvania forbids the employment on boats of children under 16 years of age. Every child

[7] Chesapeake and Ohio boats carried about 110 tons and New York boats about 240.

over 10 years of age on the boats was assisting with the work, and 5 of them were receiving pay.

The terms on which these children worked were interesting. One 14-year-old lad who worked for a man not related to him, had been engaged to drive mules at $7 per trip. The captain paid the boy's wages to his father who allowed the child to keep $2 a trip. One 15-year-old boy who was ordinarily his father's assistant, was given a temporary position as captain. For 27 days this boy had full responsibility for a boat. He hired an older boy as deck hand, met all the incidental expenses of his trips, and received pay from the company at regular rates. One captain employed his two sons to operate the boat while he himself remained on shore as a lock tender. In this case the older of the two boys, who was over 18 years of age and therefore not included in this study, received wages. The younger boy, 15 years of age, worked with his brother for 6 months without pay. According to the father's statement, the boat was operated 6 days a week, 18 hours a day, usually from 3.30 a. m. to 9.30 p. m. The boy said he got up at any time in the morning between 3.30 and 6 o'clock and went to bed between 9.30 and 11 at night.

Living Conditions.

Cabins on the boats of the Lehigh and the Delaware Division Canals were smaller than those on the boats of any of the other canals visited. They measured only 8 by 10 feet and were entered by means of a ladder. Two wooden bunks, one above the other, were built into the side of the cabin; a cupboard was constructed across one corner; a folding shelf or table also constituted a part of the stationary equipment. Such other articles as were needed were provided by the boatmen. Several families managed without chairs. The coal or oil stoves were kept in the cabin during the cool weather but were set up on deck when it was hot. Some of the families explained their lack of a washtub by stating that the washing was done at home on shore. Normally the two bunks in the cabin provided a sleeping space for two persons; yet with one exception the boating groups were made up of three or more persons. Two captains each had their wives and five children with them. One captain had constructed an extension to the lower bunk to accommodate himself, his wife, and 8-year-old daughter. The man who helped him with the work slept in the upper bunk. Another family reported that they made up beds for the children on the floor. This does not, on the whole, represent any greater congestion than on the Chesapeake and Ohio Canal. There were, however, no partitions in these cabins as there were on the Chesapeake and Ohio boats, and no attempts at privacy. Toilet facilities, as on the boats of other canals, were entirely lacking.

Although supplies were easily procurable men said that living on the boat was more expensive than living on land for the reason that much of the food had to be purchased in prepared form. Baking was not attempted on the boats, and the cupboards were not large enough to store considerable quantities.

All except one of the captains maintained homes on land. Six families owned houses which they had occupied for several years; three lived at the locks in houses provided by the company; the four

captains who rented their houses paid from $5 to $13 a month rental. In none of the houses they occupied was there any plumbing.

Opportunities for Education.

Although when in winter quarters all except one family lived within one mile of a school, the school attendance of the canal-boat children was seriously affected by the fact that boating began in April and closed in November. Two who claimed to be "still in school" had not attended at all during the year of the study. Reports showed that more than half were below normal grade. Among those who had stopped school only one had completed the seventh grade; three had failed to complete the sixth grade.

Facilities for Medical Care and Recreation.

Proportionately more sickness was reported among these children than among the children on the other canals; on the other hand, medical care was much more accessible. A physician attended the birth of the one child who was reported as having been born on a boat. Falling into the water was a common occurrence among the children here, as on the other canals, and seemed to be taken as a matter of course. Hours of sleep, though in some instances unduly short, averaged longer than for the children on the Chesapeake and Ohio Canal.

Recreation for these children was entirely lacking. Sometimes they mingled with other children when the boats stopped to load or unload. "We never boated Sunday," said one mother, "but we didn't go to church because we have no Sunday clothes." Resting on Sunday seemed to be the greatest pleasure known to the families.

New York Canals.

WHILE the Chesapeake and Ohio and the Pennsylvania canals are still operated according to the methods of the early days of canal transportation, New York has revolutionized its system by abandoning the mules and towpaths and introducing the use of steam power. Utilizing the old canals in some sections, constructing entirely new waterways in others, the State of New York has enlarged and improved its system in the expectation that the increased facilities will enable the canals to become an integral part of the transportation system. The State canal system, completed in 1918, comprises a number of waterways, the main thoroughfares being the Erie Canal, now known as the State Barge Canal, and the Champlain Canal. The depth of the old canals has been increased from 5 feet on the Champlain and 7 feet on the Erie to a minimum depth of 12 feet throughout. The locks have also been greatly enlarged so as to accommodate boats 300 feet long.

The State Barge Canal extends from Troy to Buffalo, connecting Lake Erie with the Hudson River and New York Harbor. The total distance from Buffalo to the New York terminal is 507 miles. The trip, which took 5 weeks when mules were used, can now be made by steam-towed barges in about 10 days. The Champlain Canal provides the inland water route from New York to Quebec. From the New

York terminals to the Canadian line is 321½ miles. On sections of this route in Canada mule towage is still necessary. The trip from Quebec to New York usually takes from 3 to 5 weeks. The season for these canals is from about May 1 to December 1.

Among the important cargoes carried on the New York canals are coal, lumber, wood pulp, grain, flaxseed, sugar, salt, petroleum, sand, cement, and general merchandise. Grains travel from the west via Buffalo and the canal to New York. Among the boatmen on the Champlain Division, the report was common, "We carried coal up and lumber down," referring to the traffic of lumber and wood pulp towards New York and the transportation of coal to Canada. Sand and cement were handled to a considerable extent in the vicinity of Syracuse. Not only the greater volume of traffic, but also the diversity of cargoes, differentiate the situation in New York from that in Maryland and in Pennsylvania, where coal is the one important cargo. Moreover, while the history of the latter canals shows a steady decrease in tonnage, the traffic on the New York system has increased every year since 1918, when the improved canals went into operation.

Whereas the Chesapeake and Ohio, the Lehigh, and the Delaware Division Canals were privately owned and in each case the company operating the canal owned most, if not all, the boats, in New York the canals are owned and operated by the State and navigation is free. While the State has furnished some towing facilities in order to bridge the period of change from the use of mules to the use of steam, it has not handled freight. All traffic has been carried on by transportation companies or by individual boat owners.

With the change to steam power have come changes in arrangements of boats and in the personnel of crews. Whereas, on the old systems, mule-towed boats traveled separately, the steam-towed barges are propelled in fleets consisting of the "steamer" and several, usually five or six, barges called "consorts." In this arrangement it is unnecessary for every vessel to carry a full crew. The "steamer," which may be a tug or a steam-propelled barge, carries the pilot or captain with a crew of five or six men. The "consorts" are considered adequately manned if one individual is on them.

This coupling up of the boats has also had its effect on the system of ownership. Owners of boats or barges which are not self-propelled must secure motive power. Those who own two or more barges can carry large enough cargoes to afford towage charges or may find it profitable to invest in a "steamer" of their own; but for the man who owns but one barge, the expense of towage has been so serious a matter that many have dropped out of the business. According to the report of the State superintendent of public works, for 1920: "No doubt exists in the mind of anyone that the day of the individual operator has passed."

During 1920, a large part of the canal traffic was handled by companies operating from 10 to 100 boats each. Some individual boat owners chartered their boats to these companies, attaching them to the company fleets and being paid by the companies on a time basis. In such cases the owner could not control his working conditions as he did when boating independently. His working hours and the type and size of the cargo were regulated by the company. "When we come to a town," complained the wife of one of

these men, "the pilot does not give me time to go to market. The only safe way for me to manage is to lay up supplies for the trip and it is not always convenient for me to do that."

Besides losing his independence the boat owner or captain who is working for a company may have to endure living conditions on the boat which he would not tolerate if the situation were within his control. The difference between the cabins of independent owners and of company employees was as great as that between the homes of the independent merchant and of the average wage earner ashore. The immaculate, neatly painted cabins of some of the independent boatmen, with attractive curtains at the windows, spotless linen on the bunks, good lamps, and stationary washstands, were in marked contrast with company cabins that bore no evidence of interest on the part of the company and little sense of responsibility on the part of the employee.

Boat Work.

Families on boats.—Grouping boats in fleets has greatly reduced the number of captains and consequently decreased the number of families living on boats. Formerly every boat had its captain, and most captains took their families with them; at present, however, there is one captain for the fleet, and usually only the captain's boat, and possibly the first consort, have families aboard. During 1920 the total number of boats operated on the New York canals was 798; but this number must be divided by six or seven to estimate, roughly, the number of fleets. Not all the boat families could be located and interviewed, but 71 were visited who had taken with them 179 children on canal boats in 1920. Of these children, 61 of whom were under 6 years of age, 92 were boys and 87 were girls.

All the boatmen were American born and all were able to read and write. Of their wives, 10 were foreign born, 7 being French Canadians. One of these Canadian women could not speak English, and one could not read or write any language. With the boat families on the New York canals, as on other canals, boating was a family occupation handed down from father to son. Among the fathers of the 71 families visited, 62 had begun their industrial life as boat workers assisting their fathers, most of them before they were 12 years of age. At the time of the study, 47 of the men owned their boats, 8 of them operating under charter to companies; 23 were operating for companies on a salary basis. The remaining father was below the rank of captain and he was the son of a captain, traveling with his young wife and baby in his father's fleet.

Hours of boat work.—Where an independent owner had full control of the situation, as on stretches of lake and river, he ran his boat 24 hours a day, for speed in transit meant more trips, more freight carried, and greater returns. The length of the workday on the canal, however, that is in the artificial sections of the waterways between the locks, was ordinarily 10 or 12 hours. The superintendent of public works stated in his report that agreements with chartered towboats restricted the working-day to 12 hours; this he regretted as it doubled the time required for a trip. In general boats were operated for as many hours and as nearly continuously as possible.

Earnings.

Earnings of fathers.—The income of men operating for themselves was based on the tonnage of their cargoes. From their gross income, which was often several thousand dollars, they had to deduct heavy expenses for towage, equipment, repairs, wages of a crew if they had no boys or young men in their own families, and other charges such as taxes, insurance, registration, clearance, fees, and dockage. One captain who ran two boats from New York to Quebec said he expected to clear $1,000 a trip, making two and sometimes three trips in a season. The expenses of towing, he said, just about "ate up" the returns on one boat.

Men on a salary basis were sure of their pay and were subject to very little if any expense connected with boating. Company rates of pay ranged from $110 a month for the captain of a consort to $165 for the master pilot. Mates received $90 a month. In addition to the monthly wage, a per diem allowance of from 90 cents to $1 per day for food was made by some companies and was ordinarily paid over to the ship's cook. Since she was usually the captain's wife and the mother of the family she tried to procure provisions for the entire family out of this per diem allowance.

The majority of men whose boat earnings for the season of 1920 were reported earned $1,250 or over, showing much better financial returns from their work than were found on other canals. Proportionately fewer had supplemented their boat earnings by winter employment. Among the captains interviewed were men who owned and operated several boats and whose net returns amounted to several thousand dollars; others had had a bad season and had hardly been able to make ends meet.

Earnings of children.—Whereas on both the Chesapeake and Ohio and the Pennsylvania canals the great majority of the children helped with the boat work, very few assisted in operating the boats on the New York canals. The reason for this was that the operations performed by children on the mule-drawn vessels were not called for in operating steam-towed barges. There were no mules to drive and the boats were much too heavy for a child to steer. Out of a total of 179 children living on the New York boats only 19 reported that they had done boat work during the season.

Ten of these 19 boys were reported by their fathers as helping with the boat work without pay. The other 9 boys had been employed as deck hands at regular rates; 1 at $80 a month, 5 at $90 a month, and 1 at $100. These boys, from whom the full work of an adult was expected, were employed in the fleets of which their fathers were the captains, but they were paid by the company operating the boats. The youngest of them was 12 years of age, another was 15, and the others were 16 and 17. The 12-year-old worked one month during the school vacation; the 17-year-old who received $80 was employed only one month; the others worked during the entire canal season. The season's earnings for some of these boys amounted to $700 or $800.

The child labor laws in New York State at the time of the study made no reference to boat employees, but no child under 14 years of age was allowed to undertake any kind of work during school hours.

Only three children living on canal boats reported work other than that connected with the boats. One 17-year-old girl, while her father's boat was docked in New York Harbor, had been employed at $20 a week as an inspector in a sweater factory; one boy had been a salesman in a dry goods store at $10 a week; and one of the boys who had been a paid deck hand during the summer had worked for two weeks in the winter in a box factory.

Living Conditions.

Because boat owners have regarded the operation of the improved New York canals as more or less of an experiment they have been somewhat slow to construct new boats, and although a number of large steel barges have been built, the predominating type of canal boat in use in 1920 was still the old-fashioned 240-ton wooden barge. The cabins on these boats were located at the stern and usually measured 12 by 14 or 10 by 12 feet. To this floor space a few more inches were added by shelves, cupboards, and chests of drawers. Bunks and beds also were frequently built into the wall of the boat The best cabins had one side partitioned off with sliding doors, making altogether three compartments—one large enough to accommodate a double bed or bunk, another containing the cook stove and cupboard, while the main cabin was utilized as living room and additional sleeping space. Here was a folding table, which could be opened at mealtime, and along the wall a bunk also folded to half dimensions or shut into the wall under the deck. In some cabins cretonne curtains concealed the bunk. The partitions insured privacy which was entirely lacking in more simply constructed cabins. No toilet facilities were found on any of the canal boats visited, though it was reported that some of the newer barges provided them.

Water for washing was usually drawn from the canal or river, but the more intelligent families secured their drinking water from city hydrants at the terminals. All who traveled over the Champlain route, however, said that the lake water was very clear and suitable for drinking purposes. The best cabins had stationary basins supplied with water from a tank on the deck above. Others had a barrel of water on the deck or in the cabin, from which the water was dipped with pails.

Three families had cabins fitted with electric lights. These were families which lived on "steamers" and could utilize power generated by the engine. All others used oil lamps, which were more or less ornamental according to the taste and income of the family.

Sleeping accommodations were in many cases inadequate. Among the 68 families whose sleeping arrangements were reported 35 had sleeping places for every member of the household, while 33 had fewer places than there were persons to be accommodated. The worst condition found in respect to sleeping space was the case of a family consisting of father, mother, and four children living on a boat having sleeping space for only two persons. During extreme hot weather, when some could lie out on the upper deck under an awning the lack of bunks was not much of a problem, but for families that remained on the boats throughout the winter, as 35 of the 68 reporting did, the crowded conditions were serious.

Space on the upper deck was frequently utilized by mothers who did their washing there and hung the clothes on lines stretched the full length or part length of the boat. Some boats were provided during the winter with storm or winter cabins, rough caps or cupolas of boards covered with tarred paper. These served to keep the inside cabins warmer and provided a storage space for such articles as wash tubs and pails. On the whole, although some cabins were attractive and comfortable, others were greatly congested, dirty, and without adequate ceiling or furniture.

The boats of recently formed companies are built along modern and sanitary lines, but inasmuch as companies operating these boats do not permit employees to take their families with them, the cabin improvements in the newest barges do not benefit the children living on the canals.

Food supplies could be secured at the various stopping places along the routes, though many families who could afford it made a practice of stocking up at the terminals. A few boatmen reported that the company supplied ice. Fresh milk was one of the most difficult articles to secure and only 13 families reported that they had been able to have it every day. Five families made no attempt to have fresh milk; others purchased it when they could and supplemented the supply with canned milk. Considering the fact that in the small group studied there were 76 children 6 years of age and under, the lack of fresh milk constituted a serious disadvantage of canal-boat life.

Forty-two families had winter quarters on shore. Small settlements of boatmen's families are located at Whitehall and at Champlain in northern New York, another cluster near Buffalo, and another in the central part of the State to the west of Syracuse. Many families who have made boating their principal occupation live at Champlain and Whitehall, and the homes of retired boatmen are among the finest in these communities. In the group studied, most of the families having homes on shore had the advantage of city conveniences, were located within one mile of schools, and on the whole represented a higher economic level than the boat families found on other canals.

Opportunities for Education.

All the children of school age were attending school. Children who had permanent winter homes showed fairly good attendance, while those who remained all winter on the canal boats showed low percentages of attendance. More than half the children for whom full facts were reported, however, were below the normal grade for their age. The children of families on canal boats moored in the basins or to piers in New York Harbor attended schools in New York City, Brooklyn, and in New Jersey. Though the distance from the piers to the schools was not great, children at Erie Basin had almost a mile to go, across dumps and unpaved streets and paths. Moreover, those who were back of the first tier of boats had to jump from one deck to another to get ashore. The boats were fastened as closely together as was practicable, but the levels of the decks varied with the rise and fall of the tide and the loading and unloading of the holds, and at times there was considerable risk in jumping from boat

to boat or from the boats to the shore. Children living on boats moored at the Shadyside and Edgewater Basins, on the Jersey bank of the Hudson, were in a still more hazardous position because of the wreckage that obstructed the space between the boats and the shore. Numbers of sunken canal boats cluttered these basins and families had to cross these wrecks to get to land. The school at Edgewater was at the top of the Palisades so that a steep climb up the embankment was necessary in order to reach it. One mother located at Edgewater said she never went ashore because of the difficulties of getting from boat to boat. Her little son, however, was attending the school at the top of the bluff.

Facilities for Medical Care.

Among the families that had required the services of physicians some had found that it was very difficult to get a doctor; it was universally conceded that in an emergency arising while the boats were crossing the lakes (Lake Oneida or Lake Champlain) it would be impossible to secure medical aid. Some said that it was not easy to get a doctor while on the Hudson. Most of the families agreed that on the canals doctors were fairly accessible and that the pilots were considerate in stopping the boats if anyone was ill enough to need a physician. Forty-six children in 29 families had been ill during the year of the study. Whenever possible, a sick child was left on shore. One mother who reported that her children were never very healthy said she always planned to have "a lot of medicine on board."

Fifty-eight children were reported as having been born on boats. Detailed information was secured regarding the conditions at time of the birth of the youngest child born subsequent to December 31, 1915. In most cases it was reported that the boat had docked during the mother's confinement and more frequently than not the services of a physician had been secured. One father said that his boat dropped out of the fleet when the time for his wife's confinement arrived. The boat had been delayed two days and had then been attached to another tow. Boatmen's wives who could reach New York City at the time of a childbirth were especially fortunate because of the fact that the canal terminals at Piers 5 and 6, East River, are almost directly opposite a well-equipped city hospital. One mother who had been confined there said that the doctors and nurses frequently came over to the boats to see her babies. Several women had had the care and advice of physicians both before and after confinement. While other women had not been so fortunate the reports as a whole showed more favorable confinement conditions than those found among canal families elsewhere.

Accidents to Children.

Decks of canal boats make a picturesque but somewhat restricted playground. A baby tethered on a sunny day to the flat, smooth top of a closed hatch is probably as well off as any baby need be, certainly infinitely better off than most city babies shut within four walls. The children, however, who attempt to play ball or hide-and-seek on the narrow decks run great hazards. It was a common occurrence for

a child to tumble off a boat. One mother of seven children laughed at the question and said, "Why yes, they are always falling in." Five families reported the loss of one or more children through drowning.

One mother had lost four children while on canal boats. The oldest child had died of "sunstroke"; the second, 5 years of age, had been drowned; another had been burned to death by an explosion of oil on the barge; another, a baby, had died of spinal meningitis after being dropped on the deck of the boat and injured. One of the surviving children had been injured by the oil explosion which killed the third child.

Another mother had lost a little girl by the explosion of a rifle in the cabin of the canal boat. It was two hours before the boat could reach port and then it was some time before a doctor could be secured. After this experience the mother was unwilling to accompany her husband and permitted only one of the children, an 18-year-old boy, to go with the father. She thought that women and children should be prohibited by law from going on the boats.

Recreation.

Social life among these families as among those on other canals is necessarily restricted. No families mentioned the attractions of towns except those who made a practice of wintering in New York Harbor. Even among such families those docking at the Manhattan piers had a great advantage over those docking in Brooklyn or on the Jersey side, as far as accessibility to the city was concerned. One harbor boatman who was interviewed in a Brooklyn basin said that he hardly dared to go ashore alone at night because of the stories he had heard of holdups. The usual reply to the inquiry regarding social pleasures was a reference to other boat families, and sometimes this reference was deprecatory. One mother said: "You don't like to mix with the other boat people. You don't know anything about them."

Harbor Conditions.

More than one-third of the families included in the study of the New York canals were interviewed in New York Harbor. Inasmuch as many of the canal boatmen bring their boats to New York at the close of the canal season and become harbor workers for the winter months the conditions in New York Harbor have an important bearing upon the lives of the canal-boat families.

The vastness of the activities of this largest port of the United States is suggested by the fact that over 6,000 vessels are registered at the New York customhouse. Many of these, of course, are passenger or freight steamers engaged in foreign or coastwise trade; but it is estimated that more than 3,000 boats, including both registered and unregistered vessels, are used for purely local traffic. As the canal boatmen come down to the harbor they pick up cargoes wherever they can find them and thus come, for the time being, into close contact with the life of the harbor.

Harbor conditions necessitate the presence of someone on the boats at all times of day and night. As piracy is reported to be common and the danger from fire is great, it is customary for the boat owners and operators either to employ captains who are willing to remain on

board all 24 hours of the day or to employ watchmen in addition to the day workers. The irregularities, however, which exist under a system in which some boats are manned by one person for 24 hours and other boats are operated on a 10 to 12 hour day with a watchman at night give rise to dissatisfaction on the part of both employers and employees. A boatman who lives on board his vessel with his family may be, from some points of view, an advantage to the employing company; but many of the boatmen feel keenly that conditions on the boats are not favorable for women and children, giving the following as the principal reasons for their attitude: Congestion in cabins and lack of sanitary facilities, fostering immorality and disease; inaccessibility of schools and doctors; lack of opportunities for recreation; and dangers from fire.

Unsuccessful attempts were made both in 1920 and 1921 to secure legislation forbidding the presence of women and children on boats. While the proposed laws were intended to regulate conditions in New York Harbor they were not restricted in their application and would, if passed, affect all waterways in the State. Already a number of the more progressive transportation companies, both on the canals and in the harbor, have forbidden employees to have women and children with them on the boats; and it is noteworthy that leaders among the boat employees are in accord with this decision.

Immigrant Aid: Legislative Safeguards, and Activities of Bureau of Immigration.

By Mary T. Waggaman.

THE United States Bureau of Immigration is charged with the administration of various immigration laws, including those relating to the exclusion of Chinese and the examination of seamen.[1] From the standpoint of the welfare of the immigrant, some of the provisions of these laws no doubt need to be amended. However, a close study of existing Federal legislation on immigration and of the rules issued or promulgated in connection therewith discloses, on the whole, a protective attitude on the part of the Government towards the aliens at our gates and within our borders. Even when the provisions or regulations are primarily defensive against the incoming or remaining of undesirable foreigners such measures seem at the same time to contemplate the safeguarding of these strangers. In illustration of this attitude of the Government as manifested in the various immigration laws and rules, a number of these measures are summarized below.

It should be noted that immigrants arriving at ports of entry are subjected to both physical and mental examination, as well as to the ordinary inspection by officers of the Immigration Service. Among the classes denied admission to the United States are persons with specified mental defects or physical diseases, paupers, beggars, vagrants, criminals, polygamists, prostitutes and procurers, anarchists, persons who are opposed to organized government, persons likely to become public charges, contract laborers, illiterates, and persons who arrive after the quota of their country under the 3 per centum limit law is filled.

The number debarred from entry in the year ending June 30, 1922, was 13,731, and the number of immigrant aliens admitted, 309,556.[2] The immigrant aliens who entered the United States in the year ending June 30, 1921, before the 3 per centum law was in actual operation, aggregated 805,228.[2] Notwithstanding this great reduction in the volume of immigration, the influx of aliens is still vast enough to make the administration of many of the following measures an important part of the work of the Federal Government.

In addition to the examination of immigrants the officials of the United States Bureau of Immigration at the several water ports of entry inspected 973,804 alien seamen.[3]

[1] United States. Department of Labor. Bureau of Immigration. Immigration laws. Act of Feb. 5, 1917; and acts approved Oct. 16, 1918, Oct. 19, 1918, May 10, 1920, June 5, 1920, Dec. 26, 1920, and May 19 1921, as amended, and act of May 26, 1922. Rules of May 1, 1917. 7th ed., August, 1922. Treaty, laws, and rules governing admission of Chinese. Rules of May 1, 1917, 3d ed., October, 1920.

[2] United States Department of Labor. Bureau of Immigration. Annual report of the Commissioner General, 1922. Washington, 1922. p. 24.

[3] Idem, p. 3.

Provisions in Immigration Laws and Regulations Relative to the Safeguarding of Immigrants.

THE safeguards for aliens provided in the measures here outlined are obvious even in those instances where the dominant motive of the law or regulation is the protection of the people of the United States.

Inspection of vessels.—Immigration officials inspecting passengers and crews on board vessels are instructed to observe and report on the prevailing conditions of sanitation and comfort on such vessels.

Competency of medical examiners.—The United States public health officers, both men and women, detailed to examine incoming aliens are required to have "at least two years' experience and practice in their profession since receiving the degree of doctor of medicine." Officers with special training in diagnosing mental disorders are provided for the examinations for mental defects or insanity. When civilian surgeons are used in emergency cases such surgeons are required to have had four years of professional experience.

Hospital treatment.—An alien afflicted with tuberculosis or with a loathsome or dangerous contagious disease is mandatorily debarred but may be admitted for treatment if the Secretary of Labor is satisfied that to refuse such treatment would be inhumane or cause unusual hardship or suffering, in which case the alien shall be treated in the hospital, under the supervision of the immigration officials at the expense of the vessel transporting him.

An alien, otherwise admissible, who is afflicted with a disease which is easily curable shall be treated in a hospital at the expense of the steamship company bringing him, his admissibility under the law in other respects to be determined after his discharge. Where one member of a family being so afflicted, is admitted to a hospital, the cases of the remaining members are generally held in abeyance pending his release.

Whenever an alien shall have been naturalized or shall have taken up permanent residence in the United States and thereafter shall send for his wife or minor children, and she or they shall be found to be afflicted with any contagious disorder, such wife or children shall be held until it is found whether the disorder is easily curable. If the disorder is found to be easily curable and the responsible person is willing to assume the expense of hospital treatment, the wife or children may be accorded such treatment until cured, or, if otherwise admissible, may be landed provided other persons are not endangered thereby. This section of the law has other provisions to meet specified circumstances which need not be taken up in detail here.

It is also provided that alien seamen who, on arrival at United States ports are found to be afflicted with certain disabilities or diseases, shall be placed in a hospital designated by the immigration officials in charge at the port of arrival for treatment.

The responsibility of steamship companies for hospital treatment of sick immigrants is taken up later.

If the proper authorities deem that immediate deportation would unduly imperil the safety or health of an insane alien, he may be held for treatment at the expense of the Government.

Accompanying aliens.—When an examining medical officer certifies that a rejected alien is helpless because of infancy or illness and such rejected alien is accompanied by another alien whose protection or guardianship is required by the one who is helpless, the accompanying alien may likewise be excluded.

Unaccompanied children under 16 years of age.—Among the excluded classes named in the law are "all children under 16 years of age, unaccompanied by or not coming to one or both of their parents, except that any such children may, in the discretion of the Secretary of Labor, be admitted if in his opinion they are not likely to become a public charge and are otherwise eligible."

Boards of inquiry.—Arriving aliens who in the judgment of the examining inspector are not clearly and beyond all doubt entitled to admission are held for examination before a board of special inquiry composed of three immigration officers. An alien thus held is permitted to have a friend or other representative appear with him before the board, but he may not have legal counsel.

Appeals.—An alien rejected by a board of special inquiry is allowed, under certain circumstances, to appeal through the Commissioner General of Immigration to the Secretary of Labor, and in prosecuting such appeal is allowed to have legal counsel. Only attorneys of good standing are permitted to practice before the United States Department of Labor.

To facilitate the handling of appeal cases a Board of Review was created in 1922 in the office of the Secretary of Labor. Sometimes from 75 to 100 cases have been referred to the board in one day. While two years ago it took a week or ten days to secure a decision on an appeal made at Ellis Island, according to the Secretary's report the period has now been reduced to three or four days.[4]

An alien who has been certified as insane or mentally defective may appeal to the board of medical officers of the United States Public Health Service and may engage at his own expense a medical witness.

The immigration regulations also provide that an alien shall be given as prompt notice as possible regarding the disposition of his case after appeal has been made.

Whenever an appeal results in an order to admit on bond, such bond shall be in the sum of $500 unless otherwise directed.

Privilege of remaining at station.—An admitted alien may stay a few days at an immigration station by paying actual expenses, if the proper immigration official deems the reasons for such stay satisfactory. If the delay is caused by accident or unavoidable conditions and the alien is unable to meet the expenses involved in the postponement of his departure, the immigration officer in charge may authorize that such expenses be paid by the Government.

Care in awarding contract for exchanging money, etc.—The contract for exchanging money, keeping eating houses, passenger and baggage transportation, and similar privileges connected with any United States immigration station shall be awarded to "the lowest responsible and capable bidder, after public competition."

[4] United States. Department of Labor. Annual report of the Secretary of Labor, 1922. Washington, 1922. p. 86.

Prevention of prostitution.—In addition to excluding prostitutes and procurers and forbidding the importation into the United States of "any alien for the purpose of prostitution or for any other immoral purpose" the immigration law provides that whoever shall "hold or attempt to hold * * * or shall keep, maintain, control, support, employ, or harbor in any house or other place, for the purpose of prostitution or for any other immoral purpose, any alien, in pursuance of such illegal importation, shall in every such case be deemed guilty of felony," conviction for which is punishable by imprisonment for not more than 10 years and a fine of not exceeding $5,000.

Aliens who, after admission to the United States, are found practicing prostitution or who are in any way associated with such practice are deportable on warrant of the Secretary of Labor.

Protection from fraud and distress.—The Commissioner General of Immigration "shall issue from time to time such instructions * * * as he shall deem best calculated * * * for protecting the United States and aliens migrating thereto from fraud and loss, and shall have authority to enter into contract for the support and relief of such aliens as may fall into distress or need public aid." He is also authorized to send back to their native country at any time within three years after their admission to the United States, at the expense of the Government, any aliens who "fall into distress or need public aid from causes arising subsequent to their entry and are desirous of being so removed."

Responsibilities of steamship companies.—With certain exceptions, the expenses involved in the removal of an alien from the vessel which brought him to the United States or in his detention, whether or not he is admitted or deported, must be met by the owners, masters, agents, or consignees of such vessel. These expenses may include the immigrant's maintenance, medical treatment in hospital, and burial in case of death.

Not only are fines levied upon steamship companies for unlawfully bringing certain deportable aliens, but such companies must, in such cases refund to the alien, through the collector of customs at the United States port, the sum which was paid for such alien's passage, from "the initial point of departure, as indicated in his ticket, to the port of arrival." The responsibility of steamship companies to return deportable aliens continues for a period of five years.

Aliens denied admission to the United States shall at once be sent back, "in accommodations of the same class in which they arrived," to the country from which they came, unless the Secretary of Labor is of the opinion that "immediate deportation is not practicable or proper." The steamship companies are required to return such aliens without expense either to the aliens or the Government.

When a rejected or deported alien has need of special attention and care, the steamship company involved must meet this requirement on the return ocean voyage and, except under certain circumstances, during the subsequent inland journey. When it is found that any steamship company has neglected to fulfill its duties in this connection, the Secretary of Labor shall employ suitable persons as attendants for like dependent aliens subsequently deported on vessels of that line.

Vessels responsible for the hospitalization, observation, and other expenses incident to the care of their afflicted seamen will not be allowed to clear until all those expenses, including burial costs in case of death, "are paid or satisfactorily guaranteed."

If the requirements of the law make it necessary to return an afflicted seaman to his own country, the immigration officer must have a satisfactory guaranty that such seaman will have proper medical attention and that the crew and passengers of the vessels transporting him will be safeguarded from contagion.

In certain cases alien seamen afflicted with certain diseases or liable to become public charges are allowed to pass through the United States, but the master of the vessel responsible for the return of such seamen to their own country must make due arrangements for their care during transit and provide enough money to cover the expense involved.

Suitable landing places.—The law requires that persons, companies, or transportation lines bringing in aliens for hire from Mexico or Canada shall provide suitable and conveniently located landing places for such passengers.

Interior stations.—In order to facilitate the handling of the work of the United States Immigration Bureau, interior stations are maintained in many of the important population centers. The law also provides for the establishment of interior stations to protect aliens from fraud and loss and to promote the distribution of aliens. In the discretion of the Secretary of Labor aliens in transit from ports of entry may be accompanied by immigration officers.

Consideration for family ties.—Among the exceptions to the literacy requirements is the one which allows an alien who is admissible or is already in the United States to bring in or send for certain near relatives even if such relatives are unable to read.

Under the 3 per centum limit law children under 18 years of age of citizens of the United States are not charged against the quota, and the same law directs that as far as possible preference shall be given to near relatives (1) of citizens of the United States, (2) "of aliens in the United States who have applied for citizenship in the manner provided by law, or (3) of persons eligible to United States' citizenship who served in the military or naval forces of the United States at any time between April 6, 1917, and November 11, 1918, both dates inclusive, and have been separated from such forces under honorable conditions."

Religious refugees.—Aliens who prove to the satisfaction of the proper immigration officer or the Secretary of Labor that they are seeking admission to the United States to escape religious persecution in the country in which they last had permanent residence are exempt from the literacy test.

Arrests on warrant for deportation.—Before calling attention to some of the measures for safeguarding immigrants who are arrested with a view to deportation, it should be noted that for certain causes aliens may be deported irrespective of the length of time they have been in this country; for various other causes the time limitation is five years; and in certain other instances the deportable period is restricted to three years.

In a deportable case the alien is allowed to examine his warrant of arrest and the evidence on which it is issued. The rules also provide that he shall be granted a hearing, at the beginning of which he is to be informed that he may have counsel if he so desires. A note to this rule reads as follows: "If the alien is unable to speak or understand English, an interpreter should be employed where practicable. If the alien is physically or mentally incapable of testifying some relative or friend, if any, should be questioned."

A record of the hearing in a warrant case must be sent to the United States Bureau of Immigration, also "any written argument submitted by counsel and the recommendations of the examining officer and the officer in charge." In the case of an alien physically or mentally afflicted, it is required that the record of the hearing be accompanied by a medical certificate indicating whether or not deportation would endanger such alien's life and whether or not he will need special care on his return voyage.

Aliens who can not furnish bail shall not be kept in jail if any other secure place can be found in which to hold them.

In the case of the detention of arrested deportable alien women or girls special protective procedure is prescribed, covering the character of the place in which they are detained and the presence of special woman officers, whose duty it is to cooperate with the philanthropic and similar organizations which aid immigration officials in cases of this kind. A special woman officer is sometimes called upon, in the interest of proper and humane administration, to make a separate investigation and report from those made by the inspector holding the hearings under an arrest warrant.

If it is decided that it is absolutely necessary to confine an alien woman or girl in jail, explanation of such action must be promptly made to the United States Bureau of Immigration. When an alien woman or girl is placed under the guardianship of a society for any length of time, the organization shall be requested to report weekly as to the behavior and condition of such charge.

In addition to existing arrangements resulting from the white slave traffic international agreement and of section 6 of the white slave act of June 25, 1910, efforts have been made to insure that deported women and girls, upon disembarkation at a foreign port, will at least be "in a position where responsible and charitably disposed persons will have knowledge of them and be able, wherever possible, to extend assistance."

Section 6 of the white slave act above referred to reads in part as follows:

* * * in pursuance of and for the purpose of carrying out the terms of the agreement or project of arrangement for the suppression of the white-slave traffic, adopted July 25, 1902, for submission to their respective Governments by the delegates of various powers represented at the Paris conference and confirmed by a formal agreement signed at Paris on May 18, 1904, and adhered to by the United States on June 6, 1908, as shown by the proclamation of the President of the United States, dated June 15, 1908, the Commissioner General of Immigration is hereby designated as the authority of the United States to receive and centralize information concerning the procuration of alien women and girls with a view to their debauchery, and to exercise supervision over such alien women and girls, receive their declarations, establish their identity, and ascertain from them who induced them to leave their native countries * * *.

The difficulties and expense of deportation of aliens under warrant proceedings are immensely increased by the fact that almost all European Governments require that their citizens or subjects before repatriation be furnished with passports by representatives of such Governments. Some of these countries will not receive their citizens or subjects at all as deports from the United States if they have been "without the realm in excess of a specified time." Sometimes foreign consuls in the United States will not issue passports until they have communicated with their home Governments, by which investigations are made. Lack of sufficient appropriation has made it necessary for the Bureau of Immigration to restrict its field officers' activities in connection with the deportation of aliens unlawfully resident here to the more extreme cases.[5]

Activities of Immigration Bureau.

THERE has been considerable criticism in the past regarding the inefficient methods used in handling immigrants at a number of the larger ports of entry, and in some instances charges of corruption have been made.[6] Soon after the present Secretary of Labor began his administration he appointed a committee, composed of representatives of the Office of the Secretary and of the Bureau of Immigration, to look into these charges. In his annual report for the fiscal year 1922 the Secretary states that as a result of these investigations "a reorganization has been had with most salutary effects. Resignations were received from a number of important officers and there were some removals. The methods of handling aliens, of keeping the accounts, and generally of administration were reorganized and standardized and that process is still going on." The increase in efficiency at the larger ports is reported as particularly marked.

An Advisory Committee on Welfare of Immigrants was appointed in June, 1921, by the Commissioner General of Immigration. The personnel of this organization, which serves without compensation, is as follows: Chairman, Fred. C. Croxton, chairman of the Ohio Council of Social Agencies; secretary, Mrs. Nathaniel Thayer, director of the Division of Immigration and Americanization of the Department of Education of Massachusetts; Miss Julia Lathrop, formerly Chief of the United States Children's Bureau; W. W. Sibray, of the United States Bureau of Immigration at Pittsburgh; Charles P. Neill, formerly director of the National Catholic Service School, and Miss Loula D. Lasker, who was active in Red Cross work.

The committee has visited a number of the immigrant stations, but its principal investigations have been of Ellis Island, the port of entry of the great bulk of immigration in this country, as is shown by the following table, taken from the annual report of the Commissioner General of Immigration for 1922 (p. 24).

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[5] United States. Department of Labor. Bureau of Immigration. Report of the Commissioner General, 1922. Washington, 1922. p. 17.

[6] United States. Department of Labor. Annual report of the Secretary of Labor, 1922. Washington, 1922. p. 85.

ALIENS ADMITTED, DEPARTED, DEBARRED, AND DEPORTED, FOR THE FISCAL YEARS ENDING JUNE 30, 1921 AND 1922.

Port.	Aliens.											
	1921						1922					
	Admitted.		Departed.		Debarred	Deported after landing.	Admitted.		Departed.		Debarred	Deported after landing.
	Immigrant aliens.	Non-immigrant aliens.	Emigrant aliens.	Non-emigrant aliens.			Immigrant aliens.	Non-immigrant aliens.	Emigrant aliens.	Non-emigrant aliens.		
New York, N. Y.	560,971	87,682	203,941	110,105	3,819	1,302	209,778	65,962	153,874	96,354	3,898	1,158
Boston, Mass.	51,565	1,827	2,517	768	204	102	4,924	838	8,053	1,438	142	75
Philadelphia, Pa.	24,432	1,187	3,548	892	178	69	3,257	275	4,943	729	83	57
Baltimore, Md.	265	29	1	9	234	51	163	60	43	16	138	26
Portland, Me.	1,122	107	46	795	8	10	105	40	27	360	10	3
New Bedford, Mass.	2,990	122	1,078	343	21	8	527	85	1,681	123	43	10
Providence, R. I.	12,860	440	3,614	359	69	11	2,010	432	3,060	224	161	20
Newport News, Va.	2,200	5	.....	.....	116	12	184	1	.....	.....	40	10
Norfolk, Va.	2,765	39	.....	16	353	19	531	24	.....	69	143	21
Savannah, Ga.	30	1	.....	.....	22	.....	12	.....	4	3	8	.....
Miami, Fla.	1,929	3,227	1,220	2,992	52	7	996	2,934	1,353	2,741	39	12
Key West, Fla.	2,231	9,002	1,008	16,163	80	18	623	5,304	595	6,744	62	19
Other Atlantic ports.	145	133	2	34	64	12	28	30	.....	.....	22	10
Tampa, Fla.	1,141	1,687	17	24	63	2	314	800	34	53	22	33
Pensacola, Fla.	14	1	.....	.....	16	1	6	.....	.....	.....	3	1
Mobile, Ala.	31	45	7	10	32	2	23	20	7	30	12	.....
New Orleans, La.	1,801	2,767	877	2,989	236	31	878	2,715	1,021	2,453	147	30
Galveston, Tex.	448	172	34	123	55	15	79	47	39	37	62	17
Other Gulf ports.	13	5	1	.....	4	1	4	.....	.....	.....	1	27
San Francisco, Calif.	8,361	14,102	6,876	8,689	288	88	6,724	6,986	7,362	7,112	346	49
Portland, Oreg.	98	41	7	151	4	6	59	35	12	63	12	31
Seattle, Wash.	3,682	2,878	1,971	2,790	90	69	2,837	2,195	2,169	2,562	55	62
Alaska	162	32	100	.....	8	12	97	40	46	.....	12	8
Mexican border:												
Land ports.	29,790	18,934	4,598	2,304	1,108	1,575	19,069	13,983	3,826	518	1,507	1,492
Sea ports.	117	340	262	1,265	3	5	178	443	1,185	1,576	7	9
Through Canada:												
Atlantic ports.	19,521	2,783	7,852	2,395	195	47	5,906	1,510	2,284	1,152	59	85
Pacific ports.	870	2,159	1,290	2,268	17	6	792	4,171	1,428	3,106	126	7
Border stations.	72,652	19,032	4,826	16,765	6,378	1,016	46,465	9,628	4,014	12,849	6,507	1,064
Honolulu, Hawaii.	2,531	2,212	1,463	4,145	32	15	2,679	2,893	1,328	4,720	24	4
Porto Rico.	491	1,944	562	1,919	30	5	308	1,498	324	1,640	40	5
Total.	805,228	172,935	247,718	178,313	13,779	4,517	309,556	122,949	198,712	146,672	13,731	4,345
Philippine Islands	10,652	7,129	1,724	14,455	743	454	6,537	9,237	1,105	16,861	1,004	53

It will be noted from the above table that in both 1921 and 1922 the immigrant aliens entering at Ellis Island were more than double the number admitted in the same period at all other ports combined. The Mexican borderland ports and the Canadian border stations receive immigrants in considerable numbers, but it is quite obvious that the welfare and protection of persons who come merely across the border do not constitute quite so serious a problem as the assistance of those who have come a long journey overseas. The decrease in the number of immigrants from Canada and Mexico is attributed to the industrial depression in the United States, as the 3 per centum limit law does not apply to native Canadians and Mexicans or to aliens who have resided in Canada or Mexico for five years prior to their seeking admission to the United States.

In connection with the inquiries of the Advisory Committee the United States Bureau of Immigration sent out a circular letter

in the fall of 1921 addressed to commissioners of immigration and inspectors in charge of districts, requesting them to report on the work of welfare organizations among arriving immigrants. It also indicated that comment on work among foreign-born residents in any particular community would be of interest, and suggestions were asked for the improvement of the service to immigrants. As the replies to the questionnaire inclosed in the circular letter concerned principally the activities of welfare organizations and not the work of the Bureau of Immigration, these reports will not be taken up in detail in this article.

Ellis Island Station.

Immigrants arriving at Ellis Island must undergo both physical and mental examinations by United States public health officers. When passed by these officers, the newcomers are inspected by an official of the United States Immigration Service, who refers aliens of doubtful admissibility to temporary detention rooms, from which they are summoned before special inquiry boards.

Aliens held for examination by special immigrant inspectors or before boards of special inquiry are not allowed personal communication with relatives or friends. Such relatives or friends may, however, by inquiring at a special desk at the station, secure information regarding the welfare of the detained aliens and the status of their cases. When the immigrants are ordered admitted, or their cases are completed before the boards, visiting is permitted. There is a room at the station for visitors and a kindergarten for detained children.

Admitted aliens are transported from Ellis Island in barges to the proper railway depots. Women with children or women traveling alone are turned over to the care of appropriate welfare societies. Representatives of some 14 organizations interested in aiding immigrants have headquarters at Ellis Island station in the department of social service.[7]

Recommendations of Advisory Committee.—The Advisory Committee on Welfare of Immigrants held hearings in the fall of 1921 with representatives of various welfare agencies working at the New York port of entry, carefully investigated the Ellis Island station, and early in January, 1922, made the following unanimous recommendations:[8]

An official director of information should be appointed to take entire charge of the welfare work at Ellis Island, such official to be under the immediate direction of the commissioner of immigration of New York.

That interpreters speaking several languages and trained in social work be appointed to serve immigrants pending their inspection and during such time as they are not permitted direct communication with their friends.

That a plan be developed for the systematic exchange of allowed information between immigrants who are detained and their waiting friends.

That women and young children be provided with separate and considerably improved night quarters and that a trained dietitian be placed in charge of the feeding of the children.

That detained immigrants be provided with better laundry facilities.

That the representatives of private welfare organizations who are authorized to carry on work at the station be allowed, under the direction and supervision of the Federal director of information, to aid in general welfare service for immigrants after they have been duly examined.

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[7] Report of the Advisory Committee on Welfare of Immigrants, October 31 to November 3, 1921.
[8] Records of the United States Bureau of Immigration.

That three separate religious services, Protestant, Jewish, and Catholic, be held on Sundays "with occasional services for other groups when needed."

That when aliens are excluded and deported an explanation of the reason for such action should be given to them and also, when practicable, to their interested relatives and friends.

That there shall be some welfare workers on duty at all hours.

That official interpreters meet arriving immigrants when embarking on the barges taking such aliens from the vessel to Ellis Island and that an information service be made available to them while they are detained at the Island. Heretofore immigrants have been without service of this kind until their examination was completed, and frequently they have been held apart from the public for several weeks pending their examination by a special board of inquiry.

That pending medical examination immigrants be taken to large and comfortable reception rooms in the main immigration building instead of being held on the barges.

That milk and crackers be served to all women and children at meals in the dining room and between meals and at bedtime in the detention quarters. Previously, only the small children had been provided with such food.

That the large room on the ground floor of the main building which is being used as a money exchange and railway ticket office be converted into a day room for detained women with children, such room to be provided with conveniences for the care of the children and to have easy access to an outdoor recreation place fitted up as a playground. That other commodious outside rooms near large porches with a view of the bay be made available as day rooms for other detained immigrants. That a large outside room be made into a dormitory for women and children, so that they will not have to occupy the general dormitories.

An appropriation of $100,000 for the current fiscal year has been made by Congress for improvements at Ellis Island. Additional appropriations are available for improving the heating and plumbing in the hospitals. The complete program has not yet been put into effect. Since the appropriation was made, however, various changes have been inaugurated tending to better the conditions under which all immigrants are detained.

At Ellis Island the men awaiting deportation on warrant are segregated from immigrants who are excluded on arrival or otherwise detained. In some cases, however, it is necessary to confine stowaways and other young men and boys with criminals pending their deportation, and the United States Department of Labor is endeavoring to discover a way in which to separate completely the criminal from the noncriminal class, but the problem of securing adequately guarded quarters away from the Island is a difficult one.[9]

Attention was called in the hearings of the Advisory Committee (p. 107) to the overactivity of welfare organizations in appeal cases. Reference is also made in the latest annual report of the Secretary of Labor to the pressure brought to bear in these cases by relatives and attorneys, and "very frequently Congressmen and Senators become interested in behalf of relatives of constituents, to the great embarrassment of enforcing officers as well as the Senators and Congressmen." It is almost needless to say that the administration of the law in regard to appeals has been subject to considerable criticism.[10]

With reference to the many hardships arising out of the enforcement of the excluding provisions of the law it should be noted that the Secretary of Labor is strongly advocating the passage of legislation requiring that blood, physical, mental, and character tests be given abroad to prospective emigrants before they have broken up

[9] Report of the Advisory Committee on Welfare of Immigrants, Jan. 27-28, 1922.
[10] Survey, New York, Dec. 1, 1922, p. 336.

their homes and made the sacrifices necessary for a long journey. The attitude of foreign governments, however, regarding such examinations is a matter which will have to be reckoned with.

The Advisory Committee also unanimously declared [11] that the motion pictures being shown at Ellis Island were in many cases "vicious and inappropriate" and suggested that some one be assigned to select suitable pictures especially adapted to immigrant spectators and that the director of welfare be made responsible in this matter.

Medical inspection.—According to a report of the Surgeon General of the United States, under date of August 2, 1922, "the facilities provided at the Ellis Island immigration station for the medical examination of aliens and the care and control of those requiring hospitalization can be accepted as satisfactory in every respect and as constituting a high standard. Ample space is provided for the primary and secondary examination and suitable quarters afforded for the conducting of examinations of both male and female when divested of their clothing. There are also provided adequate laboratory facilities for performing tests which are essential in arriving at a diagnosis of most of the infectious diseases." [12]

The hospital has a large recreation room where convalescent men may play billiards and other games, and there is a library available for all. On island No. 3 there is a contagious hospital, a kindergarten for children, and a playground.[13]

Recommendations of Secretary of Labor.—The inadequacy of the space and the "antiquated" character of the equipment at the Ellis Island station is commented upon by the Secretary of Labor in his annual report for the fiscal year 1922 (p. 86) in which he recommends careful consideration for improvements along these lines.

Other Stations.

Boston.—The Advisory Committee found the East Boston station (1) lacking in facilities for taking care of the sick; (2) without any recreational facilities; (3) with overcrowded offices for the officials and employees; (4) without provision for the care of mothers with very young babies.

It had been hoped to move the station to the Boston side of the harbor to piers which were constructed during the war by other governmental agencies, but it was found that the law would require the United States Immigration Service to rent the pier space at a sum greatly exceeding any available funds under present appropriations. The Secretary of Labor has recommended "consideration of the suggestion that proper legislation be had which will make possible the use of otherwise unemployed Government buildings for the immigration service in Boston." [14]

San Francisco.—The Secretary of Labor recommends that "steps be taken for the erection of a suitable immigrant station in the city of San Francisco with a view of abandoning the station at Angel Island."

[11] Report of the Advisory Committee on Welfare of Immigrants, Jan. 27-28, 1922, p. 1.
[12] United States. Department of Labor. Annual report of the Secretary of Labor, 1922. Washington, 1922. p. 94.
[13] Report of Advisory Committee on Welfare of Immigrants, Oct. 31, 1922.
[14] United States. Department of Labor. Annual report of the Secretary of Labor, 1922. Washington, 1922. p. 87.

Both the island and the station are unsuitable for the purpose for which they are being used. The buildings are of wood, without adequate fire protection, and nearly all the fresh water for the island has to be brought there in scows. The cost of putting the station in repair would, the Secretary of Labor states, "go a long ways toward constructing a new station on the mainland." The new buildings would cost approximately $600,000. It has been estimated that this change in location would save from $75,000 to $100,000 annually in overhead charges.[14]

Seattle.—The Government pays a very high rent for the Seattle immigration station, which is not half large enough for its purpose. The need for a new station at this port which would be commensurate with the volume of immigration handled there has been emphatically pointed out by the Secretary of Labor.[14]

Chicago.—The activities of the Chicago immigration station are confined chiefly to enforcing the deportation provisions of the law and the meeting of arriving immigrants, their direction and protection being left largely to welfare organizations. The acting inspector in charge, under date of October 25, 1921, wrote to headquarters in Washington, D. C., as follows: "In my opinion the organizations engaged in this class of work in this city are able to handle the situation adequately * * *. I do not believe that official aid is necsary. In fact these organizations, which are engaged solely in aiding the immigrants, can work more advantageously without connection with or aid from any official agency which is engaged in enforcing deportation provisions of the law." He also suggested that the methods of communication between detained immigrants at Ellis Island and relatives at points of destination should be improved. In many cases these relatives go from depot to depot, meeting train after train, because of having no definite knowledge as to when or where the expected immigrants will arrive.

According to the chairman of the Advisory Committee, a large crowd of newly arrived aliens going to Chicago is sometimes put on a train which "has no real accommodations," and the immigrants arrive in that city in a "deplorable condition." [17] Miss Grace Abbott, Chief of the United States Children's Bureau and former director of the Immigrants' Protective League of Chicago, expressed herself before the Advisory Committee in favor of the Government's assuming responsibility for immigrants in transit from ports of entry to interior stations.[18]

The following excerpt is from a statement prepared for the Advisory Committee early in 1922 by Dr. Ernest Freund, president of the Immigrants' Protective League, and of the Commission for the Uniformity of Legislation in the United States.

It is hoped that eventually the activities of the State [immigration] commission will be revised but it can not be expected that the State will assume functions which not only more properly belong to the Federal Government, but which the Federal Government is alone fitted to perform. This observation applies particularly to the supervision of immigrant arrivals. It is extremely doubtful whether the Immi-

[14] United States. Department of Labor. Annual report of the Secretary of Labor, 1922. Washington, 1922. p. 87.
[17] Hearings before the Advisory Committee on Welfare of Immigrants, p. 7.
[18] Report of Advisory Committee on Welfare of Immigrants, Jan. 27-28, 1922, p. 6.

grants' Protective League, which has attended to this in the past, will be financially able to do it in the future, and if it will have resources, they should be applied to forms of protection which the Government can not properly perform.

Of the things that the league has done in the past, the Government should particularly undertake the following, as part of the work of an immigrant station in Chicago:

Procure from Ellis Island lists of all immigrants bound for Chicago.

Notify those whose addresses have been given.

Aid friends in Chicago to communicate with arrivals in New York.

Prepare affidavits where necessary in order to comply with landing requirements.

Maintain an agency for giving advice, receiving complaints and referring those applying to the appropriate local authorities or voluntary organizations.

Assist those in transit through Chicago to other points.

Moreover, in cases in which the Government has occasion to enforce the restrictive or repressive provisions of the immigration acts, some friendly governmental representative should be prepared to advise the alien or his friends of his rights under the law.

Pittsburgh.—The Pittsburgh immigration office assists relatives and friends to fill out affidavits for aliens detained at ports of entry.[19] There is close and enthusiastic cooperation at this station between the representatives of the Federal Government and the various agencies in the locality interested in immigrant aid and protection.[20]

Medical inspection.—The United States Department of Labor has repeatedly made recommendations to Congress for appropriations and remedial legislation to improve facilities for the medical examination of arriving immigrants. The following extract from a letter from the Surgeon General of the United States, dated April 11, 1922, shows graphically the present inadequacies of the service along this line at stations other than Ellis Island:

* * * I think it should in all frankness be pointed out that at the majority of the ports of entry a thorough mental and physical examination is impracticable because of the lack of facilities * * *. In order to effect a thorough mental examination, there should be provided a laboratory, hospital facilities, and adequate barracks accommodations for the detention and observation of aliens for varying periods. As a matter of fact, the only ports of entry which have such facilities are San Francisco, New York, and to a less extent New Orleans * * *. The situation on the Mexican border is especially deplorable.[21]

At various ports of entry aliens who require hospitalization pending deportation or diagnosis are placed in hospitals which are not controlled by the United States Department of Labor, and the care and detention of these immigrants are delegated to the physicians in charge of such institutions, who have no police powers in these cases. The medical officers at various ports are obliged to examine aliens on shipboard, because there is no provision for quartering them on land, and not infrequently the officers are unable to secure the privacy which decency demands for such examinations.[22]

The Secretary of Labor characterizes "as astounding" the Surgeon General's statement in his report of May 2, 1922, to the Commissioner General of Immigration, as to the lack of facilities for the detention, observation, proper medical examination, and diagnosis of diseases of aliens arriving at the ports of Porto Rico.[23]

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[19] Report of Advisory Committee on Welfare of Immigrants, Jan. 27–28, 1922, p. 10.
[20] Idem, p. 16.
[21] United States. Department of Labor. Annual report of the Secretary of Labor, 1922. Washington, 1922, p. 88.
[22] Report of Surgeon General to Secretary of Labor, Aug. 6, 1922. In annual report of Secretary of Labor, 1922. Washington, 1922, p. 94.
[23] United States. Department of Labor. Annual report of Secretary of Labor, 1922. Washington, 1922, p. 92.

The Surgeon General's report of August 6, 1922, made at the request of the Secretary of Labor, further emphasized the need for the enlargement of the immigration stations at numerous ports to include hospital facilities. The bed capacity of the hospitals tentatively recommended by the Public Health Service officers was as follows: Boston, Mass., 40; Baltimore, Md., 20; Mobile, Ala., 20; Norfolk, Va., 50; New Orleans, La., 30; Pensacola, Fla., 20; Portland, Me., 30; San Diego, Calif., 20; Savannah, Ga., 10; Seattle, Wash., 30; San Juan, Porto Rico (number not specified).[24]

Suggested Plan for Land Settlement.

The present Commissioner General of Immigration is deeply interested in the matter of placing immigrants on the land. He has repeatedly called attention to the large amount of undeveloped land available for small farms and believes that Federal and State governmental machinery should be coordinated and set in motion for the utilization of some of these lands for the placement of immigrants.

The Federal agencies whose cooperation he suggests would be very important in this scheme are the Federal Farm Loan Bureau, the General Land Office, the Bureau of Education, the Reclamation Service, the Bureau of Soils, the States Relations Service, the Bureau of Agricultural Economics, the Department of Commerce, the United States Employment Service, the Bureau of Naturalization, and the Bureau of Immigration.

The Commissioner General believes that "an American farm is the best possible instrument of Americanization." He says: "Put immigrants of almost any race in an American farming community under conditions which will insure economic success, give them real American schools for their children, and there will be no immigration problem so far as they are concerned." [25]

It is of interest to note that there were 10,529 immigrant farm laborers and 7,676 immigrant farmers admitted in the fiscal year 1922[26] after the 3 per centum law went into operation compared with 32,400 immigrant farm laborers and 22,282 immigrant farmers in the year ending June 30, 1921.[27]

Conclusion.

These recent official surveys and resulting recommendations indicate that existing conditions present large opportunities for improving governmental service to incoming aliens, and it is to be hoped that appropriations will be made available to effect the needed changes. The fact that these investigations have been made is additional evidence of the vital interest of both the Secretary of Labor and the Commissioner General of Immigration not only in the general efficiency of the immigration service but in the welfare of the immigrant.

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[24] United States. Department of Labor. Annual report of Secretary of Labor, 1922. Washington, 1922, pp. 95, 96.
[25] Extract quoted from letter of Commissioner General of Immigration to the Secretary of Labor, dated Jan. 11, 1922.
[26] United States. Department of Labor. Bureau of Immigration. Report of Commissioner General, 1922. Washington, 1922. p. 31.
[27] United States. Department of Labor. Bureau of Immigration. Report of Commissioner General, 1921. Washington, 1921. p. 33.

INDUSTRIAL RELATIONS AND LABOR CONDITIONS.

Preliminary Report of United States Coal Commission.

THE United States Coal Commission has just submitted to Congress its preliminary report on the coal industry. In the report it is stated that the commission has not yet gathered enough information on a number of controversial matters connected with the industry to enable it to make a report on these points, but investigation of these is under way.

"In reality," it is stated, "the coal industry includes three interrelated industries—mining, transportation, and marketing."

The coal mining industry, in point of numbers employed, outranks any single manufacturing industry and stands next to transportation and agriculture. Approximately three quarters of a million men are employed in this industry, of whom 90 per cent work underground.

The capital invested, according to the rough figures of the census, is $2,330,000,000, of which $430,000,000 is invested in the anthracite region and the remainder in the bituminous fields. There are only 174 producers of anthracite and 8 of these control over 70 per cent of the annual output, while there are at least 6,000 commercial producers of soft coal, to say nothing of thousands of wagon mines and country coal banks. These producers operate 9,000 commercial mines.

Each coal district, if not each mine, has its own local customs and problems, determined by the quality of coal, thickness of seam, attitude of the bed, conditions of mining, the markets which it can reach, its freight rates, its labor policy and other factors. In the matter of wage scales, even in the union districts where wage scales are determined by joint agreement, we find variations from district to district and from mine to mine. Still more difficult to summarize are the wage rates in nonunion mines. Not only are these wage rates complicated, but the opportunity to labor varies so greatly from field to field or mine to mine, depending on character of coal, nearness to the market, and commercial connections, that it is hazardous to make any generalization concerning miners' earnings.

No less difficult under such conditions is the determination of average cost or profit. These subjects require specific and very detailed, painstaking investigation, which is complicated by the varying prices charged and received for the coal, quantity and quality both entering into the subject. The bituminous output is consumed approximately in the following percentages: Railroads, 28; industrials, 25; coking, 15; domestic, 10; iron and steel, 7; public utilities, 7; export, 4; mines, 2; bunkers, 2.

The coal industry does not end at the mine. Some 180 railroads take the coal at the mine mouth and transport it to thousands of destinations. Because the railroads are the largest customers of the bituminous industry, and because coal—anthracite and bituminous—constitutes one-third of the railroads' freight the problems of the two are closely interwoven and their interests interdependent. Not only does irregularity in coal output mean serious fluctuations in revenue but excessive irregularity imposes impossible traffic demands on the railroads. On the other hand, interference with rail transportation means a corresponding stoppage of output for the mines and shortage of fuel for the consumer. No solution of the coal problem can be found that does not recognize this community of interest between coal and transportation. But this community of interest, though simply stated, is not simple upon examination. The movement of coal by rail and water is complicated by variations in freight rates, arbitrary differentials, and competition between different coals and between carriers.

Nor does the coal industry end with transportation. To connect the thousands of producers, big and little, with more than 90,000 buyers of carload lot coal scattered over 48 States, requires a widespread system of wholesale marketing. Sometimes this marketing is reduced to the simplest terms, as when a steel plant or railroad buys a mine and consumes its entire output. Sometimes it is conducted by the selling

department of a large operating company. Sometimes the task of bringing together producer and consumer is performed by an independent wholesaler or selling agent. There are some hundreds of large wholesalers and a much greater number, perhaps 3,500 in all, of smaller middlemen. Like the business of running mines, the business of selling has its problems and, like mining, it has also its abuses.

The final link in the chain of coal supply is the retailer, who receives coal in carload lots from car or yard storage and delivers it in smaller quantities to the consumer. There are some 38,000 retail coal dealers, most of them conducting a small business. They handle about 130,000,000 tons of coal, or 14 per cent of the bituminous and two-thirds of the anthracite produced.

Combined charges of the railroad, the wholesaler, and the retailer in most localities exceed the price of the coal at the mines. Therefore it is readily seen that the problem whether the transportation and marketing charges are just and fair is of the utmost concern to the consumers of coal.

Deficiencies in Service.

The widespread public dissatisfaction with the service rendered by the coal industry is not confined to matters of shortage and price, for a train of unfortunate consequences has followed those recurring periods of scarcity; deterioration in the quality of fuel delivered; congestion of railway traffic, necessitating the neglect of other freight to give preference to coal, to the serious harm of other business; and breakdown of mutual confidence of producers and consumers of coal as expressed in the customary contractual relations.

How many there are we do not yet know, but there are certain mines which contract a part of their potential output, say 60 per cent, reserving the balance for spot coal. These operators guard themselves against car shortage by clauses which compel them to fill their contracts only in proportion to the relative car supply. So in recent years, when speculators with contracts could get only a partial supply of cars, they would use only the 60 per cent of available cars for deliveries upon their contracts, while the other cars would be used for spot coal—that is, they prorate their contracts with the sole purpose of having free coal for a higher spot market.

The record of production and distribution of coal in recent years may be summed up in the word "instability," and this instability in the supply of one of the most fundamental of all raw materials has been an important cause in unsettling business and in delaying the return of normal times.

Large Profits.

It has been suggested to us that one of the causes of high prices of coal is profiteering. There has been profiteering in the sense that grossly exorbitant profits have been taken at times by many operators, brokers, and retailers—profits that have been disproportionate to the cost of the coal or the service rendered or the risk incurred.

But this commission has not yet obtained the figures for the past 10-year period specifically required by the act in order to settle this question. A thorough examination of the profits of production and distribution, including the revenue derived from associated enterprises, is already under way.

Labor Difficulties.

Others attribute the instability in the coal industry primarily to labor troubles.

There can be no doubt that two of the three periods of high prices since 1916 have been caused largely by labor troubles. In the first period of scarcity—August, 1916, to March, 1918—there were no strikes of consequence, and therefore some other explanation of the high prices and distress must be found.

The second period of runaway prices, November, 1919, to late in 1920, was originally caused by a nation-wide strike of miners beginning November 1, 1919. In this case the shortage created by the strike was aggravated by difficulties in transportation, resulting in part from severe weather and in part from a strike of railway switchmen, and was further intensified by an unprecedented demand for export and by boom times at home.

In the third period of shortage and high prices, from which we have not yet emerged, the primary cause was a nation-wide suspension of mining, involving practically all union men, which closed the anthracite region completely and shut down two-thirds of the capacity in the bituminous fields of the United States and Canada. As to the merits of that suspension, whether it more resembled a "strike" or a "lockout," the

commission expresses no opinion in this report. The point of immediate interest is that, as before, the effects were prolonged and intensified by transportation troubles until prices rose alarmingly and industrial plants began to close.

We may refer to the unfortunate and unusual coincidence of the general cessation of work in the union mines in the summer of 1922 with that of the railroad shopmen and other crafts within the same period. The former very largely curtailed the output of the mines, and the latter so affected transportation in the fall and early winter as to interfere seriously with the distribution of coal. The effect was seriously to deplete the usual supply of coal with which the country enters the winter.

When work was resumed and the mines were once more turning out their product, it was found that the increased output could not be distributed apace with production, for the effect of one cessation of labor was not so quickly remedied as the other, and not even yet has the transportation equipment been restored to its former condition. With the shortage of coal and lack of railway facilities the fall season opened with general bidding for the supply on hand. Prices were forced up, with the obvious effect on the public.

Whatever the cause or the merits of the labor controversy, it is clear that an indefinite repetition of these crises in the production and distribution of coal would be intolerable. Industry and the home alike must be freed from the menace of constant interruption of their coal supply.

Feeling that "the responsibility of settling its disputes rests primarily upon the industry," and realizing that the commission itself "is vested by the law creating it with no functions of mediation or arbitration," the commission offered no suggestions until it was informed that the efforts of the representatives of the operators and miners to reach an agreement at a joint meeting in Chicago were on the verge of failure. The commission then, on January 2 and 4, 1923, sent telegrams to operators and union miners participating in the meeting in which it pointed out the necessity of an agreement which would keep the mines in operation, and warned that "failure to agree would create an intolerable situation." The commission urged that the present arrangement be continued until April 1, 1924, "by which time this commission expects to have found and reported fully all the facts over which your disagreements have arisen, with recommendations to the Congress, and by which time the Congress will have had opportunity to consider and take such action in the premises as it may deem wise."

Separate replies were received from the operators and miners participating in the meeting. That of the operators noted the fact that the representatives of mine operators and miners had failed to agree and expressed the opinion that this failure was due to "the cumbersomeness of a nation-wide conference of bituminous coal operators and coal miners, representing fifteen producing districts" which "made success impossible." The operators pointed out that the conference had no authority as to the renewal of the agreement but stated that that subject would be a matter for the consideration of a subsequent conference. The reply of the miners stated their view that "the situation is not hopeless but, on the contrary, it is reasonably certain that a wage scale conference will convene before the end of this month," and a later telegram from Mr. John L. Lewis, president of the United Mine Workers of America, stated that a conference between representatives of the miners and operators of the Central Competitive Field would be held January 18, "for the purpose of negotiating an agreement for wages and working conditions in the bituminous industry of that area."

In view of these replies, the commission felt that it has reason to believe that "an agreement will be reached in the near future that

will avert any widespread cessation of mine operation in the union fields on April 1, thus assuring the needed coal supply for at least another year."

We are seeking to promote industrial peace by ascertaining and publishing certain facts. The first group of these includes reliable data on wage rates and earnings, on the volume of employment, on the costs and profits of the industry, on the competition of other fuels and of coal produced by nonunion mines. All of these subjects the commission's staff is now studying, and the results of its investigations will be made public in supplementary reports to Congress as fast as they become available. Up to this time returns on costs are already received and are being analyzed from about 2,000 operators, representing about 40 per cent of the total bituminous output.

A second group of facts required includes the effect upon the industry of provisions for the check-off of union dues, participation in management or limitation upon freedom of management, and other working conditions. This also involves investigation of what causes petty strikes resulting in costly stoppage of operations.

Collective bargaining should rest upon reason rather than upon force. American law and American public opinion recognize the right to organize into unions and the right to work without let or hindrance. It is alleged by the mine workers that in Logan County, West Virginia, Somerset County, Pennsylvania, and elsewhere, free speech and peaceful persuasion have been denied, in violation of the law. It is charged by operators, on the other hand, that the agents of the union have resorted to violence in their efforts to organize the nonunion fields and thereby to lessen competition of nonunion coal produced at lower costs. We will investigate and report upon the methods used by union miners to organize these fields and the methods used by the operators to prevent such organization.

Car Shortage.

An opinion commonly expressed before the commission is that the primary cause of scarcity and high prices of coal is transportation deficiency.

There have been recurring periods of "car shortage," and such periods have generally been accompanied by high prices of coal. There are many other causes for the inadequacy of transportation besides the absence of cars, such as lack of motive power, congestion of yards, terminal facilities, or gateways, single tracks where double tracks are needed, inability to coordinate movement of boats and cars at ports, strikes of railway labor, and severe winter storms temporarily blockading traffic. Any one of these elements may be responsible for what to the operator at a mine seems a simple "shortage of cars."

Car shortage occurred at intervals before the war, but since 1916 it has appeared more frequently and for longer periods, and its effects upon prices and coal supply have been more serious. This increase in transportation disability as a factor interfering with the movement of coal is in part due to the depreciation of equipment under the strain of war and labor complications. This important subject—inadequacy of railroad equipment—is under careful study by the Interstate Commerce Commission, as well as by this commission, and it is hoped that definite findings and recommendations can be made later.

The so-called "car shortage" is not always due to insufficient coal-carrying equipment alone. In part it has been due to an overload upon the transportation system beyond what that system could reasonably or properly be expected to bear. The period of coal shortage and high prices from the middle of 1916 to March, 1918, was marked by almost continuous complaint of lack of cars at the mines. But the volume of traffic thrown upon the roads as a result of the war exceeded anything in their previous history, and when by the summer of 1918 adequate preparation had been made to handle the traffic all current requirements for coal were met and an unprecedented surplus accumulated in storage.

In the next period of shortage—November, 1919, to late 1920—the roads were called upon to make up for six weeks' stoppage in coal production caused by a nation-wide miners' strike. On November 1, 1919, the union bituminous miners stopped work, and when they resumed, on December 13, the movement of coal was 26,000,000 tons behind the previous year. The railroads were then asked to make up the deficit and to do it on top of the regular current movement of coal and other freight. The extra load came at a time when the export business in coal was unprecedented and when general business was booming. Even so, the railroads could probably have met the demand had it not been for the severe storms of that winter and the switchmen's strike of the following spring. As it was, they established a new record for

total volume of traffic handled, and by the end of 1920 the deficit in coal supply had been overcome and the price was again normal.

Since the resumption of work, in August, 1922, after five months' cessation, more bituminous coal has been offered for shipment than the railroads have been able to carry, but only by investing money in a transportation system vastly in excess of reasonable requirements may the people of the country expect the railroads to make up within a few weeks the consequences of the five months' suspension of a large part of the coal mining.

At the beginning of 1923 the bituminous coal industry presents to the country its usual contradictions. The one complaint common to most of the coal mining territory is that of "car shortage"; yet the outstanding fact is that in spite of a miner's election day and the Christmas holidays, these coal mines produced in December, 1922, over 46,000,000 tons of soft coal. An actual shortage of anthracite has kept domestic consumers on the verge of a buyer's panic, restrained only by the cooperation of the larger coal operators with the Federal and State fuel distributors, yet the 46,000,000 tons of soft coal were probably sufficient for the country's needs for current consumption, even in December, if evenly distributed. The fact that low coal reserves in the hands of the consumers are not being rapidly replenished doubtless adds to the fear of scarcity, yet a full car supply for the country's soft coal mines, as rated by the railroads would have furnished transportation in December for more than 75,000,000 tons or 20,000,000 tons more than the country ever took from the mines in a single month. Plainly, "100 per cent car supply," as based on such inflated ratings, would create a car surplus or a coal surplus far beyond the ability of the market to absorb.

Overdevelopment.

Already in our study we have come to see that underlying these immediate causes of scarcity and high prices—labor difficulties and transportation deficiency—are other causes; namely, the irregularity of demand and the overdevelopment of the mining industry. These basic factors apply directly only to bituminous coal but indirectly they affect anthracite as well, for anthracite is in competition with bituminous coal and the wage scale in the one industry is influenced by changes in the other.

We find that in the bituminous industry since 1890 the mines have averaged, over the country as a whole, only 213 days out of a possible working year of 308 days. These averages, of course, show nothing as to the relative annual earnings of individual miners or their individual opportunity to work. In 1920, a year of active demand, the average time worked was only 220 days, and in 1921, the year of depression, it dropped to 149 days, with many districts showing a figure much below this average. Over a long period comparatively little of the time lost has been on account of strikes and that in the years when there are no strikes the aggregate time lost from all causes is about as great as in those when strikes occur. In the twenty-three years over which the statistical record of strikes extends, the time lost because of strikes has averaged nine days a year, or less than 10 per cent of the time lost for all causes combined.

The other attributed cause, lack of transportation facilities during the annual peak of railroad business, commonly known as "car shortage," enhances the cost to the consumer, but it does not explain the short working year for the miners. When the needed coal is supplied the miner gets it out at one time or another and his work takes so much time and no more. Short working time is the result of overdevelopment in the industry. There are more mines and more miners than the needs of the country require.

A cause of part-time operations of the bituminous mines is the variation in demand for the product, in part annual and in part seasonal. In so far as the irregularity in demand is seasonal, greater in cold weather than in summer, the lost time in summer is unavoidable unless some means can be devised to encourage the storage of coal during the dull months. The seasonal fluctuation in demand varies greatly from one district to another; in some fields of the East it is unimportant; further West it is dominant.

Moreover, our preliminary studies show that even in times of maximum demand the mines as a whole do not work full time. In other words, the mine capacity is in excess even of maximum requirements. Although the country has never been able to absorb in a year more than 579,000,000 tons of bituminous coal, the present capacity of the mines is well above 800,000,000 tons.

The steady increase in the army of bituminous coal miners during the last four years, notwithstanding a lessened demand for their product is also a fact that stands out in the statistical records furnished the commission by the United States Geological

Survey. In 1918, the year of maximum coal output, when 579,000,000 tons were mined, 615,000 men were employed in the bituminous coal mines, nearly 622,000 the next year, over 639,000 in 1920, and in 1921, 663,000 mine workers were employed in producing about 416,000,000 tons. To get a year comparable in soft coal output with 1921 we have to go back to 1910, when 417,000,000 tons were mined, and it is significant that in that year less than 556,000 mine workers were employed, or about a million more tons of coal with 100,000 fewer miners.

The difference between 1910 and 1921 may be viewed by the consumer of bituminous coal somewhat as follows: The manufacturer who bought 10,000 tons of steam coal in 1910 paid for the year's labor of 13⅓ mine workers, whereas if he bought the same amount of coal in 1921 he paid the wages of nearly 16 mine workers. This plainly is not progress, but the mistake must not be made of blaming the miner for a decreased output, for the average miner's daily output in 1921 was 4⅛ tons, taking the 8,000 commercial mines, large and small, in the United States, and in 1910 his daily output was about 3½ tons, although this difference is attributable in part to the increased use of machines. But in 1910 the average bituminous coal mine was operating 217 days as against 149 days in 1921.

This condition of overdevelopment in mines and of surplus number of miners is an underlying cause of the instability of the industry. It means unemployment and intermittent employment to the coal miner and a direct loss to him of earning power. It explains his need and demand for a day wage rate higher that the average for most other industries. It has also adversely affected the profits of the operator and imposed a burden on the consumer.

The seasonal character of coal movement is a serious handicap to the railroads in those districts where it is the rule. If the peak demands of the mines are to be met the carrier must provide equipment for which there is no use in the off season.

The unequal distribution of work between mines, attributed by many persons to the assigned and private car system, is also being considered by the Interstate Commerce Commission at this time. By this system men in one mine may get perhaps only one day's work a week and others, even in an adjoining mine, may get six days' work, causing discontent and strengthening the demands for higher rates of pay applicable to all.

As for the public, the cost of maintaining an overdeveloped industry is reflected in the high price of coal. We do not know accurately the extent of burden, but it may well be measured by the cost of keeping in the industry an excess of perhaps 200,000 miners and their families and the excess investment in mines.

The commission is convinced that there can be no permanent peace in the industry until this underlying cause of instability is removed. Diverse causes have apparently promoted overdevelopment and inquiries are in progress as to the relative importance, among others, of the following: The policy of railroads toward encouraging the opening of new mines and new mine fields as sources of revenue; car distribution rules that permit, if they do not encourage, larger capacity than the market obviously requires; the opening of new mines by large consumers; the establishment of freight rates that encourage the development of new fields; shifts in centers of consumption that abandon old fields and encourage new fields; the difference between union and nonunion wage costs; large scale suspensions in the unionized fields; and irregularity of demand.

Coal Storage.

A preliminary survey indicates that much can be done to overcome irregular demand by encouraging the storage of coal, and the commission can not stress too strongly the great advantage of coal storage during the spring and summer for fall and winter use. This recommendation should apply to all consumers of coal—the railroads, the public utilities, the industries, and the home—and on the measure in which it may be adopted will largely depend the evenness of distribution and the cost of coal to the public during the season of heavy consumption. In addition, it will contribute to more continuous operation of the mines during the summer, distributing employment more evenly throughout the year, thus tending to stabilize the industry. Coal storage, generally adopted by the consumer, large and small, would benefit the carrier systems of the country by equalizing their load. It should have the effect of reducing the price of coal to the consumer.

The report concludes as follows:

The way in which to reduce the overdevelopment of the mining industry is fraught with so many complications, not all of which are evident at first glance, that the commission has not yet had time to ascertain sufficient facts on which to base any

recommendations now to be made to the Congress. While it might be expected that in an overdeveloped industry aggressive competition would have driven out mines with high producing costs and forced prices to the consumer down to a minimum, so many such complex factors have operated to prevent the free play of economic forces that a very detailed and comprehensive investigation is required before a valid conclusion can be reached.

The inquiry involves the whole question as to what is best for the people—free competition, Government or private ownership, regulation or control in the coal industry. Should the operators in given areas be permitted to combine, so that the low-cost mines would furnish the product to the people and the high-cost mines kept in abeyance to meet an emergency, properly regulated as to price and profit by some governmental agency, or should this prime necessity of life and business be left wholly to open competition in the market? This problem is of so great moment with reference not only to theories of government but also to the economic life of the Republic that the view of the commission must be left to its final report.

There can be no satisfactory agreement as to wage rates and no lasting peace between operators and men unless steadier employment can be provided. There can be no satisfactory solution of our transportation problem as long as the railroads are subjected to sudden peak loads of coal traffic at the season when the demands of agriculture and industry are at their height.

The commission believes that the public interest in coal raises fundamental questions of the relation of this industry to the Nation and of the degree to which private right must yield to public welfare. It may be that both private property in an exhaustible resource and labor in a public-service industry must submit to certain modifications of their private rights, receiving in return certain guaranties and privileges not accorded to purely private business or persons in private employ.

Report of Railway Committee to United States Coal Commission.

A PRELIMINARY report prepared by a special committee appointed by the American Railway Association to render such assistance as possible has just been filed with the United States Coal Commission.

Referring to the production and distribution difficulties in the coal industry, the report in part said:

We feel that the real remedy is to be found in the adoption by the American people, speaking through legislative bodies and regulating commissions, of policies which will bring about:

First. Such an attitude toward the railroads as will convince the public that money invested in railroads will receive a fair return, thereby strengthening railroad credit and making it possible to increase railroad facilities so as to care for the growing transportation needs of the country.

Second. Peace in the coal industry and in the railroad industry, with such relations between employers and employees as will prevent strikes, the fruitful cause of interrupted production and restricted transportation.

It has been intimated that an immediate contributing cause of difficulty is found in "inadequate transportation facilities." To what extent the conditions which create this impression are attributable to the abnormal overexpansion of the coal industry by the uneconomic multiplication of mine operations it is not our province to determine. It is enough to point out that there is an immediate demand on the part of an important section of the shipping public for additional rail transportation facilities; and, furthermore, the growth of the country and the increase of its commerce would in themselves constitute sufficient reasons for developing the carriers' facilities to meet the demands which are sure to be made upon them. But this can only be done by the investment of additional capital, and additional capital can be secured only by the reasonable assurance of a fair return, and this assurance will not exist unless the investing public has reason to expect from the Government a liberal and not a repressive attitude.

The report calls attention to the fact that in 1920 a total of 14,766 bituminous coal mines were in operation, an increase of 154

per cent over the total number in operation in 1910, while coal production increased only 37 per cent.

"This shows a continual decrease in the production per mine," the report says. "Had the 1910 tonnage production per mine been maintained in 1920, the tonnage of that year could have been produced by 7,950 mines instead of 14,766."

This means that the railroads were called upon to divide the available cars among 6,800 more mines in 1920 than would have been necessary had the average production per mine been maintained on the 1910 basis. Expressed in another way, it means that the 150,000,000 tons by which the coal production in 1920 exceeded 1910 was gathered from 6,800 additional mines, calling for vastly increased motive power, coal-car supply, and man power for the railroads to serve them all.

While complete statistics for 1922 are not as yet available, such information as is in hand justifies the conclusion that this tendency toward inflation of the bituminous coal industry continues.

The expansion was not confined to the increase in number of mines. The number of cars ordered, based on the rated ability of the mines to produce coal, kept pace with the increase in number of mines, until for the year 1920 the mines ordered cars sufficient to load 830,000,000 tons, which was 46 per cent more than the total consumption of the country.

In October and November, 1922, after the mines got fully under way following the miner's strike, the mines of the United States ordered cars for 165,000,000 tons, which was at the rate of approximately 1,000,000,000 tons per annum, or at the rate of twice the annual consumption of the country.

The outstanding feature is the enormous increase in the number of mines contrasted with the relatively small increase in production, and is, we believe, a prime factor contributing to the plight in which the bituminous coal industry and the country finds itself at this time.

It has been shown that the coal produced increased from 1910 to 1920 37 per cent, while the number of mines increased 154 per cent, requiring a greater amount of transportation service. To meet this increased demand the railroads provided additional coal cars, with an increased aggregate tonnage capacity of 42½ per cent, in comparison with an increase of coal tonnage produced of 37 per cent.

In addition, the aggregate tractive effort of the motive power provided by the railroads increased 53.1 per cent. Furthermore, the investment in road and equipment, for the purposes of coal and other traffic, increased 39.7 per cent.

It is therefore pleasing to note the increase in transportation efficiency from the fact that a greater transportation capacity was provided with a minimum increase in individual units. It further indicates an economical policy in providing transportation facilities.

The results of this policy are to be found in the freight transportation service rendered by the railways during this same period, for in 1920 they handled an increase in freight traffic of 62½ per cent, measured in net ton-miles, compared with 1911. This increased freight service in 1920 was accomplished with an actual decrease in the number of freight-train miles, while there was an increase over 1911 of 46 per cent in the average train load.

The report points out that strikes among certain classes of railroad employees, miners, longshoremen, lake seamen, and tugboat men "have all been potent factors in disrupting the orderly and regular flow of coal from producing centers to their normal markets."

This has thrown undue and abnormal strains upon transportation facilities, causing congestion of railway channels and gateways, which decidedly slowed up movement of loaded and empty coal cars through such congested channels and gateways, causing great loss of car utilization and decreasing the number of cars available. It will thus be seen that general car shortage periods are usually related closely to major industrial disturbances.

It seems that the railways have fairly kept pace with the increase in coal production, but even with such additions and improvements they are unable to provide adequate service to accommodate a sporadic expansion and contraction of the coal industry such as has existed in recent years.

Notwithstanding the fact that, as shown by the foregoing figures, railroad facilities have increased in greater ratio than coal tonnage, and in spite of the fact that there have been frequent periods when a substantial portion of the carriers' equipment

has been stored for lack of traffic, it has also happened that the carriers have been unable to furnish transportation service for the traffic currently offered. In such situations the public insistently contends, as in fact the bituminous coal operators are doing at the present time, that the facilities of the carriers are inadequate. It is of course, certain that the commerce of the country will increase, with resulting increase of traffic, and that periods will continue to recur when the railroads will be unable, as heretofore from time to time, to transport traffic as offered. If the public desires such service, it is obvious that the facilities of the carriers will have to be substantially increased in order to enable them to meet the public demand, which increase will be possible only in the event that railroad credit is strengthened and a more liberal treatment extended than has heretofore prevailed.

Conditions of Harvest Labor in the Wheat Belt, 1920 and 1921.

OWING partly to their general isolation and partly to their traditional individualism agricultural laborers are less articulate as regards their needs and wishes than industrial workers. Farm hands in the United States, generally speaking, do not organize nor make collective agreements fixing hours and wages and other labor conditions, nor do they go on strike in order to alleviate the inequalities of their position. Farm wage bargains are in the main individual ones, the details of which are usually known only to the contracting parties. The increasing urgency of certain phases of the farm labor problem, however, has in recent years produced a demand for reliable data concerning this scattered group of workers, and the departments of agriculture, both State and Federal, have been and are making efforts to secure such information.

The bases of this brief account of the labor problems of the wheat harvest of the Middle West are two reports[1] by D. D. Lescohier, produced in collaboration with the Bureau of Agricultural Economics of the United States Department of Agriculture, whose field agents secured most of the information. The area covered by the investigation extends from Fort Worth, Tex., to the Canadian boundary and includes the Fort Worth and Panhandle districts of Texas, north central and northwestern Oklahoma, the western two-thirds of Kansas, southern and eastern Nebraska, north central and northeastern South Dakota, most of North Dakota east of the Missouri River, and the Red River Valley of Minnesota. The small-grain harvest which yearly necessitates a force of over 100,000 men to handle nearly 450,000,000 bushels of wheat and 600,000,000 bushels of oats, barley, rye, and buckwheat, is a national rather than a local enterprise, constituting, in the words of the author of the reports, "one of the most dramatic episodes in the economic life of the United States," and, it may be added, if individual cases are considered, one of the most romantic episodes as well.

Number and Classes of the Harvest Hands.

OWING to its shifting, seasonal character the exact number of workers in the annual harvest labor force is indeterminable, but it is said to include from 100,000 to 200,000 persons, who may be divided

[1] U. S. Department of Agriculture. Office of Farm Management and Farm Economics (now a part of the Bureau of Agricultural Economics). Harvest labor problems in the wheat belt, by D. D. Lescohier, collaborator. Washington, 1922. Bulletin No. 1020: Preliminary report on harvest labor investigations, 1921, by D. D. Lescohier.

generally into four groups, as follows: (1) Residents of towns of the small-grain States who work for wheat growers in their vicinity; (2) men who from year to year make advance contracts with the farmers for whom they work; (3) transient hands regularly employed on farms, in shops, factories, etc., who temporarily engage in harvest work; (4) transient laborers, really professionals, who "make the harvest" fairly regularly as a part of their year's employment.

Members of the first group naturally constitute a large proportion of the total number of harvest hands. Their proximity to the work gives them the advantage in securing the best jobs. Some of these men follow the harvest northward, but most of them obtain work in the vicinity of their homes after the harvest is past. This is also true of the contract men, thousands of whom contract with the same farmers year after year, often staying on through the threshing and the fall work. The members of these two groups are able to work from 45 to 100 days at the special harvest wages, and since they are in addition spared the traveling and other expenses which must be met by outside workers they realize the most financially from the harvest work and in some instances eventually acquire farms of their own. Transient hands, as the grouping indicates, include both temporary and regular seasonal harvest labor. Their periods of employment are shorter than those in the first two groups and their earnings consequently less.

Data relative to the age when becoming wage earners, education, and previous occupational training were secured for 1920 in the cases of 153 harvest hands and are shown in the table following:

AGE WHEN BECOMING WAGE EARNERS, EDUCATION, AND OCCUPATIONAL TRAINING OF 153 TRANSIENT HARVEST HANDS IN 1920.

Age when becoming wage earners.	Number of cases.	Education.	Number of cases.	Occupational training.	Number of cases.
Under 14 years	26	None	2	Raised on farm	94
14 years	29	Less than fifth grade	11	Trade apprenticeship	7
15 years	30	Fifth to eighth grade	103	None	52
16 years	24	Ninth or tenth grade	13		
Over 16 years	33	Finished high school	5		
Others (in school)	11	Commercial college	2		
		In college	11		
		Unknown	6		

Regular Occupations of Transient Hands.

THE regular occupations of these 153 men varied greatly. Thirteen were farmers, most of whom owned small farms or homesteads and were trying to earn a little extra money for payments on them or for their development; 20 were ordinarily employed as factory hands, mechanics, or in some mercantile undertaking in which work was slack at the time; 11 were students, either college or high school, who were taking advantage of high wages to help put themselves through school; a number were farm hands who were lured from farm to farm by advances in wages. Fifty-five of the 153 men considered were what is known in the wheat area as "floaters," or as they expressed it, they were "on the road"—that is, they were confirmed

migratory laborers whose ambition was simply to earn enough during the summer to carry them comfortably through the winter.

In the investigation made during the harvest season of 1921 the customary occupations of 14,133 harvest hands were recorded, a general classification of which is shown in the following statement:

Agriculture	4,130
Clerical work	209
Common laborers	4,654
Manufacturing industries	1,994
Merchants or salesmen	140
Professions	27
Semiskilled men (expressmen, oil-field workers, restaurant workers)	1,090
Skilled men:	
Building trades	808
Other lines (musicians, miners, etc., not of a factory character)	606
Students	422
Not reported	53
Total	14,133

Of the 153 men for whom this information was received in 1920, all came from humble homes, 94 from farms, the others from cities or villages. Twenty-nine were foreign born. Similar statistics for 1,125 men in the 1921 investigation show that 623, or 55.4 per cent, were born on farms and that 242 of these were still engaged in agricultural pursuits. One hundred and eighteen were common laborers, and the others were usually employed in nonagricultural occupations. One hundred and ten of the 1,125 were foreign born, the Scandinavian countries contributing the largest proportion.

Savings and Living Conditions.

THE savings of the 153 harvest workers investigated in 1920 included real estate, Government bonds, and cash, the cash amounts ranging from "a little nest egg for a rainy day" to $35,000 in one case, invested in a building in Chicago, and $43,000 in another, invested in Pennsylvania coal lands and urban property not described. Forty-three had attempted farming, 27 of whom had been unsuccessful. The savings of 18 "floaters" averaged $345; only 1 possessed more than $500, and 3 reported less than $100. Eleven farm hands on the contrary reported average savings of $4,475 each, and 3 others owned farms or city real estate.

Most of the men spoke well of their employers' treatment of them, admitting that the farmers generally "treated them square." The greatest fault found was with inadequate or uncomfortable sleeping quarters. Board furnished was universally good.

Motives for Following the Harvest.

THE motives which urge men to the harvest fields are, in the words of the author of these reports, "as varied as human life." The investigators found in the fields "farmers whose crops had been ruined or impaired by hail, drought, storm, or fire; some who had not enough land under cultivation to afford them a livelihood, and others who were seeking new locations; students and young men who were looking for experience, a vacation, a chance to see the world; prodigal

sons trying to earn enough money to return to the homes they had forsaken; soldiers and sailors who had developed a thirst for roaming while in the Army and Navy; and men attracted by the lure of the great out-of-doors or the pleasure of harvesting." But reduced to their simplest terms the strongest reasons were (1) lack of employment, either permanent or temporary; (2) the hope of making "a big stake"; (3) the lure of adventure and unusual experience; and (4) habit.

With the "seasonal floater" the "harvest is a habit" whose yearly fascination he is unable to resist. Thousands go to the harvest fields in order to satisfy their cravings for adventure and new experiences. "The grain harvest of the Central West," says Mr. Lescohier, "is one of the few big adventures left in American life. The frontier and the Indians have been conquered; the lands of the West have been put under the plow; the secret resting places of the gold and silver have been explored and exploited; and the harvest mobilization now remains the most dramatic, adventurous experience in the industrial life of the Nation. From every State in the Union men of a hundred different occupations come to rub elbows for a few days or weeks in the garnering of millions of bushels of grain over a territory adequate for an empire, and then vanish one by one back into the everyday walks of life. The quiet pursuits of agriculture become dramatic; imaginations are fired; the glamour and lure of adventure prevail over the humdrum of life."

Difficulties Operating Against Satisfactory Employment Conditions.

FROM the standpoint of the farm hand a most important difficulty in harvest work is the fluctuation in the demand for labor. Owing to the seasonal character of the farming industry, especially of the small-grain part of it, the demand for harvest labor is of necessity many times greater than that during the planting and growing of the crops. This means irregularity of employment for many of the men. At the height of the season the harvesting in each county or section is usually all completed about the same time. The army of workers must then either redistribute themselves in the vicinity or make the next harvest farther north, entailing in either case a loss of time and wages and in many instances the additional expense of travel. The report for 1920 finds that on the average 154 men spent 26 days in the harvest area, working 15 days and losing 11 days.

Similar data for 998 men secured in 1921 show that these men, on the average, worked 8.34 days out of 16.32 days in the harvest area, losing nearly 50 per cent of their time. In comparison with the large number of men engaged in the grain harvest these are rather small numbers upon which to base general deductions, but they indicate the general tendency to irregularity of employment prevailing in an important industry.

Climatic conditions that retard or advance the time of harvest also affect the volume of the demand for labor, while damage to crops by rust, grasshoppers, drought, hail, etc., which materially reduce the output, the concentration of labor during the threshing season, and variations in wage rates also tend to produce conditions eventually resulting in irregularity of employment.

It follows from the foregoing that an outstanding labor problem of the wheat area is the development of adequate machinery for the mobilization and distribution of harvest labor. Efforts have been made by State labor offices to estimate with some degree of accuracy the amount of labor which will be needed during a certain season, but the only known definite method for computing the number of harvest hands needed for a certain season was that adopted by a group of county agents at Manhattan, Kans., in November, 1919, and later put into operation in Kansas. Describing the method the report says:

> This formula gives a reasonably conservative estimate of the amount of labor needed. The Office of Farm Management and Farm Economics had found that the average header crew consists of 6 men; the county agents of Kansas had found that a county is usually harvested in about 10 days; and it was found that a crew harvests, on the average, 30 acres a day. Assuming a supply of labor on the farm averaging 1.3 men to a farm, the following formula was devised:
>
> Divide the number of acres of wheat in the county by 50, subtract the man power on the farms and that available from towns within the county. The difference represents the men needed from outside the county. This formula may be expressed as follows:
>
> A=number of acres of wheat within a county.
> mf=man power of the farms (number of farms multiplied by 1.3).
> mt=man power available from towns within the county.
> mo=number of men needed from the outside.
>
> $$\frac{A}{50}-(mf+mt)=mo.$$
>
> While this formula would not apply accurately to counties that do not use the headers, it is better than wild estimates for computing the demand in any wheat county.
>
> Applying this formula to the 8,943,000 acres of wheat harvested in Kansas in 1920, the State farm demonstrator estimated a need for 50,000 men in addition to those resident in the wheat counties.

Published statements in newspapers regarding prospective labor needs and prevailing wage rates, advertising by public and private employment agencies, estimates given out by railroads, and industrial information passed on from one workman or group of workmen to another are important means of attracting men to the harvest fields, and each without the exercise of great care has the serious weakness of securing an oversupply of labor at some places while at others grain wastes for lack of hands to gather it. "To be reliable," continues the report for 1920, "advertising must be centralized and coordinated. To give out accurate forecasts of the need for harvest labor, all agencies need information upon the acreage to be harvested, the condition of the crops in each locality, the available local labor supplies, weather conditions, the agencies which feed labor into the harvest, the experience of preceding years, the unemployment that prevails in the cities of the central part of the country and the wages current there, and the extent to which the labor employed in the southern wheat area can be used in the northern area. Only a Government office in touch with responsible correspondents throughout the wheat belt and able to combine and analyze their reports is in a position to appraise correctly the harvest labor needs or to forecast harvest wages."

Since 1917 the United States Department of Labor through its Employment Service has done much to furnish reliable information

not only for the mobilization of harvest labor but also for its distribution. Through the cooperation established between this service and the State employment agencies, the United States Department of Agriculture, and the State and local agricultural officials, the work of existing public employment agencies has been centralized and made more effective, crop information compiled by the United States Department of Agriculture has been furnished the Employment Service, and county agricultural agents and farm bureaus have used their good offices to place harvest hands where they were needed.

Each of the States in the wheat belt has one or more permanent State employment offices and during the rush season establishes temporary offices, some financed by Federal funds, others by State funds, and still others by Federal and State funds combined. These offices merely distribute harvest labor to the various local representatives, who in turn place the men with the employing farmers.

The heavy expenses of transportation, even if men seeking work during harvest live in the wheat belt, discourages some of the best hands from a second venture. Expenses incurred by 2,643 transient hands before beginning the harvest work in 1920 ranged from less than $10 in the cases of 663 men to $100 or more in the cases of 3 men. It is the consensus of opinion among employment officials, agricultural officials, and farmers' organizations that the harvest labor situation would be improved by the running of excursions to and from the harvest fields, which would bring necessary harvest hands to the places needing them. Canada has adopted this system with effective results in controlling the supply and distribution of harvest labor.

Wages of Harvest Labor.

THE variation in harvest wages which occurs not only as between different States but also as between the different counties and sections of individual States is a perplexing question from the standpoint of both the worker and the employer. Both are dissatisfied; one because he does not receive as high a daily wage as is paid elsewhere, perhaps not 10 miles away; the other because he feels compelled to pay the higher wage rate set by his neighbor. According to the report for 1920, farmers in some sections deliberately lured labor from near-by farms by the offer of better wages. Where the men were organized the farmers were forced to meet their demands; where the farmers had agreed upon a standard wage, as in Kansas, the men were obliged to accept the established rates. Two distinct needs as regards harvest wages are, the author believes, apparent: (1) A standard wage known to everyone concerned, in each locality; (2) wages as uniform as possible, with due consideration given to the varying conditions in the different localities. The daily wage rates paid harvest hands during the seasons 1920 and 1921 are shown in the table following.

DAILY WAGES OF HARVEST HANDS IN THE WHEAT BELT, 1920 AND 1921, BY STATES.

State.	1920	1921
Minnesota	(1)	(2)
Nebraska	$6.00 to $7.00	$3.00 to $4.00
North Dakota	[3] 5.50 to 6.50	3.50 to 4.00
Oklahoma	6.00	4.00 to 5.00
Kansas	[4] 7.00	5.00
South Dakota	6.00 to 7.00	3.00 to 3.50

[1] About 50 cents lower than those in North Dakota.
[2] About the same as those in North Dakota.
[3] Approximately.
[4] In central, north central, and northwestern Kansas. In southern counties Oklahoma wages prevailed.

Statistics based on the earnings and the expenses of 1,022 men employed in the harvest of 1921 showed that average earnings amounted to $40.09, while average expenses for subsistence during unemployed periods were $15.88, or a little more than one-third of their earnings.

Conclusion.

AS A result of his study of this phase of agricultural labor the author reached the following conclusions regarding possible improvement in the employment conditions of workers in the grain harvest:

The continual fluctuation in harvest labor demand, caused by climate, pests, etc., makes it imperative that additional means be found to facilitate the spread of reliable information concerning harvest conditions among those who constitute the potential supply of harvest labor. The daily bulletins issued by the Federal Employment Service during the winter-wheat harvest may be cited as an important step in this direction. Without the further development of such a service, the mobilization of the army of harvest laborers must remain largely a matter of guesswork.

Wildcat advertising by misinformed or unscrupulous persons causes the loss of much time and money and even produces distress among transient harvest hands. Newspapers outside of the wheat belt frequently are misled into giving publicity to erroneous statements about the demand for harvest labor.

Most of those who "make the harvest" get no more than a mere subsistence out of the venture. The comparatively small number who save money are those who, through fortunate location or foresight, are able to secure steady work without being forced to make long "jumps."

It seems desirable that a definite standard wage for each State, or perhaps for each distinct region within States, should be established annually.

While it is impossible that State or regional standards should be uniform, such standards should be as nearly uniform as possible under the prevailing conditions.

Employment offices must follow the policy of adhering to the "going wage." [2]

Women's Industrial Conference, Washington, D. C.

THE industrial conference called by the Women's Bureau of the Department of Labor held its first session on Thursday morning, January 11, 1923. In opening the proceedings, Miss Mary Anderson, Director of the Women's Bureau, called attention to its representative character. It was representative of the Union as a whole, since delegates were present from 42 States, covering every part of the country. It was representative of industry as a whole,

[2] The expression "going wage" is used here to signify that wage which the majority of farmers are willing to pay and at which labor can be secured for them.

since, either by speakers or delegates, employers, employees, personnel workers, social engineers, and industrial experts of every kind were represented. And it was representative of the varied life of the Union since delegates were present from over 60 national organizations dealing with social, religious, welfare, industrial, educational, and vocational problems. Either among delegates or speakers practically every variety of attitude toward industrial problems had its representative.

Miss Anderson also stressed the fact that the aim of the conference was educational. It was not proposed to take any action unless a desire to do so developed in the gathering itself. Since the delegates had not been instructed by their organizations, it would clearly be unfair to ask them to adopt any definite program of action, and there was no intention of doing so. The purpose was to study and discuss the problems growing out of the industrial employment of women in the hope that this would help to promote local campaigns for education and perhaps action on these problems.

The first speaker of the day was Hon. James J. Davis, Secretary of Labor, who extended a cordial welcome to the delegates both on behalf of the President and of the Department of Labor. The President, Secretary Davis explained, had hoped to welcome the assembly in person, but being prevented by stress of official duties from doing so had sent a letter of greeting, which was read to the conference, expressing not only his welcome to this particular assemblage, but his approval of such gatherings:

> Long before women were called to that broader participation in public affairs, which is now both their duty and the public's advantage, I was personally strongly convinced of the great benefits which would be derived from a more insistent expression and more general consideration of woman's point of view in relation to social and industrial concerns.
>
> The revolutionary change that has taken place in the status of woman in the world of business and affairs has not only justified but necessitated that broader and more intimate activity of women in behalf of the particular phases of public and social interests which especially appeal to them. Conferences and continuing organized activities of the kind represented by the present gathering are certain to be of very definite public benefit, and I have much pleasure and satisfaction in welcoming the present gathering to Washington, and in expressing the hope that its considerations may prove as helpful as its most ardent supporters could possibly wish.

After reading the President's welcome, Secretary Davis addressed the conference on the general subject of women in industry, stressing the need of protective legislation as to hours, wages, and working conditions, and unequivocally declaring against the industrial employment of mothers of young children. Such employment, he declared, is an outrage.

> Take out of industry these mothers who have babes to care for. An economic structure which is anywhere based upon the labor in industry of the mothers of the nation is false and sooner or later it will come crashing down about our heads. If in this conference we can do this one thing, if we can each and every one of us go hence filled with the determination to stamp out the need for the industrial exploitation of the mother whose babes need care, we shall have accomplished much.

Equal pay for equal work, the Secretary declared, was a mere matter of justice, yet in many cases it is difficult or impossible for women unaided to secure this. Fair wages, regulation of hours, and the enforcement of healthful working conditions are required in the public interest, since to-day more than one-fifth of the women of the

United States are employed in gainful occupations. Whatever contribution woman may make to industry it can not equal in social value her potential contribution as a mother, and for its own sake society must safeguard this potentiality.

The first speaker at the afternoon session was Mr. Charles Cheney, representing the National Association of Manufacturers, who spoke on the topic: What woman workers mean to industry. Women mean primarily, he said, a supply of labor. Each industry has its separate labor requirements and will seek its own source of supply. In doing this it must consider, first, the kind of worker best suited to the work to be performed; second, the number and character of workers available; and third, the relative economy of the employment of various kinds of workers, allowing for the natural and legal limitations placed upon each kind. Industry will give employment to women or to men either because they are better adapted to the work in question, or because scarcity of labor forces it, or because their work can be secured at the lowest cost. "It must be remembered that the lowest cost does not necessarily mean the lowest wage." Because of this natural and inevitable tendency of industry to seek the kind of labor it finds most profitable it is doubtful whether special protective legislation may not prove a grave handicap to women, tending to exclude them from many kinds of industrial work. This would be unfortunate, because experience shows that it is desirable that industry should be so organized that in every locality there should be a fairly even distribution of the amount of work open to men and women. When there is a scarcity of work for women they compete among themselves for employment until they bring down the wage level unreasonably, and even their low wages will not secure employment for all.

In discussing the limitation of hours for woman workers Mr. Cheney pointed out the difficulty of maintaining different schedules of hours for men and women. Ordinarily their work is interdependent, so that if the women's hours are limited the men's are also in fact, though not in theory. "The short-time workers must therefore be chargeable not only with the loss due to their own failure to function, but also with the consequent loss of efficiency of the men as well."

The most controversial question connected with the employment of women, Mr. Cheney held, is the proper wage scale. In discussing this, it is necessary to bear in mind the many factors which enter into the value, actual and potential, of an employee to an industry. The mere number of hours a worker is employed or the amount of piecework turned out is a very imperfect measure of this value. The skill due to training and long experience, ability to turn from one occupation to another, initiative, willingness to take responsibility, and regularity of attendance all count heavily in determining the worker's value to the employer. As a general rule, women fall behind men in these and other factors, and the difference between their wages and men's reflects this variation. There is great need of a careful study of the whole wage problem in order to secure an accurate and scientific basis for fixing wages, but such a basis can not be reached by a mere demand for equality without considering the many factors which are required to make up real equality.

Miss Mary Van Kleeck, of the Russell Sage Foundation, followed Mr. Cheney, her topic being: What industry means to woman workers. It means, she said, first, an opportunity to earn; second, a test of endurance; and third, a challenge to take part in the construction of a better industrial order. It means not only an opportunity to earn, but also to share in the joy of work suited to her capacity, and in the sense of power which comes from economic independence. Considering the various factors involved in opportunity this should mean: (1) A chance to choose freely the occupation for which she is best fitted; (2) a chance to be trained for it; (3) a chance to advance to more important work in her chosen field; and (4) fair compensation for the work she does.

Miss Van Kleeck stressed the need of thinking in terms of fact, and of basing any attempt at improving conditions upon knowledge of what conditions really are. She pointed out that we have now a large and constantly increasing body of data collected by governmental and private agencies bearing upon the conditions under which women are employed, their hours, wages, home conditions, and so on, and that it is essential to take this into consideration in proposing any plan for improvement. She also urged that in considering employment problems weight should be given to the interest of society in the matter. Employers and employees are not the only interested parties; society as a whole has a strong interest in the right adjustment of these matters, and no solution which loses sight of this fact is likely to be satisfactory. Legislation, based on a body of facts and recognizing the interests of the public as well as of the two parties actively concerned, is likely to be a more effective method of remedying undesirable conditions than the unaided efforts of the women affected.

So far, laws passed to limit the working day for women have resulted in the recovery of leisure for both men and women in the same industry. The time may come when men, too, may discover the need for laws limiting their hours. Meanwhile, the limitations of our Constitution and the prevailing opinion in industry itself show that the practical next step is to make more adequate the labor laws which establish better standards of employment for women, and therefore raise standards for all workers.

Mrs. Raymond Robins, president of the International Federation of Working Women, speaking on the same topic, made a strong plea for a better industrial order for workers regardless of sex. The industrial problem of to-day, she pointed out, "is the struggle of the group at the bottom trying to find its way up to the larger things of life." It will not be settled until the less fortunate have obtained a larger share of life. In this struggle women have a special interest, and here they can bring to bear their political power.

We are more deeply concerned than the men with feeding, clothing, and housing the world. We are not theorists. We know that we can not feed and clothe and house the children, we can not take them out of the factories into the schools, we can not warm our homes, on theories. We are realists. We are weary of the haggling, the debates, the theories of the masters of the world in the face of suffering and cold and hunger. The earth is rich with the means of life. We want bread and coal and the right to an education; we want our children in the schools and out of the factories; we want peace, not war; we want peace. At each election we intend to test the party in power by the facts of our human welfare. These simple understandable facts will, I believe, be the determining factor in the votes of women. Men and women of eager brains and strong hands are ready to work. We have the workers; we have the means; what is it that is wrong?

The morning session of Friday, January 12, began with an address by Mrs. Florence Kelley, executive secretary of the National Consumers' League, on home work. She called attention to the fact that while the kinds of work sent out to be done in the home have changed within the last 20 or 30 years, it is doubtful whether the practice has diminished. The introduction of the parcel post and the motor truck has made it possible to send such work out through a much wider territory and has immeasurably increased the difficulty of keeping it under official supervision. From a social standpoint, one of the greatest evils of home work is that it brings the whole vast body of possible home workers into potential competition with the factory workers and thereby enables the unscrupulous employer to beat down wages and to block efforts at improving conditions. England and Australia have found it possible to combat this feature by the establishment of wage boards in sweated industries, which set a minimum below which wages, whether in the shop or the home, may not fall. This has not, in England, abolished home work, but it has made it impossible for the employer to use the potential competition of home workers against the shop or factory workers.

Dr. R. A. Spaeth, of Johns Hopkins University, spoke on the topic, Health standards for women in industry. The change in industrial methods, he said, which has brought it about that women now carry on their share of the industrial work of the world in factories rather than in the home, demands a careful study of working conditions to see whether special restrictions should be placed on the work of women. The most fundamental difference between men and women is the child-bearing function of women, and this is the outstanding reason for special health legislation for women. Such legislation should be based on more careful study of facts than is the case at present. For instance, women certainly ought not to lift weights exceeding some definite amount, but the amount fixed by law in different places ranges from 15 to over 50 pounds. Obviously, some of these limitations are wrongly fixed. As to matters of general health, improvements would be possible for both men and women without detriment to industry if jobs were more closely analyzed, if machinery were utilized wherever possible to take the place of human strength, if tools were adapted to the height, strength, and other physical peculiarities of those expected to use them, and if workers were taught the most effective method of applying their strength.

The employment of married women presents the most difficult problems of health regulation, because motherhood exposes women to dangers from which other women are free. A period of rest before and after childbirth has been discussed, but this seems impracticable, as it would place the mother at a distinct disadvantage as compared with single women. "College professors are the only people who can ask for three months off and get away with it." Light employment for mothers may be possible when labor is scarce, but not under ordinary conditions. The best solution would appear to be the payment of a wage to husbands which would render it unnecessary for mothers to enter industry. Another way might be to permit the giving of birth-control information by industrial physicians to industrial women. This might be worth trying, but would not be a panacea.

Apart from the liabilities involved in the maternal function, there is not much evidence that women are more seriously affected by industrial conditions than men. It is very doubtful whether it is desirable to attempt to secure a shorter workday for them than for men, since this places them at a disadvantage in regard to employment. The matter of domestic duties outside of the hours of industrial employment constitutes a serious problem which it is difficult to reach through legislation. For women the task or piecework system has some advantages, since it gives them some choice as to the length of time they shall work. In general the employment of women calls not so much for special conditions as for an effort to make conditions the best possible for both sexes.

Doctor Spaeth's address was followed by considerable discussion from the floor, in which some of the delegates voiced their dissent from the idea that the task system is desirable, or that instruction in birth control is an advisable method of meeting the problem of the mother in industry. Miss Lathrop, former head of the Children's Bureau, indorsed Doctor Spaeth's statement that the wages of men should be made sufficient for family support, so that married women need not enter industry. The family is likely to be for some time to come the social unit, and the home needs the mother's care. Maternity is not only a function but a profession, and the mother should not be obliged to take on a second vocation.

Miss Mary Gilson, of the Joseph & Feiss Co., Cleveland, spoke on what woman workers mean to industry. In that plant there are 1,000 woman workers and 500 men, and the company has tried out the effect of shorter working hours, establishing a five-day week. This has proved very popular among the women, but the men do not seem to care so much for it. One effect has been a great improvement in regularity of attendance among women.

Women's wages formed the subject of discussion at the afternoon meeting. The first speaker was Mrs. Maud Swartz, president of the National Women's Trade Union League. Mrs. Swartz called attention to the expense of the low wage in terms of excessive turnover and frequent industrial disputes, and pointed out that the underpaid worker must be provided for by subsidized agencies in case of intermittent employment, and illness or death in her family. Passing the costs of higher wages on to the public, she contended, is not so formidable a thing. In illustration of this she cited a case in which the price of candy had to be advanced only one-fourth of a cent a pound to offset a raise in wages of $2.50 a week (from $14 to $16.50) for the girl workers in a certain candy factory.

The second speaker was Miss Sophonisba P. Breckenridge, associate professor of sociology in the University of Chicago, who declared that numerous misapprehensions concerning women's position had resulted from "the complicated character of the two demands, an occupational wage and equal rights of admission to all occupations. Even high courts think women's political emancipation has been accompanied by her occupational emancipation." The working out of this problem rationally and permanently must be free from discrimination against women on the basis of sex, and due consideration must be given to the different groups which constitute the total

number of male wage earners, as well as to the different groups composing the total number of woman breadwinners.

The United States is clear that neither young girls nor young boys are to be conscripted by a low wage scale for men into the army of wage workers. An equally clear determination is working itself out to the effect that mothers with young children are to be allowed to devote their strength to the nurture of the children and the building up of sound family life. If they have husbands who can work, the mothers and young children are to be maintained out of the husband's earnings; and two interesting bodies of doctrine are being developed, calling for an adequate wage for husbands who can and will work, and disciplinary measures for those who can but will not work. These are to be supplemented by mothers' aid laws for the wives of those who can not work.

Of unmarried workers there are two groups, those in the category of learners and those fully competent. For the first, the demand should be for the widest opportunity for choice and training. For the fully trained, the demand should be for an occupational wage, according to tests set up, and for women the great demand must be for opportunity to submit to those tests.

In discussing the question of women's dependents, Miss Breckenridge suggested the need of better definitions of this term, and mentioned that recently several surveys had been made on the subject, the value of which was less than it would otherwise have been simply because of the lack of a recognized definition of the word "dependent."

Discussion from the floor gave further emphasis to this point. Mention was made of a study recently made in Indiana concerning the aid given by women to their families and of an inquiry conducted by the Women's Educational and Industrial Union of Boston into working women's provision for their old age, as showing the importance of a further investigation of the extent of financial responsibility for their families assumed by woman wage earners.

Discussing the general subject of women's wages, several colored delegates mildly intimated that the white women did not take the interest they might in the wages of their darker sisters, one delegate making a special plea for cooperation between the white and colored women to work out labor standards for the kitchens of the country.

On Saturday, January 13, the morning session was devoted to a consideration of labor legislation for women. Miss Melinda Scott, of the United Textile Workers of America, spoke from the point of view of a trade-union organizer, to whom legislation is a necessary device until women shall be sufficiently organized to help themselves. Legislation is necessary to secure a fair deal for the child; the mother needs rest before and after childbirth, and child labor should be prohibited by Federal legislation. A reasonable degree of education, at least through the high school, is needed to fit the child for his part in life, and a playtime in childhood is his right. Legislation is necessary also, at present, to secure fair hours for the woman worker. The 48-hour week where tried has resulted in an improvement in quantity and quality of output and in greater health and safety to the worker. Nightwork for women must be eliminated. The majority of women so employed are married, and they can not work at night and care properly for their homes and children in the day; also, night work involves special dangers to health and morals. Legislation is also needed to do away with home work, to insure proper sanitary conditions in factories and shops, and to establish minimum wage standards. It should also be used to establish proper compensation for workers injured by accident or industrial disease.

In brief, while only cooperation between employers and employees can really solve the problems of employment, legislation can be used as a temporary measure to alleviate some evils and prevent others.

Miss Merica Hoagland, of the Diamond Chain & Manufacturing Co. of Indianapolis, the second speaker on this topic, frankly opposed special protective legislation for women. As a citizen, she expressed an unwillingness to give up her right of contract; as a member of an industrial organization, she did not wish to have "square dealing policies" interfered with by arbitrary legislative limitations.

> Through the series of studies of "Women in Industry" being made by a State federation of business and professional women of which I am a member, the conviction is growing stronger and stronger that regulation through the cooperation of owners, managers, and those employed, is far preferable to the proposed protective legislation, imposed without the consent of the majority of those affected by it, and executed by tax-supported more or less autocratic bureaus or commissions.
>
> While it seems to some of us undesirable to repeal at one fell swoop the protective legislation enacted for women in the past, it also appears not only desirable but quite necessary that henceforth labor legislation shall be equally applicable to adult men and women, to whom equal economic opportunity shall be one of the achievements of the near future when the repeal of discriminatory laws shall have been gradually accomplished, as better methods of regulation gain acceptance.

The labor legislation equally applicable to adult men and women, Miss Hoagland thought, might properly include provision for "better physical surroundings in well-lighted, heated, and ventilated buildings, with proper maintenance of machine and safety appliances; personal hygiene and prevention of health hazards; compensation extensions; vocational training, information, guidance, and placement; housing and transportation; reduction of seasonal unemployment; adoption of work standards and of uniform employment records.

The two addresses of the morning, representing opposite views, were followed by earnest discussion which was continued through the afternoon. While no formal resolutions were adopted, it appeared that the conference as a whole strongly approved protective legislation for women.

The conference closed on Saturday night with a dinner, at which various speakers emphasized the need of having women among the officers assigned to enforce labor laws.

Throughout the conference the speeches and the discussions in general brought out four points, as being, in the opinion of the majority of the gathering, of special importance:

(1) The extension of laws protecting children from industrial employment, securing for them a fair education, and giving due care to their healthful physical development.

(2) Protective legislation for women, covering hours, wages, night work, and health conditions of employment.

(3) The necessity of preventing the industrial employment of mothers, and of seeing that they are adequately cared for in some other manner.

(4) The necessity for basing attempted action on facts, and the consequent importance of supporting all reliable fact collecting agencies, such as the Federal and State bureaus and various private agencies engaged in the study of industrial problems.

Trend in Policies of Employers' Associations in Various Countries.

A SURVEY of recent changes in the policies and activities of employers' organizations in various countries was published in the December, 1922, issue of the International Labor Review. According to that article, "the imperative necessity of reducing costs has been the dominant thought behind the policy of employers' associations during the past 18 months," the three principal methods in favor for effecting such reduction being wage decreases, longer working hours, and greater efficiency.

Wage reductions.—In nearly every country changes in cost of living have been regarded as a "sufficient reason" for adjusting wages. It would seem, however, that "the majority of employers are opposed to the rigid application of this principle and argue that the only plan which can be considered as economically sound is to pay what the industry can afford."

As a broad generalization it may be said that on a rising market variations in the cost of living are usually accepted by employers as affording a reliable basis for wage adjustments; but on a falling market the essential consideration is "what industry can bear," and the extent to which the cost of living is accepted as a modifying factor usually depends upon the bargaining power of the parties concerned.

In France and Germany many employers have resorted to family allowances or special grants, from central funds contributed by groups of employers, to workers with family responsibilities.

In the matter of wage negotiations the general trend of employers' associations is "toward uniform policy but decentralized action." Norway, Sweden, Denmark, and Finland offer an interesting illustration of the adoption of these methods along international lines. A complementary policy of employers' organizations in countries where there is the least centralization in wage negotiations has been the institution of "propaganda against existing wage scales, which in some industries have continued above the general level."

Hours of work.—The movement to increase the hours of the working day, or in any event to oppose any further reduction of hours, has been more or less intense in all industrial countries, but particularly so in western Europe—France, Belgium, Denmark, and Sweden having been very active in such campaign. It must be remembered that the main motive back of this movement "is not increased production, but reduction of costs." Parallel, therefore, with this attempt to lengthen the working-day is frequently found a movement for the organization of short time. Objection to the 8-hour day has been especially striking in some industries, for example, the building industry and industries largely dependent upon machinery.

The suggestions for amending the regulations for working hours vary, of course, in different countries, but may be classified under a few principal heads. Besides the proposal "that arrangements be made to distribute the hours of work over a longer period than a day or week" the following typical propositions have been offered:

(1) Suspension of the 8-hour day act till the general economic situation permits of its enforcement, or until an international agreement can be arrived at.

(2) Legal recognition of agreements between employers' and workers' associations providing for modifications in the hours of work.

(3) Permission to work extraordinary overtime as a transitional measure, e. g., 300 hours per annum for 7 years.

(4) Extensive exemptions, according to the needs of the district, industry, and type of work.

Outside of continental Europe employers' organizations have not been so concerned regarding the regulation of the hours of labor, possibly because such hours are, on the whole, less regulated in other parts of the world.

Employers' associations in Norway, Sweden, and Poland have declared themselves opposed to holidays with pay.

Increased efficiency.—It is stated in the article that employers' associations in the United States have given more attention to the matter of reducing costs by greater industrial efficiency than similar organizations in any other country.

By way of illustrating this declaration reference is made to the "deep impression" made upon employers by the report on "Waste in Industry" prepared by the Federated American Engineering Societies, the full recognition by business men of the importance of industrial statistics, and the great interest being taken by such men in the study of business cycles.

Employers' opposition to trade-union practices tending to restrict output is reported as being especially noticeable in the building trades in the United States.

The Federation of Swedish Industries has proposed that a governmental commission be created for promoting the standardization of industrial products.

In referring to the movement among employers for vocational and apprenticeship training, attention is called to the schemes for rapid and strictly practical training of apprentices in various industries in the United States, particularly in the metal, printing, and construction industries. Mention is also made of the interest employers' organizations in France, especially the chambers of commerce, have been taking in apprenticeship and the improvement of training courses in the national technical schools.

Reducing costs to increase demand.—A few far-seeing employers have pointed out the need of studying closely the final results of methods used in the reduction of costs in order to make sure that such methods are of a character to increase effective demand.

Industrial control.—The recent so-called "open shop" campaign in the United States is cited as an example of the counter movements by employers to meet "the incursions made by workers' organizations upon managerial functions." The Engineering and National Employers' Federation in Great Britain has declared in connection with the engineering lockout in the spring of 1922 that "it is essential in the interest of the country, the work people, and the employers that freedom of management should be maintained in the works." The General Confederation of Italian Industry considers it a duty to oppose by every means at its disposal the growth of workers' control of industry, as the workers consider such control "a step toward revolution and the abolition of the present economic system."

Conciliatory attitude of employers.—The report of the New Jersey Chamber of Commerce and of the committee on industrial relations of the Merchants' Association of New York are cited as manifestations of a conciliatory attitude on the part of certain employers' associations in the matter of industrial relations. A brief description is

given of the National Alliance of Employers and Employees in Great Britain, recently reorganized on a national scale, which has for its aim the establishment of a better understanding between industrial and labor leaders.

Employers' proposals for averting industrial disputes.—Employers in various countries are in favor of works councils as means for avoiding industrial controversies. Some space is accorded the recent efforts in the United States to establish industrial courts and to the proposal supported by some employers in Great Britain for an "industrial truce" of 10 years, during which period strikes and lockouts would be prohibited.

Employers' responsibilities for welfare of workers.—The objections to trade boards in Great Britain, to bills on family allowances and social insurance in France, to bills on unemployment insurance, employment exchanges, and the regulation of trade agreements in Germany, and the demand for "less government in business and more business in government" in the United States show the tendency of employers' organizations to oppose anything like "paternalism" or "bureaucratic mismanagement" by governments. On the other hand, these organizations have displayed a readiness to cooperate with governments in the drafting of legislation and the working out of industrial problems.

Welfare activities are reported as less marked than in the period preceding the recent industrial depression. The safety movement, however, continues to hold the interest of employers' associations.

Organization.—Progress is reported in the formation of new employers' associations and in the development of existing bodies. The International Organization of Industrial Employers is now well established and includes a recently created agricultural section.

Together with the movement toward greater centralization in the organization of employers' associations, a certain trend toward decentralization in administration is discernible.

Industrial Conditions in the Almond Industry of Italy and Spain.[1]

ALMOND growing is an industry of Mediterranean countries dating back to prehistoric times. While almonds may be grown as far north as latitude 45° their culture is followed chiefly along the east coast of Italy in and about Foggia and Bari, along the east and south coasts of Spain from Barcelona to Malaga, and in the islands of Sicily, Majorca, and Iviza.

During 1920, according to data compiled by the Italian Office of Agricultural Statistics, Italy produced 303,352,960 pounds of almonds as compared with 140,212,560 pounds in 1915, while the total production of these nuts in Spain during the season of 1920–21 is estimated by the Comite Information de Producciones Agricolas at 287,325,957 pounds gathered from 18,299,656 trees on an area of 194,570 acres.

[1] United States. Department of Agriculture. Bureau of Agricultural Economics. The almond industry in Italy and Spain, by Edward A. Foley. Report F. S. 22, Nov. 1, 1922.

The Italian almonds are grown chiefly by peasants who own little farms which in many cases have been handed down as the generations came and went. In the Bari district these peasants are as a rule poor and illiterate and follow the most primitive methods of almond culture. They live largely from the crops raised on these small holdings, their necessary cash expenses being met by the income from their almonds. On the larger estates more modern methods of cultivation are followed, but cheap hand labor, receiving considerably less than 50 cents a day, is employed for everything. Special efficiency is, under these conditions, naturally not demanded. The shelling and grading of the almonds for export are carelessly done by hand by women, who receive about 97 cents a day.

In the Balearic Islands almonds are grown both by the large estate owners and by the peasants on their small farms. On Majorca, the largest island of this group, the almond crop is the cash crop. The natives here as a rule hold their nuts for good prices, and shell them only when the demand is promising. Peasant labor on the islands receives from 20 to 40 cents a day. On the Spanish mainland the grading of the almonds is done by women paid at the rate of 80 cents or $1 a day. Hand grading is followed because it results in less damage to the nuts and also because hand labor is cheap and abundant.

While the same low standards of living and backward methods of farming prevail among the peasant farmers of Spain as of Italy, considerable improvement has been shown, especially in Italy, in the methods of almond culture and export during the past few years. A progressive spirit is being inculcated in the Italian peasants by the Department of Agriculture. At Bari and Sicily the departments of agriculture are "quite up to date and are working with the farmers and also with the trade." This aid, the author believes will mean much in the future.

Commenting upon the possibilities of American competition with these countries in almond culture Mr. Foley says:

* * * American growers with their high standards of living can never hope to bring their product into successful competition with the almonds grown in Italy and Spain where the needs of the peasants are so easily satisfied. It is therefore important that American growers treat the almond-growing industry as a luxury business only, so that by raising only the finer grades and by intensive cultivation they may overcome, if possible, the cheap labor and low standards of living that prevail in Spain and Italy.

PRICES AND COST OF LIVING.

Retail Prices of Food in the United States.

THE following tables are based on figures which have been received by the Bureau of Labor Statistics from retail dealers through monthly reports of actual selling prices.[1]

Table 1 shows for the United States retail prices of food on December 15, 1921, and on November 15 and December 15, 1922, as well as the percentage changes in the year and in the month. For example, the price of strictly fresh eggs per dozen was 70.5 cents on December 15, 1921; 64.5 cents on November 15, 1922; and 66.5 cents on December 15, 1922. These figures show a decrease of 6 per cent in the year, but an increase of 3 per cent in the month.

The cost of the various articles of food,[2] combined, showed a decrease of 2 per cent in December, 1922, as compared with December, 1921; and an increase of 1 per cent in December, 1922, as compared with November, 1922.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE DECEMBER 15, 1922, COMPARED WITH DECEMBER 15, 1921, AND NOVEMBER 15, 1922.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (−) Dec. 15, 1922, compared with—	
		Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.
		Cents.	*Cents.*	*Cents.*		
Sirloin steak	Pound	55.3	37.3	36.8	+4	−1
Round steak	do	31.8	32.0	31.5	+2	−2
Rib roast	do	26.7	27.5	27.3	+2	−1
Chuck roast	do	19.2	19.6	19.4	+1	−1
Plate beef	do	12.8	12.7	12.7	−1	
Pork chops	do	30.4	33.0	29.5	−3	−11
Bacon	do	38.7	40.9	40.3	+4	−1
Ham	do	44.4	46.3	45.4	+2	−2
Lamb, leg of	do	32.3	35.8	35.6	+10	−1
Hens	do	35.8	33.9	33.6	−6	−1
Salmon, canned, red	do	33.9	31.5	31.4	−7	−0.3
Milk, fresh	Quart	14.1	13.4	13.7	−3	+2
Milk, evaporated	15–16 oz. can	12.7	11.7	11.9	−6	+2
Butter	Pound	52.1	54.6	60.2	+16	+10
Oleomargarine	do	30.1	28.1	28.7	−5	+2
Nut margarine	do	28.5	27.1	27.3	−4	+1
Cheese	do	33.0	35.5	36.6	+11	+3
Lard	do	15.9	17.6	17.5	+10	−1

[1] In addition to monthly retail prices of food and coal, the bureau secures prices of gas and dry goods from each of 51 cities and for electricity from 32 cities. These prices are published at quarterly intervals in the MONTHLY LABOR REVIEW.

[2] The following 22 articles, weighted according to the consumption of the average family, have been used from January, 1913, to December, 1920: 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. The remainder of the 43 articles shown in Tables 1 and 2 have been included in the weighted aggregates for each month, beginning with January, 1921.

TABLE 1.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE DECEMBER 15, 1922, COMPARED WITH DECEMBER 15, 1921, AND NOVEMBER 15, 1922—Concluded.

Article.	Unit.	Average retail price on—			Per cent of increase (+) or decrease (−) Dec. 15, 1922, compared with—	
		Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.
		Cents.	*Cents.*	*Cents.*		
Crisco	Pound	21.6	23.2	23.3	+8	+0.4
Eggs, strictly fresh	Dozen	70.5	64.5	66.5	−6	+3
Eggs, storage	do	49.1	39.8	40.8	−17	+3
Bread	Pound	9.1	8.7	8.6	−5	−1
Flour	do	5.0	4.8	4.9	−2	+2
Corn meal	do	4.1	3.9	4.0	−2	+3
Rolled oats	do	9.6	8.8	8.7	−9	−1
Corn flakes	8-oz. package	11.9	9.7	9.7	−18	.....
Cream of Wheat	28-oz. package	29.3	25.6	25.5	−13	−0.4
Macaroni	Pound	20.2	19.9	20.0	−1	+1
Rice	do	9.3	9.5	9.5	+2	.....
Beans, navy	do	8.2	10.2	10.5	+28	+3
Potatoes	do	3.1	2.1	2.1	−32	.....
Onions	do	8.0	4.4	4.6	−43	+5
Cabbage	do	5.1	3.4	3.6	−29	+6
Beans, baked	No. 2 can	13.8	13.2	13.1	−5	−1
Corn, canned	do	16.0	15.2	15.2	−5	.....
Peas, canned	do	17.8	17.4	17.4	−2	.....
Tomatoes, canned	do	13.0	12.8	12.7	−2	−1
Sugar, granulated	Pound	6.5	8.1	8.3	+28	+2
Tea	do	67.7	68.5	68.5	+1	.....
Coffee	do	35.6	36.5	36.7	+3	+1
Prunes	do	18.7	20.2	20.1	+7	−0.4
Raisins	do	25.5	19.8	19.2	−25	−3
Bananas	Dozen	37.3	36.8	37.1	−1	+1
Oranges	do	50.3	51.0	48.5	−4	−5
All articles combined [1]					−2	+1

[1] See note 2, page 62.

Table 2 shows for the United States average retail prices of specified food articles on December 15, 1913 and 1914, and on December 15 of each year from 1917 to 1922, together with the percentage changes in December of each of these specified years compared with December, 1913. For example, the price per quart of fresh milk was 9.1 cents in December, 1913; 9 cents in December, 1914; 13.1 cents in December, 1917; 15.7 cents in December, 1918; 16.7 cents in December, 1919; 16.8 cents in December, 1920; 14.1 cents in December, 1921; and 13.7 cents in December, 1922. As compared with the average price in December, 1913, these figures show the following percentage changes: A decrease of 1 per cent in December, 1914; and the following increases: 44 per cent in December, 1917; 73 per cent in December, 1918; 84 per cent in December, 1919; 85 per cent in December, 1920; 55 per cent in December, 1921; and 51 per cent in December, 1922.

The cost of the various articles of food, combined, showed an increase of 41 per cent in December, 1922, as compared with December, 1913.

TABLE 2.—AVERAGE RETAIL PRICES OF SPECIFIED FOOD ARTICLES AND PER CENT OF INCREASE OR DECREASE DECEMBER 15 OF CERTAIN SPECIFIED YEARS COMPARED WITH DECEMBER 15, 1913.

[Percentage changes of five-tenths of 1 per cent and over are given in whole numbers.]

Article.	Unit.	Average retail prices Dec. 15—								Per cent of increase (+) or decrease (−) Dec. 15 of each specified year compared with Dec. 15, 1913.						
		1913	1914	1917	1918	1919	1920	1921	1922	1914	1917	1918	1919	1920	1921	1922
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.							
Sirloin steak	Pound.	25.1	25.6	32.0	40.4	39.1	39.7	35.3	36.8	+2	+27	+61	+56	+58	+41	+47
Round steak	...do..	22.6	23.0	30.0	38.2	35.9	35.7	30.8	31.5	+2	+33	+69	+59	+58	+36	+39
Rib roast	...do..	19.9	20.1	25.4	31.9	30.3	30.1	26.7	27.3	+1	+28	+60	+52	+51	+34	+37
Chuck roast	...do..	16.2	16.5	21.5	27.3	24.3	23.2	19.2	19.4	+2	+33	+69	+50	+43	+19	+20
Plate beef	...do..	12.4	12.5	16.2	21.1	17.3	16.5	12.8	12.7	+1	+31	+70	+40	+33	+3	+2
Pork chops	...do..	20.3	19.5	33.9	41.3	38.1	33.0	30.4	29.5	−4	+67	+103	+88	+63	+50	+45
Bacon	...do..	26.7	27.8	48.8	58.5	50.3	47.4	38.7	40.3	+4	+83	+119	+88	+78	+45	+51
Ham	...do..	26.5	26.8	43.4	53.3	49.9	49.9	44.4	45.4	+1	+64	+101	+88	+88	+68	+71
Lamb, leg of	...do..	18.5	19.0	30.2	34.4	33.6	35.2	32.3	35.6	+3	+63	+86	+82	+90	+75	+92
Hens	...do..	20.8	19.9	30.4	38.4	39.1	40.2	35.8	33.6	−4	+46	+85	+88	+93	+72	+62
Salmon, canned, red	...do..	....	....	[1]29.0	[1]31.4	[1]36.4	[1]38.4	32.5	31.4	....	....	....	....	....	....	....
Milk, fresh	Quart.	9.1	9.0	13.1	15.7	16.7	16.8	14.1	13.7	−1	+44	+73	+84	+85	+55	+51
Milk, evaporated (unsweetened)	[2]	....	....	....	....	16.9	14.8	12.7	11.9	....	....	....	....	....	....	....
Butter	Pound.	39.7	39.3	54.3	72.7	78.0	62.0	52.1	60.2	−1	+37	+83	+96	+56	+31	+52
Oleomargarine	...do..	....	....	....	....	43.4	39.5	30.1	28.7	....	....	....	....	....	....	....
Nut margarine	...do..	....	....	....	....	35.8	34.7	28.5	27.3	....	....	....	....	....	....	....
Cheese	...do..	22.5	23.0	34.5	42.7	43.3	39.0	33.0	36.6	+2	+53	+90	+92	+73	+47	+63
Lard	...do..	15.8	15.4	33.4	34.2	34.9	25.6	15.9	17.5	−3	+111	+116	+121	+62	+1	+11
Crisco	...do..	....	....	....	....	37.7	29.5	21.6	23.3	....	....	....	....	....	....	....
Eggs, strictly fresh	Dozen.	47.6	47.8	63.5	81.1	90.1	92.4	70.5	66.5	+0.4	+33	+70	+89	+94	+48	+40
Eggs, storage	...do..	34.5	31.7	45.0	58.1	63.5	69.4	49.1	40.8	−8	+30	+68	+84	+101	+42	+18
Bread	Pound.	5.6	6.5	9.3	9.8	10.2	10.8	9.1	8.6	+16	+66	+75	+82	+93	+63	+54
Flour	...do..	3.3	3.7	6.8	6.7	7.7	6.6	5.0	4.9	+12	+106	+103	+133	+100	+52	+48
Corn meal	...do..	3.1	3.2	7.1	6.4	6.6	5.5	4.1	4.0	+3	+129	+106	+113	+77	+32	+29
Rolled oats	...do..	....	....	....	....	9.2	10.9	9.6	8.7	....	....	....	....	....	....	....
Corn flakes	[3]	....	....	....	....	14.1	14.1	11.9	9.7	....	....	....	....	....	....	....
Cream of Wheat	[4]	....	....	....	....	27.6	30.2	29.3	25.5	....	....	....	....	....	....	....
Macaroni	Pound.	....	....	....	....	19.8	21.6	20.2	20.0	....	....	....	....	....	....	....
Rice	...do..	8.7	8.8	11.6	13.9	17.7	13.2	9.3	9.5	+1	+33	+60	+103	+52	+7	+9
Beans, navy	...do..	....	....	18.8	15.4	12.2	9.4	8.2	10.5	....	....	....	....	....	....	....
Potatoes	...do..	1.8	1.4	3.0	3.2	4.3	3.2	3.1	2.1	−22	+67	+78	+139	+78	+72	+17
Onions	...do..	....	....	5.0	3.9	8.1	4.1	8.0	4.6	....	....	....	....	....	....	....
Cabbage	...do..	....	....	....	....	6.1	3.4	5.1	3.6	....	....	....	....	....	....	....
Beans, baked	[5]	....	....	....	....	17.0	16.3	13.8	13.1	....	....	....	....	....	....	....
Corn, canned	[5]	....	....	....	....	18.9	17.8	16.0	15.2	....	....	....	....	....	....	....
Peas, canned	[5]	....	....	....	....	19.2	18.7	17.8	17.4	....	....	....	....	....	....	....
Tomatoes, canned	[5]	....	....	....	....	16.1	13.0	13.0	12.7	....	....	....	....	....	....	....
Sugar, granulated	Pound.	5.4	6.1	9.5	10.8	14.5	10.5	6.5	8.3	+13	+76	+100	+169	+94	+20	+54
Tea	...do.	54.5	54.7	62.1	67.4	69.3	72.1	67.7	68.5	+0.4	+14	+24	+27	+32	+24	+26
Coffee	...do..	29.7	29.6	30.3	32.4	48.9	39.7	35.6	36.7	+0.3	+2	+9	+65	+34	+20	+24
Prunes	...do..	....	....	16.4	19.2	29.3	25.6	18.7	20.1	....	....	....	....	....	....	....
Raisins	...do..	....	....	15.0	16.1	23.9	32.4	25.5	19.2	....	....	....	....	....	....	....
Bananas	Dozen.	....	....	....	....	40.4	41.8	37.3	37.1	....	....	....	....	....	....	....
Oranges	...do..	....	....	....	....	52.0	49.5	50.3	48.5	....	....	....	....	....	....	....
All articles combined [6]	.....	....	....	....	....	....	....	....	....	+1	+51	+79	+89	+71	+44	+41

[1] Both pink and red.
[2] 15–16 oz. can.
[3] 8-oz. package.
[4] 28-oz. package.
[5] No. 2 can.
[6] See note 2, page 62.

Table 3 shows for the United States average retail prices of the principal articles of food for the years 1913 and 1922, and for each month of 1922.

Meat prices showed a slight increase in December as compared with the retail price in January. Groceries, however, decreased slightly during the year 1922.

TABLE 3.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS 1913 AND 1922, AND BY MONTHS FOR 1922.

Article.	Unit.	Average for year 1913.	1922												Average for year 1922.
			Jan. 15.	Feb. 15.	Mar. 15.	Apr. 15.	May 15.	June 15.	July 15.	Aug. 15.	Sept. 15.	Oct. 15.	Nov. 15.	Dec. 15.	
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	25.4	35.3	35.2	35.9	36.4	37.7	38.4	39.2	39.0	38.7	38.3	37.3	36.8	37.4
Round steak	do	22.3	30.4	30.2	30.8	31.4	32.5	33.5	34.2	34.1	33.6	33.1	32.0	31.5	32.3
Rib roast	do	19.8	26.7	26.5	27.0	27.3	27.9	28.2	28.5	28.2	28.1	28.0	27.5	27.3	27.6
Chuck roast	do	16.0	19.0	18.9	19.3	19.5	19.8	20.1	20.3	20.0	20.0	19.9	19.6	19.4	19.7
Plate beef	do	12.1	12.8	12.8	13.0	13.0	13.0	12.9	12.8	12.6	12.6	12.8	12.7	12.7	12.8
Pork chops	do	21.0	28.9	29.3	31.3	33.0	34.4	33.9	34.4	35.1	36.4	36.6	33.0	29.5	33.0
Bacon, sliced	do	27.0	37.6	37.9	39.0	39.7	39.8	40.4	40.6	40.6	40.4	40.8	40.9	40.3	39.8
Ham, sliced	do	26.9	44.2	46.5	49.8	50.7	51.3	51.9	52.3	50.8	48.4	47.6	46.3	45.4	48.8
Lamb	do	18.9	33.9	35.4	37.5	38.5	39.2	38.0	37.4	36.0	35.9	35.9	35.8	35.6	36.6
Hens	do	21.3	36.9	36.9	37.8	37.8	37.7	36.9	35.7	34.9	34.9	34.8	33.9	33.6	36.0
Salmon, canned, red.	do	.....	33.3	32.9	32.6	32.4	32.3	32.2	32.1	31.9	31.7	31.6	31.5	31.4	32.2
Milk, fresh	Quart	8.9	13.6	13.2	13.0	12.7	12.5	12.5	12.8	13.0	13.1	13.3	13.4	13.7	13.1
Milk, evaporated	15–16 oz. can.	.....	12.4	11.6	11.3	11.1	11.0	10.9	10.9	10.8	10.8	11.2	11.7	11.9	12.3
Butter	Pound	38.3	45.3	45.9	45.8	45.2	44.9	44.9	45.7	44.2	46.7	50.8	54.6	60.2	47.9
Oleomargarine	do	.....	29.3	28.3	27.9	27.7	27.6	27.5	27.5	27.6	27.8	27.8	28.1	28.7	28.0
Nut margarine	do	.....	28.2	27.5	27.0	26.9	26.7	26.7	26.6	26.6	26.8	26.9	27.1	27.3	27.0
Cheese	do	22.1	32.9	32.9	33.0	32.1	30.8	31.1	31.5	31.8	32.1	34.1	35.5	36.6	32.9
Lard	do	15.8	15.4	15.9	17.3	16.9	17.0	17.2	17.2	17.2	17.2	17.5	17.6	17.5	17.0
Crisco	do	.....	21.6	21.7	21.9	22.1	22.2	22.4	22.7	22.9	23.0	23.2	23.2	23.3	22.5
Eggs, strictly fresh	Dozen	34.5	49.9	48.4	31.8	31.7	33.5	34.1	36.0	37.1	44.8	54.3	64.5	66.5	44.4
Eggs, storage	do	.....	39.3	39.1	.....	.....	.....	.....	.....	.....	.....	39.1	39.8	40.8	39.7
Bread	Pound	5.6	8.8	8.6	8.7	8.7	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.6	8.7
Flour	do	3.3	4.9	5.1	5.3	5.3	5.3	5.3	5.2	5.1	4.9	4.8	4.8	4.9	5.1
Corn meal	do	3.0	3.9	3.9	3.9	3.9	3.8	3.9	3.9	3.9	3.9	3.9	3.9	4.0	3.9
Rolled oats	do	.....	9.2	8.9	8.8	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.8	8.7	8.8
Corn flakes	8-oz. pkg	.....	10.7	10.3	10.2	10.1	10.0	9.9	9.8	9.8	9.8	9.7	9.7	9.7	10.0
Cream of Wheat	28-oz. pkg	.....	26.6	26.2	26.0	25.9	25.8	25.8	25.8	25.7	25.6	25.6	25.6	25.5	25.8
Macaroni	Pound	.....	20.3	20.2	20.2	20.0	20.1	20.0	20.0	20.0	19.9	19.9	19.9	20.0	20.0
Rice	do	8.7	9.3	9.3	9.3	9.4	9.5	9.6	9.6	9.6	9.6	9.6	9.5	9.5	9.5
Beans, navy	do	.....	8.2	8.3	8.9	9.3	9.7	10.6	11.1	11.3	10.8	10.1	10.2	10.5	9.9
Potatoes	do	1.7	3.3	3.3	3.1	2.9	3.0	3.5	3.6	2.6	2.3	2.2	2.1	2.1	2.8
Onions	do	.....	9.1	10.9	11.6	13.8	9.8	8.0	7.0	5.9	5.1	4.4	4.4	4.6	7.9
Cabbage	do	.....	5.6	5.7	5.4	5.3	5.7	5.1	4.6	3.8	3.7	3.5	3.4	3.6	4.6
Beans, baked	No. 2 can	.....	13.5	13.3	13.2	13.1	13.1	13.2	13.3	13.4	13.4	13.2	13.2	13.1	13.3
Corn, canned	do	.....	16.0	15.9	15.7	15.6	15.5	15.5	15.4	15.4	15.3	15.3	15.2	15.2	15.5
Peas, canned	do	.....	17.7	17.8	17.7	17.8	17.8	17.8	17.8	17.6	17.5	17.4	17.4	17.4	17.6
Tomatoes, canned	do	.....	13.2	13.4	13.6	13.7	13.7	13.9	13.8	13.6	13.1	12.7	12.8	12.7	13.4
Sugar, granulated	Pound	5.5	6.2	6.4	6.5	6.7	6.6	7.1	7.6	8.1	7.9	7.9	8.1	8.3	7.3
Tea	do	54.4	68.3	67.8	67.5	67.7	67.9	68.0	68.0	68.3	68.2	68.2	68.5	68.5	68.1
Coffee	do	29.8	35.7	35.6	35.6	35.7	35.9	36.1	36.2	36.2	36.2	36.3	36.5	36.7	36.1
Prunes	do	.....	18.8	18.8	19.2	20.0	20.4	20.6	20.8	20.8	20.9	20.6	20.2	20.1	20.1
Raisins	do	.....	25.0	24.8	24.6	24.4	24.2	24.1	24.0	23.2	22.1	20.7	19.8	19.2	23.0
Bananas	Dozen	.....	36.6	36.8	36.9	36.1	36.2	36.3	35.8	34.2	34.0	35.6	36.8	37.1	36.0
Oranges	do	.....	46.2	48.5	53.9	61.1	62.0	63.5	63.2	64.8	64.8	61.1	51.0	48.5	57.4

Table 4 shows the trend for the United States in the retail prices of the principal articles of food, by relative figures. These figures have been computed by dividing the average price for each month of 1922 and the average for the year 1922 by the average price for each article for the year 1913. Should the percentage increase since 1913 be desired, it is only necessary to subtract 100 from these relative figures.

TABLE 4.—RELATIVE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES BY YEARS, 1913 AND 1922, AND BY MONTHS FOR 1922.

Article.	Unit.	Average for year 1913.	1922												Average for year 1922.
			Jan. 15.	Feb. 15.	Mar. 15.	Apr. 15.	May 15.	June 15.	July 15.	Aug. 15.	Sept. 15.	Oct. 15.	Nov. 15.	Dec. 15.	
Sirloin steak	Pound	100	139	139	141	143	148	151	154	154	152	151	147	145	147
Round steak	do	100	136	135	138	141	146	150	153	153	151	148	144	141	145
Rib roast	do	100	135	134	136	138	141	142	144	142	142	141	139	138	139
Chuck roast	do	100	119	118	121	122	124	126	127	125	125	124	123	121	123
Plate beef	do	100	106	106	107	107	107	107	106	104	104	106	105	105	106
Pork chops	do	100	138	140	149	157	164	161	164	167	173	174	157	140	157
Bacon, sliced	do	100	139	140	144	147	147	150	150	150	150	151	151	149	147
Ham, sliced	do	100	164	173	185	188	191	193	194	189	180	177	172	169	181
Lamb	do	100	179	187	198	204	207	201	198	190	190	190	189	188	194
Hens	do	100	173	173	177	177	177	173	168	164	164	163	159	158	169
Milk, fresh	Quart	100	153	148	146	143	140	140	144	146	147	149	151	154	147
Butter	Pound	100	118	120	120	118	117	117	119	115	122	133	143	157	125
Cheese	do	100	149	149	149	145	139	141	143	144	145	154	161	166	149
Lard	do	100	97	101	109	107	108	109	109	109	109	111	111	111	108
Eggs, strictly fresh	Dozen	100	145	140	92	92	97	99	104	108	130	157	187	193	129
Bread	Pound	100	157	154	155	155	157	157	157	155	155	155	155	154	155
Flour	do	100	148	155	161	161	161	161	158	155	148	145	145	148	155
Corn meal	do	100	130	130	130	130	127	130	130	130	130	130	130	133	130
Rice	do	100	107	107	107	108	109	110	110	110	110	110	109	109	109
Potatoes	do	100	194	194	182	171	176	206	212	153	135	129	124	124	165
Sugar, granulated	do	100	113	116	118	122	120	129	138	147	144	144	147	151	133
Tea	do	100	126	125	124	124	125	125	125	125	125	125	126	126	125
Coffee	do	100	120	119	119	120	120	121	121	121	121	122	122	123	121
All articles combined.[1]		100	142	142	139	139	139	141	142	139	140	143	145	147	142

[1] See note 2, p. 62.

Table 5 shows the changes in the retail prices of each of 22 articles of food [3] as well as the changes in the amounts of the articles that could be purchased for $1, each year, 1913 to 1922, and for each month of 1922.

TABLE 5.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1, IN EACH YEAR, 1913 TO 1922, AND BY MONTHS FOR 1922.

Year.	Sirloin steak.		Round steak.		Rib roast.		Chuck roast.		Plate beef.		Pork chops.	
	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.254	3.9	$0.223	4.5	$0.198	5.1	$0.160	6.3	$0.121	8.3	$0.210	4.8
1914	.259	3.9	.236	4.2	.204	4.9	.167	6.0	.126	7.9	.220	4.5
1915	.257	3.9	.230	4.3	.201	5.0	.161	6.2	.121	8.3	.203	4.9
1916	.273	3.7	.245	4.1	.212	4.7	.171	5.8	.128	7.8	.227	4.4
1917	.315	3.2	.290	3.4	.249	4.0	.209	4.8	.157	6.4	.319	3.1
1918	.389	2.6	.369	2.7	.307	3.3	.266	3.8	.206	4.9	.390	2.6
1919	.417	2.4	.389	2.6	.325	3.1	.270	3.7	.202	5.0	.423	2.4
1920	.437	2.3	.395	2.5	.332	3.0	.262	3.8	.183	5.5	.423	2.4
1921	.388	2.6	.344	2.9	.291	3.4	.212	4.7	.143	7.0	.349	2.9
1922	.374	2.7	.323	3.1	.276	3.6	.197	5.1	.128	7.8	.330	3.0
January	.353	2.8	.304	3.3	.267	3.7	.190	5.3	.128	7.8	.288	3.5
February	.352	2.8	.302	3.3	.265	3.8	.189	5.3	.128	7.8	.293	3.4
March	.359	2.8	.308	3.2	.269	3.7	.193	5.2	.130	7.7	.313	3.2
April	.364	2.7	.314	3.2	.273	3.7	.195	5.1	.130	7.7	.330	3.0
May	.377	2.7	.325	3.1	.279	3.6	.199	5.0	.130	7.7	.344	2.9
June	.384	2.6	.335	3.0	.282	3.5	.201	5.0	.129	7.8	.339	2.9
July	.392	2.6	.342	2.9	.285	3.5	.203	4.9	.128	7.8	.344	2.9
August	.390	2.6	.341	2.9	.282	3.5	.200	5.0	.126	7.9	.351	2.8
September	.387	2.6	.336	3.0	.280	3.6	.200	5.0	.126	7.9	.364	2.7
October	.383	2.6	.331	3.0	.281	3.6	.199	5.0	.128	7.8	.366	2.7
November	.373	2.7	.320	3.1	.275	3.6	.196	5.1	.127	7.9	.330	3.0
December	.368	2.7	.315	3.2	.273	3.7	.194	5.2	.127	7.9	.295	3.4

[3] Although monthly prices have been secured on 43 food articles since January, 1919, prices on only 22 of these articles have been secured each month since 1913.

TABLE 5.—AVERAGE RETAIL PRICES OF SPECIFIED ARTICLES OF FOOD AND AMOUNT PURCHASABLE FOR $1 IN EACH YEAR, 1913 TO 1922, AND BY MONTHS FOR 1922—Concluded.

Year.	Bacon.		Ham.		Lard.		Hens.		Eggs.		Butter.	
	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.	Average retail price.	Amt. for $1.
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per dz.*	*Dozs.*	*Per lb.*	*Lbs.*
1913	$0.270	3.7	$0.269	3.7	$0.158	6.3	$0.213	4.7	$0.345	2.9	$0.383	2.6
1914	.275	3.6	.273	3.7	.156	6.4	.218	4.6	.353	2.8	.362	2.8
1915	.269	3.7	.261	3.8	.148	6.8	.208	4.8	.341	2.9	.358	2.8
1916	.287	3.5	.294	3.4	.175	5.7	.236	4.2	.375	2.7	.394	2.5
1917	.410	2.4	.382	2.6	.276	3.6	.286	3.5	.481	2.1	.487	2.1
1918	.529	1.9	.479	2.1	.333	3.0	.377	2.7	.569	1.8	.577	1.7
1919	.554	1.8	.534	1.9	.369	2.7	.411	2.4	.628	1.6	.678	1.5
1920	.523	1.9	.555	1.8	.295	3.4	.447	2.2	.681	1.5	.701	1.4
1921	.427	2.3	.488	2.0	.180	5.6	.397	2.5	.509	2.0	.517	1.9
1922	.398	2.5	.488	2.0	.170	5.9	.360	2.8	.444	2.3	.479	2.1
January	.376	2.7	.442	2.3	.154	6.5	.369	2.7	.499	2.0	.453	2.2
February	.378	2.6	.465	2.2	.159	6.3	.369	2.7	.484	2.1	.459	2.2
March	.390	2.6	.497	2.0	.173	5.8	.378	2.6	.318	3.1	.458	2.2
April	.397	2.5	.507	2.0	.169	5.9	.378	2.6	.317	3.2	.452	2.2
May	.398	2.5	.513	1.9	.170	5.9	.377	2.7	.335	3.0	.449	2.2
June	.404	2.5	.519	1.9	.172	5.8	.369	2.7	.341	2.9	.449	2.2
July	.406	2.5	.523	1.9	.172	5.8	.357	2.8	.360	2.8	.457	2.2
August	.406	2.5	.508	2.0	.172	5.8	.349	2.9	.371	2.7	.442	2.3
September	.404	2.5	.484	2.1	.172	5.8	.349	2.9	.448	2.2	.467	2.1
October	.408	2.5	.477	2.1	.175	5.7	.348	2.9	.543	1.8	.509	2.0
November	.409	2.4	.463	2.2	.176	5.7	.339	2.9	.645	1.6	.546	1.8
December	.403	2.5	.454	2.2	.175	5.7	.386	3.0	.665	1.5	.602	1.7

Year.	Cheese.		Milk.		Bread.		Flour.		Corn meal.		Rice.	
	Per lb.	*Lbs.*	*Per qt.*	*Ots.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.221	4.5	$0.089	11.2	$0.056	17.9	$0.033	30.3	$0.030	33.3	$0.087	11.5
1914	.229	4.4	.089	11.2	.063	15.9	.034	29.4	.032	31.3	.088	11.4
1915	.233	4.3	.088	11.4	.070	14.3	.042	23.8	.033	30.3	.091	11.0
1916	.258	3.9	.091	11.0	.073	13.7	.044	22.7	.034	29.4	.091	11.0
1917	.332	3.0	.112	9.0	.092	10.9	.070	14.3	.058	17.2	.104	9.6
1918	.359	2.8	.139	7.2	.098	10.2	.067	14.9	.068	14.7	.129	7.8
1919	.426	2.3	.155	6.5	.100	10.0	.072	13.9	.064	15.6	.151	6.6
1920	.416	2.4	.167	6.0	.115	8.7	.081	12.3	.065	15.4	.174	5.7
1921	.340	2.9	.146	6.8	.099	10.1	.058	17.2	.045	22.2	.095	10.5
1922	.329	3.0	.131	7.6	.087	11.5	.051	19.6	.039	25.6	.095	10.5
January	.329	3.0	.136	7.4	.088	11.4	.049	20.4	.039	25.6	.093	10.8
February	.329	3.0	.132	7.6	.086	11.6	.051	19.6	.039	25.6	.093	10.8
March	.330	3.0	.130	7.7	.087	11.5	.053	18.9	.039	25.6	.093	10.8
April	.321	3.1	.127	7.9	.087	11.5	.053	18.9	.039	25.6	.094	10.6
May	.308	3.2	.125	8.0	.088	11.4	.053	18.9	.038	26.3	.095	10.5
June	.311	3.2	.125	8.0	.088	11.4	.053	18.9	.039	25.6	.096	10.4
July	.315	3.2	.128	7.8	.088	11.4	.052	19.2	.039	25.6	.096	10.4
August	.318	3.1	.129	7.8	.087	11.5	.051	19.6	.039	25.6	.096	10.4
September	.321	3.1	.131	7.6	.087	11.5	.049	20.4	.039	25.6	.096	10.4
October	.341	2.9	.133	7.5	.087	11.5	.048	20.8	.039	25.6	.096	10.4
November	.355	2.8	.134	7.5	.087	11.5	.048	20.8	.039	25.6	.096	10.4
December	.366	2.7	.137	7.3	.086	11.6	.049	20.4	.040	25.0	.095	10.5

Year.	Potatoes.		Sugar.		Coffee.		Tea.	
	Per lb.	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*	*Per lb.*	*Lbs.*
1913	$0.017	58.8	$0.055	18.2	$0.298	3.4	$0.544	1.8
1914	.018	55.6	.059	16.9	.297	3.4	.546	1.8
1915	.015	66.7	.066	15.2	.300	3.3	.545	1.8
1916	.027	37.0	.080	12.5	.299	3.3	.546	1.8
1917	.043	23.3	.093	10.8	.302	3.3	.582	1.7
1918	.032	31.3	.097	10.3	.305	3.3	.648	1.5
1919	.038	26.3	.113	8.8	.433	2.3	.701	1.4
1920	.063	15.9	.194	5.2	.470	2.1	.733	1.4
1921	.031	32.3	.080	12.5	.363	2.8	.697	1.4
1922	.028	35.7	.073	13.7	.361	2.8	.681	1.5
January	.033	30.3	.062	16.1	.357	2.8	.682	1.5
February	.033	30.3	.064	15.6	.356	2.8	.680	1.5
March	.031	32.3	.065	15.4	.356	2.8	.675	1.5
April	.029	34.5	.067	14.9	.357	2.8	.676	1.5
May	.030	33.3	.066	15.2	.359	2.8	.679	1.5
June	.035	27.8	.071	14.1	.361	2.8	.680	1.5
July	.036	27.8	.076	13.2	.362	2.8	.680	1.5
August	.026	38.5	.081	12.3	.362	2.8	.682	1.5
September	.023	43.5	.079	12.7	.362	2.8	.682	1.5
October	.022	45.5	.079	12.7	.363	2.8	.682	1.5
November	.021	47.6	.081	12.3	.365	2.7	.685	1.5
December	.021	47.6	.083	12.0	.367	2.7	.685	1.5

Index Numbers of Retail Prices of Food in the United States.

IN TABLE 6 index numbers are given which show the changes in the retail prices of each of 22 food articles,[4] by years from 1907 to 1922, and by months for 1921 and 1922.[5] 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 rib roast for the year 1920 was 168, which means that the average money price for the year 1920 was 68 per cent higher than the average money price for the year 1913. The relative price of bacon for the year 1919 was 205 and for the year 1920, 194, which figures show a drop of 11 points but a decrease of only 5 per cent in the year.

In the last column of Table 4 are given index numbers showing the changes in the retail cost of all articles of food combined. From January, 1913, to December, 1920, 22 articles have been included in the index, and beginning with January, 1921, 43 articles have been used.[4] For an explanation of the method used in making the link between the cost of the market basket of 22 articles, weighted according to the average family consumption in 1901, and the cost of the market basket based on 43 articles and weighted according to the consumption in 1918, see MONTHLY LABOR REVIEW for March, 1921 (p. 25).

The curve shown in the chart on page 70 pictures more readily to the eye the changes in the cost of the family market basket and the trend in the cost of the food budget than do the index numbers given in the table. The retail cost of the food articles included in the index has decreased since July, 1920, until the curve is brought down in December, 1922, to approximately where it was in July, 1917. The chart has been drawn on the logarithmic scale,[6] because the percentages of increase or decrease are more accurately shown than on the arithmetic scale.

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[4] See note 2, p. 62.

[5] For index numbers of each month, January, 1913, to December, 1920, see MONTHLY LABOR REVIEW for February, 1921, pp. 19-21.

[6] For a discussion of the logarithmic chart, see article on "Comparison of arithmetic and ratio charts," by Lucian W. Chaney, MONTHLY LABOR REVIEW for March, 1919, pp. 20-34. Also, "The 'ratio' charts," by Prof. Irving Fisher, reprinted from Quarterly Publications of the American Statistical Association June, 1917, 24 pp.

TABLE 6.—INDEX NUMBERS SHOWING CHANGES IN THE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD IN THE UNITED STATES, BY YEARS, 1907 TO 1922, AND BY MONTHS FOR 1921 AND 1922.

[Average for year 1913=100.]

Year and month.	Sirloin steak.	Round steak.	Rib roast.	Chuck roast.	Plate beef.	Pork chops.	Bacon.	Ham.	Lard.	Hens.	Eggs.	Butter.	Cheese.	Milk.	Bread	Flour.	Corn meal.	Rice.	Potatoes.	Sugar.	Coffee.	Tea.	All articles combined.
1907	71	68	76	.....	.....	74	74	76	81	81	84	85	.....	87	.....	95	88	.....	105	105	.....	.....	82
1908	73	71	78	.....	.....	76	77	78	80	83	86	86	.....	90	.....	102	92	.....	111	108	.....	.....	84
1909	77	74	81	.....	.....	83	83	82	90	89	93	90	.....	91	.....	109	94	.....	112	107	.....	.....	89
1910	80	78	85	.....	.....	92	95	91	104	94	98	94	.....	95	.....	108	95	.....	101	109	.....	.....	93
1911	81	79	85	.....	.....	85	91	89	88	91	94	88	.....	96	.....	102	94	.....	130	117	.....	.....	92
1912	91	89	94	.....	.....	91	91	91	94	93	99	98	.....	97	.....	105	102	.....	135	115	.....	.....	98
1913	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**
1914	102	106	103	104	104	105	102	102	99	102	102	94	104	100	113	104	105	101	108	108	100	100	102
1915	101	103	101	101	100	96	100	97	93	97	99	93	105	99	125	126	108	104	89	120	101	100	101
1916	108	110	107	107	106	108	106	109	111	111	109	103	117	102	130	135	113	105	159	146	100	100	114
1917	124	130	126	131	130	152	152	142	175	134	139	127	150	125	164	211	192	119	253	169	101	107	146
1918	153	165	155	166	170	186	196	178	211	177	165	151	162	156	175	203	227	148	188	176	102	119	168
1919	164	174	164	169	167	201	205	199	234	193	182	177	193	174	179	218	213	174	224	205	145	129	186
1920	172	177	168	164	151	201	194	206	187	210	197	183	188	188	205	245	217	200	371	353	158	135	203
1921: Av. for year	153	154	147	133	118	166	158	181	114	186	148	135	154	164	177	176	150	109	182	145	122	128	153
January	159	163	157	148	140	171	169	180	141	200	229	159	175	183	193	203	173	137	176	176	129	133	172
February	151	153	148	138	129	156	166	179	131	201	139	148	174	173	189	197	167	121	153	162	126	131	158
March	154	157	152	141	130	168	155	181	124	203	121	150	176	171	188	194	160	113	147	176	125	131	156
April	157	160	154	140	127	177	164	183	116	202	99	145	169	167	184	179	153	106	135	176	123	129	152
May	158	160	153	138	124	167	161	181	106	194	97	111	143	162	177	173	150	101	129	153	121	129	145
June	157	160	151	135	117	162	159	182	103	181	101	105	133	160	175	179	150	101	159	142	120	126	144
July	158	161	148	129	109	163	160	190	106	182	123	122	133	157	173	176	147	100	200	129	119	127	148
August	157	160	147	130	112	181	162	197	115	183	138	134	148	161	173	173	150	101	247	136	119	127	155
September	153	154	144	128	110	179	159	191	113	179	146	132	148	158	171	170	147	103	235	133	119	127	153
October	147	148	139	124	109	171	153	180	109	175	171	139	149	160	170	164	143	107	206	125	119	127	153
November	141	139	135	120	106	152	147	170	105	168	201	139	151	161	166	155	140	108	188	122	119	127	152
December	139	138	135	120	106	145	143	165	101	168	204	136	149	158	163	152	137	107	182	118	119	124	150
1922: Av. for year	147	145	139	123	106	157	147	181	108	169	129	125	149	147	155	155	130	109	165	133	121	125	142
January	139	136	135	119	106	138	139	164	97	173	145	118	149	153	157	148	130	107	194	113	120	126	142
February	139	135	134	118	106	140	140	173	101	173	140	120	149	148	154	155	130	107	194	116	119	125	142
March	141	138	136	121	107	149	144	185	109	177	92	120	149	146	155	161	130	107	182	118	119	124	139
April	143	141	138	122	107	157	147	188	107	177	92	118	145	143	155	161	130	108	171	122	120	124	139
May	148	146	141	124	107	164	147	191	108	177	97	117	139	140	157	161	127	109	176	120	120	125	139
June	151	150	142	126	107	161	150	193	109	173	99	117	141	140	157	161	130	110	206	129	121	125	141
July	154	153	144	127	106	164	150	194	109	168	104	119	143	144	157	158	130	110	212	138	121	125	142
August	154	153	142	125	104	167	150	189	109	164	108	115	144	146	155	155	130	110	153	147	121	126	139
September	152	151	142	125	104	173	150	180	109	164	130	122	145	147	155	148	130	110	135	144	121	125	140
October	151	148	141	124	106	174	151	177	111	163	157	133	154	149	155	145	130	110	129	144	122	125	143
November	147	144	139	123	105	157	151	172	111	159	187	143	161	151	155	145	130	109	124	147	122	126	145
December	145	141	138	121	105	140	149	169	111	158	193	157	166	154	154	148	133	109	124	151	123	126	147

TREND IN THE RETAIL COST OF ALL ARTICLES OF FOOD, COMBINED, FOR THE UNITED STATES, BY MONTHS, JANUARY, 1913, TO DECEMBER, 1922.

[Average cost for 1913=100.]

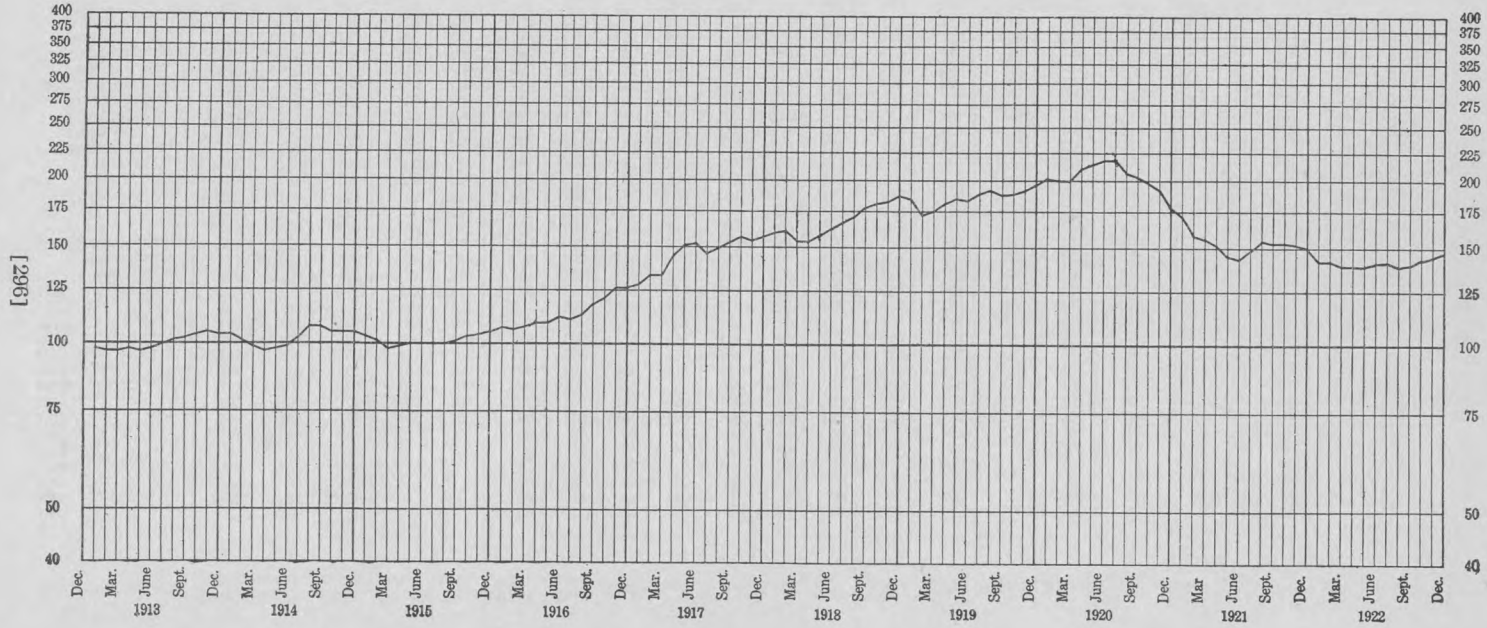


Table 7 shows by index numbers the trend in the retail cost of food in the United States from 1890 to 1922. The percentage decrease in the cost from 1921 to 1922 was 7 per cent, while the percentage increase from 1890 to 1922 was 103 per cent. This percentage means that the cost of food in 1922 was more than twice as much as it was in 1890.

TABLE 7.—INDEX NUMBERS SHOWING THE TREND IN THE RETAIL COST OF FOOD[1] IN THE UNITED STATES, BY YEARS, 1890 TO 1922.

[Average for year 1913=100.]

Year.	Relative price.	Year.	Relative price.	Year.	Relative price.	Year.	Relative price.
1890	70	1899	68	1907	82	1915	101
1891	71	1900	69	1908	84	1916	114
1892	69	1901	72	1909	89	1917	146
1893	71	1902	75	1910	93	1918	168
1894	68	1903	75	1911	92	1919	186
1895	67	1904	76	1912	98	1920	203
1896	65	1905	76	1913	100	1921	153
1897	65	1906	79	1914	102	1922	142
1898	67						

[1] The number of articles included in the index number for each year has not been the same throughout the period, but a sufficient number have been used fairly to represent food as a whole. From 1890 to 1907, 30 articles were used; from 1907 to 1913, 15 articles; from 1913 to 1920, 22 articles; and for the year 1921, 43 articles. The relatives for the period have been so computed as to be comparable with each other.

Retail Prices of Food in 51 Cities on Specified Dates.

AVERAGE retail food prices are shown in Table 8 for 39 cities for December 15, 1913, for December 15, 1921, and for November 15 and December 15, 1922. For 12 other cities prices are shown for the same dates, with the exception of December, 1913, as these cities were not scheduled by the bureau until after 1913.

TABLE 8.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

[The prices shown in this table are computed from reports sent monthly to the Bureau by retail dealers.

Article.	Unit.	Atlanta, Ga.				Baltimore, Md.				Birmingham, Ala.			
		Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	23.7	32.4	34.7	32.8	22.3	33.6	35.4	35.0	28.0	33.6	33.0	33.0
Round steak	do	21.3	29.6	31.4	29.8	20.8	30.3	32.7	32.0	23.0	29.7	29.7	29.5
Rib roast	do	19.7	25.1	25.7	25.4	17.5	27.4	28.9	28.7	20.5	24.3	24.9	25.1
Chuck roast	do	15.8	17.5	18.3	18.1	15.3	19.7	19.2	19.2	16.1	19.0	19.5	19.7
Plate beef	do	9.9	11.9	11.9	11.7	12.6	13.3	12.7	13.1	10.0	11.9	12.4	11.7
Pork chops	do	23.3	29.3	32.9	27.6	17.0	29.1	31.9	28.2	20.6	29.7	33.9	29.7
Bacon	do	31.4	39.5	38.1	37.1	20.5	32.0	36.5	35.4	33.0	41.0	41.7	41.4
Ham	do	30.0	44.8	46.9	46.7	27.5	47.3	49.9	50.6	32.0	44.8	46.8	45.5
Lamb, leg of	do	20.2	31.9	37.7	35.8	17.5	33.4	36.7	36.5	21.9	35.4	35.6	35.6
Hens	do	20.3	33.0	29.9	30.3	20.7	35.9	35.6	35.9	19.3	32.3	30.9	30.6
Salmon, canned, red	do	.....	15.6	28.4	27.9	.....	27.8	26.2	26.6	.....	34.7	30.5	30.5
Milk, fresh	Quart	10.8	17.8	16.7	16.7	8.7	12.0	12.0	13.0	10.0	20.0	19.0	19.0
Milk, evaporated	15–16 oz. can	.....	14.7	13.6	14.0	.....	11.7	11.3	11.7	.....	13.7	13.0	13.1
Butter	Pound	40.4	52.2	54.6	58.3	40.2	58.6	59.2	64.6	44.0	51.3	53.1	58.6
Oleomargarine	do	.....	33.3	30.8	31.7	.....	28.0	25.7	26.3	.....	35.7	32.9	33.9
Nut margarine	do	.....	30.2	27.4	26.4	.....	28.1	27.5	27.5	.....	31.0	29.4	30.6
Cheese	do	25.0	32.1	35.1	36.8	23.3	33.4	35.2	36.1	23.0	30.8	35.1	37.2
Lard	do	15.5	16.6	18.2	18.0	14.8	15.9	17.0	17.0	15.7	15.2	18.0	17.8
Crisco	do	.....	20.3	21.7	21.8	.....	19.7	22.4	22.1	.....	23.5	21.5	22.0
Eggs, strictly fresh	Dozen	43.3	63.0	51.8	59.5	40.4	71.3	68.7	66.4	41.8	63.1	50.8	62.0
Eggs, storage	do	28.5	53.8	40.7	41.6	33.1	49.4	36.4	37.6	35.0	46.4	41.4	43.5
Bread	Pound	5.6	10.0	9.6	9.6	5.5	8.6	8.3	8.4	5.4	9.3	9.0	9.0
Flour	do	3.4	5.5	5.2	5.3	3.1	4.9	4.6	4.6	3.6	5.9	5.6	5.7
Corn meal	do	2.6	2.7	3.2	3.2	2.5	3.2	3.2	3.1	2.5	2.9	3.0	3.0
Rolled oats	do	.....	11.2	9.5	9.5	.....	9.4	8.4	8.5	.....	10.5	9.5	9.6
Corn flakes	8-oz. pkg	.....	12.3	9.6	9.6	.....	10.5	9.0	8.9	.....	12.3	10.1	10.1
Cream of Wheat	28-oz. pkg	.....	29.2	26.6	26.6	.....	27.9	24.5	24.5	.....	30.8	27.4	27.2
Macaroni	Pound	.....	21.9	21.6	21.9	.....	20.3	19.2	19.4	.....	20.3	19.7	19.7
Rice	do	8.6	8.9	8.9	9.0	9.0	9.5	9.3	9.3	8.2	9.3	9.7	9.6
Beans, navy	do	.....	9.7	11.7	12.0	.....	8.0	9.9	10.3	.....	9.5	11.5	11.4
Potatoes	do	2.3	4.2	3.2	3.1	1.8	3.2	2.0	2.0	2.1	4.2	3.1	3.2
Onions	do	.....	9.9	6.1	6.1	.....	7.8	4.7	4.8	.....	9.0	5.4	5.5
Cabbage	do	.....	6.0	4.5	4.7	.....	4.6	3.4	3.6	.....	5.8	4.6	4.8
Beans, baked	No. 2 can	.....	14.2	13.5	13.3	.....	12.5	11.9	12.0	.....	15.2	15.1	15.0
Corn, canned	do	.....	16.5	15.9	16.0	.....	15.8	14.1	14.2	.....	17.2	16.1	16.1
Peas, canned	do	.....	18.0	18.2	18.0	.....	16.9	15.7	16.2	.....	20.3	19.2	20.1
Tomatoes, canned	do	.....	13.4	12.5	12.6	.....	11.2	11.4	11.3	.....	12.4	11.2	11.3
Sugar, granulated	Pound	5.5	7.0	8.5	8.8	4.9	6.0	7.5	7.6	5.2	6.5	8.2	8.7
Tea	do	60.0	89.8	88.6	88.6	56.0	64.5	65.0	65.9	61.3	82.7	82.2	81.8
Coffee	do	32.0	35.4	36.5	36.8	24.4	30.9	32.4	32.6	28.8	36.8	37.6	37.4
Prunes	do	.....	19.0	22.1	21.1	.....	17.9	18.8	18.8	.....	20.6	22.0	21.3
Raisins	do	.....	26.2	21.4	20.6	.....	23.8	17.9	16.5	.....	26.6	21.3	20.6
Bananas	Dozen	.....	24.4	26.2	24.4	.....	27.5	25.9	26.6	.....	32.5	35.0	34.7
Oranges	do	.....	33.9	40.4	40.0	.....	45.7	52.4	46.8	.....	36.6	46.4	40.4

[1] The steak for which prices are here quoted is called "sirloin" in this city, but in most of the other cities included in this report it would be known as porterhouse steak.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES.

As some dealers occasionally fail to report, the number of quotations varies from month to month.]

Boston, Mass.				Bridgeport, Conn.			Buffalo, N. Y.				Butte, Mont.			Charleston, S. C.			
Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
1913	1921						1913	1921						1913	1921		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 33.0	[1] 55.4	[1] 61.7	[1] 60.3	41.5	43.7	43.6	21.6	32.5	36.4	35.9	26.8	28.0	27.6	22.5	34.9	33.2	33.2
34.3	48.2	49.3	47.7	36.5	37.7	36.7	18.8	26.8	29.6	29.4	23.4	24.6	24.3	21.0	32.9	30.9	30.9
23.7	33.9	36.0	36.0	32.7	33.6	33.1	16.4	25.9	27.1	26.7	22.4	22.9	22.7	20.0	29.1	26.8	27.7
16.2	24.0	24.4	23.2	22.8	23.9	23.3	15.0	19.1	19.8	19.6	16.0	16.5	15.9	15.0	21.8	19.8	19.8
.....	15.6	15.4	15.4	10.3	10.6	10.9	11.8	12.0	12.0	12.0	11.3	11.4	11.3	12.5	14.6	13.4	13.2
21.9	33.2	36.7	32.2	32.5	34.5	30.7	17.6	30.9	34.1	30.1	27.1	32.5	30.0	25.0	35.0	34.5	29.7
24.3	36.6	38.7	38.5	41.8	45.1	44.7	20.6	31.3	35.2	35.0	49.2	47.7	48.6	27.0	37.0	37.9	38.4
30.7	50.6	51.5	50.5	51.8	52.9	52.5	26.3	44.5	46.9	46.2	52.9	53.4	53.4	27.5	44.3	45.0	43.3
20.2	36.3	39.3	39.2	36.2	37.0	36.6	15.4	25.0	30.6	30.9	23.6	31.2	28.9	24.0	38.5	43.1	41.9
24.0	42.1	41.0	40.1	40.8	39.1	39.1	19.8	34.6	34.7	35.1	29.1	27.7	26.2	21.8	40.9	37.0	36.6
.....	33.7	29.6	29.7	37.1	33.3	33.3	.....	29.2	27.4	27.4	40.4	37.7	37.7	.....	28.7	27.5	27.1
8.9	15.4	14.5	14.5	15.0	14.0	15.0	8.0	15.0	14.0	14.0	14.3	14.2	14.2	12.0	18.7	18.5	18.0
.....	13.1	12.0	12.2	12.7	11.5	12.0	.....	11.4	11.4	11.6	13.3	12.3	12.3	.....	12.4	11.6	11.9
37.9	53.6	52.7	56.6	52.3	52.6	55.7	39.1	53.8	56.5	61.7	50.0	54.3	56.9	39.0	49.4	49.3	55.6
.....	31.2	28.3	28.5	28.3	27.0	27.5	.....	28.7	27.3	27.5	35.0	30.0	30.0	.....	29.3	27.6	27.0
.....	28.6	26.3	25.9	25.7	25.0	25.5	.....	28.3	26.9	25.7	33.0	30.2	30.4	.....	29.0	28.0	28.0
23.4	33.5	37.0	37.4	33.4	35.2	35.9	21.5	32.5	34.6	35.5	36.7	36.7	36.7	21.0	30.1	33.6	35.0
15.8	16.5	18.4	18.4	15.1	17.5	17.5	14.2	14.7	16.8	16.7	20.7	22.0	20.9	15.0	17.2	18.8	18.8
.....	22.1	24.1	24.6	20.3	23.0	22.9	.....	20.0	21.8	22.2	25.1	26.0	26.3	.....	20.9	21.3	21.6
57.5	95.0	100.6	87.7	89.1	87.5	89.4	47.6	74.8	75.9	70.8	71.4	65.6	78.1	46.7	53.2	44.0	51.2
36.0	51.6	45.8	45.6	50.3	43.3	45.2	31.4	47.3	37.3	38.4	48.3	41.2	44.4	35.2	44.1	34.5	35.8
5.9	9.4	8.4	8.4	9.7	8.4	8.4	5.6	8.7	8.3	8.2	9.6	9.7	9.7	6.4	10.3	9.5	9.4
3.6	5.7	5.5	5.5	5.2	4.9	4.9	3.0	4.5	4.3	4.4	5.6	5.5	5.5	3.7	6.1	5.9	5.9
3.6	5.0	4.9	4.8	7.7	6.9	6.9	2.6	3.8	3.4	3.3	4.4	3.9	3.9	2.6	3.1	3.0	3.0
.....	9.1	8.4	8.2	9.4	8.5	8.5	.....	8.4	7.9	8.1	8.2	6.7	6.7	.....	10.5	9.5	9.5
.....	11.7	10.0	10.0	10.7	9.3	9.3	.....	10.7	9.2	9.2	13.6	11.9	11.9	.....	12.4	10.0	10.0
.....	29.4	25.9	25.9	28.4	25.3	25.3	.....	28.1	25.3	25.4	33.2	28.8	29.2	.....	29.4	25.0	25.0
.....	24.1	23.7	23.8	24.5	23.9	24.2	.....	21.9	21.7	22.0	22.6	22.5	23.3	.....	19.9	19.6	19.7
9.4	10.3	11.1	11.0	9.7	10.3	10.1	9.3	9.0	9.0	9.0	9.3	9.6	9.9	5.6	6.6	6.5	6.4
.....	7.9	10.3	10.5	8.8	10.5	10.9	.....	8.0	10.3	10.5	8.7	9.3	9.3	.....	9.7	11.3	11.4
1.7	2.8	2.2	2.2	3.0	2.2	2.1	1.7	2.4	1.7	1.7	1.7	1.2	1.2	2.2	3.5	2.4	2.5
.....	8.9	4.3	5.1	8.2	4.4	4.5	.....	8.8	4.7	4.7	7.8	3.8	3.9	.....	9.2	5.0	5.0
.....	5.8	4.5	4.8	4.9	3.6	3.9	.....	3.7	2.2	2.6	5.0	2.7	3.0	.....	5.3	3.8	3.8
.....	15.1	14.4	14.2	12.2	12.2	11.9	.....	11.4	11.0	11.1	19.2	17.5	17.9	.....	11.8	11.3	11.3
.....	19.1	18.5	18.7	19.2	17.9	17.9	.....	16.1	15.0	15.0	17.9	16.1	16.1	.....	14.2	14.3	14.3
.....	21.0	21.7	21.6	21.0	20.1	20.1	.....	17.4	16.7	16.0	17.2	16.1	16.5	.....	18.2	18.5	18.5
.....	12.9	13.5	14.0	12.8	12.8	12.5	.....	13.1	13.4	13.1	15.5	14.7	14.7	.....	11.5	10.4	10.4
5.3	6.3	8.0	8.3	6.3	7.8	7.9	5.1	6.1	7.9	8.1	8.7	9.9	9.9	5.0	6.0	7.7	8.0
58.6	67.2	68.9	68.9	58.9	57.6	57.6	45.0	60.8	60.9	61.3	76.2	79.0	79.0	50.0	74.9	71.4	71.4
33.0	41.3	43.0	42.8	35.4	34.9	34.9	29.3	33.2	34.5	35.0	46.1	45.8	45.8	26.8	32.4	32.4	32.4
.....	19.2	21.0	21.2	19.0	19.8	19.7	.....	18.1	19.5	19.4	19.3	21.2	20.5	.....	18.8	20.6	20.3
.....	24.3	19.2	18.9	26.4	19.1	19.2	.....	22.7	18.4	17.7	29.5	21.5	20.8	.....	24.9	19.4	19.2
.....	46.4	47.5	45.9	36.7	36.0	36.0	.....	42.6	44.7	46.4	[2] 15.4	[2] 15.0	[2] 15.7	.....	38.0	33.3	35.6
.....	55.6	50.0	51.3	52.1	51.5	47.4	.....	54.6	55.2	53.7	55.9	54.2	50.0	.....	32.3	35.4	36.3

[2] Per pound.

TABLE 8.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Chicago, Ill.				Cincinnati, Ohio.				Cleveland, Ohio.			
		Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	24.1	36.9	38.6	38.1	23.0	29.7	32.0	32.1	24.6	29.8	33.9	33.0
Round steak	do	21.2	29.6	29.9	29.4	20.7	27.0	29.3	29.1	21.7	25.9	28.1	27.0
Rib roast	do	19.7	29.2	29.5	28.9	19.5	25.4	26.6	26.7	18.6	22.0	24.4	24.9
Chuck roast	do	15.7	19.4	19.8	19.5	15.3	16.3	17.5	17.1	17.0	17.9	18.9	18.5
Plate beef	do	11.8	12.0	12.0	11.8	11.8	12.9	12.8	13.4	12.5	11.3	11.2	11.5
Pork chops	do	17.9	29.0	28.9	25.9	18.9	25.7	27.1	25.0	19.4	28.3	30.5	27.3
Bacon	do	32.0	45.2	45.9	45.4	22.6	30.9	35.0	33.5	27.9	34.8	40.6	40.1
Ham	do	31.8	47.0	47.7	46.5	27.8	44.5	47.6	45.5	36.3	43.8	46.3	45.1
Lamb, leg of	do	19.4	32.5	35.4	34.4	17.5	29.2	31.4	32.1	18.0	28.2	34.1	33.4
Hens	do	17.7	32.0	30.7	29.5	22.7	34.0	33.5	32.8	19.3	32.8	32.6	32.9
Salmon, canned, red	do	.....	34.8	32.0	31.9	.....	29.3	27.9	28.0	.....	33.0	29.8	30.0
Milk, fresh	Quart	8.0	12.0	12.0	12.0	8.0	13.0	12.0	12.0	8.0	13.0	13.0	14.0
Milk, evaporated	15–16 oz. can	.....	11.7	10.5	11.1	.....	11.8	11.0	11.5	.....	11.7	11.3	11.5
Butter	Pound	38.3	51.2	54.5	60.4	39.3	50.5	54.5	60.4	42.2	56.3	59.4	64.4
Oleomargarine	do	.....	25.3	23.8	25.3	.....	28.9	28.7	29.5	.....	29.9	28.5	29.3
Nut margarine	do	.....	24.5	22.4	24.0	.....	27.9	26.9	28.4	.....	27.4	26.0	27.1
Cheese	do	25.3	35.8	37.4	38.8	21.4	34.0	35.4	36.8	24.0	32.3	33.9	35.2
Lard	do	15.0	15.4	16.8	16.9	13.9	12.9	15.7	15.7	16.4	16.2	18.0	18.3
Crisco	do	.....	21.3	22.8	22.8	.....	20.8	22.1	22.4	.....	21.4	23.5	23.7
Eggs, strictly fresh	Dozen	40.0	69.2	60.3	65.8	38.0	63.0	63.7	59.9	48.0	76.9	75.5	76.1
Eggs, storage	do	32.0	49.1	37.8	39.3	30.6	47.7	36.8	37.4	34.3	51.5	43.2	42.4
Bread	Pound	6.1	9.8	9.7	9.7	4.8	8.6	8.4	8.4	5.6	8.1	7.9	7.9
Flour	do	2.9	4.4	4.2	4.3	3.3	5.0	4.6	4.6	3.1	5.1	4.7	4.7
Corn meal	do	2.9	5.7	5.1	5.1	2.8	3.0	2.8	2.9	2.9	3.8	3.5	3.6
Rolled oats	do	.....	9.0	7.9	8.1	.....	9.4	8.6	8.6	.....	9.6	8.5	8.6
Corn flakes	8-oz. pkg	.....	10.9	9.5	9.4	.....	11.3	9.4	9.4	.....	12.4	10.0	10.0
Cream of Wheat	28-oz. pkg	.....	28.0	24.2	24.1	.....	28.7	24.7	24.3	.....	28.8	25.9	25.6
Macaroni	Pound	.....	18.3	18.3	18.0	.....	18.0	16.5	16.2	.....	21.1	20.5	20.0
Rice	do	9.0	9.7	9.7	9.5	8.8	9.2	8.8	8.8	9.0	9.7	9.0	9.0
Beans, navy	do	.....	7.7	10.2	10.6	.....	6.9	9.5	9.9	.....	7.5	9.7	9.9
Potatoes	do	1.7	2.9	1.7	1.8	1.8	3.1	2.1	2.0	2.0	3.0	2.0	2.0
Onions	do	.....	7.2	4.1	4.5	.....	7.7	4.5	4.8	.....	7.9	3.8	4.0
Cabbage	do	.....	5.9	3.3	3.7	.....	5.0	3.4	3.6	.....	5.2	3.1	3.4
Beans, baked	No. 2 can	.....	13.0	12.7	12.9	.....	11.9	11.5	11.3	.....	12.8	12.3	12.4
Corn, canned	do	.....	15.3	13.7	14.1	.....	14.8	13.8	13.8	.....	16.6	15.9	15.5
Peas, canned	do	.....	16.0	15.5	15.6	.....	16.7	16.4	16.4	.....	17.4	17.1	17.3
Tomatoes, canned	do	.....	13.7	13.3	13.5	.....	12.3	12.3	12.2	.....	13.7	13.6	13.5
Sugar, granulated	Pound	5.1	6.0	7.6	7.7	5.2	6.4	7.9	8.1	5.4	6.6	8.1	8.2
Tea	do	55.0	66.1	66.6	67.4	60.0	69.0	69.3	68.0	50.0	65.1	68.4	68.0
Coffee	do	30.7	34.1	34.8	35.2	25.6	30.4	31.8	31.6	26.5	36.0	38.2	39.0
Prunes	do	.....	19.7	20.6	20.3	.....	20.8	19.4	19.2	.....	17.5	20.0	19.4
Raisins	do	.....	26.1	20.8	19.5	.....	22.9	19.9	18.8	.....	24.3	20.3	20.1
Bananas	Dozen	.....	36.9	37.5	38.3	.....	40.3	38.5	38.7	.....	45.7	44.5	45.0
Oranges	do	.....	53.7	57.9	52.1	.....	42.4	42.8	43.1	.....	55.3	52.6	50.0

[1] The steak for which prices are here quoted is called "rump" in this city, but in most of the other cities included in this report it would be known as porterhouse steak.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Columbus, Ohio.			Dallas, Tex.				Denver, Colo.				Detroit, Mich.				Fall River, Mass.			
			Dec. 15—				Dec. 15—				Dec. 15—				Dec. 15—			
Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	1913	1921	Nov. 15, 1922.	Dec. 15, 1922.	1913	1921	Nov. 15, 1922.	Dec. 15, 1922.	1913	1921	Nov. 15, 1922.	Dec. 15, 1922.	1913	1921	Nov. 15, 1922.	Dec. 15, 1922.
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
31.3	34.3	33.6	23.6	31.4	34.5	34.0	22.9	27.6	28.7	28.4	24.8	31.6	34.8	34.0	[1] 34.3	[1] 52.7	[1] 55.7	[1] 56.6
26.9	30.0	29.4	21.3	29.5	31.5	30.7	20.7	23.2	24.0	23.1	20.4	24.9	27.6	27.1	27.3	40.1	41.8	42.8
23.9	26.3	25.9	20.6	26.4	27.1	27.0	16.7	21.7	21.2	20.8	20.2	24.7	25.4	24.8	23.3	26.5	26.4	27.0
19.5	20.5	20.1	16.4	20.3	21.2	20.7	15.0	16.6	16.1	15.7	15.4	17.5	18.4	18.2	18.3	19.9	20.0	20.3
12.8	13.4	13.8	13.6	16.1	15.6	15.0	9.9	9.4	9.7	9.4	11.7	11.2	11.6	11.6	.....	12.4	11.9	12.6
23.8	30.1	26.6	21.6	34.3	33.5	32.5	20.0	9.3	31.1	27.0	18.2	28.5	31.9	28.8	20.2	30.2	34.3	29.4
35.3	38.6	36.8	37.5	45.1	43.6	43.8	28.0	41.6	44.2	43.1	22.3	35.9	41.2	40.3	25.4	38.5	37.9	38.7
41.9	45.6	44.1	31.6	49.9	52.0	50.6	30.0	50.7	51.7	48.8	28.0	47.3	48.3	47.3	30.4	47.2	46.5	46.3
32.3	35.0	34.4	22.5	37.0	40.0	40.0	15.6	29.0	34.2	34.1	16.0	30.6	35.7	36.8	19.0	35.0	38.9	38.9
35.0	30.0	30.1	19.3	30.4	30.0	29.9	19.9	30.1	28.0	26.8	18.6	33.5	32.6	32.3	24.6	46.2	42.2	41.8
34.0	32.0	31.6	.....	33.4	31.1	31.4	.....	36.0	34.0	33.8	.....	31.4	30.5	30.7	.....	33.6	30.3	31.1
12.0	11.0	12.0	10.8	15.0	15.0	15.0	8.3	10.8	9.8	11.8	9.0	13.0	13.0	13.8	9.0	15.0	14.0	14.0
12.4	11.5	11.8	.....	14.3	12.9	13.3	.....	12.4	11.6	11.8	.....	12.0	11.2	11.5	.....	14.5	12.6	12.9
51.4	55.9	61.3	41.3	49.5	53.2	58.1	37.9	45.9	52.5	56.6	38.9	50.7	55.4	61.9	36.4	50.9	48.8	52.8
27.5	26.1	27.1	.....	27.0	27.3	27.3	.....	30.0	29.0	29.0	.....	29.6	27.5	28.3	.....	37.5	30.3	31.3
27.1	25.3	25.5	.....	30.1	29.4	30.1	.....	29.2	28.3	28.0	.....	28.0	26.3	27.1	.....	34.0	31.3	30.3
30.5	35.6	37.1	20.0	33.8	35.8	36.5	26.1	35.5	37.9	38.4	22.7	33.0	35.5	37.8	23.6	33.9	35.5	36.7
12.8	16.0	15.9	17.2	21.0	20.1	21.1	16.1	17.8	19.6	19.5	16.0	15.6	17.1	17.2	15.3	15.9	16.6	16.7
22.4	22.3	22.5	.....	20.3	21.7	21.0	.....	23.4	24.2	24.4	.....	20.6	22.9	23.1	.....	21.2	23.0	23.0
69.5	67.1	61.7	45.0	61.9	48.1	54.3	47.1	66.7	59.7	66.2	45.3	81.8	66.1	68.6	55.8	111.5	93.1	99.8
45.5	39.7	39.3	37.5	46.0	41.5	44.6	36.0	47.7	39.8	40.7	33.5	51.2	39.4	40.1	36.0	51.4	41.4	43.0
8.3	7.6	7.6	5.4	9.4	8.9	8.9	5.6	9.7	8.2	8.2	5.6	8.7	8.6	8.6	6.3	9.6	9.2	9.2
4.9	4.5	4.6	3.3	4.8	4.7	4.7	2.6	3.8	3.8	3.8	3.1	4.9	4.5	4.5	3.3	5.3	5.1	5.2
3.2	3.0	3.0	3.5	3.5	3.5	3.6	2.5	3.0	3.1	3.2	2.8	4.7	4.4	4.5	3.6	6.9	6.6	6.2
9.7	9.5	8.8	.....	11.3	10.4	10.8	.....	9.7	8.7	8.8	.....	9.9	9.4	9.1	.....	10.7	9.2	9.4
11.1	9.5	9.5	.....	12.9	11.8	11.4	.....	13.0	9.9	10.0	.....	11.1	9.2	9.1	.....	13.7	10.1	9.9
29.4	26.1	26.1	.....	30.4	25.6	26.0	.....	28.9	25.2	25.2	.....	29.1	25.3	25.2	.....	29.9	28.4	28.5
19.7	19.3	19.3	.....	21.2	21.3	21.5	.....	20.8	20.6	20.6	.....	19.4	19.9	19.7	.....	24.6	23.8	23.9
10.0	10.4	10.2	9.3	10.3	10.7	9.9	8.6	9.4	9.7	9.5	8.4	9.0	9.1	9.2	10.0	9.6	9.9	10.1
7.3	9.5	9.6	.....	9.3	10.9	10.9	.....	8.9	10.5	10.9	.....	7.2	9.5	9.8	.....	8.1	10.7	11.1
3.0	2.0	1.7	2.4	4.2	3.5	3.6	1.6	2.5	1.8	1.8	1.6	2.4	1.4	1.3	1.8	3.0	2.1	2.1
8.3	5.0	5.0	.....	8.8	6.0	6.5	.....	6.9	3.9	3.9	.....	7.4	3.5	4.1	.....	9.3	4.8	4.9
5.6	3.8	3.9	.....	6.9	5.0	5.0	.....	4.3	2.2	2.2	.....	4.9	2.6	3.1	.....	4.9	3.7	4.1
13.3	13.8	13.5	.....	16.1	15.8	15.9	.....	16.4	14.3	14.3	.....	12.0	12.1	12.3	.....	14.5	12.9	13.1
13.6	12.7	12.6	.....	17.9	17.2	17.5	.....	14.9	14.5	14.5	.....	14.9	15.4	15.5	.....	16.6	15.5	15.8
15.8	14.9	14.9	.....	21.9	21.4	21.8	.....	17.5	16.2	16.0	.....	16.6	16.6	16.8	.....	18.6	17.4	17.9
12.3	13.6	13.2	.....	13.9	14.1	13.8	.....	13.2	13.1	13.6	.....	12.9	12.8	12.8	.....	13.9	13.2	13.6
6.7	8.3	8.3	5.6	7.3	8.6	9.0	5.2	7.2	8.9	9.1	5.1	6.4	7.8	7.9	5.3	6.8	8.3	8.5
82.8	76.2	76.6	66.7	87.6	96.5	96.7	52.8	70.9	69.1	69.1	43.3	61.2	64.5	65.1	44.2	57.2	60.5	60.5
34.3	35.0	35.1	36.7	38.9	41.5	43.3	29.4	35.7	35.9	36.3	29.3	34.7	36.7	36.5	33.0	38.9	38.1	38.4
17.8	21.9	20.5	.....	22.5	23.6	24.0	.....	19.3	20.7	21.4	.....	18.9	20.4	20.4	.....	18.3	18.2	18.5
23.9	19.7	19.4	.....	26.9	21.0	20.0	.....	26.3	19.8	19.8	.....	25.1	18.9	18.3	.....	25.5	21.4	20.6
37.5	38.2	38.2	.....	35.0	34.3	34.4	.....	[2] 13.4	[2] 13.5	[2] 13.7	.....	33.7	34.9	34.7	.....	[2] 10.4	[2] 10.1	[2] 10.2
49.5	49.6	46.1	.....	53.7	56.3	54.0	.....	51.4	51.9	51.7	.....	56.6	53.5	51.8	.....	50.7	51.4	51.6

[1] Per pound.

TABLE 8.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Houston, Tex.			Indianapolis, Ind.				Jacksonville, Fla.			
		Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
					1913	1921			1913	1921		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	29.6	29.3	29.1	25.5	30.4	34.9	34.0	25.5	34.2	33.5	32.1
Round steak	do	28.4	27.8	27.7	24.2	28.7	33.1	32.5	21.0	29.5	27.7	26.7
Rib roast	do	24.1	23.9	23.9	17.8	23.6	25.6	25.6	21.3	25.8	26.2	25.4
Chuck roast	do	20.0	19.4	18.9	16.3	19.6	21.6	21.7	14.1	17.5	15.8	15.8
Plate beef	do	15.2	14.4	14.6	12.5	13.3	13.9	13.8	10.6	9.8	10.8	10.9
Pork chops	do	33.2	33.3	28.8	20.7	25.8	31.1	27.3	22.5	31.7	33.5	29.2
Bacon	do	49.9	46.2	43.9	29.7	36.4	39.0	38.0	30.1	37.7	37.9	35.4
Ham	do	49.3	47.5	46.7	30.3	46.8	49.0	48.2	29.3	45.0	45.5	43.6
Lamb, leg of	do	33.0	34.3	34.4	19.0	32.5	37.1	33.6	20.6	35.6	34.8	35.0
Hens	do	32.0	31.1	31.7	20.8	31.1	30.4	29.8	24.2	34.8	34.0	34.3
Salmon, canned, red	do	32.6	30.5	30.7	.....	18.1	37 2	36.5	.....	33.1	30.4	29.7
Milk, fresh	Quart	16.7	15.8	15.8	8.0	11.3	10.3	10.3	12.3	20.0	17.7	17.7
Milk, evaporated	15–16 oz. can	12.9	12.4	12.9	.....	12.4	11.7	11.6	.....	13.6	11.7	12.1
Butter	Pound	48.0	53.4	58.8	38.3	48.2	54.5	59.5	39.6	52.6	54.1	59.3
Oleomargarine	do	32.7	33.0	32.8	.....	29.6	27.3	28.2	.....	30.4	29.9	29.0
Nut margarine	do	30.0	29.5	29.6	.....	28.3	26.5	27.1	.....	31.6	29.2	28.8
Cheese	do	30.5	35.1	36.1	21.8	33.3	36.2	37.4	22.5	31.7	35.0	35.9
Lard	do	17.3	18.6	17.9	14.6	12.5	15.2	14.7	15.3	17.5	17.5	17.7
Crisco	do	21.7	24.6	24.3	.....	21.5	22.7	23.4	.....	21.6	21.7	22.5
Eggs, strictly fresh	Dozen	54.4	44.9	51.5	38.5	62.4	57.5	60.2	50.0	67.8	62.9	67.2
Eggs, storage	do	43.6	38.5	40.3	32.8	47.3	38.7	37.6	40.0	49.5	42.5	42.3
Bread	Pound	8.4	6.6	6.6	5.1	8.6	7.8	7.3	6.1	10.4	10.6	10.6
Flour	do	5.2	5.1	5.1	3.1	4.8	4.5	4.6	3.7	5.9	5.6	5.4
Corn meal	do	3.7	3.3	3.6	2.6	2.8	2.9	3.0	2.8	3.3	3.3	3.3
Rolled oats	do	10.5	8.7	8.7	.....	8.9	7.8	8.0	.....	11.1	9.7	9.5
Corn flakes	8-oz. pkg	12.6	9.7	9.7	.....	11.8	8.9	9.0	.....	12.7	9.8	9.6
Cream of Wheat	28-oz. pkg	29.6	24.8	24.7	.....	31.4	26.3	26.6	.....	30.6	25.9	25.3
Macaroni	Pound	20.2	19.9	19.9	.....	19.8	18.9	18.8	.....	26.8	19.3	19.4
Rice	do	7.8	7.7	7.7	9.2	9.9	10.3	10.0	6.8	8.8	8.9	8.7
Beans, navy	do	9.0	10.0	10.3	.....	7.6	10.0	10.3	.....	9.3	11.3	11.1
Potatoes	do	4.1	3.4	3.6	1.7	2.7	1.7	1.5	2.5	4.0	2.7	2.9
Onions	do	7.5	5.3	5.4	.....	8.3	4.2	4.4	.....	9.6	5.0	5.1
Cabbage	do	6.0	4.7	4.9	.....	5.4	3.7	3.8	.....	6.6	4.5	4.6
Beans, baked	No. 2 can	13.4	14.0	13.8	.....	13.6	13.3	13.3	.....	12.6	11.9	12.1
Corn, canned	do	13.9	13.6	13.6	.....	15.0	13.7	13.6	.....	17.3	15.9	16.0
Peas, canned	do	17.7	18.7	18.4	.....	15.5	15.5	15.4	.....	20.2	17.1	16.3
Tomatoes, canned	do	13.4	12.0	12.1	.....	14.4	13.6	13.5	.....	12.3	10.5	10.9
Sugar, granulated	Pound	6.0	8.1	8.5	5.8	6.8	8.6	8.8	5.9	6.9	8.0	8.3
Tea	do	72.1	72.2	72.2	60.0	79.1	75.6	76.1	60.0	85.2	83.7	84.5
Coffee	do	31.2	32.1	32.3	30.0	37.7	37.3	37.8	34.5	38.1	37.9	38.3
Prunes	do	18.0	21.1	20.9	.....	19.4	21.4	21.5	.....	17.8	21.0	21.3
Raisins	do	25.2	20.5	19.9	.....	27.6	21.4	20.2	.....	27.1	20.6	20.0
Bananas	Dozen	30.6	31.3	31.9	.....	28.7	28.7	30.0	.....	35.0	30.0	30.7
Oranges	do	47.2	48.5	43.2	.....	47.7	49.3	47.5	.....	35.6	30.6	31.0

[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.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Kansas City, Mo.				Little Rock, Ark.				Los Angeles, Calif.				Louisville, Ky.				Manchester, N. H.			
Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
1913	1921			1913	1921			1913	1921			1913	1921			1913	1921		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
24.6	33.3	35.8	34.8	25.0	30.0	32.2	31.7	23.1	32.9	33.9	33.7	23.0	28.1	29.4	29.3	[1] 34.5	[1] 50.3	[1] 50.4	[1] 50.0
22.1	27.8	30.0	29.2	20.0	29.1	29.3	28.3	21.3	27.4	28.3	28.1	20.0	26.5	27.4	26.7	28.8	43.2	41.6	41.9
18.1	23.6	23.8	23.6	20.0	24.4	25.9	25.1	19.4	27.9	28.7	28.7	18.1	22.2	22.4	22.5	20.8	25.3	25.9	24.8
15.6	16.6	17.4	16.9	16.3	17.5	18.0	17.7	16.1	17.9	18.3	18.2	15.5	16.7	16.8	16.8	17.3	20.9	20.8	19.7
12.2	10.8	10.9	10.6	12.5	12.7	13.9	13.6	13.4	13.1	13.3	13.6	13.1	13.3	12.8	13.1	.....	15.8	14.7	14.3
19.6	28.2	29.8	25.3	20.0	30.1	33.9	31.5	25.3	35.9	40.0	37.1	19.0	25.3	28.7	25.0	19.3	31.3	34.3	27.9
30.3	43.0	43.5	43.5	36.7	41.2	42.6	41.8	33.5	52.2	52.6	52.8	27.0	32.3	38.4	37.1	24.0	33.9	34.6	34.9
28.8	49.2	45.2	45.0	27.5	47.5	49.1	46.9	34.5	57.6	60.8	59.8	28.5	39.6	41.7	40.2	27.5	40.3	41.2	40.9
18.7	28.6	30.9	31.4	18.8	32.9	35.0	35.7	19.1	27.4	33.4	33.6	18.2	29.0	33.0	32.5	20.0	34.3	35.7	35.1
16.4	31.2	28.3	27.7	20.0	29.4	29.3	29.2	27.9	43.1	39.7	39.1	21.6	30.7	28.1	28.6	24.5	45.7	41.7	40.7
.....	32.7	31.9	31.7	....	33.4	30.3	29.9	....	40.9	39.3	38.6	....	32.2	29.4	30.0	.....	33.2	30.0	29.7
9.3	14.7	12.7	13.0	10.5	15.0	15.0	15.3	10.0	14.0	15.0	15.0	8.6	11.0	12.0	13.0	8.0	15.0	13.0	13.0
.....	13.5	11.8	12.1	....	13.9	12.5	12.9	....	11.5	10.8	10.9	....	13.5	11.6	12.0	.....	14.2	13.2	13.4
40.3	49.8	54.1	61.3	45.0	51.9	52.9	59.9	39.7	54.3	55.4	59.2	41.3	54.3	56.1	61.9	41.4	56.8	55.7	58.2
.....	29.2	26.6	27.0	....	31.3	29.3	29.5	....	32.1	32.2	31.2	....	29.3	27.6	28.1	.....	30.5	28.0	28.5
.....	28.3	27.0	27.1	....	30.1	28.6	29.4	....	29.6	28.9	28.9	....	28.9	26.0	26.7	.....	24.3	23.3	23.3
22.0	33.7	36.1	37.5	23.3	32.9	37.6	38.7	19.5	37.8	37.4	38.0	22.5	29.4	34.0	36.4	22.3	34.1	35.7	35.7
16.4	16.8	17.5	17.5	16.5	18.4	19.7	19.4	18.1	17.3	19.8	20.0	15.8	13.3	15.6	15.3	15.8	16.7	17.4	17.5
.....	23.3	24.3	23.9	....	21.7	22.9	22.5	....	21.6	23.6	23.6	....	22.4	23.3	23.3	.....	21.5	23.2	23.7
38.0	58.4	50.9	58.7	40.0	57.2	45.5	46.6	53.3	64.6	64.8	63.2	36.6	62.6	54.1	60.0	52.4	89.6	85.2	77.5
33.0	47.2	37.3	38.9	....	50.1	38.3	41.2	38.3	45.7	43.8	44.9	33.3	46.8	38.2	37.3	37.0	51.0	42.5	44.1
6.0	9.6	7.9	7.9	6.0	8.4	8.3	8.3	6.0	9.2	9.0	8.8	5.7	8.9	8.8	8.8	5.9	8.3	7.6	7.6
3.0	4.8	4.5	4 5	3.6	5.4	5.3	5.3	3.5	4.8	4.9	5.0	3.5	5.0	5.1	5.2	3.4	5.5	5.1	5.1
2.8	4.8	4.4	4.5	2.8	2.9	3.2	3.2	3.5	4.1	4.5	4.6	2.4	2.3	2.6	2.8	3.4	5.2	4.6	4.5
.....	10.2	8.2	8.2	....	11.1	10.2	10.2	....	10.6	10.2	10.3	....	9.8	8.6	8.6	.....	9.6	8.9	8.5
.....	13.0	9.9	9.9	....	12.8	9.8	9.8	....	12.1	9.9	10.0	....	11.1	9.4	9.3	.....	13.0	9.5	9.5
.....	30.3	26.3	26.5	....	29.8	26.3	26.8	....	28.1	24.2	24.4	....	29.4	24.7	24.7	.....	29.2	26.1	25.6
.....	22.1	21.2	21.4	....	21.4	21.5	21.6	....	17.2	16.0	16.0	....	19.2	17.1	17.2	.....	25.5	24.5	24.7
8.7	8.7	9.3	9.1	8.3	8.1	8.4	8.2	7.7	10.0	9.7	9.5	9.0	8.9	8.6	8.5	8.8	9.2	9.2	9.0
.....	8.6	10.5	10.8	....	8.4	10.7	11.4	....	8.2	9.2	9.4	....	7.1	9.7	10.2	.....	8.2	10.2	10.4
1.9	2.9	2.2	2.0	2.2	3.5	2.4	2.6	1.9	3.3	2.6	2.5	2.0	2.6	1.7	1.6	1.6	2.7	1.9	1.9
.....	9.1	4.7	5.2	....	8.8	5.5	5.5	....	7.6	4.6	4.8	....	8.5	3.4	4.0	.....	8.5	3.9	4.3
.....	5.7	3.2	3.3	....	6.7	4.1	3.9	....	3.7	4.5	4.4	....	5.4	3.2	3.4	.....	5.1	3.8	3.6
.....	14.3	14.7	14.2	....	13.6	13.5	13.3	....	15.9	13.7	13.4	....	12.6	12.1	11.9	.....	16.2	15.1	15.1
.....	13.4	13.7	13.7	....	15.9	14.9	14.9	....	18.2	16.1	16.1	....	15.8	14.1	13.6	.....	18.9	17.6	17.2
.....	15.0	15.5	15.2	....	18.9	18.6	18.6	....	18.1	19.2	19.4	....	16.5	15.5	15.5	.....	21.9	20.4	20.3
.....	13.3	13.1	13.2	....	12.7	13.1	12.8	....	[2]16.1	[2] 15.8	[2] 15.5	....	13.4	11.4	11.3	.....	[3] 19.5	[3] 18.1	[3]18.8
5.5	6.8	8.4	8.6	5.3	7.4	8.8	9.0	5.3	6.6	8.3	8.5	5.3	6.6	8.1	8.2	5.3	6.8	8.2	8.6
54.0	79.1	80.5	80.0	50.0	90.8	91.8	91.8	54.5	66.7	72.1	72.1	65.0	76.9	72.4	72.4	47.5	57.8	57.7	57.1
27.8	35.9	37.7	38.0	30.8	38.1	39.7	39.7	36.3	37.7	38.2	38.8	27.5	33.6	35.2	34.9	32.0	38.7	39.2	38.2
.....	18.0	20.4	20.5	....	20.9	20.9	20.2	....	17.4	19.1	19.3	....	18.9	20.1	19.9	19.5	19.5	20.3	19.7
.....	29.4	20.7	20.2	....	26.3	22.9	21.5	....	27.5	19.5	18.7	....	24.7	19.4	19.3	24.2	24.2	19.1	19.0
.....	[4] 11.9	[4] 12.5	[4] 13.3	....	[4] 10.5	[4] 10.3	[4] 10.3	....	[4] 11.5	[4] 11.6	[4] 11.5	....	36.0	33.9	37.2	10.2	[4] 10.2	[4] 10.1	[4] 10.5
.....	58.9	55.3	53.9	....	51.1	57.7	46.8	....	40.0	44.5	38.5	....	35.9	40.8	38.8	55.2	55.2	54.1	52.1

[2] No. 2½ can. [3] No. 3 can. [4] Per pound.

TABLE 8.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Memphis, Tenn.				Milwaukee, Wis.				Minneapolis, Minn.			
		Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
		1913	1921			1913	1921			1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	24.0	27.4	30.0	28.6	23.4	33.5	35.8	36.0	19.3	26.9	29.5	29.3
Round steak	do	20.0	24.1	26.8	25.4	21.6	29.7	31.4	30.9	18.0	23.6	25.1	24.9
Rib roast	do	21.0	22.2	22.3	21.7	18.8	25.5	25.7	26.2	18.7	21.3	23.5	23.5
Chuck roast	do	15.0	16.0	16.6	16.7	16.4	20.9	21.8	21.4	14.7	16.1	17.3	17.3
Plate beef	do	12.5	12.5	12.2	12.5	12.1	13.1	12.4	12.5	10.0	9.3	9.2	9.5
Pork chops	do	20.0	26.3	28.3	24.9	17.4	26.8	30.8	27.2	17.2	26.4	29.8	27.5
Bacon	do	30.0	36.8	38.3	37.9	27.4	40.0	41.7	41.2	26.7	40.4	44.1	43.8
Ham	do	[1] 29.0	[1] 43.2	[1] 46.2	[1] 46.2	27.8	44.0	45.0	44.8	28.3	40.7	44.4	45.1
Lamb, leg of	do	20.6	32.4	36.6	35.3	18.5	33.1	35.9	35.8	14.6	28.6	31.7	31.5
Hens	do	19.6	30.5	29.4	27.6	17.2	29.9	27.3	28.0	16.4	27.9	26.2	27.6
Salmon, canned, red	do	.....	40.7	34.8	34.6	.....	38.3	32.3	32.6	.....	42.1	39.0	37.9
Milk, fresh	Quart	10.0	17.0	15.0	15.0	7.0	9.0	10.0	10.0	8.0	11.0	11.0	11.0
Milk, evaporated	15–16 oz. can	.....	14.3	11.4	11.8	.....	12.3	10.9	11.3	.....	13.3	11.9	12.1
Butter	Pound	38.8	48.9	51.1	55.9	38.8	51.0	54.8	60.5	36.9	46.4	52.3	57.7
Oleomargarine	do	.....	31.0	31.0	30.0	.....	26.3	25.0	26.3	.....	28.8	25.4	27.0
Nut margarine	do	.....	28.3	26.5	26.7	.....	25.8	24.2	25.2	.....	26.5	25.0	25.1
Cheese	do	22.0	29.9	33.9	35.9	22.3	30.9	34.3	34.8	21.3	30.4	33.8	35.2
Lard	do	15.0	14.4	16.0	15.8	16.0	16.0	17.7	17.7	15.4	14.6	17.0	17.0
Crisco	do	.....	19.4	20.7	20.2	.....	21.9	22.6	22.6	.....	22.8	24.3	24.3
Eggs, strictly fresh	Dozen	39.0	57.3	43.6	51.5	40.0	71.6	56.7	67.1	39.1	63.2	55.1	60.9
Eggs, storage	do	30.0	45.7	39.0	39.0	33.0	46.0	36.4	36.3	31.6	46.1	36.0	36.5
Bread	Pound	6.0	9.6	9.0	9.1	5.7	8.5	8.8	8.9	5.6	8.4	9.0	9.0
Flour	do	3.5	5.6	5.3	5.3	3.0	4.6	4.2	4.2	2.8	4.9	4.6	4.7
Corn meal	do	2.5	2.6	2.8	2.8	3.2	4.4	3.7	3.8	2.5	4.2	3.8	3.9
Rolled oats	do	.....	10.4	9.0	8.9	.....	6.9	7.1	7.3	.....	8.0	8.0	8.2
Corn flakes	8-oz. pkg	.....	12.4	9.5	9.6	.....	11.5	9.0	9.0	.....	12.4	9.9	9.8
Cream of Wheat	28-oz. pkg	.....	28.5	25.6	25.3	.....	28.5	24.5	24.5	.....	29.1	25.0	25.0
Macaroni	Pound	.....	16.5	17.5	17.8	.....	18.3	17.2	17.4	.....	17.6	17.6	17.7
Rice	do	8.1	7.8	8.3	8.2	9.0	9.9	10.0	9.7	8.6	9.5	9.6	9.9
Beans, navy	do	.....	8.1	10.1	10.6	.....	7.6	9.9	10.2	.....	8.8	9.5	9.8
Potatoes	do	2.0	3.4	2.4	2.5	1.7	2.7	1.4	1.3	1.6	3.0	1.4	1.4
Onions	do	.....	8.1	3.8	4.3	.....	8.2	4.1	4.4	.....	6.9	3.8	3.9
Cabbage	do	.....	5.0	2.6	3.3	.....	5.1	1.6	2.3	.....	4.9	2.0	2.8
Beans, baked	No. 2 can	.....	14.1	13.1	13.3	.....	11.7	11.1	11.6	.....	15.4	15.2	14.2
Corn, canned	do	.....	15.2	14.3	14.3	.....	15.2	14.9	15.0	.....	14.3	13.3	13.5
Peas, canned	do	.....	18.7	17.4	17.4	.....	15.1	15.5	15.4	.....	16.2	15.3	15.6
Tomatoes, canned	do	.....	12.6	12.3	12.5	.....	12.8	13.5	13.6	.....	15.2	14.7	14.7
Sugar, granulated	Pound	5.3	6.7	8.4	8.3	5.5	6.2	7.9	8.0	5.0	6.7	8.4	8.5
Tea	do	63.8	86.5	85.9	82.6	50.0	68.5	68.7	68.6	45.0	63.4	65.0	65.0
Coffee	do	27.5	37.9	36.6	36.6	27.5	32.4	33.3	33.8	30.8	39.6	40.7	40.7
Prunes	do	.....	19.3	22.5	20.5	.....	18.3	20.6	20.6	.....	19.3	21.2	20.8
Raisins	do	.....	29.0	20.1	19.3	.....	25.2	18.4	18.3	.....	25.7	19.9	19.4
Bananas	Dozen	.....	32.0	32.2	34.4	.....	[3] 10.4	[3] 10.4	[3] 10.2	.....	[3] 11.5	[3] 12.3	[3] 12.3
Oranges	do	.....	41.4	47.8	43.0	.....	54.8	54.5	54.2	.....	61.3	58.6	55.3

[1] Whole.

[3] No. 3 can.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Mobile, Ala.			Newark, N. J.				New Haven, Conn.				New Orleans, La.				New York, N. Y.			
Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
			1913	1921			1913	1921			1913	1921			1913	1921		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
29.4	29.4	30.0	27.2	39.6	43.5	42.4	30.8	46.4	49.0	48.2	21.5	30.0	30.5	31.2	25.7	40.5	41.9	40.6
29.4	29.3	29.2	26.5	38.9	42.0	40.1	28.4	38.6	40.1	39.7	19.1	27.3	27.0	27.7	25.3	39.2	40.0	39.1
25.2	24.8	26.0	21.0	32.3	34.3	33.6	22.8	32.9	34.5	33.4	18.5	26.3	27.5	27.2	21.3	35.3	35.3	35.3
21.0	19.6	19.5	17.3	21.1	22.1	22.5	18.8	24.0	24.7	24.1	15.4	18.8	18.9	19.0	15.8	22.2	21.8	21.7
14.9	15.7	15.8	12.4	12.1	11.8	12.1	.....	15.1	14.3	14.5	12.0	16.0	15.5	16.0	14.5	18.0	17.5	17.7
34.3	35.8	35.0	21.0	31.8	34.4	30.1	19.6	31.8	34.3	30.5	24.0	33.0	36.1	32.2	18.4	36.1	36.7	33.7
43.8	43.5	41.9	25.3	34.6	39.0	38.8	28.2	41.7	41.3	41.3	30.4	41.0	41.1	40.9	25.5	38.3	39.8	39.1
44.3	45.4	45.8	[1] 19.8	[1] 26.7	[1] 27.9	[1] 27.2	30.8	49.8	53.4	52.2	27.0	45.6	44.1	42.2	29.0	50.7	53.0	50.6
31.7	33.3	34.4	20.0	36.6	37.9	37.5	18.7	34.8	38.2	37.6	20.5	36.3	39.3	38.5	15.4	33.7	34.3	34.4
36.9	35.0	35.0	23.4	39.5	38.5	37.3	23.3	42.9	41.2	40.6	22.0	36.3	36.3	36.5	20.7	38.8	36.9	35.9
35.2	30.3	30.3	.....	31.3	29.6	29.6	.....	36.9	33.4	33.2	.....	37.6	37.7	37.5	.....	35.4	29.2	29.7
17.5	15.0	15.0	9.0	17.0	16.5	17.5	9.0	15.0	15.0	15.0	9.8	14.7	14.0	14.0	9.0	15.0	15.0	16.0
12.7	12.6	12.8	.....	11.3	11.3	11.9	.....	12.3	11.3	11.8	.....	12.0	11.6	11.8	.....	11.1	11.0	11.7
53.7	56.3	62.2	43.7	54.8	58.2	63.1	37.3	50.7	49.2	53.3	39.8	52.0	53.1	59.0	41.1	53.9	57.4	61.7
31.0	30.2	30.3	.....	30.4	29.0	29.3	.....	28.5	29.3	29.7	.....	30.4	28.8	30.1	.....	30.6	28.5	28.3
29.4	27.5	28.0	.....	27.8	25.5	25.9	.....	26.7	27.0	27.0	.....	29.2	27.7	28.1	.....	27.4	26.4	25.6
31.5	35.9	39.7	24.8	35.5	36.7	37.6	23.5	33.2	34.4	35.0	21.9	31.6	36.1	36.8	20.2	33.9	34.3	36.1
15.9	17.4	17.8	16.3	15.3	17.4	17.5	15.6	15.4	17.2	17.0	15.0	14.7	16.8	16.9	16.1	16.8	17.7	17.9
21.3	22.7	22.8	.....	20.2	22.3	22.3	.....	19.8	22.1	22.1	.....	21.5	22.8	22.8	.....	20.3	23.0	22.9
61.4	46.1	51.0	57.2	80.6	83.4	80.5	56.4	91.9	87.2	83.5	34.0	53.8	42.8	49.1	54.3	82.0	80.3	79.0
47.1	37.4	38.4	35.6	51.0	42.8	43.4	34.2	51.5	42.4	43.7	30.0	44.0	35.6	37.4	36.7	50.6	39.8	41.9
8.3	8.3	8.3	5.5	9.3	8.6	8.6	6.0	9.4	8.1	8.1	5.0	8.1	7.6	7.7	6.1	9.9	9.8	9.7
5.1	5.2	5.4	3.6	4.9	4.8	4.9	3.1	4.9	4.8	4.8	3.7	5.7	5.6	5.7	3.2	5.0	4.9	4.9
3.0	3.1	3.3	3.6	5.8	6.2	6.5	3.2	5.8	5.7	5.9	2.7	2.9	3.2	3.2	3.4	6.0	5.4	5.5
10.6	9.0	9.0	.....	8.6	8.2	7.9	.....	10.0	8.9	8.9	.....	9.4	8.9	8.9	.....	8.9	7.9	7.9
11.9	9.4	9.4	.....	10.2	8.9	8.9	.....	10.9	9.4	9.5	.....	11.1	9.5	9.5	.....	10.0	8.6	8.7
28.3	24.2	24.2	.....	28.4	25.4	25.4	.....	28.4	24.8	24.8	.....	28.5	24.5	24.4	.....	28.6	24.6	24.6
19.4	20.1	20.3	.....	19.3	21.2	21.1	.....	21.7	22.3	22.4	.....	9.5	9.5	9.5	.....	20.0	20.3	20.1
8.5	8.5	8.6	9.0	8.7	9.0	8.9	9.3	9.1	10.2	10.0	7.5	8.1	8.8	8.6	8.0	9.0	9.2	9.2
8.6	12.1	11.8	.....	7.8	9.7	10.4	.....	8.1	9.7	9.9	.....	7.6	10.3	10.2	.....	8.7	10.5	11.1
3.9	2.8	2.9	2.5	3.7	2.2	2.3	1.7	3.0	2.1	2.1	2.2	3.7	3.0	2.9	2.4	4.1	2.4	2.6
8.9	4.5	4.7	.....	8.7	5.2	5.1	.....	8.1	5.0	5.2	.....	7.1	4.0	4.2	.....	7.7	4.1	4.7
5.6	3.6	3.7	.....	5.2	4.1	4.2	.....	5.2	3.5	3.6	.....	5.5	4.0	3.8	.....	5.0	3.0	3.4
13.6	12.9	13.3	.....	11.3	11.0	11.1	.....	13.6	12.2	12.4	.....	13.1	12.7	12.8	.....	12.4	11.6	11.6
16.2	14.9	15.0	.....	16.1	14.4	14.6	.....	19.0	18.1	17.5	.....	14.2	12.9	13.0	.....	14.7	14.4	14.1
17.6	15.9	15.7	.....	18.0	17.3	17.3	.....	22.0	21.2	21.1	.....	18.1	16.7	16.7	.....	16.5	16.3	16.3
13.0	12.2	12.4	.....	11.2	11.2	11.2	.....	[2] 22.2	[2] 22.5	[2] 22.2	.....	12.9	12.1	11.6	.....	11.9	11.0	10.8
6.8	8.4	8.6	5.3	5.7	7.7	8.0	5.5	6.2	7.9	8.0	5.1	6.0	7.7	7.8	4.9	5.7	7.7	7.7
73.5	76.3	76.3	53.8	50.5	49.5	50.8	55.0	54.9	56.9	56.9	62.1	70.9	72.0	72.0	43.3	50.3	50.1	50.2
32.2	35.6	35.6	29.3	31.5	33.0	33.0	33.8	37.7	38.4	38.6	25.0	30.3	30.9	30.9	27.2	32.4	33.0	33.0
18.6	20.8	20.3	.....	16.8	18.3	18.3	.....	17.8	19.7	19.0	.....	18.6	21.2	21.3	.....	18.0	18.8	19.0
24.9	21.5	20.6	.....	23.3	18.0	17.8	.....	24.6	18.6	18.0	.....	25.6	19.8	19.0	.....	24.6	18.0	17.6
28.0	26.9	27.3	.....	41.5	37.5	37.8	.....	34.6	32.7	32.0	.....	21.3	25.0	23.8	.....	42.8	43.5	43.8
41.1	41.0	43.3	.....	58.6	56.0	50.5	.....	52.5	50.1	46.5	.....	45.5	45.0	45.7	.....	62.6	60.8	52.9

[1] Per pound.

TABLE 8.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Norfolk, Va.			Omaha, Nebr.				Peoria, Ill.		
		Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15— 1913	Dec. 15— 1921	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	35.6	36.7	36.3	26.0	32.1	35.4	34.4	30.6	30.9	30.4
Round steak	do	29.8	30.8	30.0	22.4	28.8	32.0	30.7	29.2	29.8	29.1
Rib roast	do	29.8	30.1	29.5	20.0	23.9	24.8	24.6	22.9	23.3	23.0
Chuck roast	do	19.0	19.5	19.1	16.6	18.5	19.4	18.9	18.8	19.2	19.2
Plate beef	do	13.7	14.4	14.0	11.2	10.7	10.7	10.3	12.8	12.5	12.8
Pork chops	do	27.4	31.2	28.8	19.7	28.7	31.3	26.7	27.4	30.4	27.0
Bacon	do	33.8	37.3	36.3	28.0	44.8	45.9	45.6	41.9	42.5	41.1
Ham	do	38.8	40.7	39.6	30.0	48.8	49.7	48.5	47.7	47.9	45.4
Lamb, leg of	do	35.0	38.7	37.2	16.3	29.7	36.7	35.8	32.1	34.4	34.4
Hens	do	36.6	35.8	35.6	15.6	28.9	27.7	26.4	30.7	27.6	27.4
Salmon, canned, red	do	30.6	29.1	29.9	.....	33.7	33.0	33.5	33.3	33.1	33.1
Milk, fresh	Quart	18.0	17.0	17.0	8.7	12.8	11.0	11.0	12.7	10.6	10.8
Milk, evaporated	15-16 oz. can	12.0	10.9	11.3	.....	12.8	11.9	11.8	13.1	11.8	11.8
Butter	Pound	53.7	53.8	58.1	37.2	49.0	50.9	58.2	47.5	51.5	59.0
Oleomargarine	do	29.0	28.4	30.4	.....	31.2	29.3	28.9	29.5	27.7	29.2
Nut margarine	do	30.3	26.6	28.5	.....	28.4	27.6	27.9	28.0	26.9	27.4
Cheese	do	30.8	33.7	35.5	23.5	32.5	34.4	35.4	32.7	36.1	36.7
Lard	do	16.6	16.8	16.9	17.6	18.7	18.9	19.1	15.9	17.2	17.1
Crisco	do	20.3	21.9	22.0	.....	22.8	24.3	24.4	22.7	24.4	24.4
Eggs, strictly fresh	Dozen	63.9	56.3	60.8	36.0	58.1	45.0	53.8	66.8	55.7	59.5
Eggs, storage	do	47.1	38.4	38.7	31.7	46.7	34.9	36.0	45.9	36.3	36.7
Bread	Pound	9.1	8.1	8.1	5.2	10.0	9.8	9.8	9.2	8.5	8.5
Flour	do	5.2	4.8	4.9	2.8	4.1	4.2	4.2	5.0	4.8	4.7
Corn meal	do	3.2	3.6	3.5	2.5	3.4	3.5	3.5	3.8	3.7	3.7
Rolled oats	do	9.7	7.8	8.1	.....	10.6	9.9	9.6	10.2	8.8	9.1
Corn flakes	8-oz. pkg	11.4	9.4	9.6	.....	13.8	9.6	10.2	13.3	10.0	10.0
Cream of Wheat	28-oz pkg	29.4	25.4	25.4	.....	30.8	25.3	24.8	30.5	27.5	26.8
Macaroni	Pound	19.7	20.2	19.9	.....	20.8	20.9	20.8	20.8	20.0	19.8
Rice	do	10.0	9.9	9.9	8.5	8.9	9.8	9.3	9.2	9.9	9.9
Beans, navy	do	8.7	9.7	10.0	.....	8.3	11.0	11.2	8.1	10.4	10.8
Potatoes	do	3.3	2.2	2.3	2.0	2.7	1.6	1.5	2.6	1.7	1.7
Onions	do	8.5	4.7	5.3	.....	8.5	4.1	4.2	8.8	4.7	4.9
Cabbage	do	4.8	3.7	3.8	.....	5.8	2.8	2.9	5.8	3.2	3.4
Beans, baked	No. 2 can	10.8	10.5	10.6	.....	15.7	15.9	15.4	14.6	13.4	13.7
Corn, canned	do	15.5	14.6	15.0	.....	14.7	16.8	16.0	14.7	14.6	14.6
Peas, canned	do	19.9	18.7	18.8	.....	16.2	16.7	16.7	16.3	17.0	17.0
Tomatoes, canned	do	11.5	11.1	11.3	.....	14.4	14.5	13.8	13.1	14.4	14.4
Sugar, granulated	Pound	6.3	7.7	8.0	5.7	6.6	8.6	8.8	7.1	8.8	8.9
Tea	do	79.9	77.1	76.8	56.0	71.4	76.5	74.2	62.9	61.1	61.1
Coffee	do	38.9	37.3	37.7	30.0	37.5	39.9	40.5	31.6	36.0	36.0
Prunes	do	18.8	19.3	19.4	.....	18.9	20.5	20.1	22.3	22.3	22.3
Raisins	do	25.6	19.1	18.9	.....	27.0	21.8	21.3	29.3	21.4	20.4
Bananas	Dozen	36.0	33.2	33.5	.....	[1] 10.9	[1] 11.3	[1] 12.4	[1] 10.7	[1] 11.4	[1] 11.8
Oranges	do	44.8	45.1	40.5	.....	53.4	52.3	51.2	55.0	46.3	42.1

[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.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

Philadelphia, Pa.				Pittsburgh, Pa.				Portland, Me.			Portland, Oreg.				Providence, R. I.			
Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
1913	1921			1913	1921						1913	1921			1913	1921		
Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
[1] 30.0	[1] 42.9	[1] 46.5	[1] 46.3	[1] 27.0	[1] 37.6	[1] 40.0	[1] 42.2	[1] 53.8	[1] 54.2	[1] 53.0	21.8	28.1	27.7	27.6	[1] 39.2	[1] 62.7	[1] 66.4	[1] 66.3
26.0	34.9	37.0	36.7	22.8	31.3	34.0	34.6	41.5	43.4	43.1	21.0	25.2	25.9	25.0	31.0	46.8	47.8	47.1
21.8	31.0	31.9	31.7	21.8	28.7	30.7	31.2	26.1	28.3	27.6	18.7	23.5	24.0	24.0	23.8	35.4	36.4	35.8
17.8	18.6	19.5	19.5	16.7	20.1	21.4	21.4	18.1	18.6	18.2	16.0	17.0	16.2	16.1	18.8	26.7	26.1	25.5
12.1	10.3	9.9	9.5	12.7	11.1	11.5	11.7	13.8	13.8	14.0	13.0	12.0	12.1	11.8	.....	17.9	16.3	16.1
20.6	32.3	34.0	31.4	20.8	29.7	32.2	30.0	32.7	35.7	30.8	21.4	31.0	34.6	33.2	19.6	33.2	37.8	32.2
25.0	34.1	39.2	39.0	28.8	40.2	42.9	43.0	38.1	37.8	38.4	30.3	43.2	45.6	45.0	22.8	35.4	38.0	37.7
29.1	49.6	51.2	50.4	29.0	49.0	52.8	52.4	47.1	50.2	48.2	30.8	46.1	48.6	47.1	32.7	52.9	52.8	52.4
18.8	35.7	38.0	38.5	20.7	34.9	38.1	38.6	33.4	36.3	35.7	17.1	28.0	31.8	32.2	19.0	38.1	40.9	41.0
22.6	38.7	38.8	37.8	24.8	39.1	39.6	38.9	41.2	38.1	38.1	21.0	35.0	30.7	30.5	24.2	45.1	41.9	40.8
.....	27.7	27.4	27.4	.....	30.9	28.9	28.4	29.9	28.6	28.2	.....	41.5	39.1	39.1	.....	35.4	32.0	31.0
8.0	11.0	12.0	12.0	9.2	13.0	14.0	14.0	14.0	14.0	14.0	9.7	12.8	12.6	12.6	9.0	15.3	15.0	15.0
.....	12.7	11.6	11.9	.....	11.4	11.3	11.8	13.6	12.7	12.8	.....	12.4	12.1	12.0	.....	13.3	12.2	12.5
46.6	59.7	61.0	65.7	42.0	56.5	57.7	64.0	55.9	55.7	59.6	41.5	50.5	53.9	56.8	38.8	52.5	52.7	56.0
.....	29.5	27.5	28.5	.....	28.5	27.3	28.7	33.3	29.6	29.8	.....	31.0	29.1	29.8	.....	31.6	30.8	30.1
.....	27.5	27.2	27.2	.....	27.3	26.3	26.5	29.0	28.3	27.9	.....	30.0	28.5	27.9	.....	28.8	28.2	28.2
25.0	35.0	36.6	38.0	24.5	34.1	36.0	37.7	34.5	35.4	36.2	20.8	35.6	37.9	38.2	22.0	32.5	34.2	35.0
15.2	14.1	16.6	16.2	15.6	14.1	16.1	15.7	15.5	17.9	17.9	17.3	19.1	20.3	20.2	15.8	15.2	17.2	17.3
.....	19.9	22.7	22.8	.....	20.1	22.8	22.8	22.5	24.1	24.2	.....	24.1	24.9	24.9	.....	22.4	23.8	24.2
48.3	73.5	71.8	72.5	49.2	71.7	63.1	69.2	93.6	83.8	76.5	50.8	57.2	59.4	57.5	57.3	95.8	88.0	85.7
34.7	48.9	41.1	41.2	35.1	47.4	40.3	41.8	53.2	44.6	45.3	37.5	43.8	43.0	42.6	35.6	51.1	43.1	44.5
4.8	8.7	8.5	8.6	5.4	11.2	8.2	8.2	9.5	9.4	9.4	5.5	8.4	9.4	9.4	6.1	10.1	8.7	8.7
3.1	5.0	4.8	4.8	3.2	4.9	4.7	4.7	5.1	5.0	5.0	2.9	4.2	4.4	4.5	3.4	5.6	5.3	5.4
2.8	4.0	3.7	3.8	3.0	4.1	3.9	4.1	4.3	4.3	4.4	3.6	4.3	3.5	3.5	2.9	4.4	3.9	4.1
.....	8.4	8.3	8.3	.....	10.0	8.6	8.7	7.5	6.9	6.5	.....	9.3	9.8	9.5	.....	10.3	9.5	9.5
.....	10.7	8.9	9.0	.....	11.2	9.4	9.4	11.8	9.7	9.7	.....	12.9	11.1	11.0	.....	11.8	9.9	9.9
.....	28.4	25.0	25.0	.....	28.4	25.2	25.2	29.5	25.9	25.9	.....	31.2	28.3	28.0	.....	29.3	26.6	26.9
.....	20.6	21.2	21.1	.....	21.6	20.0	19.9	24.0	23.4	23.2	.....	17.5	16.3	16.4	.....	22.9	22.0	22.2
9.8	10.4	10.3	10.2	9.2	10.0	9.5	9.7	10.6	10.4	10.6	8.6	10.1	10.0	10.0	9.3	9.8	9.7	9.9
.....	8.3	10.0	10.4	.....	7.7	10.1	10.7	8.2	10.8	10.8	.....	7.5	9.2	9.4	.....	8.0	10.3	10.5
2.3	3.7	2.4	2.3	1.9	2.8	2.1	2.0	2.6	2.0	1.9	1.2	2.3	1.4	1.4	1.7	2.8	2.2	2.2
.....	7.5	4.4	4.8	.....	7.9	3.9	4.5	8.4	4.2	4.6	.....	6.5	3.5	3.4	.....	8.5	4.5	5.2
.....	4.7	3.4	3.6	.....	4.9	3.5	4.0	3.9	2.5	2.4	.....	3.4	2.2	3.3	.....	5.1	3.6	3.6
.....	12.0	11.9	11.7	.....	12.9	12.7	12.7	16.3	15.3	15.3	.....	18.3	17.3	17.5	.....	13.0	12.9	13.0
.....	15.4	14.9	14.5	.....	14.5	13.9	14.0	16.5	15.9	16.0	.....	17.8	16.9	16.9	.....	18.0	17.8	17.6
.....	16.3	16.5	16.3	.....	15.4	16.0	16.0	19.9	19.9	19.9	.....	18.0	17.3	17.6	.....	20.0	19.9	20.1
.....	11.9	11.8	11.8	.....	12.6	12.9	12.2	[2] 20.5	[2] 24.1	[2] 23.3	.....	[3] 15.1	[3] 15.8	[3] 15.8	.....	13.9	13.7	13.5
5.0	5.8	7.4	7.6	5.5	6.3	8.1	8.3	6.4	8.4	8.5	6.0	6.9	8.4	8.5	5.1	6.4	8.0	8.2
54.0	61.7	59.6	58.8	58.0	75.0	75.3	75.0	57.1	56.0	56.0	55.0	62.8	64.1	63.8	48.3	60.5	58.5	58.5
24.5	29.4	31.1	31.1	30.0	35.5	35.9	35.5	38.3	40.4	40.3	35.0	37.2	37.5	37.5	30.0	39.1	40.3	40.3
.....	16.6	17.9	18.3	.....	21.1	20.2	20.7	17.9	20.1	19.7	.....	14.8	14.0	13.8	.....	18.7	20.5	20.7
.....	24.2	19.6	19.3	.....	26.2	19.2	18.9	24.5	19.2	19.3	.....	24.8	18.8	18.9	.....	23.9	19.7	18.9
.....	34.5	31.9	32.8	.....	42.7	44.7	46.6	[4] 10.5	[4] 10.9	[4] 11.0	.....	[4] 13.2	[4] 14.5	[4] 14.6	.....	35.0	34.4	34.7
.....	50.1	46.6	46.7	.....	54.4	52.1	51.5	59.4	55.3	51.7	.....	55.7	50.3	49.1	.....	58.6	55.2	54.5

[1] No. 3 can. [2] No. 2½ can. [4] Per pound.

TABLE 8.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES

Article.	Unit.	Richmond, Va.				Rochester, N.Y.			St. Louis, Mo.			
		Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
		1913	1921						1913	1921		
		Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Sirloin steak	Pound	22.2	36.7	36.9	36.5	35.3	36.8	36.1	26.6	32.1	34.4	33.6
Round steak	do	20.0	31.8	32.6	31.9	30.3	31.2	30.7	23.6	29.0	31.4	31.0
Rib roast	do	18.9	29.4	29.0	29.1	26.5	26.7	27.2	19.5	26.8	27.2	26.7
Chuck roast	do	15.9	23.0	21.5	21.2	21.8	21.9	21.7	15.9	17.8	18.4	18.5
Plate beef	do	13.2	17.0	16.1	15.9	12.0	12.3	12.1	12.8	12.7	12.3	12.6
Pork chops	do	20.8	29.3	33.5	29.3	32.2	34.2	32.5	17.8	26.9	28.4	23.8
Bacon	do	25.0	33.7	37.9	37.2	32.8	36.8	36.1	25.0	34.8	39.3	38.1
Ham	do	25.0	38.0	41.0	41.0	45.6	47.3	46.8	27.3	42.4	42.1	41.2
Lamb, leg of	do	19.3	38.3	43.0	40.3	34.2	36.3	36.6	18.3	28.7	33.3	33.1
Hens	do	19.3	34.1	34.1	34.7	37.6	36.9	36.8	17.3	31.3	28.3	28.3
Salmon, canned, red	do	.....	32.5	32.0	32.0	30.6	29.1	28.9	32.5	31.9	32.1	31.8
Milk, fresh	Quart	10.0	14.0	14.0	14.0	14.0	13.0	14.0	8.8	10.0	12.0	13.0
Milk, evaporated	15-16 oz. can	.....	14.1	13.1	12.8	12.9	12.0	12.0	.....	11.1	11.3	11.2
Butter	Pound	42.2	58.8	58.3	66.8	52.1	53.0	59.1	39.6	52.5	57.7	63.6
Oleomargarine	do	.....	32.6	29.0	29.5	30.3	28.7	28.5	.....	27.4	26.4	27.3
Nut margarine	do	.....	28.6	27.6	27.6	29.2	26.8	26.4	.....	25.6	24.9	25.3
Cheese	do	22.3	32.9	36.4	37.7	34.5	35.8	36.7	20.7	30.2	34.5	36.1
Lard	do	15.4	17.5	18.1	17.9	15.9	17.5	17.1	12.7	11.9	13.8	14.1
Crisco	do	.....	21.8	23.5	23.4	20.5	22.5	23.1	.....	20.7	22.2	22.1
Eggs, strictly fresh	Dozen	38.0	69.4	61.4	62.8	84.6	77.4	80.9	40.8	57.4	56.3	59.8
Eggs, storage	do	33.2	50.4	40.3	40.4	48.7	39.7	41.4	.....	41.6	36.8	37.3
Bread	Pound	5.3	10.6	9.2	9.2	8.2	8.0	8.0	5.6	9.5	8.9	8.9
Flour	do	3.2	5.1	5.0	5.0	4.9	4.9	4.9	2.9	4.4	4.1	4.2
Corn meal	do	2.3	3.9	4.3	4.1	5.1	4.8	4.9	2.6	2.7	3.0	3.0
Rolled oats	do	.....	10.6	9.5	9.4	7.6	7.8	7.4	.....	9.1	8.2	8.0
Corn flakes	8-oz. pkg	.....	12.6	9.8	9.6	11.6	9.7	9.7	.....	10.6	8.9	8.9
Cream of Wheat	28-oz. pkg	.....	30.9	26.5	26.5	28.6	24.8	24.8	.....	28.8	24.2	24.3
Macaroni	Pound	.....	20.8	20.3	20.3	20.2	18.8	19.0	.....	21.0	20.4	20.7
Rice	do	10.0	11.4	11.6	11.2	9.3	9.4	9.5	8.2	8.5	8.7	9.0
Beans, navy	do	.....	9.4	10.6	10.7	8.2	10.2	10.4	.....	7.4	9.8	9.8
Potatoes	do	2.0	4.3	2.7	2.6	2.5	1.4	1.4	1.7	3.2	2.2	2.2
Onions	do	.....	8.9	5.3	5.4	7.3	4.5	4.3	.....	8.4	4.3	4.6
Cabbage	do	.....	5.2	3.8	4.0	4.1	2.6	2.6	.....	4.6	2.6	3.3
Beans, baked	No. 2 can	.....	12.2	12.0	11.8	12.0	11.8	11.4	.....	11.4	10.9	11.1
Corn, canned	do	.....	15.4	14.8	14.8	15.8	15.9	15.9	.....	15.2	14.9	14.6
Peas, canned	do	.....	20.3	19.0	19.3	19.2	19.0	18.9	.....	16.0	16.4	16.4
Tomatoes, canned	do	.....	13.3	12.2	12.0	12.1	12.8	13.0	.....	12.7	11.3	11.5
Sugar, granulated	Pound	5.4	6.6	8.2	8.4	6.2	7.9	8.0	5.1	6.2	8.1	8.2
Tea	do	56.0	85.3	79.9	79.9	61.0	61.4	61.4	55.0	68.1	66.8	66.4
Coffee	do	26.8	36.3	35.7	35.6	33.5	34.4	34.8	24.4	32.2	34.9	35.3
Prunes	do	.....	20.3	22.5	22.7	19.4	20.0	20.6	.....	18.7	21.4	20.8
Raisins	do	.....	24.5	20.5	19.3	25.1	19.2	18.9	.....	25.5	18.5	18.1
Bananas	Dozen	.....	37.9	36.5	37.3	41.3	41.4	42.9	.....	32.3	31.1	31.1
Oranges	do	.....	42.3	53.2	46.0	56.3	61.7	53.4	.....	46.5	45.0	49.0

[1] No. 2½ can.

OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Continued.

St. Paul, Minn.				Salt Lake City, Utah.				San Francisco, Calif.				Savannah, Ga.			Scranton, Pa.			
Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
1913	1921			1913	1921			1913	1921						1913	1921		
Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
25.0	30.0	32.6	32.4	22.6	26.9	26.5	25.4	21.0	29.0	29.9	29.9	30.0	28.7	29.3	25.5	46.2	47.0	46.8
20.8	25.3	26.0	26.1	20.0	23.2	23.6	22.4	20.0	25.9	27.0	27.2	25.7	24.3	24.0	21.5	36.4	37.5	37.3
19.6	23.8	26.2	26.2	19.0	20.8	21.3	20.4	21.7	27.8	28.2	28.5	24.3	21.2	21.9	22.8	34.1	35.0	34.6
16.0	17.6	19.0	19.1	14.5	16.3	16.3	16.1	15.0	17.0	17.8	18.2	16.8	15.3	14.7	17.6	24.7	25.0	25.2
10.3	9.5	10.4	10.1	12.5	11.1	11.2	11.4	15.0	14.2	14.9	14.7	14.0	13.5	12.6	11.3	11.4	11.3	11.3
17.4	26.0	30.1	25.9	23.4	27.9	32.0	28.6	24.2	38.8	37.9	37.4	28.2	31.0	27.3	20.8	33.6	37.3	33.1
26.0	38.7	40.7	40.4	29.0	38.3	40.3	39.0	34.4	53.2	53.9	53.9	35.6	36.8	36.6	25.8	41.2	42.5	41.7
27.0	41.8	43.3	42.4	30.0	42.5	47.1	45.0	34.0	52.1	53.5	52.6	38.3	39.2	38.1	27.7	49.6	54.4	53.3
16.3	29.3	31.2	31.6	18.0	25.5	31.6	31.3	16.6	31.0	35.5	35.6	35.0	39.2	37.5	18.7	38.5	43.0	42.2
16.8	27.4	24.8	26.1	22.6	35.2	32.2	31.4	24.5	44.6	42.3	42.4	34.5	32.3	30.7	21.8	43.3	41.5	41.1
.....	37.2	35.2	35.2	.....	35.5	32.9	32.9	.....	28.8	28.2	28.3	40.5	35.0	35.6	.....	38.3	36.4	36.6
7.8	11.0	11.0	11.0	8.7	12.5	9.0	9.7	10.0	14.0	11.5	13.0	20.0	17.3	17.3	8.8	14.0	13.0	14.0
.....	13.5	11.7	12.1	.....	12.6	11.2	11.1	.....	12.0	10.6	10.7	11.6	11.2	11.4	37.8	13.1	11.8	12.2
36.9	44.7	50.9	56.8	40.0	47.7	53.1	56.3	38.6	55.1	56.8	59.0	53.5	53.4	60.2	.....	52.0	50.7	54.0
.....	28.9	28.3	28.3	.....	30.0	.....	.....	.....	29.5	28.8	29.0	33.9	31.7	32.7	.....	30.0	27.8	27.6
.....	28.0	27.0	26.8	.....	30.1	28.9	28.8	.....	29.8	30.0	28.7	30.6	29.0	30.3	.....	29.0	23.5	24.0
21.0	31.8	35.3	35.5	24.2	30.0	30.9	31.0	21.0	36.3	38.7	37.5	31.2	33.8	36.2	18.3	31.5	33.6	34.5
14.8	15.2	17.8	17.8	19.7	17.6	19.8	20.1	18.0	18.3	19.4	19.6	19.7	17.8	18.0	16.5	17.0	17.9	18.0
.....	24.9	25.0	25.2	.....	24.4	26.4	26.5	.....	22.6	25.1	25.2	19.3	21.8	21.7	.....	22.1	23.4	23.5
37.6	65.7	51.4	60.8	48.3	58.9	54.3	56.1	53.3	64.1	67.4	61.6	62.3	54.6	65.3	52.5	87.7	71.1	76.1
30.8	47.3	37.5	38.8	37.0	47.2	39.4	41.1	41.7	42.2	41.7	43.7	48.4	38.1	39.7	35.3	50.6	41.9	41.5
6.0	8.4	9.4	9.4	5.9	9.6	9.4	9.4	5.9	8.5	9.0	9.0	10.4	8.7	8.7	5.5	10.2	8.7	8.7
2.8	5.0	4.9	4.9	2.4	3.1	3.2	3.4	3.4	5.2	5.2	5.3	5.5	5.4	5.5	3.6	5.9	5.4	5.3
2.5	4.0	3.4	3.4	3.3	3.9	3.6	3.7	3.5	4.7	4.6	4.6	2.6	2.7	2.8	.....	7.0	5.9	5.7
.....	9.5	9.4	9.4	.....	10.6	9.2	9.1	.....	9.9	9.3	9.5	10.1	8.6	8.5	.....	11.0	9.8	9.6
.....	13.7	9.9	10.0	.....	13.7	11.7	11.8	.....	12.2	10.7	10.9	10.6	9.0	9.1	.....	12.3	9.8	9.9
.....	29.1	26.0	26.0	.....	30.8	25.6	25.8	.....	28.8	25.2	25.2	29.8	24.9	24.8	.....	29.1	26.5	26.6
.....	18.6	19.0	19.2	.....	22.6	20.7	20.6	.....	13.4	13.9	14.0	20.1	17.6	17.8	.....	23.4	23.0	23.0
10.0	9.0	9.5	9.6	8.2	8.5	9.1	9.1	8.5	8.5	9.2	9.2	8.0	7.8	7.9	8.5	9.8	9.7	9.7
.....	8.8	10.4	10.0	.....	8.3	10.0	10.0	.....	7.2	9.2	9.1	9.0	11.0	11.6	.....	9.7	11.2	11.4
1.4	2.7	1.3	1.4	1.4	2.2	1.2	1.2	1.9	3.5	2.6	2.4	3.6	2.2	2.4	1.9	3.0	2.0	2.0
.....	6.4	3.3	3.3	.....	6.2	2.9	2.9	.....	5.4	3.2	3.1	9.1	6.2	5.8	.....	7.6	4.7	4.9
.....	5.5	1.8	2.6	.....	3.5	2.8	2.9	.....	.....	.....	.....	6.8	4.5	4.4	.....	4.2	3.0	3.3
.....	15.3	14.7	14.5	.....	17.9	16.8	16.5	.....	16.2	15.1	14.9	13.4	13.1	12.9	.....	13.0	12.9	12.7
.....	16.2	14.2	14.4	.....	15.1	14.5	14.4	.....	17.5	16.7	16.3	15.0	14.4	14.8	.....	16.6	16.3	16.3
.....	16.7	16.1	16.4	.....	15.5	16.0	15.8	.....	18.1	17.4	17.7	18.6	16.4	16.2	.....	17.5	18.0	17.9
.....	14.3	14.3	14.3	.....	13.4	13.9	13.4	.....	[1]14.3	[1]14.3	[1]14.3	12.1	10.2	10.2	.....	13.2	13.0	13.4
5.1	6.7	8.5	8.6	5.8	7.7	9.1	9.2	5.4	6.4	8.2	8.4	6.5	7.7	8.1	5.5	6.8	8.1	8.3
45.0	65.8	64.2	65.4	65.7	82.0	79.1	79.4	50.0	57.5	57.3	57.3	68.2	66.8	66.2	52.5	61.8	59.0	60.1
30.0	39.8	40.7	39.9	35.8	44.9	43.9	43.8	32.0	33.8	35.7	35.7	32.2	33.4	33.8	31.3	38.9	38.3	38.8
.....	19.3	22.3	21.9	.....	15.8	18.1	18.6	.....	16.5	19.2	19.2	19.4	20.5	19.8	.....	17.2	19.1	19.0
.....	26.9	21.2	19.9	.....	24.9	18.8	19.0	.....	22.9	18.9	18.8	23.7	19.4	18.9	.....	26.6	20.2	19.6
.....	[2]11.8	[2]12.4	[2]12.4	.....	[2]15.8	[2]14.5	[2]14.9	.....	39.3	37.1	34.3	37.0	34.2	37.1	.....	36.2	32.7	31.9
.....	55.8	66.2	57.3	.....	46.9	43.1	46.7	.....	51.8	53.8	51.3	38.2	39.0	39.7	.....	51.1	54.8	51.4

[2] Per pound.

TABLE 8.—AVERAGE RETAIL PRICES OF THE PRINCIPAL ARTICLES OF FOOD FOR 51 CITIES ON CERTAIN SPECIFIED DATES—Concluded.

Article.	Unit.	Seattle, Wash.				Springfield, Ill.			Washington, D. C.			
		Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15, 1921.	Nov. 15, 1922.	Dec. 15, 1922.	Dec. 15—		Nov. 15, 1922.	Dec. 15, 1922.
		1913	1921						1913	1921		
		Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.	Cts.
Sirloin steak	Pound	23.6	29.0	29.2	29.3	29.9	29.3	28.9	26.5	39.9	42.3	41.8
Round steak	do	20.6	25.4	25.7	25.8	29.4	29.7	28.7	22.6	33.8	35.0	34.5
Rib roast	do	20.0	22.4	23.9	24.0	19.4	21.7	21.6	21.0	33.1	33.5	32.6
Chuck roast	do	15.6	16.3	16.0	16.1	17.3	18.5	17.9	17.3	21.9	22.6	22.5
Plate beef	do	12.9	12.7	12.7	12.7	11.8	12.2	12.2	12.4	13.3	12.8	12.5
Pork chops	do	24.0	33.6	35.9	34.8	26.4	30.6	26.2	19.9	34.0	35.4	32.0
Bacon	do	33.0	47.7	49.5	48.4	37.5	39.0	38.7	24.9	35.9	40.1	39.9
Ham	do	30.0	49.3	51.1	49.6	41.7	43.2	43.2	29.0	51.1	55.2	55.2
Lamb, leg of	do	18.0	27.5	31.7	32.7	31.4	35.6	35.6	19.4	38.1	41.1	41.7
Hens	do	24.6	35.3	29.7	31.0	30.4	29.7	29.3	22.0	38.4	38.7	37.7
Salmon, canned, red	do	.....	31.9	31.2	31.2	37.3	33.6	33.4	.....	32.7	28.8	28.0
Milk, fresh	Quart	9.8	12.0	13.0	13.0	12.5	11.1	11.1	9.0	15.0	14.0	14.0
Milk, evaporated	15-16 oz. can	.....	12.2	11.0	11.1	13.5	12.3	12.6	.....	13.1	11.4	11.5
Butter	Pound	43.8	49.6	54.8	57.1	50.9	56.3	61.7	42.3	57.1	56.9	62.8
Oleomargarine	do	.....	30.0	28.5	29.7	29.9	28.1	28.3	.....	28.9	27.0	27.8
Nut margarine	do	.....	30.3	28.9	29.0	28.8	26.3	27.4	.....	28.3	27.0	27.2
Cheese	do	22.3	34.1	35.4	36.2	33.4	37.5	38.3	23.5	35.4	37.7	38.1
Lard	do	16.9	17.0	19.5	19.7	15.1	17.4	17.4	15.0	15.1	17.5	17.2
Crisco	do	.....	23.7	25.4	25.5	20.4	23.1	23.1	.....	21.7	32.3	23.2
Eggs, strictly fresh	Dozen	54.2	58.3	60.0	56.4	69.7	58.5	62.5	42.1	73.6	69.0	70.4
Eggs, storage	do	37.0	48.8	43.3	43.0	50.0	39.1	39.2	35.0	54.4	40.0	43.8
Bread	Pound	6.6	8.1	8.6	8.6	10.3	9.5	9.5	5.5	7.9	8.5	8.5
Flour	do	2.9	4.3	4.5	4.6	5.4	5.1	5.1	3.8	5.6	5.2	5.2
Corn meal	do	3.3	3.8	3.9	3.9	4.0	4.2	4.5	2.6	3.9	3.6	3.6
Rolled oats	do	.....	8.5	8.3	8.2	10.7	10.1	10.1	.....	10.8	9.2	9.3
Corn flakes	8-oz. pkg	.....	13.3	11.7	11.7	13.5	9.8	9.8	.....	11.3	9.4	9.4
Cream of Wheat	28-oz. pkg	.....	30.3	26.9	26.9	30.5	26.8	26.8	.....	28.8	25.3	25.3
Macaroni	Pound	.....	17.9	18.6	18.5	20.9	20.5	20.5	.....	22.5	21.7	21.0
Rice	do	7.7	10.2	10.8	10.9	9.1	10.4	10.1	9.4	10.0	10.7	10.4
Beans, navy	do	.....	8.0	9.4	9.4	7.8	10.1	10.6	.....	8.3	10.5	10.9
Potatoes	do	1.5	2.4	1.7	1.7	2.7	1.9	1.9	1.8	3.9	2.6	2.7
Onions	do	.....	7.1	3.9	4.1	8.5	4.5	4.7	.....	8.5	4.8	5.1
Cabbage	do	.....	3.8	3.0	3.2	6.2	3.2	3.6	.....	4.7	3.7	3.8
Beans, baked	No. 2 can	.....	17.2	15.5	15.2	14.3	13.7	13.7	.....	12.2	12.0	11.9
Corn, canned	do	.....	17.8	16.8	16.8	15.5	14.3	14.3	.....	15.6	14.7	14.6
Peas, canned	do	.....	18.4	19.0	18.5	18.0	17.9	17.9	.....	16.8	16.0	15.9
Tomatoes, canned	do	.....	[1] 15.7	[1] 16.4	[1] 16.4	14.2	14.5	14.4	.....	12.6	11.3	11.2
Sugar, granulated	Pound	6.1	7.1	8.5	8.9	7.1	8.8	9.0	5.0	6.7	7.7	7.9
Tea	do	50.0	62.2	66.4	66.4	73.7	72.6	72.9	57.5	75.5	75.2	76.0
Coffee	do	28.0	36.6	39.0	39.0	34.9	36.3	36.3	28.8	33.1	34.6	34.4
Prunes	do	.....	17.2	18.1	18.1	19.9	20.4	22.8	.....	20.6	21.9	22.1
Raisins	do	.....	25.4	18.5	18.7	28.2	22.9	21.6	.....	24.5	20.5	18.7
Bananas	Dozen	.....	[2] 15.0	[2] 14.2	[2] 14.8	[2] 10.5	[2] 12.0	[2] 11.6	.....	37.4	35.3	37.5
Oranges	do	.....	50.9	58.4	54.3	54.0	57.3	56.2	.....	47.6	47.4	46.2

[1] No. 2½ can. [2] Per pound.

Comparison of Retail Food Costs in 51 Cities.

TABLE 9 shows for 39 cities the percentage of increase or decrease in the retail cost of food[7] in December, 1922, compared with the average cost in the year 1913, in December, 1921, and in November, 1922. For 12 other cities comparisons are given for the one-year and the one-month periods. These cities have been scheduled by the bureau at different dates since 1913. These 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.[8]

[7] For list of articles see note 2, p. 62.

[8] The consumption figure used from January, 1913, to December, 1920, for each article in each city is given in the MONTHLY 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 MONTHLY LABOR REVIEW for March, 1921, p. 26.

Effort has been made by the bureau each month to have perfect reporting cities. For the month of December, 98 per cent of all the firms reporting in the 51 cities sent in a report promptly. The following were perfect reporting cities; that is, every merchant in the following-named 29 cities who is cooperating with the bureau sent in his report in time for his prices to be included in the city averages: Atlanta, Birmingham, Boston, Bridgeport, Charleston, Chicago, Cincinnati, Detroit, Houston, Indianapolis, Kansas City, Little Rock, Los Angeles, Manchester, Memphis, Milwaukee, Newark, New Haven, New Orleans, New York, Omaha, Peoria, Portland, Me., Providence, St. Louis, Salt Lake City, Savannah, Scranton, and Seattle.

The following summary shows the promptness with which the merchants responded in December:

RETAIL PRICE REPORTS RECEIVED DURING DECEMBER.

Item.	United States.	Geographical division.				
		North Atlantic.	South Atlantic.	North Central.	South Central.	Western.
Percentage of reports received	98	99	97	99	98	98
Number of cities in each section from which every report was received	29	9	3	9	5	3

TABLE 9.—PERCENTAGE CHANGES IN THE RETAIL COST OF FOOD IN DECEMBER, 1922, COMPARED WITH THE COST IN NOVEMBER, 1922, DECEMBER, 1921, AND WITH THE AVERAGE COST IN THE YEAR 1913, BY CITIES.

City.	Percentage increase December 1922, compared with year 1913.	Percentage decrease December 1922, compared with December, 1921.	Percentage increase December 1922, compared with November, 1922.	City.	Percentage increase December 1922, compared with year 1913.	Percentage decrease December 1922, compared with December, 1921.	Percentage increase December 1922, compared with November, 1922.
Atlanta	44	2	1	Milwaukee	47	1	3
Baltimore	51	1	1	Minneapolis	45	1	2
Birmingham	49	2	2	Mobile	.....	2	3
Boston	51	4	[1] 2	Newark	48	1	1
Bridgeport	.....	3	1	New Haven	46	4	[1] 0.3
Buffalo	54	1	[1] 0.1	New Orleans	44	1	2
Butte	.....	[2] 1	2	New York	56	2	1
Charleston	46	4	2	Norfolk	.....	3	1
Chicago	49	2	2	Omaha	41	4	1
Cincinnati	41	2	0	Peoria	.....	5	1
Cleveland	45	[2] 0.1	2	Philadelphia	50	0.4	1
Columbus	.....	3	[1] 0.4	Pittsburgh	49	[2] 0.2	3
Dallas	46	1	2	Portland, Me	.....	4	[1] 1
Denver	39	0.1	4	Portland, Oreg	36	[2] 1	0.3
Detroit	49	2	2	Providence	54	5	[1] 0.1
Fall River	52	5	2	Richmond	57	4	1
Houston	.....	3	2	Rochester	.....	2	3
Indianapolis	36	3	[1] 0.4	St. Louis	47	[2] 2	2
Jacksonville	40	4	1	St. Paul	.....	0.1	2
Kansas City	41	6	2	Salt Lake City	27	4	1
Little Rock	38	2	1	San Francisco	45	1	1
Los Angeles	42	[2] 1	0	Savannah	.....	5	3
Louisville	38	0.2	2	Scranton	54	6	2
Manchester	44	8	[1] 1	Seattle	39	[2] 3	0.2
Memphis	36	4	2	Springfield, Ill	.....	4	1
				Washington, D.C	55	1	1

[1] Decrease. [2] Increase.

Retail Prices of Coal in the United States.[a]

THE following table shows the average retail prices of coal on December 15, 1921, and on November 15 and December 15, 1922, for the United States and for each of the cities included in the total for the United States. Prices for coal are secured from the cities from which monthly retail prices of food are received.

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 used. The coal dealers in each city are asked to quote prices on the kinds of bituminous coal usually sold for household use.

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.

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON DECEMBER 15, 1921, AND ON NOVEMBER 15 AND DECEMBER 15, 1922.

City, and kind of coal.	1921	1922	
	Dec. 15.	Nov. 15.	Dec. 15.
United States:			
Pennsylvania anthracite—			
Stove	**$15.092**	**$15.534**	**$15.527**
Chestnut	**15.129**	**15.521**	**15.516**
Bituminous	**10.275**	**11.311**	**11.233**
Atlanta, Ga.:			
Bituminous	8.729	10.462	10.404
Baltimore, Md.:			
Pennsylvania anthracite—			
Stove	[1] 15.000	[1] 15.750	[1] 16.250
Chestnut	[1] 14.750	[1] 15.750	[1] 16.267
Bituminous	8.050	11.000	10.200
Birmingham, Ala.:			
Bituminous	7.770	8.314	8.398
Boston, Mass.:			
Pennsylvania anthracite—			
Stove	15.500	16.000	16.000
Chestnut	15.500	16.000	16.000
Bridgeport, Conn.:			
Pennsylvania anthracite—			
Stove	14.500	16.125	15.563
Chestnut	14.400	16.125	15.750
Buffalo, N. Y.:			
Pennsylvania anthracite—			
Stove	13.120	13.238	13.238
Chestnut	13.120	13.238	13.238
Butte, Mont.:			
Bituminous	11.740	11.513	11.500
Charleston, S. C.:			
Pennsylvania anthracite—			
Stove	[1] 17.000	[1] 17.000	[1] 17.000
Chestnut	[1] 17.100	[1] 17.100	[1] 17.100
Bituminous	12.000	12.000	12.000
Chicago, Ill.:			
Pennsylvania anthracite—			
Stove	15.560	16.080	16.180
Chestnut	15.530	15.850	16.000
Bituminous	8.922	10.833	10.820
Cincinnati, Ohio:			
Pennsylvania anthracite—			
Stove	15.500	.....	.....
Chestnut	15.750	.....	.....
Bituminous	7.563	9.619	9.619

[1] Per ton of 2,240 pounds.

[a] Prices of coal were formerly secured semiannually and published in the March and September issues of the MONTHLY 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 DECEMBER 15, 1921, AND ON NOVEMBER 15 AND DECEMBER 15, 1922—Con.

City, and kind of coal.	1921	1922	
	Dec. 15.	Nov. 15.	Dec. 15.
Cleveland, Ohio:			
Pennsylvania anthracite—			
Stove	$14.375	$15.875	$15.675
Chestnut	14.438	15.875	15.675
Bituminous	8.519	10.526	10.900
Columbus, Ohio:			
Pennsylvania anthracite—			
Chestnut	15.083	.....	.....
Bituminous	7.554	9.605	9.742
Dallas, Tex.:			
Arkansas anthracite—			
Egg	18.417	18.000	18.125
Bituminous	15.462	15.538	15.477
Denver, Colo.:			
Colorado anthracite—			
Stove, 3 and 5 mixed	15.917	17.000	17.000
Furnace, 1 and 2 mixed	15.917	17.000	17.000
Bituminous	10.921	11.168	11.041
Detroit, Mich.:			
Pennsylvania anthracite—			
Stove	14.563	15.688	15.938
Chestnut	14.563	15.688	15.938
Bituminous	8.781	12.219	12.031
Fall River, Mass.:			
Pennsylvania anthracite—			
Stove	15.167	16.500	16.500
Chestnut	15.000	15.833	15.750
Bituminous	9.500	11.000	11.000
Houston, Tex.:			
Bituminous	12.333	12.750	12.833
Indianapolis, Ind.:			
Pennsylvania anthracite—			
Stove	15.750	15.750	15.750
Chestnut	15.667	15.750	15.750
Bituminous	8.000	9.825	9.613
Jacksonville, Fla.:			
Pennsylvania anthracite—			
Stove	17.500	18.500	.....
Chestnut	17.500	18.500	.....
Bituminous	13.000	15.000	15.000
Kansas City, Mo.:			
Arkansas anthracite—			
Furnace	17.286	17.000	16.929
Stove, No. 4	18.000	17.938	17.875
Bituminous	9.453	9.643	8.964
Little Rock, Ark.:			
Arkansas anthracite—			
Egg	16.000	15.000	15.000
Bituminous	13.133	13.167	12.500
Los Angeles, Calif.:			
Bituminous	19.000	16.500	16.500
Louisville, Ky.:			
Pennsylvania anthracite—			
Stove	16.875	.....	.....
Chestnut	16.917	.....	.....
Bituminous	8.090	10.283	10.114
Manchester, N. H.:			
Pennsylvania anthracite—			
Stove	16.500	17.667	18.000
Chestnut	16.500	17.667	18.000
Bituminous	11.333	14.000	14.000
Memphis, Tenn.:			
Pennsylvania anthracite—			
Stove	18.000	.....	.....
Chestnut	18.000	.....	.....
Bituminous	8.393	9.464	9.411
Milwaukee, Wis.:			
Pennsylvania anthracite—			
Stove	16.010	16.324	16.424
Chestnut	15.950	16.304	16.404
Bituminous	10.556	12.611	12.423
Minneapolis, Minn.:			
Pennsylvania anthracite—			
Stove	17.950	17.500	17.660
Chestnut	17.950	17.470	17.670
Bituminous	12.498	14.125	14.188

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON DECEMBER 15, 1921, AND ON NOVEMBER 15 AND DECEMBER 15, 1922—Con.

City, and kind of coal.	1921	1922	
	Dec. 15.	Nov. 15.	Dec. 15.
Mobile, Ala.:			
Bituminous	$11.357	$10.688	$10.969
Newark, N. J.:			
Pennsylvania anthracite—			
Stove	12.850	12.750	12.792
Chestnut	12.850	12.750	12.792
New Haven, Conn.:			
Pennsylvania anthracite—			
Stove	14.000	15.333	15.333
Chestnut	14.000	15.333	15.333
New Orleans, La.:			
Pennsylvania anthracite—			
Stove	18.000	20.750	21.500
Chestnut	18.000	20.750	21.500
Bituminous	10.781	11.292	11.208
New York, N. Y.:			
Pennsylvania anthracite—			
Stove	13.300	13.833	14.542
Chestnut	13.300	13.833	14.542
Norfolk, Va.:			
Pennsylvania anthracite—			
Stove	14.000	16.000	16.000
Chestnut	14.000	16.000	16.000
Bituminous	9.429	12.381	12.429
Omaha, Nebr.:			
Pennsylvania anthracite—			
Stove	21.600	22.000	22.000
Chestnut	21.600	22.000	22.000
Bituminous	12.368	12.571	12.036
Peoria, Ill.:			
Pennsylvania anthracite—			
Stove	15.500	.....	.....
Chestnut	15.500	.....	.....
Bituminous	6.083	7.625	7.125
Philadelphia, Pa.:			
Pennsylvania anthracite—			
Stove	[1] 14.313	[1] 14.538	[1] 14.969
Chestnut	[1] 14.313	[1] 14.538	[1] 14.969
Pittsburgh, Pa.:			
Pennsylvania anthracite—			
Stove	[1] 15.500	17.000	17.000
Chestnut	[1] 15.667	17.000	17.000
Bituminous	6.750	8.375	8.375
Portland, Me.:			
Pennsylvania anthracite—			
Stove	15.843	15.843	15.840
Chestnut	15.843	15.843	15.843
Bituminous	.....	.....	.....
Portland, Oreg.:			
Bituminous	12.924	14.230	14.270
Providence, R. I.:			
Pennsylvania anthracite—			
Stove	[2] 15.000	[2] 15.500	[2] 15.600
Chestnut	[2] 15.000	[2] 15.500	[2] 15.600
Bituminous	.....	.....	.....
Richmond, Va.:			
Pennsylvania anthracite			
Stove	14.250	15.500	16.000
Chestnut	14.250	15.500	16.000
Bituminous	10.846	12.600	12.900
Rochester, N. Y.:			
Pennsylvania anthracite—			
Stove	13.550	13.450	13.450
Chestnut	13.550	13.450	13.450
St. Louis, Mo.:			
Pennsylvania anthracite—			
Stove	16.188	16.125	16.438
Chestnut	16.375	16.250	16.438
Bituminous	7.200	8.408	8.329
St. Paul, Minn.:			
Pennsylvania anthracite—			
Stove	17.950	17.667	17.667
Chestnut	17.950	17.642	17.642
Bituminous	13.202	14.256	14.369

[1] Per ton of 2,240 pounds.

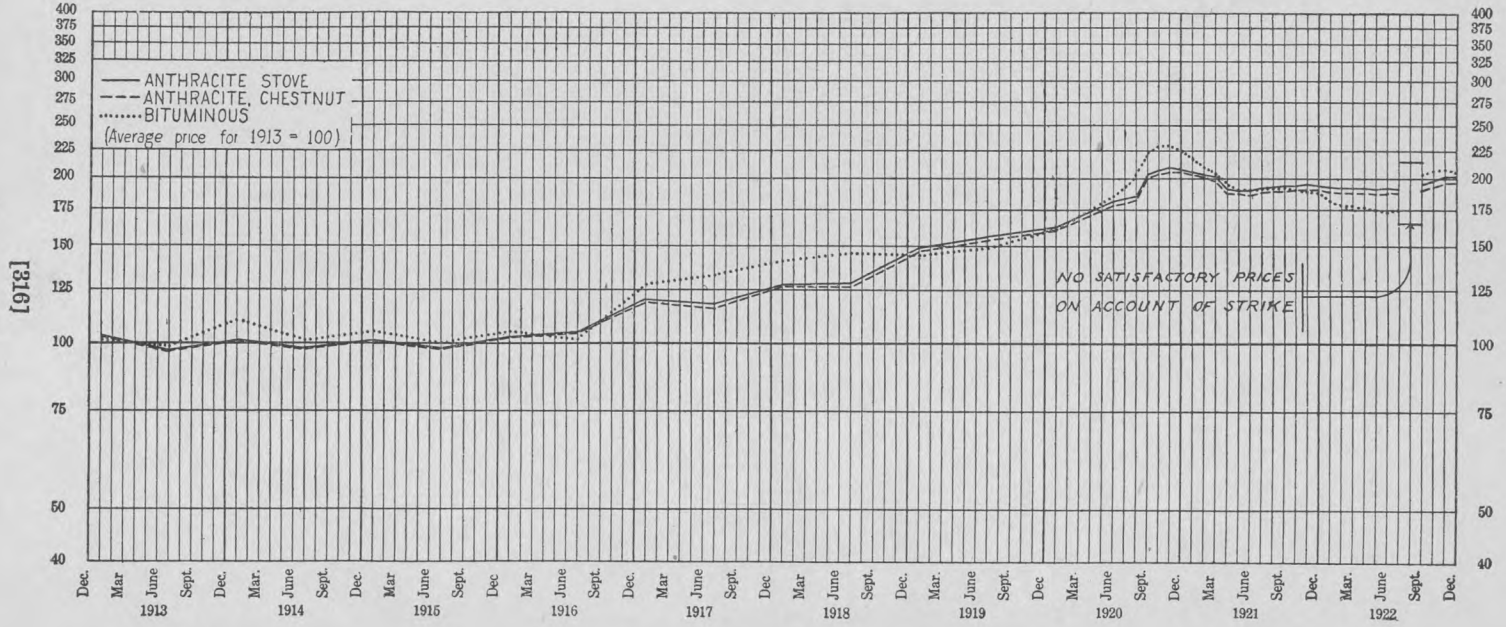
[2] Fifty cents per ton additional is charged for "binning." Most customers require binning or basketing the coal into the cellar.

AVERAGE RETAIL PRICES OF COAL, PER TON OF 2,000 POUNDS, FOR HOUSEHOLD USE, ON DECEMBER 15, 1921, AND ON NOVEMBER 15 AND DECEMBER 15, 1922—Con.

City, and kind of coal.	1921	1922	
	Dec. 15.	Nov. 15.	Dec. 15.
Salt Lake City, Utah:			
Colorado anthracite—			
Furnace, 1 and 2 mixed	$19.125	$20.000	.....
Stove, 3 and 5 mixed	20.000	20.000	.....
Bituminous	9.061	9.466	$9.452
San Francisco, Calif.:			
New Mexico anthracite—			
Cerillos egg	27.250	26.750	26.750
Colorado anthracite—			
Egg	26.250	24.250	24.250
Bituminous	19.273	17.900	17.900
Savannah, Ga.:			
Pennsylvania anthracite—			
Stove	[3] 17.100	[3] 17.600	[3] 17.100
Chestnut	[3] 17.100	[3] 17.600	[3] 17.100
Bituminous	[3] 12.267	[3] 12.267	[3] 14.183
Scranton, Pa.:			
Pennsylvania anthracite—			
Stove	9.783	9.783	9.817
Chestnut	9.783	10.267	10.300
Seattle, Wash.:			
Bituminous	[4] 10.325	[4] 10.211	[4] 10.068
Springfield, Ill.:			
Bituminous	4.625	5.325	5.350
Washington, D. C.:			
Pennsylvania anthracite—			
Stove	[1] 15.064	[1] 15.629	[1] 15.871
Chestnut	[1] 14.700	[1] 15.629	[1] 15.871
Bituminous	[1] 9.575	[1] 11.296	[1] 11.296

[1] Per ton of 2,240 pounds.
[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 prices.
[4] Prices in zone A. The cartage charges in zone A were as follows: December, 1920, $1.85; November and December, 1921, $1.75. These charges have been included in the averages. The cartage charges in Seattle during these months have ranged from $1.75 to $2.80 according to distance.

TREND IN RETAIL PRICE OF COAL FOR THE UNITED STATES JANUARY, 1913, TO DECEMBER, 1922.



The following table shows for the United States both average and relative retail prices of Pennsylvania white ash coal, stove and chestnut sizes, and of bituminous coal on specified dates from January, 1913, to December, 1922. An average price for the year 1913 has been made from the averages for January and July of that year. The average prices for each month have been divided by this average price for the year 1913 to obtain the relative prices.

July, 1922, compared with July, 1913, shows an increase of 99 per cent in the price of Pennsylvania white ash stove coal, 94 per cent in the price of chestnut, and 76 per cent in the price of bituminous.

December, 1922, compared with July, 1922, shows an increase of 4 per cent in the price of Pennsylvania white ash stove and in the price of chestnut, and an increase of 18 per cent in the price of bituminous coal.

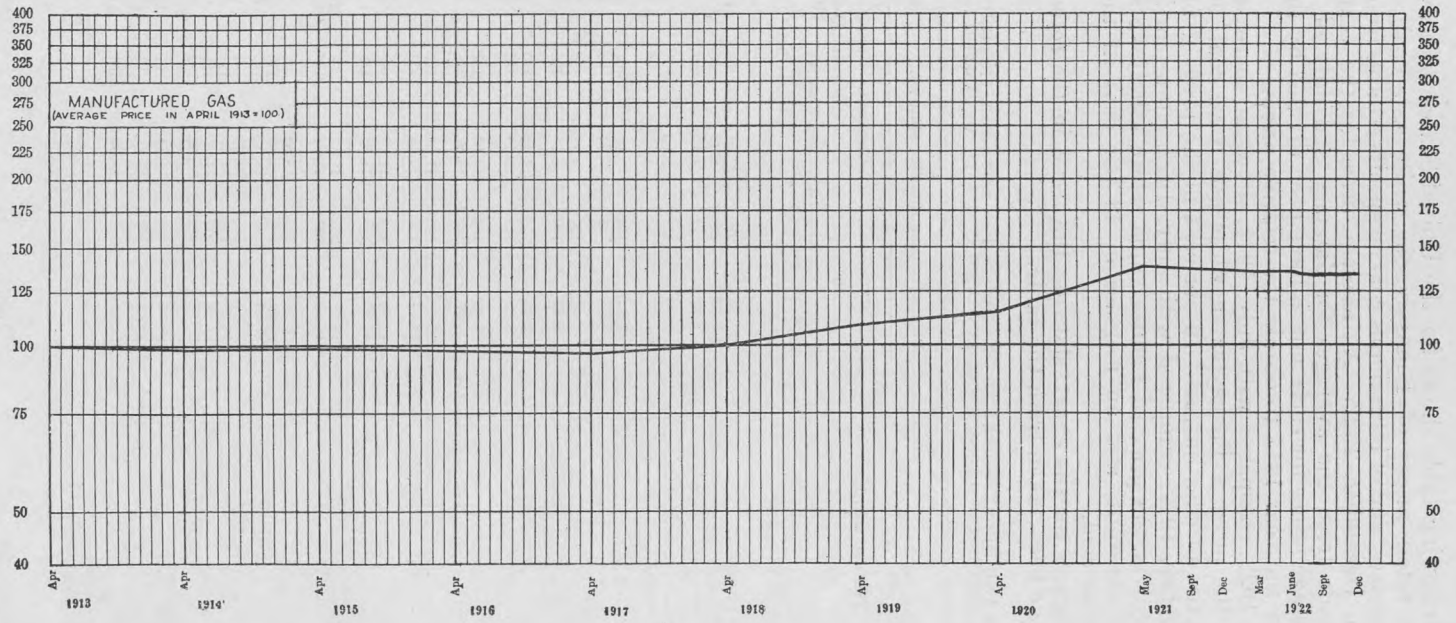
The figures for the chart, showing the trend in the retail prices of coal, have been taken from the table.

AVERAGE AND RELATIVE PRICES OF COAL IN TON LOTS FOR THE UNITED STATES ON SPECIFIED DATES FROM JANUARY 15, 1913, TO DECEMBER 15, 1922.

Year and month.	Pennsylvania anthracite, white ash.				Bituminous.	
	Stove.		Chestnut.			
	Average price.	Relative price.	Average price.	Relative price.	Average price.	Relative price.
1913—						
Average for year	$7.73	100	$7.91	100	$5.43	100
January	7.99	103	8.15	103	5.48	101
July	7.46	97	7.68	97	5.39	99
1914—						
January	7.80	101	8.00	101	5.97	110
July	7.60	98	7.78	98	5.46	101
1915—						
January	7.83	101	7.99	101	5.71	105
July	7.54	98	7.73	98	5.44	100
1916—						
January	7.93	103	8.13	103	5.69	105
July	8.12	105	8.28	105	5.52	102
1917—						
January	9.29	120	9.40	119	6.96	128
July	9.08	118	9.16	116	7.21	133
1918—						
January	9.88	128	10.03	127	7.68	141
July	9.96	129	10.07	127	7.92	146
1919—						
January	11.51	149	11.61	147	7.90	145
July	12.14	157	12.17	154	8.10	149
1920—						
January	12.59	163	12.77	161	8.81	162
July	14.28	185	14.33	181	10.55	194
1921—						
January	15.99	207	16.13	204	11.82	218
July	14.90	193	14.95	189	10.47	193
1922—						
January	14.98	194	15.02	190	9.89	182
February	14.92	193	14.99	189	9.71	179
March	14.89	193	14.94	189	9.72	179
April	14.89	193	14.94	189	9.62	177
May	14.85	192	14.91	188	9.50	175
June	14.88	193	14.93	189	9.48	174
July	14.87	192	14.92	189	9.49	175
August	(1)	(1)	(1)	(1)	(1)	(1)
September	15.11	196	15.13	191	11.08	204
October	15.39	199	15.37	194	11.26	207
November	15.53	201	15.52	196	11.31	208
December	15.53	201	15.52	196	11.23	207

[1] No satisfactory prices on account of strike.

TREND IN RETAIL PRICE OF GAS, FOR THE UNITED STATES, APRIL, 1913, TO DECEMBER, 1922.



Retail Prices of Gas in the United States.[a]

THE following table shows for 51 cities the net price for the first 1,000 cubic feet of gas used for household purposes. Prices are, in most cases, for manufactured gas, but prices for natural gas have also been quoted for those cities where it is in general use. For Buffalo and Los Angeles prices are given for natural and manufactured gas, mixed. The prices shown do not include any extra charge for service.

NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS, FOR HOUSEHOLD USE, ON APRIL 15 OF EACH YEAR 1913 TO 1920, AND ON MAY 15, SEPTEMBER 15, AND DECEMBER 15, 1921, AND MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922, BY CITIES.

City.	Apr. 15, 1913.	Apr. 15, 1914.	Apr. 15, 1915.	Apr. 15, 1916.	Apr. 15, 1917.	Apr. 15, 1918.	Apr. 15, 1919.	Apr. 15, 1920.	May 15, 1921.	Sept. 15, 1921.	Dec. 15, 1921.	Mar. 15, 1922.	June 15, 1922.	Sept. 15, 1922.	Dec. 15, 1922.
Atlanta, Ga	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.15	$1.15	$1.90	$1.65	$1.65	$1.65	$1.65	$1.65	$1.65
Baltimore, Md	.90	.80	.80	.75	.75	.75	.75	.75	.75	.92	.92	.92	.92	.92	.92
Birmingham, Ala	1.00	.95	.95	.95	.95	.95	.95	.95	.88	.88	.88	.88	.88	.80	.80
Boston, Mass	.82	.82	.80	.80	.80	.85	1.02	1.07	1.42	1.35	1.34	1.34	1.32	1.30	1.30
Bridgeport, Conn	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	[1] 1.30	1.60	1.60	1.60	1.50	1.50	1.50
Buffalo, N. Y	1.00	1.00	1.00	1.00	1.00	1.00	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	.....
Butte, Mont	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Charleston, S. C	1.10	1.10	1.10	1.10	1.00	1.10	1.10	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Chicago, Ill	.80	.80	.80	.80	.80	.75½	.94	.90	1.29	1.29	1.29	1.20	1.20	1.20	1.20
Cleveland, Ohio	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80
Denver, Colo	.85	.80	.80	.80	.80	.85	.95	.95	.95	.95	.95	.95	.95	.95	.95
Detroit, Mich	.75	.75	.75	.75	.75	.75	.79	.79	.85	.85	.85	.79	.79	.79	.79
Fall River, Mass	.80	.80	.80	.80	.80	.95	.95	1.05	1.25	1.15	1.15	1.15	1.15	1.15	1.15
Houston, Tex	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Indianapolis, Ind	.60	.55	.55	.55	.55	.55	.60	.60	.90	.90	.90	.90	[2] 1.20	[2] 1.20	[2] 1.20
Jacksonville, Fla	1.20	1.20	1.15	1.15	1.15	1.25	1.25	1.50	1.75	1.75	1.75	1.75	1.65	1.65	1.65
Manchester, N. H	1.10	1.10	1.00	1.00	1.00	1.00	1.10	1.10	[3] 1.50	[3] 1.50	[2] 1.50	[3] 1.40	[3] 1.40	[3] 1.40	[3] 1.50
Memphis, Tenn	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[1] 1.10	1.35	1.35	1.35	1.35	1.20	1.20	1.20
Milwaukee, Wis	.75	.75	.75	.75	.75	.75	.75	.75	.90	.90	.90	.90	.90	.98	.98
Minneapolis, Minn	.85	.80	.80	.77	.77	.77	.95	.95	1.28	1.11	1.11	1.02	1.02	.99	.99
Mobile, Ala	1.10	1.10	1.10	1.10	1.10	1.10	1.35	1.35	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Newark, N. J	1.00	.90	.90	.90	.90	.97	.97	1.15	1.40	1.40	1.40	1.40	1.25	1.25	1.25
New Haven, Conn	.90	.90	.90	.90	.90	1.00	1.10	1.10	[1] 1.10	[1] 1.10	[1] 1.10	[1] 1.10	1.45	1.45	1.45
New Orleans, La	1.10	1.00	1.00	1.00	1.00	1.00	1.30	1.30	1.30	1.45	1.45	1.45	1.45	1.30	1.30
New York, N. Y	.84	.84	.83	.83	.83	.83	.85	.87	[4] 1.36	[4] 1.28	[4] 1.28	[4] 1.28	[4] 1.27	[5] 1.27	[5] 1.21
Norfolk, Va	1.00	1.00	1.00	1.00	1.00	1.20	1.20	1.60	1.40	1.35	1.35	1.45	1.40	1.40	1.35
Omaha, Nebr	1.15	1.15	1.15	1.00	1.00	1.15	1.15	1.15	1.53	1.45	1.45	1.40	1.35	1.35	1.35
Peoria, Ill	.90	.90	.90	.90	.85	.85	.85	.85	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Philadelphia, Pa	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Pittsburgh, Pa	1.00	1.00	1.00	1.00	1.00	1.00	1.00	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]
Portland, Me	1.10	1.00	1.00	1.00	1.00	1.00	1.40	1.40	1.85	1.85	1.75	1.75	1.65	1.65	1.55
Portland, Oreg	.95	.95	.95	.95	.95	.95	.95	.95	1.67	1.50	1.50	1.50	1.50	1.43	1.43
Providence, R. I	.85	.85	.85	.85	.85	1.00	1.30	1.30	[1] 1.25	[1] 1.25	[1] 1.25	[1] 1.25	[1] 1.25	[1] 1.15	[1] 1.15
Richmond, Va	.90	.90	.90	.80	.80	.80	1.00	1.00	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Rochester, N. Y	.95	.95	.95	.95	.95	.95	.95	.95	[7] 1.05	[7] 1.05	1.10	1.10	1.10	1.10	1.05
St. Louis, Mo	.80	.80	.80	.80	.75	.75	.75	.85	1.05	1.05	1.05	1.05	1.05	1.05	1.05
St. Paul, Minn	.95	.90	.90	.85	.85	.85	.85	.85	1.00	1.00	1.00	1.00	1.00	.85	1.00
Salt Lake City, Utah	.90	.90	.90	.90	.90	.90	1.10	[3] 1.30	[3] 1.52	[3] 1.52	[3] 1.52	[3] 1.52	[3] 1.52	[3] 1.52	[3] 1.52
San Francisco, Calif	.75	.85	.85	.85	.85	.85	.95	.95	1.05	1.04	1.04	1.04	1.02	.92	.92
Savannah, Ga	.....	.....	.....	.....	.....	.....	.....	1.25	1.60	1.60	1.60	1.60	1.45	1.45	1.45
Scranton, Pa	.95	.95	.95	.95	.95	1.15	1.30	1.30	1.70	1.70	1.70	1.70	1.60	1.60	1.60
Seattle, Wash	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Springfield, Ill	1.00	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Washington, D. C	.93	.93	.93	.93	.80	.90	.95	.95	1.25	1.25	1.10	1.10	1.05	1.05	1.05

[1] Plus 50 cents per month service charge.
[2] The rate was increased from 90 cents by order of the Federal court, and is subject to final decision by the same court. Pending the decision this increase has been impounded.
[3] Plus 25 cents per month service charge.
[4] The prices of two companies included in this average have an additional service charge of 2½ cents per day.
[5] The price of one company included in this average has an additional service charge of 2½ cents per day.
[6] Sale of manufactured gas discontinued.
[7] Plus 40 cents per month service charge.

[a] Retail prices of gas are published at quarterly intervals in the MONTHLY LABOR REVIEW.

NET PRICE FOR THE FIRST 1,000 CUBIC FEET OF GAS, FOR HOUSEHOLD USE, ON APRIL 15 OF EACH YEAR, 1913 TO 1920, AND ON MAY 15, SEPTEMBER 15, AND DECEMBER 15, 1921, AND MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922, BY CITIES—Concluded.

Natural gas.

City.	Apr. 15, 1913.	Apr. 15, 1914.	Apr. 15, 1915.	Apr. 15, 1916.	Apr. 15, 1917.	Apr. 15, 1918.	Apr. 15, 1919.	Apr. 15, 1920.	May 15, 1921.	Sept. 15, 1921.	Dec. 15, 1921.	Mar. 15, 1922.	June 15, 1922.	Sept. 15, 1922.	Dec. 15, 1922.
Buffalo, N. Y.	$0.30	$0.30	$0.30	$0.30	$0.30	$0.30	$0.35	$0.35	$0.35	$0.40	$0.40	$0.42	$0.42	.....	.....
Cincinnati, Ohio.	.30	.30	.30	.30	.30	.35	.35	.35	.35	.35	.50	.50	.50	$0.50	$0.50
Cleveland, Ohio.	.30	.30	.30	.30	.30	.30	.35	.35	.35	.35	.45	.40	.40	.40	.40
Columbus, Ohio.	.....	.....	.....	.....	.30	.30	.30	.30	.30	.45	.45	.45	.45	.45	.45
Dallas, Tex.	.45	.45	.45	.45	.45	.45	.45	.45	.67½	.67½	.67½	.67½	.67½	.67½	.67½
Kansas City, Mo.	.27	.27	.27	.27	.30	.60	.80	.80	[1] .80	[1] .80	[1] .80	[1] .80	[1] .80	[1] .85	[1] .85
Little Rock, Ark.	.40	.40	.40	.40	.40	.40	.45	.45	.45	.45	.45	.45	.45	.45	.45
Louisville, Ky.	.....	.62	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Pittsburgh, Pa.	.28	.28	.28	.28	.28	.28	.35	.35	.45	.45	.50	.50	.50	.50	.50

Manufactured and natural gas, mixed.

Los Angeles, Calif.	.....	.....	$0.68	$0.68	$0.68	$0.68	$0.75	$0.75	$0.75	$0.76	$0.76	$0.76	$0.73	$0.70	$0.69
Buffalo, N. Y.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	[3] .68	.63

[1] Plus 50 cents per month service charge.

[3] Price includes a coal charge.

From the prices quoted on manufactured gas in 43 cities average prices have been computed for the 43 cities combined and are shown in the next table for April 15 of each year from 1913 to 1920 and for May 15, September 15, and December 15, 1921, and March 15, June 15, September 15, and December 15, 1922. Relative prices have been computed by dividing the price of each year by the price in April, 1913.

As may be seen in the table, the price of manufactured gas changed but little until 1921. The price in December, 1922, showed an increase of 34 per cent since April, 1913. From September, 1922, to December, 1922, there was no change in price.

AVERAGE [1] AND RELATIVE PRICES OF MANUFACTURED GAS, FOR HOUSEHOLD USE, PER 1,000 CUBIC FEET, ON APRIL 15 OF EACH YEAR, 1913 TO 1920, AND ON MAY 15, SEPTEMBER 15, AND DECEMBER 15, 1921, AND MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922, FOR ALL CITIES COMBINED.

[Average prices in April, 1913=100.]

Date.	Average price.	Relative price.	Date.	Average price.	Relative price.
April 15, 1913	$0.95	100	May 15, 1921	$1.32	139
April 15, 1914	.94	99	September 15, 1921	1.31	138
April 15, 1915	.93	98	December 15, 1921	1.30	137
April 15, 1916	.92	97	March 15, 1922	1.29	136
April 15, 1917	.92	97	June 15, 1922	1.29	136
April 15, 1918	.95	100	September 15, 1922	1.27	134
April 15, 1919	1.04	109	December 15, 1922	1.27	134
April 15, 1920	1.09	115			

[1] Net price.

Retail Prices of Electricity in the United States.

THE following table shows for 32 cities the net price per kilowatt hour of electricity used for household purposes. Rates for these cities are shown for certain specified months; for 19 cities from December, 1914, to December, 1922, and for 13 cities from December, 1917, to December, 1922.

The consumption per month is expressed in hours of demand for several of the cities from which prices for electricity have been obtained. Since the demand is determined by a different method in each city, the explanation of these methods is given following the table.

NET PRICE PER KILOWATT HOUR FOR ELECTRICITY, FOR HOUSEHOLD USE, IN SPECIFIED MONTHS, 1914 TO 1922, FOR 32 CITIES.

City.	Measure of consumption, per month.	December, 1914.	December, 1915.	December, 1916.	December, 1917.	1918		1919		1920		1921			1922			
						June.	December.	June.	December.	June.	December.	May.	September.	December.	March.	June.	September.	December.
		Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Atlanta	First 100 kilowatt hours	.....	.....	.....	7.0	7.0	8.0	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Baltimore	First 50 kilowatt hours	8.5	8.5	8.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Birmingham	First 100 kilowatt hours	.....	.....	.....	8.1	8.1	8.1	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Boston:																		
Company A	All current	10.0	10.0	10.0	10.0	10.0	[1] 11.2	[1] 11.5	[1] 11.4	[1] 11.8	[1] 11.8	[1] 11.3	[1] 11.2	[1] 11.0	10.0	10.0	9.5	9.5
Company B	do	10.0	10.0	10.0	10.0	10.0	[1] 11.5	[1] 11.5	[1] 11.4	[1] 11.8	[1] 11.8	[1] 11.3	[1] 11.3	[1] 11.0	10.0	10.0	9.5	9.5
Buffalo [2]	First 60 hours' use of demand	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	Next 120 hours' use of demand	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	Excess	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Chicago [2]	First 30 hours' use of demand	10.0	10.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Next 30 hours' use of demand	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Excess	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Cincinnati [2]	First 30 hours' use of demand	.....	.....	.....	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
	Next 30 hours' use of demand	.....	.....	.....	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Excess	.....	.....	.....	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Cleveland:																		
Company A [2]	All current	[3] 10.0	[3] 10.0	[3] 10.0	[4] 10.0	[4] 10.0	[4] 10.0	[4] 10.0	[4] 10.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
	Excess	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
Company B	All current	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Denver	do	.....	.....	.....	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Detroit	First 3 kilowatt hours per active room.	[5] 12.6	[5] 12.6	[5] 12.6	[5] 12.6	[5] 12.6	[5] 12.6	[5] 12.6	[5] 12.6	[5] 12.6	12.6	12.6	12.6	12.6	12.6	12.6	10.8	10.8
	Excess	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Houston [2]	First 30 hours' use of demand	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	7.2	7.2	7.2	7.2
	Excess	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Indianapolis:																		
Company A	First 50 kilowatt hours	.....	.....	.....	[6] 6.5	[6] 6.5	[6] 6.5	[6] 6.5	[6] 6.5	[6] 6.5	[6] 7.5	[6] 7.5	[6] 7.5	[6] 7.5	[6] 7.5	[6] 7.0	7.0	7.0
	Next 150 kilowatt hours	.....	.....	.....	[7] 5.0	[7] 5.0	[7] 5.0	[7] 5.0	[7] 5.0	[7] 5.0	[7] 7.0	[7] 7.0	[7] 7.0	[7] 7.0	[7] 7.0	[7] 6.5	6.5	6.5
Company B	First 50 kilowatt hours	.....	.....	.....	[6] 6.5	[6] 6.5	[6] 6.5	[6] 6.5	[6] 6.5	[6] 6.5	[6] 7.5	[6] 7.5	[6] 7.5	[6] 7.5	[6] 7.5	[6] 7.0	7.0	7.0
	Next 150 kilowatt hours	.....	.....	.....	[7] 5.0	[7] 5.0	[7] 5.0	[7] 5.0	[7] 5.0	[7] 5.0	[7] 7.0	[7] 7.0	[7] 7.0	[7] 7.0	[7] 7.0	[7] 6.5	6.5	6.5
Jacksonville	All current	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Kansas City	First 3 kilowatt hours per room (minimum, 3 rooms).	.....	.....	.....	7.6	7.6	8.4	8.4	9.0	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
	Excess	.....	.....	.....	4.8	4.8	5.2	5.2	5.6	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4

[1] Price includes a coal charge, and a surcharge of 10 per cent from December, 1918, to June, 1920, and 5 per cent from December, 1920, to December, 1921.
[2] For determination of demand see explanation following table.
[3] First 35 hours' use of demand. For determination of demand see explanation following table.
[4] First 1,000 kilowatt hours.
[5] First 2 kilowatt hours' per active room.
[6] First block of demand. For determination of demand in effect from December, 1917, to March, 1922, and that in effect in June, 1922, see explanation following table.
[7] Excess.

NET PRICE PER KILOWATT HOUR FOR ELECTRICITY, FOR HOUSEHOLD USE, IN SPECIFIED MONTHS, 1914 TO 1922, FOR 32 CITIES—Concluded.

City.	Measure of consumption, per month.	December, 1914.	December, 1915.	December, 1916.	December, 1917.	1918		1919		1920		1921			1922			
						June.	December.	June.	December.	June.	December.	May.	September.	December.	March.	June.	September.	December.
		Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
Los Angeles:																		
Company A	First 100 kilowatt hours	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.2	6.2	6.2	6.2	6.2	5.6	5.6	5.6
Company B	do	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.2	6.2	6.2	6.2	6.2	5.6	.....	.....
Memphis	First 6 kilowatt hours per room.	.....	.....	.....	[8] 6.0	[8] 6.0	[8] 6.0	[8] 6.0	[8] 6.0	[8] 6.0	[9] 9.0	[9] 9.0	[9] 9.0	[9] 9.0	[9] 9.0	[9] 9.0	[9] 9.0	8.0
	Excess	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.0
Minneapolis	First 3 kilowatt hours per active room.	.....	.....	.....	7.6	7.6	9.5	9.5	9.5	9.5	[10] 10.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
	Next 3 kilowatt hours per active room.	.....	.....	.....	5.7	5.7	7.1	7.1	7.1	7.1	[10] 7.8	7.1	7.1	7.1	7.1	7.1	7.1	7.1
Mobile	First 50 kilowatt hours	7.0	7.0	7.0	8.0	8.0	[11] 11.7	[11] 11.7	[11] 10.8	8.0	8.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
New Orleans [12]	First 20 kilowatt hours	.....	.....	.....	7.0	7.0	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	Next 30 kilowatt hours	.....	.....	.....	6.0	6.0	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
New York:																		
Company A	First 1,000 kilowatt hours	[13] 10.0	[14] 8.0	8.0	7.0	7.0	7.0	7.0	7.0	7.0	[15] 7.9	[15] 7.9	[15] 7.7	[15] 7.7	[15] 7.5	[15] 7.4	[15] 7.5	[15] 7.6
Company B [16]	All current	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Company C [2]	First 60 hours' use of demand	11.0	11.0	11.0	8.0	8.0	8.0	8.0	8.0	8.0	[15] 9.0	[15] 8.8	[15] 8.8	[15] 8.7	[15] 8.4	[15] 8.4	[15] 8.5	[15] 8.6
Norfolk	First 100 kilowatt hours	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Philadelphia:																		
Company A	First 12 kilowatt hours	[17] 10.0	[17] 10.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	8.0	8.0	8.0
	Next 75 kilowatt hours	.....	.....	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Company B	First 500 kilowatt hours	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.0
Pittsburgh [2]	First 30 hours' use of demand	.....	.....	.....	[17] 8.0	[17] 8.0	[17] 8.0	[17] 8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
	Next 60 hours' use of demand	.....	.....	.....	.....	.....	.....	.....	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Portland, Me	All current	9.0	8.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Portland, Oreg.:																		
Company A	First 9 kilowatt hours	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Next kilowatt hours [18]	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
	Next 50 kilowatt hours	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Company B	First 13 kilowatt hours	[19] 9.0	[19] 9.0	[19] 9.0	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	Next kilowatt hours [20]	[21] 7.0	[21] 7.0	[21] 7.0	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
	Next 50 kilowatt hours	[22] 4.0	[22] 4.0	[22] 4.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Richmond, Va	First 100 kilowatt hours	.....	.....	.....	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
St. Louis:																		
Company A [23]	First block of demand	.....	.....	.....	7.6	7.6	7.6	8 1	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Next block of demand	.....	.....	.....	5.7	5.7	5.7	6.2	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	Excess	.....	.....	.....	2.9	2.9	2.9	3.4	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Company B [24]	First block of demand	.....	.....	.....	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
	Next block of demand	.....	.....	.....	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	Excess	.....	.....	.....	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9

San Francisco:																	
Company A....	First 50 kilowatt hours.....	7.0	7.0	7.0	7.0	7.0	8.0	[25] 8.0	[25] 8.0	[25] 8.0	[25] 9.2	8.5	8.5	8.5	8.5	8.5	8.5
Company B....	.....do	7.0	7.0	7.0	7.0	7.0	8.0	[25] 8.0	[25] 8.0	[25] 8.0	9.2	8.5	8.5	8.5	8.5	8.5	8.5
Savannah:																	
Company A....	.....do	[26] 10.8	[26] 10.8	[26] 10.8	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
	Excess.....	5.4	5.4	5.4													
Company B....	First 100 kilowatt hours.....	[17] 6.0	[17] 6.0	[17] 6.0	[27] 7.2	[27] 7.2	[27] 7.2	[27] 7.2	[27] 7.2	[27] 7.2	[27] 9.0	9.0	9.0	9.0	9.0	9.0	9.0
Scranton.....	First 150 kilowatt hours.....	.....	.....	.....	8.0	9.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Seattle:																	
Company A....	First 45 kilowatt hours.....	[28] 6.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Company B....	.....do	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Washington, D. C.[2].	First 120 hours' use of demand.	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

[2] For determination of demand see explanation following table.
[8] First 50 kilowatt hours. There is an additional charge of 30 cents per month. At the end of the year any amount paid in excess of 7½ cents per kilowatt hour is refunded.
[9] First 50 kilowatt hours.
[10] Price includes a 10 per cent surcharge.
[11] First 100 kilowatt hours.
[12] There is an additional service charge of 25 cents per month in New Orleans.
[13] First 250 kilowatt hours.
[14] First 900 kilowatt hours.
[15] Price includes a coal charge.
[16] A discount of 5 per cent is allowed on all bills over $2 when payment is made within 10 days.
[17] All current.
[18] The number of kilowatt hours paid for at this rate is that in excess of the first 9 kilowatt hours until 100 hours' use of the demand is reached. After 100 hours of demand has been consumed the lower rate can be applied. For determination of demand see explanation following table.
[19] First 6 per cent of demand. For determination of demand see explanation following table.
[20] For an installation of 600 watts or less 7 kilowatt hours will apply. For each 30 watts of installation in excess of 60 watts one additional kilowatt hour will apply.
[21] Next 6 per cent of demand. For determination of demand see explanation following table.
[22] Excess.
[23] For determination of demand in effect from December, 1917, to October, 1919, and that in effect since Oct. 31, 1919, see explanation following table.
[24] For determination of demand in effect from December, 1917, to July 31, 1922, and that in effect since July 31, 1922, see explanation following table.
[25] First 30 kilowatt hours.
[26] First 10 kilowatt hours.
[27] First 50 kilowatt hours.
[28] First 60 kilowatt hours.

Determination of Demand.

IN BUFFALO, from December, 1914, to December, 1922, there has been no change in the method of determining the number of kilowatt hours to be paid for at each rate The demand consists of two parts—lighting, 25 per cent of the total installation, but never less than 250 watts; and power, 2½ per cent of the capacity of any electric range, water heater, or other appliance of 1,000 watts or over and 25 per cent of the rated capacity of motors exceeding one-half horsepower but less than 1 horsepower. The installation is determined by inspection of premises.

In Chicago, from December, 1914, to December, 1922, the equivalent in kilowatt hours to 30 hours' use of demand has been estimated as follows: For a rated capacity of 475 to 574 watts, 11 kilowatt hours; 575 to 674 watts, 12 kilowatt hours; 675 to 774 watts, 13 kilowatt hours; and 775 to 874 watts, 14 kilowatt hours. Although the equivalent in kilowatt hours to 30 hours' use of demand of from 1 to 1,500 watts is given on the printed tariff, the equivalent is here shown only for installations of from 475 to 874 watts; the connected load of the average workingman's home being, as a rule, within this range.

In Cincinnati, from December, 1917, to December, 1922, the demand has been estimated as being 70 per cent of the connected load, excluding appliances.

In Cleveland, from December, 1914, to December, 1916, inclusive, Company A determined the demand by inspection as being 40 per cent of the connected load. From December, 1917, to December, 1919, there was a fixed number of kilowatt hours to be paid for at the primary rate by all customers, after which there was a flat rate for all current consumed.

In Houston, from December, 1914, to December, 1922, the demand has been estimated as 50 per cent of the connected load, each socket opening being rated at 50 watts.

In Indianapolis the determination of demand has been the same for both companies. From December, 1917, to March, 1922, the first block of demand for these companies was for 1.5 kilowatt hours per socket for not less than 10 sockets, 1 kilowatt hour per socket for the next 10 sockets, and 0.5 kilowatt hour per socket for excess sockets.

From April 1, 1922, to July 1, 1922, the first block of demand consisted of the first 5 kilowatt hours for each of the first 5 active rooms plus the first 3 kilowatt hours for each additional room, but not less than 15 kilowatt hours per month. Beginning July 1, 1922, a fixed number of kilowatt hours is to be paid for at each rate.

In New York the demand for Company C from December, 1914, to December, 1922, when not determined by meter, has been computed at 50 per cent of total installation in residences, each standard socket being rated at 50 watts and all other outlets being rated at their actual kilowatt capacity.

In Pittsburgh from December, 1919, to December, 1922, the demand has been determined by inspection. The first 10 outlets have been rated at 30 watts each, the next 20 outlets at 20 watts

each, and each additional outlet at 10 watts. Household utensils and appliances of not over 660 watts each have been excluded.

In Portland, Oreg., from June 16, 1917, to December, 1922, the demand for Company A has been estimated as one-third of the connected lighting load. Ranges, heating devices, and small power up to rated capacity of 2 kilowatts are not included.

From December, 1914, to December, 1916, inclusive, the demand for Company B, when not based on actual measurement, was estimated at one-third of the connected load. No demand was established at less than 233 watts. Since December, 1917, the present schedule has been in effect.

In St. Louis the first block of demand for Company A from December, 1917, to October, 1919, consisted of the first 4 kilowatt hours per month for each of the first 4 active rooms and the first 2½ kilowatt hours for each additional active room. The second block consisted of additional energy until a total of 7 kilowatt hours per month per active room had been consumed, after which the third rate became effective. Since October 31, 1919, the first block has consisted of the first 5 kilowatt hours per month for each of the first 5 active rooms, and the first 2½ kilowatt hours for each additional active room. The second block has been for additional energy until a total of 9 kilowatt hours per active room shall have been consumed. The third rate then becomes effective.

From December, 1917, to July 31, 1922, the number of kilowatt hours paid for at the primary and secondary rates for Company B was as follows: For homes of 4 rooms or less, 8 kilowatt hours at the primary rate and 6 at the secondary rate; 5 or 6 rooms, 12 kilowatt hours at the primary rate and 9 at the secondary rate; 7 or 8 rooms, 16 kilowatt hours at the primary rate and 12 at the secondary rate; 9 or 10 rooms, 20 kilowatt hours at the primary rate and 15 at the secondary rate. Beginning with August 1, 1922, the following number of kilowatt hours have been paid for at the primary and the secondary rates: For homes of 4 rooms or less, 10 kilowatt hours at the primary rate and 8 at the secondary rate; 5 or 6 rooms, 15 kilowatt hours at the primary rate and 12 at the secondary rate; 7 or 8 rooms, 20 kilowatt hours at the primary rate and 16 at the secondary rate; 9 or 10 rooms, 25 kilowatt hours at the primary rate and 20 at the secondary rate.

In Washington, D. C., from December, 1914, to December, 1922, the demand as determined by inspection consists of 100 per cent of the connected load, excluding small fans and heating and cooking appliances.

Retail Prices of Dry Goods in the United States.[1]

THE following table gives the average retail prices of 10 articles of dry goods on the 15th of February, May, August, and October, 1921, and on the 15th of March, June, September, and December, 1922, by cities. The averages given are based on the retail prices of standard brands only.

[1] Retail prices of dry goods are secured from each of 51 cities and are published at quarterly intervals in the MONTHLY LABOR REVIEW.

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEBRUARY 15, MAY 15, AUGUST 15, AND OCTOBER 15, 1921, AND ON MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922.

Article.	Unit.	Atlanta, Ga.								Baltimore, Md.							
		1921				1922				1921				1922			
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.
Calico, 24 to 25 inch	Yard	.....	.....	.....	.....	$0.150	.....	.....	.....	.....	.....	$0.200	$0.217	$0.217	.....	.....	$0.208
Percale	do	$0.275	$0.250	$0.251	$0.257	.263	$0.257	$0.268	$0.264	$0.243	$0.238	.238	.238	.235	$0.244	$0.243	.258
Gingham, apron, 27 to 28 inch	do	.161	.158	.183	.181	.171	.178	.175	.178	.161	.161	.147	.149	.158	.156	.158	.171
Gingham, dress, 27-inch	do	.238	.245	.246	.254	.254	.253	.259	.261	.234	.238	.241	.241	.243	.236	.233	.235
Gingham, dress, 32-inch	do	.464	.483	.453	.471	.459	.471	.452	.451	.349	.368	.365	.375	.376	.361	.366	.386
Muslin, bleached	do	.222	.214	.187	.211	.204	.212	.217	.234	.211	.216	.208	.225	.226	.212	.218	.237
Sheeting, bleached, 9-4	do	.662	.668	.647	.693	.735	.728	.718	.708	.673	.673	.649	.748	.739	.695	.689	.686
Sheets, bleached, 81 by 90	Each	1.599	1.591	1.583	1.594	1.646	1.652	1.655	1.652	1.754	1.736	1.707	1.762	1.718	1.655	1.673	1.778
Outing flannel, 27 to 28 inch	Yard	.265	.248	.212	.221	.218	.210	.216	.225	.252	.223	.219	.223	.223	.216	.231	.236
Flannel, white, wool, 27-inch	do	1.250	1.117	1.000	.950	.950	.....	.990	1.000	1.077	1.080	1.140	1.008	1.000	.952	.993	.968
Blankets, cotton, 66 by 80	Pair	3.240	4.740	3.937	3.868	3.913	3.868	3.695	3.483	6.113	5.894	4.711	4.479	4.131	4.479	4.427	4.633
		Birmingham, Ala.								Boston, Mass.							
Calico, 24 to 25 inch	Yard	.....	.....	$0.125	$0.093	$0.100	$0.100	$0.100	$0.113	$0.150	$0.150	$0.150	$0.150	$0.142	$0.142	$0.161	.....
Percale	do	$0.258	$0.250	.250	.256	.261	.245	.245	.265	.266	.246	.241	.252	.257	.261	.246	$0.250
Gingham, apron, 27 to 28 inch	do	.175	.148	.140	.154	.161	.170	.163	.162	.178	.206	.162	.172	.173	.170	.174	.177
Gingham, dress, 27-inch	do	.251	.249	.242	.243	.246	.257	.265	.269	.240	.248	.245	.245	.239	.238	.228	.225
Gingham, dress, 32-inch	do	.413	.419	.454	.503	.490	.463	.473	.436	.504	.499	.521	.559	.490	.462	.440	.447
Muslin, bleached	do	.194	.175	.166	.185	.177	.177	.191	.218	.262	.238	.244	.258	.249	.252	.244	.247
Sheeting, bleached, 9-4	do	.604	.591	.558	.629	.639	.648	.643	.639	.666	.659	.661	.680	.681	.669	.672	.666
Sheets, bleached, 81 by 90	Each	1.517	1.469	1.395	1.550	1.469	1.482	1.491	1.509	1.663	1.698	1.619	1.664	1.659	1.685	1.636	1.501
Outing flannel, 27 to 28 inch	Yard	.245	.205	.210	.207	.202	.205	.215	.216	.251	.259	.249	.240	.211	.212	.215	.239
Flannel, white, wool, 27-inch	do	1.096	.974	.980	.930	.868	.923	1.004	1.063	.998	.891	.891	.927	.880	.880	.896	.950
Blankets, cotton, 66 by 80	Pair	4.804	4.154	4.066	4.143	4.183	4.183	4.036	4.320	4.735	4.368	4.483	4.588	4.000	3.995	3.675	3.709

		Bridgeport, Conn.								Buffalo, N. Y.							
Calico, 24 to 25 inch	Yard	.....	.....	.....	.....	.....	.....	.....	.....	$0.113	$0.119	$0.106	$0.110	$0.106	$0.113	$0.141	.....
Percale	do	$0.278	$0.255	$0.245	$0.248	$0.246	$0.245	$0.255	$0.258	.285	.259	.262	.257	.263	.263	.281	$0.289
Gingham, apron, 27 to 28 inch	do	.185	.182	.170	.166	.170	.174	.174	.178	.196	.160	.158	.163	.181	.179	.201	.213
Gingham, dress, 27-inch	do	.253	.237	.230	.242	.260	.227	.244	.249	.242	.257	.280	.267	.266	.261	.255	.266
Gingham, dress, 32-inch	do	.488	.488	.474	.488	.496	.450	.423	.445	.491	.522	.506	.522	.533	.482	.510	.503
Muslin, bleached	do	.241	.208	.200	.221	.223	.227	.232	.233	.258	.226	.216	.221	.229	.216	.219	.240
Sheeting, bleached, 9-4	do	.660	.677	.677	.673	.709	.678	.680	.688	.681	.689	.676	.705	.708	.674	.667	.671
Sheets, bleached, 81 by 90	Each	1.855	1.855	1.741	1.774	1.786	1.773	1.710	1.710	1.789	1.718	1.702	1.668	1.739	1.674	1.648	1.669
Outing flannel, 27 to 28 inch	Yard	.300	.252	.225	.225	.238	.274	.246	.249	.297	.231	.228	.226	.212	.240	.218	.233
Flannel, white, wool, 27-inch	do	1.250	.....	.700	.700	.750	.670	.897	.833	.865	.....	.850	.865	.865	.865	.913	.....
Blankets, cotton, 66 by 80	Pair	6.050	5.850	5.000	5.063	5.042	5.150	4.388	4.388	5.530	5.416	5.384	5.210	4.796	4.474	4.160	4.241

		Butte, Mont.								Charleston, S. C.							
Calico, 24 to 25 inch	Yard	$0.150	$0.150	$0.150	$0.133	$0.133	$0.133	$0.100	$0.133	$0.133	$0.131	$0.113	$0.113	$0.119	$0.119	$0.125	$0.150
Percale	do	.334	.310	.258	.260	.263	.335	.305	.295	.265	.244	.239	.233	.238	.241	.241	.255
Gingham, apron, 27 to 28 inch	do	.214	.188	.180	.154	.170	.178	.182	.178	.164	.153	.153	.158	.153	.163	.161	.179
Gingham, dress, 27-inch	do	.300	.270	.248	.248	.261	.237	.235	.242	.232	.217	.218	.222	.247	.236	.228	.228
Gingham, dress, 32-inch	do	.478	.471	.478	.438	.438	.430	.464	.460	.420	.373	.376	.410	.415	.403	.424	.428
Muslin, bleached	do	.244	.244	.228	.244	.241	.239	.239	.243	.223	.194	.193	.201	.203	.199	.204	.219
Sheeting, bleached, 9-4	do	.842	.788	.767	.797	.803	.823	.816	.810	.614	.602	.588	.590	.664	.614	.607	.663
Sheets, bleached, 81 by 90	Each	2.113	1.992	1.933	2.044	2.044	1.991	2.010	2.000	1.553	1.539	1.511	1.544	1.685	1.579	1.521	1.703
Outing flannel, 27 to 28 inch	Yard	.308	.286	.272	.266	.264	.266	.267	.259	.262	.218	.197	.198	.208	.207	.208	.235
Flannel, white, wool, 27-inch	do	.950	1.013	1.013	.932	.890	.964	.980	1.088	1.073	.713	.725	.758	.760	.818	.835	.938
Blankets, cotton, 66 by 80	Pair	4.875	5.190	5.270	5.270	5.130	5.260	4.860	5.088	4.060	4.135	3.655	3.572	3.880	.....	4.215	3.860

		Chicago, Ill.								Cincinnati, Ohio.							
Calico, 24 to 25 inch	Yard	$0.132	$0.126	$0.129	$0.137	$0.117	$0.119	$0.122	$0.107	$0.173	$0.150	$0.150	$0.150	$0.129	$0.132	$0.150	.....
Percale	do	.284	.279	.250	.246	.231	.226	.237	.240	.276	.268	.245	.254	.246	.244	.235	$0.242
Gingham, apron, 27 to 28 inch	do	.159	.142	.143	.157	.157	.154	.155	.160	.165	.145	.139	.144	.149	.155	.161	.182
Gingham, dress, 27-inch	do	.255	.245	.245	.241	.236	.226	.228	.224	.244	.242	.252	.237	.237	.240	.250	.261
Gingham, dress, 32-inch	do	.579	.559	.592	.565	.537	.503	.456	.453	.574	.561	.549	.525	.511	.490	.462	.449
Muslin, bleached	do	.228	.208	.214	.226	.203	.205	.215	.234	.213	.208	.195	.201	.198	.196	.204	.218
Sheeting, bleached, 9-4	do	.637	.641	.649	.711	.672	.666	.667	.709	.643	.639	.629	.654	.625	.629	.645	.650
Sheets, bleached, 81 by 90	Each	1.530	1.569	1.566	1.654	1.643	1.574	1.655	1.640	1.604	1.617	1.550	1.695	1.667	1.650	1.624	1.581
Outing flannel, 27 to 28 inch	Yard	.236	.200	.209	.198	.189	.198	.210	.213	.237	.215	.209	.206	.202	.200	.201	.211
Flannel, white, wool, 27-inch	do	1.100	.950	.892	.896	1.420	1.400	1.475	1.500	1.250	.983	.873	.910	.926	.926	.928	.963
Blankets, cotton, 66 by 80	Pair	5.098	4.986	4.628	4.607	4.772	4.688	4.667	4.492	4.920	4.771	4.211	3.979	3.903	3.976	4.115	4.237

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEBRUARY 15, MAY 15, AUGUST 15, AND OCTOBER 15, 1921, AND ON MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922—Continued.

Article.	Unit.	Cleveland, Ohio.								Columbus, Ohio.							
		1921				1922				1921				1922			
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.
Calico, 24 to 25 inch	Yard	.....	$0.125	$0.125	$0.131	$0.133	$0.158	$0.160	$0.160	$0.145	$0.141	$0.132	$0.146	$0.148	$0.141	$0.144	$0.140
Percale	do	$0.276	.249	.263	.259	.259	.250	.265	.279	.267	.251	.250	.244	.246	.253	.258	.271
Gingham, apron, 27 to 28 inch	do	.175	.174	.140	.157	.167	.168	.176	.189	.163	.176	.164	.170	.169	.167	.173	.196
Gingham, dress, 27-inch	do	.238	.229	.243	.247	.242	.243	.244	.257	.275	.279	.280	.276	.281	.280	.293	.308
Gingham, dress, 32-inch	do	.528	.508	.516	.538	.553	.473	.489	.490	.593	.584	.570	.583	.581	.556	.534	.459
Muslin, bleached	do	.252	.238	.229	.244	.239	.230	.238	.241	.222	.209	.190	.210	.215	.210	.215	.242
Sheeting, bleached, 9–4	do	.676	.696	.666	.676	.682	.642	.656	.692	.763	.709	.699	.639	.750	.736	.726	.748
Sheets, bleached, 81 by 90	Each	1.558	1.523	1.525	1.613	1.675	1.625	1.655	1.714	1.743	1.777	1.709	1.715	1.786	1.763	1.750	1.762
Outing flannel, 27 to 28 inch	Yard	.234	.204	.205	.203	.229	.215	.243	.240	.290	.250	.218	.228	.234	.238	.247	.250
Flannel, white, wool, 27-inch	do	1.250	1.000	1.000	1.117	.983	1.017	1.017	.950	.....	.....	.....	1.250	1.250	1.250	1.000	.....
Blankets, cotton, 66 by 80	Pair	5.420	4.779	4.529	4.756	4.550	4.441	4.494	4.572	4.749	4.711	4.564	4.747	4.089	4.205	4.272	4.211
		Dallas, Tex.								Denver, Colo.							
Calico, 24 to 25 inch	Yard	$0.125	$0.125	$0.100	$0.100	$0.100	$0.108	$0.108	$0.119	$0.175	$0.145	$0.134	$0.140	$0.167	$0.195	$0.175	$0.152
Percale	do	.270	.246	.233	.219	.219	.246	.238	.239	.348	.321	.304	.293	.298	.298	.275	.279
Gingham, apron, 27 to 28 inch	do	.174	.143	.143	.152	.162	.162	.168	.187	.179	.170	.160	.165	.168	.178	.176	.178
Gingham, dress, 27-inch	do	.247	.225	.225	.228	.237	.245	.249	.248	.264	.242	.249	.246	.258	.263	.269	.267
Gingham, dress, 32-inch	do	.516	.542	.513	.495	.497	.457	.439	.433	.626	.565	.571	.571	.535	.507	.479	.502
Muslin, bleached	do	.209	.187	.195	.207	.206	.204	.214	.225	.245	.239	.234	.228	.221	.231	.236	.238
Sheeting, bleached, 9–4	do	.593	.570	.559	.634	.627	.625	.593	.632	.716	.754	.740	.767	.768	.779	.739	.725
Sheets, bleached, 81 by 90	Each	1.529	1.514	1.443	1.483	1.561	1.486	1.506	1.508	1.823	1.922	1.862	1.871	1.754	1.704	1.673	1.676
Outing flannel, 27 to 28 inch	Yard	.194	.184	.196	.187	.188	.187	.191	.217	.271	.218	.212	.215	.218	.237	.228	.233
Flannel, white, wool, 27-inch	do	.....	.....	.650	.850	.....	.750	.850	1.000	.....	1.425	1.050	1.125	.979	.979	.973	.967
Blankets, cotton, 66 by 80	Pair	4.156	4.350	4.706	4.583	4.522	4.500	3.930	4.321	5.393	5.646	5.542	5.458	4.854	4.725	4.842	4.569

		Detroit, Mich.								Fall River, Mass.							
Calico, 24 to 25 inch	Yard	$0.136	$0.136	$0.136	$0.136	$0.129	$0.121	$0.120	.....	.....	.....	.....	.....	.....	.....	.....	.....
Percale	do	.282	.282	.262	.270	.264	.258	.258	$0.255	$0.238	$0.246	$0.246	$0.246	$0.258	$0.258	$0.246	$0.260
Gingham, apron, 27 to 28 inch	do	.190	.181	.172	.174	.172	.178	.176	.193	.167	.145	.143	.151	.158	.155	.156	.164
Gingham, dress, 27-inch	do	.225	.219	.220	.216	.223	.220	.216	.227	.240	.238	.243	.270	.283	.283	.280	.280
Gingham, dress, 32-inch	do	.574	.520	.489	.501	.510	.494	.472	.460	.390	.402	.460	.450	.443	.433	.450	.430
Muslin, bleached	do	.225	.220	.209	.217	.223	.228	.231	.242	.230	.203	.221	.226	.223	.227	.240	.244
Sheeting, bleached, 9–4	do	.715	.693	.698	.731	.733	.718	.714	.744	.783	.688	.697	.708	.720	.705	.693	.714
Sheets, bleached, 81 by 90	Each	1.727	1.770	1.765	1.862	1.751	1.733	1.746	1.781	1.610	1.690	1.680	1.683	1.710	1.717	1.655	1.749
Outing flannel, 27 to 28 inch	Yard	.263	.247	.229	.221	.220	.218	.226	.236	.258	.254	.236	.228	.228	.203	.170	.245
Flannel, white, wool, 27-inch	do	1.233	1.233	1.233	1.233	1.233	1.317	1.067	1.083	.....	.....	.690	.625	.....	.923	.910	.903
Blankets, cotton, 66 by 80	Pair	5.013	4.708	4.623	4.498	4.270	4.144	4.280	4.375	4.320	3.555	4.944	4.788	4.406	4.384	4.278	3.903

		Houston, Tex.								Indianapolis, Ind.							
Calico, 24 to 25 inch	Yard	$0.125	$0.123	$0.123	$0.130	$0.122	$0.126	$0.128	$0.133	$0.140	$0.128	$0.123	$0.132	$0.126	$0.125	$0.125	$0.131
Percale	do	.280	.282	.262	.280	.268	.242	.252	.257	.295	.285	.275	.275	.277	.272	.270	.252
Gingham, apron, 27 to 28 inch	do	.163	.158	.168	.190	.172	.167	.167	.181	.171	.164	.165	.177	.168	.173	.172	.180
Gingham, dress, 27-inch	do	.220	.204	.199	.208	.210	.205	.208	.224	.249	.242	.263	.263	.260	.257	.278	.261
Gingham, dress, 32-inch	do	.497	.523	.515	.507	.505	.486	.485	.460	.410	.381	.456	.445	.532	.512	.461	.443
Muslin, bleached	do	.209	.173	.176	.181	.188	.184	.190	.199	.238	.220	.215	.224	.208	.213	.213	.241
Sheeting, bleached, 9–4	do	.588	.518	.565	.580	.579	.574	.582	.600	.698	.671	.683	.694	.693	.683	.657	.684
Sheets, bleached, 81 by 90	Each	1.654	1.528	1.507	1.510	1.613	1.518	1.576	1.609	1.527	1.571	1.523	1.620	1.611	1.593	1.564	1.561
Outing flannel, 27 to 28 inch	Yard	.203	.188	.170	.183	.182	.173	.198	.197	.254	.226	.198	.205	.200	.206	.210	.211
Flannel, white, wool, 27-inch	do	.804	.723	.723	.723	.762	.773	.850	.845	.997	.997	.997	1.047	1.023	1.050	1.033	1.005
Blankets, cotton, 66 by 80	Pair	5.932	4.983	3.943	4.270	4.270	.....	4.733	4.599	4.905	4.503	4.808	4.941	4.628	4.439	4.484	4.468

		Jacksonville, Fla.								Kansas City, Mo.							
Calico, 24 to 25 inch	Yard	$0.138	$0.144	$0.144	$0.144	$0.144	$0.142	$0.142	$0.107	$0.161	$0.149	$0.138	$0.153	$0.144	$0.142	$0.145	$0.140
Percale	do	.300	.270	.290	.290	.270	.270	.270	.266	.284	.260	.251	.273	.270	.258	.270	.277
Gingham, apron, 27 to 28 inch	do	.160	.170	.170	.170	.170	.164	.160	.163	.190	.181	.189	.183	.206	.210	.210	.210
Gingham, dress, 27-inch	do	.233	.243	.243	.234	.240	.232	.228	.246	.270	.267	.273	.270	.270	.282	.276	.276
Gingham, dress, 32-inch	do	.438	.446	.540	.521	.465	.439	.425	.423	.555	.534	.522	.487	.487	.490	.470	.447
Muslin, bleached	do	.229	.216	.204	.216	.215	.217	.219	.235	.241	.204	.225	.232	.229	.223	.233	.255
Sheeting, bleached, 9–4	do	.688	.642	.608	.588	.670	.710	.750	.733	.705	.699	.660	.715	.743	.718	.718	.749
Sheets, bleached, 81 by 90	Each	1.615	1.482	1.444	1.512	1.498	1.460	1.478	1.462	1.712	1.675	1.519	1.644	1.612	1.646	1.647	1.574
Outing flannel, 27 to 28 inch	Yard	.270	.210	.206	.218	.220	.195	.195	.235	.243	.223	.203	.221	.222	.220	.240	.230
Flannel, white, wool, 27-inch	do	.850	.850	.850	.850	.....	.750	.750	.750	.750	.750	.920	.920	.850	.725	.725	.975
Blankets, cotton, 66 by 80	Pair	5.317	.....	4.250	4.186	4.186	4.250	3.908	3.893	5.431	4.969	4.810	4.994	4.997	5.176	4.747	4.783

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEBRUARY 15, MAY 15, AUGUST 15, AND OCTOBER 15, 1921, AND ON MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922—Continued.

Article.	Unit.	Little Rock, Ark.								Los Angeles, Calif.							
		1921				1922				1921				1922			
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.
Calico, 24 to 25 inch	Yard	$0.200	$0.133	$0.140	$0.153	$0.113	$0.114	$0.118	$0.150	$0.150	$0.125	$0.125	$0.125	$0.163	$0.138	$0.168	$0.223
Percale	do	.276	.261	.230	.237	.235	.255	.269	.261	.353	.317	.280	.282	.297	.274	.274	.287
Gingham, apron, 27 to 28 inch	do	.188	.156	.163	.163	.150	.150	.175	.188	.186	.185	.178	.178	.172	.173	.173	.186
Gingham, dress, 27-inch	do	.215	.208	.236	.235	.231	.229	.233	.262	.274	.251	.254	.251	.257	.255	.240	.243
Gingham, dress, 32-inch	do	.409	.399	.433	.427	.451	.427	.436	.406	.584	.557	.518	.544	.556	.548	.550	.561
Muslin, bleached	do	.221	.200	.198	.199	.183	.184	.204	.240	.247	.230	.217	.223	.226	.225	.237	.238
Sheeting, bleached, 9-4	do	.664	.583	.567	.610	.687	.611	.658	.672	.713	.666	.688	.723	.744	.709	.685	.679
Sheets, bleached, 81 by 90	Each	1.700	1.543	1.484	1.522	1.646	1.531	1.640	1.607	1.623	1.586	1.596	1.618	1.662	1.632	1.695	1.699
Outing flannel, 27 to 28 inch	Yard	.238	.197	.206	.203	.178	.187	.228	.233	.269	.255	.246	.245	.239	.241	.242	.258
Flannel, white, wool, 27-inch	do	.911	.771	.886	.875	.894	.867	.915	1.067	.950	1.317	1.317	1.200	1.250	1.125	1.125	1.033
Blankets, cotton, 66 by 80	Pair	4.175	3.875	3.895	4.095	3.676	3.386	3.393	3.792	5.106	4.633	4.342	4.581	4.443	4.436	4.489	4.493
		Louisville, Ky.								Manchester, N. H.							
Calico, 24 to 25 inch	Yard	$0.134	$0.129	$0.125	$0.128	$0.122	$0.125	$0.133	$0.140	$0.130	$0.129	$0.128	$0.133	$0.133	$0.139	$0.125	$0.125
Percale	do	.261	.246	.257	.257	.257	.270	.261	.263	.261	.233	.229	.241	.220	.215	.217	.223
Gingham, apron, 27 to 28 inch	do	.156	.159	.143	.158	.163	.156	.163	.180	.156	.163	.163	.167	.167	.151	.170	.178
Gingham, dress, 27-inch	do	.269	.261	.260	.264	.252	.262	.251	.275	.233	.222	.221	.222	.224	.211	.210	.236
Gingham, dress, 32-inch	do	.532	.550	.539	.521	.454	.461	.478	.491	.450	.439	.427	.413	.456	.453	.387	.387
Muslin, bleached	do	.194	.189	.199	.214	.198	.207	.210	.219	.236	.226	.224	.230	.225	.220	.232	.245
Sheeting, bleached, 9-4	do	.635	.609	.616	.686	.675	.658	.635	.683	.719	.633	.627	.668	.644	.577	.571	.668
Sheets, bleached, 81 by 90	Each	1.932	1.604	1.608	1.625	1.620	1.579	1.566	1.709	1.625	1.636	1.634	1.681	1.656	1.505	1.520	1.630
Outing flannel, 27 to 28 inch	Yard	.257	.220	.228	.244	.240	.240	.251	.240	.230	.240	.228	.230	.223	.231	.230	.216
Flannel, white, wool, 27-inch	do	.875	.670	.750	.770	.807	.973	1.053	1.007	1.250	.885	.840	.843	.864	.868	.895	.903
Blankets, cotton, 66 by 80	Pair	5.917	5.000	4.980	4.265	3.787	4.057	4.722	4.490	4.302	4.009	4.472	4.351	4.083	3.752	3.464	4.102

		Memphis, Tenn.								Milwaukee, Wis.							
Calico, 24 to 25 inch	Yard	$0.144	$0.153	$0.121	$0.133	$0.132	$0.135	$0.135	$0.150	$0.155	$0.122	$0.130	$0.132	$0.132	$0.123	$0.150	$0.150
Percale	do	.301	.295	.255	.275	.252	.238	.266	.265	.260	.260	.258	.265	.258	.258	.231	.244
Gingham, apron, 27 to 28 inch	do	.150	.146	.146	.161	.159	.156	.159	.175	.176	.173	.173	.184	.176	.176	.165	.173
Gingham, dress, 27-inch	do	.266	.250	.251	.269	.251	.249	.259	.290	.258	.243	.242	.243	.241	.244	.268	.286
Gingham, dress, 32-inch	do	.545	.548	.524	.533	.518	.501	.461	.455	.519	.502	.514	.516	.473	.465	.415	.431
Muslin, bleached	do	.204	.203	.201	.199	.203	.206	.237	.231	.263	.219	.219	.236	.232	.225	.238	.239
Sheeting, bleached, 9–4	do	.552	.659	.651	.712	.672	.632	.691	.683	.664	.681	.650	.705	.708	.682	.707	.706
Sheets, bleached, 81 by 90	Each	1.627	1.635	1.611	1.689	1.740	1.661	1.723	1.756	1.734	1.760	1.744	1.706	1.763	1.530	1.736	1.780
Outing flannel, 27 to 28 inch	Yard	.209	.191	.190	.202	.190	.185	.240	.230	.280	.201	.193	.209	.224	.234	.221	.217
Flannel, white, wool, 27-inch	do	.875	.875	.875	.917	.870	.870	.990	.....	.....	.850	.850	1.000	1.000	.750	.750	1.000
Blankets, cotton, 66 by 80	Pair	4.857	4.945	4.900	4.546	4.506	4.459	4.326	4.488	5.032	4.368	4.533	4.463	4.411	4.353	4.184	4.380

		Minneapolis, Minn.								Mobile, Ala.							
Calico, 24 to 25 inch	Yard	$0.132	$0.130	$0.111	$0.111	$0.107	$0.105	$0.105	$0.121	$0.150	$0.150	$0.144	$0.144	$0.148	$0.146	$0.153	$0.150
Percale	do	.242	.244	.262	.258	.267	.259	.256	.262	.244	.256	.239	.244	.239	.239	.260	.266
Gingham, apron, 27 to 28 inch	do	.169	.165	.165	.160	.162	.155	.159	.170	.158	.150	.145	.150	.150	.150	.150	.150
Gingham, dress, 27-inch	do	.264	.265	.254	.258	.258	.260	.244	.252	.221	.220	.209	.209	.212	.212	.221	.222
Gingham, dress, 32-inch	do	.618	.671	.551	.562	.543	.494	.520	.558	.398	.476	.415	.410	.421	.397	.440	.510
Muslin, bleached	do	.233	.228	.229	.225	.226	.228	.230	.239	.219	.213	.197	.199	.198	.202	.198	.195
Sheeting, bleached, 9–4	do	.624	.622	.614	.634	.666	.659	.656	.661	.590	.620	.620	.595	.568	.593	.624	.624
Sheets, bleached, 81 by 90	Each	1.639	1.682	1.639	1.681	1.741	1.670	1.709	1.765	1.570	1.570	1.461	1.504	1.517	1.493	1.556	1.571
Outing flannel, 27 to 28 inch	Yard	.220	.198	.203	.211	.206	.215	.221	.237	.226	.225	.193	.193	.188	.188	.201	.207
Flannel, white, wool, 27-inch	do	.....	.720	1.115	.916	.948	.990	.990	.928	.590	.763	.857	.897	.890	.785	.910	.795
Blankets, cotton, 66 by 80	Pair	5.098	4.992	4.634	4.457	4.509	4.542	4.703	4.751	4.979	4.858	4.841	5.000	4.428	4.464	4.281	4.247

		Newark, N. J.								New Haven, Conn.							
Calico, 24 to 25 inch	Yard	$0.125	$0.100	$0.104	$0.100	$0.100	$0.102	$0.107	$0.129	$0.144	$0.136	$0.125	$0.125	$0.125	$0.125	$0.125	$0.125
Percale	do	.303	.277	.283	.277	.277	.293	.283	.282	.255	.236	.239	.245	.248	.254	.260	.274
Gingham, apron, 27 to 28 inch	do	.183	.163	.150	.150	.150	.158	.164	.188	.177	.168	.154	.157	.159	.159	.164	.179
Gingham, dress, 27-inch	do	.243	.236	.234	.248	.241	.236	.236	.290	.263	.240	.235	.239	.239	.233	.232	.273
Gingham, dress, 32-inch	do	.508	.504	.500	.494	.554	.502	.456	.461	.459	.439	.499	.476	.498	.454	.424	.460
Muslin, bleached	do	.219	.218	.203	.209	.231	.234	.231	.234	.221	.210	.211	.219	.222	.220	.226	.227
Sheeting, bleached, 9–4	do	.670	.670	.665	.665	.745	.745	.745	.747	.675	.647	.634	.646	.671	.648	.628	.649
Sheets, bleached, 81 by 90	Each	1.809	1.769	1.769	1.786	1.824	1.841	1.768	1.718	1.552	1.512	1.518	1.525	1.608	1.563	1.572	1.639
Outing, flannel, 27 to 28 inch	Yard	.245	.228	.218	.221	.222	.225	.237	.242	.263	.213	.211	.212	.219	.218	.219	.242
Flannel, white, wool, 27-inch	do	1.140	1.068	1.053	1.053	1.020	1.062	1.083	1.183	.810	.838	.800	.875	.875	.857	.837	.916
Blankets, cotton, 66 by 80	Pair	4.760	4.521	4.558	4.849	5.125	4.536	4.042	3.875	4.634	4.496	4.365	4.366	4.457	4.643	4.583	5.050

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEBRUARY 15, MAY 15, AUGUST 15, AND OCTOBER 15, 1921, AND ON MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922—Continued.

Article.	Unit.	New Orleans, La.								New York, N. Y.							
		1921				1922				1921				1922			
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.
Calico, 24 to 25 inch	Yard	$0.150	$0.131	$0.131	$0.120	$0.117	$0.134	$0.125	$0.129	$0.173	$0.125	$0.132	$0.129	$0.140	$0.144	$0.136	$0.138
Percale	do	.226	.226	.215	.225	.213	.200	.220	.239	.284	.254	.253	.257	.261	.265	.264	.268
Gingham, apron, 27 to 28 inch	do	.180	.170	.150	.174	.150	.150	.167	.172	.181	.152	.155	.155	.166	.176	.179	.186
Gingham, dress, 27-inch	do	.220	.224	.216	.222	.215	.215	.223	.230	.262	.262	.249	.260	.257	.242	.241	.246
Gingham, dress, 32-inch	do	.637	.598	.499	.503	.466	.437	.405	.384	.628	.588	.541	.515	.515	.492	.473	.480
Muslin, bleached	do	.192	.178	.174	.191	.170	.172	.188	.203	.230	.213	.210	.225	.220	.216	.224	.240
Sheeting, bleached, 9-4	do	.557	.508	.482	.522	.513	.523	.535	.576	.682	.644	.650	.674	.697	.685	.700	.706
Sheets, bleached, 81 by 90	Each	1.695	1.497	1.319	1.440	1.434	1.409	1.451	1.494	1.626	1.593	1.611	1.629	1.711	1.715	1.636	1.695
Outing flannel, 27 to 28 inch	Yard	.184	.184	.182	.182	.179	.179	.175	.201	.263	.223	.227	.223	.218	.204	.219	.233
Flannel, white, wool, 27-inch	do	.....	.....	.750	.750	.750	.750	.750	.750	.979	.991	1.008	1.030	.930	.915	.976	.964
Blankets, cotton, 66 by 80	Pair	5.130	.....	4.415	4.270	.....	.....	4.085	3.923	5.462	4.517	4.483	4.550	4.130	4.146	4.075	4.183
		Norfolk, Va.								Omaha, Nebr.							
Calico, 24 to 25 inch	Yard	$0.150	.....	$0.150	$0.150	$0.139	$0.144	$0.138	$0.150	$0.142	$0.127	$0.141	$0.141	$0.149	$0.151	$0.141	$0.145
Percale	do	.273	$0.258	.240	.240	.246	.256	.260	.276	.286	.276	.259	.290	.290	.283	.264	.273
Gingham, apron, 27 to 28 inch	do	.188	.175	.175	.179	.182	.178	.176	.182	.185	.182	.173	.188	.189	.183	.180	.185
Gingham, dress, 27-inch	do	.243	.244	.241	.242	.242	.243	.243	.250	.268	.252	.259	.260	.263	.259	.259	.259
Gingham, dress, 32-inch	do	.455	.455	.461	.457	.485	.481	.442	.459	.581	.529	.509	.488	.533	.485	.466	.431
Muslin, bleached	do	.245	.216	.205	.218	.216	.218	.222	.239	.232	.204	.212	.232	.219	.226	.234	.243
Sheeting, bleached, 9-4	do	.701	.677	.664	.675	.691	.676	.679	.716	.741	.720	.722	.725	.744	.726	.727	.756
Sheets, bleached, 81 by 90	Each	1.699	1.685	1.647	1.697	1.686	1.603	1.676	1.697	1.725	1.696	1.713	1.784	1.864	1.747	1.776	1.844
Outing flannel, 27 to 28 inch	Yard	.249	.231	.190	.199	.196	.196	.215	.240	.256	.215	.207	.210	.218	.220	.228	.248
Flannel, white, wool, 27-inch	do	1.035	1.035	1.035	1.058	1.058	1.078	1.108	1.080	1.250	1.210	1.070	1.088	1.130	1.214	1.192	1.163
Blankets, cotton, 66 by 80	Pair	5.143	.....	3.317	3.500	3.500	.....	4.317	4.317	4.707	4.382	4.663	4.544	4.705	4.264	3.984	4.181

		Peoria, Ill.								Philadelphia, Pa.							
Calico, 24 to 25 inch	Yard	.....	$0.125	$0.125	$0.125	$0.108	$0.113	$0.100	$0.113	$0.176	$0.119	$0.119	$0.121	$0.121	$0.119	.....	.....
Percale	do	$0.250	.240	.292	.271	.251	.245	.266	.267	.253	.251	.251	.252	.263	.257	$0.251	$0.249
Gingham, apron, 27 to 28 inch	do	.167	.156	.164	.174	.176	.176	.178	.178	.169	.161	.164	.159	.168	.168	.170	.171
Gingham, dress, 27-inch	do	.241	.249	.262	.257	.250	.246	.258	.261	.216	.221	.236	.236	.243	.237	.225	.233
Gingham, dress, 32-inch	do	.565	.522	.544	.570	.548	.473	.450	.442	.499	.526	.531	.512	.530	.455	.453	.466
Muslin, bleached	do	.221	.213	.203	.223	.225	.227	.241	.248	.238	.231	.226	.237	.232	.231	.237	.253
Sheeting, bleached, 9-4	do	.630	.687	.680	.678	.734	.762	.760	.710	.676	.657	.654	.680	.714	.682	.664	.674
Sheets, bleached, 81 by 90	Each	1.673	1.619	1.658	1.697	1.741	1.837	1.782	1.802	1.623	1.581	1.555	1.564	1.625	1.583	1.554	1.600
Outing flannel, 27 to 28 inch	Yard	.246	.226	.240	.220	.213	.217	.227	.244	.223	.203	.193	.208	.216	.214	.216	.223
Flannel, white, wool, 27-inch	do	.....	.....	.950	.950	1.250	.....	1.250	1.100	1.101	1.068	1.020	1.027	1.052	1.028	1.124	1.100
Blankets, cotton, 66 by 80	Pair	5.313	4.626	4.152	4.478	4.353	4.292	4.456	3.928	4.664	3.737	4.174	4.369	4.328	4.271	4.601	4.939

		Pittsburgh, Pa.								Portland, Me.							
Calico, 24 to 25 inch	Yard	$0.156	$0.144	$0.148	$0.134	$0.133	$0.135	$0.138	$0.138	.....	.....	.....	$0.125	$0.125	.....	$0.125	.....
Percale	do	.279	.265	.255	.245	.251	.233	.233	.238	$0.235	$0.250	$0.258	.237	.246	$0.242	.273	$0.265
Gingham, apron, 27 to 28 inch	do	.178	.172	.149	.149	.162	.166	.171	.175	.190	.190	.190	.190	.190	.190	.210	.210
Gingham, dress, 27-inch	do	.239	.229	.236	.243	.238	.240	.244	.243	.245	.250	.250	.250	.250	.253	.248	.248
Gingham, dress, 32-inch	do	.551	.563	.528	.547	.498	.447	.433	.451	.493	.521	.507	.501	.494	.446	.464	.448
Muslin, bleached	do	.219	.201	.203	.223	.221	.205	.221	.226	.224	.206	.218	.226	.218	.212	.210	.212
Sheeting, bleached, 9-4	do	.674	.640	.632	.641	.664	.670	.704	.664	.651	.674	.639	.647	.680	.651	.660	.681
Sheets, bleached, 81 by 90	Each	1.692	1.703	1.623	1.618	1.623	1.538	1.436	1.479	1.602	1.649	1.671	1.664	1.688	1.594	1.551	1.657
Outing flannel, 27 to 28 inch	Yard	.257	.205	.193	.191	.194	.208	.214	.215	.270	.247	.239	.222	.217	.212	.236	.222
Flannel, white, wool, 27-inch	do	1.000	.813	.865	.865	.772	.791	.950	1.020	1.445	.935	.865	.990	.985	.985	1.088	1.070
Blankets, cotton, 66 by 80	Pair	3.450	4.350	3.897	3.963	3.600	.....	4.183	3.338	4.347	4.058	4.060	4.643	4.273	3.886	4.200	4.100

		Portland, Oreg.								Providence, R. I.							
Calico, 24 to 25 inch	Yard	$0.138	$0.135	$0.135	$0.135	$0.135	$0.135	$0.129	$0.138	$0.135	$0.125	$0.129	$0.137	$0.143	.....	.....	$0.138
Percale	do	.336	.329	.293	.286	.286	.286	.307	.320	.250	.241	.229	.244	.232	$0.245	$0.248	.248
Gingham, apron, 27 to 28 inch	do	.183	.178	.178	.167	.161	.167	.167	.178	.178	.160	.194	.171	.174	.173	.174	.175
Gingham, dress, 27-inch	do	.243	.245	.243	.247	.238	.239	.242	.244	.252	.217	.228	.235	.240	.235	.226	.240
Gingham, dress, 32-inch	do	.527	.561	.567	.555	.558	.553	.541	.539	.456	.457	.474	.461	.453	.408	.407	.404
Muslin, bleached	do	.238	.239	.228	.233	.235	.238	.235	.238	.193	.200	.204	.213	.212	.217	.218	.223
Sheeting, bleached, 9-4	do	.646	.633	.650	.652	.652	.669	.666	.661	.633	.613	.607	.640	.666	.643	.637	.650
Sheets, bleached, 81 by 90	Each	1.760	1.753	1.769	1.765	1.756	1.821	1.812	1.790	1.528	1.593	1.621	1.614	1.717	1.537	1.545	1.553
Outing flannel, 27 to 28 inch	Yard	.244	.222	.207	.212	.218	.215	.231	.230	.245	.241	.236	.235	.235	.233	.219	.221
Flannel, white, wool, 27-inch	do	1.133	1.217	1.133	1.100	1.100	.925	1.033	1.150	.980	.940	.893	.888	.888	.980	1.020	.932
Blankets, cotton, 66 by 80	Pair	5.144	4.748	4.748	4.524	4.495	4.271	4.521	4.519	4.550	4.613	4.519	4.934	4.717	4.516	4.433	4.406

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEBRUARY 15, MAY 15, AUGUST 15, AND OCTOBER 15, 1921, AND ON MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922—Continued.

Article.	Unit.	Richmond, Va.								Rochester, N. Y.							
		1921				1922				1921				1922			
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.
Calico, 24 to 25 inch	Yard	$0.145	$0.162	$0.159	$0.141	$0.127	$0.133	$0.133	$0.133	$0.138	$0.125	$0.143	$0.143	$0.143	$0.134	$0.140	$0.133
Percale	do	.257	.252	.234	.239	.243	.246	.246	.248	.280	.260	.246	.248	.257	.258	.239	.244
Gingham, apron, 27 to 28 inch	do	.156	.157	.150	.160	.178	.175	.175	.175	.164	156	154	.167.	.163	.163	.165	.167
Gingham, dress, 27-inch	do	.244	.236	.230	.234	.239	.243	.246	.260	.251	.242	.234	.238	.230	.221	.221	.235
Gingham, dress, 32-inch	do	.409	.468	.469	.468	.482	.447	.413	.414	.562	.589	.579	.563	.531	.514	.472	.469
Muslin, bleached	do	.225	.222	.228	.226	.210	.210	.220	.238	.214	.201	.198	.212	.209	.205	.211	.218
Sheeting, bleached, 9–4	do	.652	.647	.639	.688	.703	.663	.635	.651	.621	.637	.634	.639	.647	.631	.626	.639
Sheets, bleached, 81 by 90	Each	1.615	1.594	1.528	1.601	1.675	1.625	1.632	1.665	1.773	1.748	1.795	1.839	1.815	1.659	1.710	1.775
Outing flannel, 27 to 28 inch	Yard	.251	.219	.200	.201	.200	.201	.207	.223	.253	.233	.221	.213	.203	.205	.203	. 205
Flannel, white, wool, 27-inch	do	.913	.906	.897	.911	.876	.864	.923	.957	1.173	1.125	1.115	1.115	1.115	1.016	.935	.990
Blankets, cotton, 66 by 80	Pair	5.229	5.274	4.264	4.468	4.398	3.788	4.137	4.228	5.920	4.566	5.050	4.340	4.432	4.450	4.243	4.210
		St. Louis, Mo.								St. Paul, Minn.							
Calico, 24 to 25 inch	Yard	$0.131	$0.144	$0.120	$0.134	$0.150	$0.150	$0.142	$0.140	$0.156	$0.128	$0.131	$0.131	$0.128	$0.128	$0.125	$0.125
Percale	do	.262	.273	.248	.280	.269	.241	.254	.258	.251	.262	.256	.255	.261	.253	.255	.256
Gingham, apron, 27 to 28 inch	do	.154	.149	.149	.160	.169	.166	.164	.179	.163	.158	.164	.164	.163	.166	.168	.173
Gingham, dress, 27-inch	do	.238	.243	.238	.249	.256	.262	.248	.248	.242	.244	.240	.248	.243	.251	.251	.247
Gingham, dress, 32-inch	do	.593	.508	.502	.521	.517	.503	.519	.491	.503	.530	.502	.516	.463	.489	.506	.493
Muslin, bleached	do	.208	.203	.197	.207	.201	.195	.205	.227	.217	.227	.212	.210	.225	.215	.217	.230
Sheeting, bleached, 9–4	do	.670	.652	.650	.680	.711	.668	.659	.686	.632	.643	.636	.658	.699	.648	.650	.658
Sheets, bleached, 81 by 90	Each	1.729	1.627	1.607	1.666	1.601	1.629	1.601	1.695	1.631	1.686	1.629	1.642	1.712	1.683	1.697	1.706
Outing flannel, 27 to 28 inch	Yard	.238	.220	.215	.237	.198	.190	.177	.200	.242	.201	.201	.210	.202	.201	.206	. 219
Flannel, white, wool, 27-inch	do	.985	.960	.848	.910	.....	.....	.....	.925	.980	.....	.....	.....	.975	.975	.750	1.077
Blankets, cotton, 66 by 80	Pair	4.916	4.628	4.511	4.476	4.385	4.365	4.511	4.388	5.346	5.393	4.838	4.584	4.501	4.758	4.598	4.449

		Salt Lake City, Utah.								San Francisco, Calif.							
Calico, 24 to 25 inch	Yard	$0.144	$0.132	$0.134	$0.144	$0.144	$0.144	$0.150	$0.138	.....	$0.100	$0.100	$0.100	.....	.....	.....	.....
Percale	do	.299	.285	.289	.300	.300	.305	.315	.318	$0.372	.337	.322	.334	$0.329	$0.301	$0.287	$0.290
Gingham, apron, 27 to 28 inch	do	.154	.150	.161	.148	.169	.154	.172	.172	.175	.175	.150	.165	.165	.190	.250	.225
Gingham, dress, 27-inch	do	.238	.247	.257	.255	.275	.275	.275	.274	.254	.259	.258	.261	.261	.247	.264	.259
Gingham, dress, 32-inch	do	.494	.558	.550	.551	.517	.521	.519	.527	.581	.600	.578	.550	.571	.527	.518	.522
Muslin, bleached	do	.240	.218	.232	.230	.230	.220	.233	.239	.235	.240	.225	.225	.222	.225	.225	.234
Sheeting, bleached, 9-4	do	.833	.741	.730	.711	.749	.756	.744	.748	.725	.687	.687	.725	.775	.735	.725	.761
Sheets, bleached, 81 by 90	Each	1.844	1.864	1.771	1.765	1.834	1.816	1.787	1.786	1.957	1.782	1.768	1.763	1.846	1.693	1.675	2.011
Outing flannel, 27 to 28 inch	Yard	.291	.241	.240	.238	.234	.232	.239	.251	.323	.269	.254	.250	.243	.249	.249	.262
Flannel, white, wool, 27-inch	do	.....	1.217	.820	.855	.717	.900	1.021	.937	1.625	1.250	1.750	1.175	1.125	1.125	1.125	1.250
Blankets, cotton, 66 by 80	Pair	4.984	4.987	5.490	4.906	4.774	4.631	4.916	4.630	5.920	5.104	5.073	4.955	4.955	.....	4.383	4.867
		Savannah, Ga.								Scranton, Pa.							
Calico, 24 to 25 inch	Yard	.....	.....	.....	.....	.....	.....	.....	.....	$0.150	$0.125	$0.125	$0.155	$0.121	$0.122	$0.125	$0.125
Percale	do	$0.257	$0.257	$0.230	$0.250	$0.263	$0.245	$0.260	$0.261	.290	.250	.247	.247	.247	.241	.244	.256
Gingham, apron, 27 to 28 inch	do	.158	.150	.150	.155	.175	.172	.167	.174	.161	.159	.158	.158	.169	.175	.167	.176
Gingham, dress, 27-inch	do	.247	.243	.248	.248	.252	.268	.264	.265	.250	.246	.242	.251	.248	.255	.246	.255
Gingham, dress, 32-inch	do	.490	.503	.538	.537	.494	.486	.464	.471	.470	.548	.492	.512	.484	.490	.467	.437
Muslin, bleached	do	.243	.199	.209	.221	.223	.222	.229	.239	.252	.229	.219	.244	.220	.236	.231	.237
Sheeting, bleached, 9-4	do	.620	.608	.520	.645	.699	.713	.697	.688	.695	.705	.679	.730	.758	.745	.689	.703
Sheets, bleached, 81 by 90	Each	1.630	1.370	1.401	1.559	1.671	1.723	1.662	1.728	1.856	1.756	1.783	1.816	1.809	1.828	1.760	1.683
Outing flannel, 27 to 28 inch	Yard	.246	.209	.211	.208	.201	.206	.205	.205	.236	.211	.191	.216	.215	.215	.214	.203
Flannel, white, wool, 27-inch	do	.....	.....	.890	.890	.785	.785	.785	.785	.990	.865	.845	.953	.903	.928	.938	.958
Blankets, cotton, 66 by 80	Pair	4.500	.....	3.750	4.316	.....	.....	.....	3.923	4.707	3.990	4.559	4.769	4.671	4.238	4.301	4.284
		Seattle, Wash.								Springfield, Ill.							
Calico, 24 to 25 inch	Yard	$0.150	$0.145	$0.130	$0.130	$0.117	$0.117	$0.140	.....	$0.136	$0.134	$0.126	$0.129	$0.124	$0.115	$0.127	$0.123
Percale	do	.317	.283	.275	.275	.279	.279	.295	$0.294	.264	.258	.249	.243	.244	.245	.251	.253
Gingham, apron, 27 to 28 inch	do	.192	.192	.196	.206	.183	.190	.180	.196	.173	.168	.168	.175	.171	.166	.165	.170
Gingham, dress, 27-inch	do	.259	.244	.242	.245	.245	.239	.239	.244	.228	.253	.259	.240	.248	.244	.248	.243
Gingham, dress, 32-inch	do	.543	.537	.555	.564	.540	.533	.564	.505	.435	.411	.399	.438	.411	.396	.413	.413
Muslin, bleached	do	.251	.235	.237	.242	.245	.235	.242	.242	.228	.199	.206	.210	.200	.196	.205	.229
Sheeting, bleached, 9-4	do	.708	.708	.704	.717	.753	.710	.714	.727	.605	.653	.646	.653	.659	.672	.615	.650
Sheets, bleached, 81 by 90	Each	1.800	1.785	1.840	1.827	1.883	1.800	1.810	1.804	1.752	1.617	1.589	1.627	1.706	1.594	1.611	1.623
Outing flannel, 27 to 28 inch	Yard	.263	.237	.236	.239	.241	.235	.247	.262	.233	.221	.211	.218	.227	.215	.188	.236
Flannel, white, wool, 27-inch	do	1.225	1.288	1.138	1.138	1.138	1.075	1.050	1.050	.750	.750	.575	.717	.750	.725	.783	.750
Blankets, cotton, 66 by 80	Pair	4.700	4.479	4.700	4.621	4.707	4.707	4.450	4.288	4.917	4.203	4.069	4.124	4.108	4.085	3.958	3.698

AVERAGE RETAIL PRICES OF 10 ARTICLES OF DRY GOODS ON FEBRUARY 15, MAY 15, AUGUST 15, AND OCTOBER 15, 1921, AND ON MARCH 15, JUNE 15, SEPTEMBER 15, AND DECEMBER 15, 1922—Concluded.

Article.	Unit.	Washington, D. C.															
		1921				1922				1921				1922			
		Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.	Feb. 15.	May 15.	Aug. 15.	Oct. 15.	Mar. 15.	June 15.	Sept. 15.	Dec. 15.
Calico, 24 to 25 inch	Yard	$0.170	$0.160	$0.160	$0.160	$0.160	.....	.....	.....								
Percale	do	.267	.277	.267	.269	.270	$0.255	$0.271	$0.274								
Gingham, apron, 27 to 28 inch	do	.179	.170	.168	.168	.165	.173	.169	.188								
Gingham, dress, 27-inch	do	.263	.255	.261	.283	.275	.268	.249	.263								
Gingham, dress, 32-inch	do	.511	.498	.498	.500	.498	.465	.458	.433								
Muslin, bleached	do	.213	.214	.204	.227	.201	.203	.203	.229								
Sheeting, bleached, 9–4	do	.683	.669	.675	.680	.702	.662	.693	.700								
Sheets, bleached, 81 by 90	Each	1.652	1.598	1.624	1.712	1.625	1.630	1.672	1.645								
Outing flannel, 27 to 28 inch	Yard	.246	.198	.192	.199	.202	.202	.198	.199								
Flannel, white, wool, 27-inch	do	.875	.826	.796	.851	.980	.997	1.054	.956								
Blankets, cotton, 66 by 80	Pair	5.592	5.403	5.065	4.986	4.562	4.296	3.955	3.931								

Index Numbers of Wholesale Prices in December, 1922.

ALTHOUGH the tendency of wholesale prices was upward in December, no change from the general level of the previous month is shown by the weighted index number compiled by the United States Department of Labor through the Bureau of Labor Statistics. This index, which includes 404 commodities or price series taken in representative markets, and which is weighted according to the relative importance of such commodities, rounds off to 156 for December, the same figure as announced for November.

While there was no increase in the general price level as measured by the index number, appreciable advances took place among certain farm products, clothing materials, chemicals, and house-furnishing goods. Among farm products, corn, oats, rye, wheat, hogs, lambs, cottonseed, flaxseed, milk, peanuts, onions, and potatoes all showed small price increases over the month before. The increase in this group as a whole approximated 1½ per cent. Cloths and clothing, due to increases in cotton woven goods, cotton yarns, worsted yarns, and raw silk, averaged about 1 per cent higher than in November. Chemicals and drugs were 2¼ per cent higher and housefurnishing goods 1¾ per cent higher than in the month before. A small increase was also reported for food articles.

To offset these price increases, there were decreases among important fuel and lighting materials and among metals and metal products. Fuel and lighting averaged almost 1 per cent and metals 1½ per cent lower than in November. No change in the general price level was reported for building materials or for miscellaneous commodities.

Of the 404 commodities or series of quotations for which comparable data for November and December were collected, increases were shown in 170 instances and decreases in 70 instances. In 164 instances no change in price was reported.

INDEX NUMBERS OF WHOLESALE PRICES, BY GROUPS OF COMMODITIES.

[1913=100.]

Commodity group.	1921	1922	
	December.	November.	December.
Farm products	120	143	145
Foods	136	143	144
Cloths and clothing	180	192	194
Fuel and lighting	199	218	216
Metals and metal products	113	133	131
Building materials	158	185	185
Chemicals and drugs	127	127	130
House-furnishing goods	178	179	182
Miscellaneous	121	122	122
All commodities	140	156	156

Comparing prices in December with those of a year ago, as measured by changes in the index numbers, it is seen that the general level has risen 11½ per cent. Farm products show the largest increase, 20¾ per cent. Building materials have increased 17 per cent, metals 16 per cent, fuel and lighting 8½ per cent, and clothing 7¾ per cent in price in the year. Food articles, chemicals and drugs, housefurnishing goods, and miscellaneous commodities all show smaller increases compared with prices of a year ago.

Index Numbers of Wholesale Prices, by Years, 1890 to 1922.

TO MEET the demand for index numbers of wholesale prices for years prior to 1913, comparable with the revised figures for years and months since 1913 recently computed by the United States Department of Labor through the Bureau of Labor Statistics, the following table is presented. While the results here shown for earlier years are necessarily based on a smaller number of commodities than the data for recent years, the figures are believed to furnish a reliable barometer of wholesale price changes in general over the period stated.

REVISED INDEX NUMBERS OF WHOLESALE PRICES, BY YEARS, 1890 TO 1922.

[1913=100.]

Year.	Farm products.	Foods.	Cloths and clothing.	Fuel and lighting.	Metals and metal products.	Building materials.	Chemicals and drugs.	House-furnishing goods.	Miscellaneous.	All commodities.
1890	70	86	95	62	116	82	91	88	99	81
1891	75	85	91	60	102	78	92	89	97	80
1892	68	79	91	57	92	74	93	85	91	75
1893	71	85	90	58	85	73	91	85	92	77
1894	61	75	79	56	72	70	82	80	88	69
1895	61	74	77	66	77	68	81	77	93	70
1896	55	69	76	65	78	68	81	77	92	67
1897	59	71	75	55	72	66	88	75	93	67
1898	63	74	77	56	72	70	97	78	96	70
1899	64	74	80	67	110	77	101	80	100	75
1900	70	79	88	76	108	81	102	87	104	81
1901	74	79	81	73	103	78	105	87	96	79
1902	81	83	82	84	100	80	108	87	93	84
1903	77	81	87	98	99	82	105	90	102	86
1904	81	84	88	87	88	79	105	89	110	86
1905	79	86	90	81	98	85	103	88	117	86
1906	80	83	98	85	113	95	96	91	116	89
1907	87	89	105	89	121	100	98	98	111	94
1908	86	91	94	88	95	92	99	92	101	90
1909	97	97	98	84	93	95	100	92	130	97
1910	103	101	100	78	94	98	102	96	151	101
1911	93	97	96	76	89	98	102	93	111	93
1912	101	104	97	84	99	99	101	94	110	99
1913	100	100	100	100	100	100	100	100	100	100
1914	103	102	98	93	85	92	101	100	95	98
1915	104	105	98	88	99	94	134	100	95	101
1916	123	121	127	126	162	120	181	106	121	127
1917	190	167	175	169	231	157	202	125	148	177
1918	218	188	228	170	187	172	215	153	156	194
1919	231	207	253	181	162	201	169	184	175	206
1920	218	220	295	241	192	264	200	254	196	226
1921	124	144	180	199	129	165	136	195	128	147
1922	133	138	181	218	122	168	124	176	117	149

Wholesale Prices of Commodities, October to December, 1922, and Average for Year 1922.

IN CONTINUATION of information first published in the MONTHLY LABOR REVIEW for May, 1922, there are presented herewith the average prices in October, November, and December of the commodities included in the series of index numbers of wholesale prices constructed by the Bureau of Labor Statistics. For convenience of comparison with pre-war prices, index numbers based on average prices in the year 1913 as 100 are shown in addition to the statement of absolute money prices. Average prices for the year 1922 are also included in the table.

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Farm products.								
(a) Grains:								
Barley, malting, per bushel, Chicago	$0.660	$0.678	$0.689	$0.633	105.5	108.3	110.2	101.3
Corn, per bushel, Chicago—								
Contract grades	.691	.722	.734	.623	110.6	115.5	117.4	99.6
No. 3 mixed	.686	.717	.722	.614	111.5	116.5	117.3	99.7
Oats, contract grades, per bushel, Chicago	.432	.445	.459	.396	114.8	118.4	122.1	105.3
Rye, No. 2, per bushel, Chicago	.776	.868	.890	.883	122.0	136.4	139.8	138.8
Wheat, per bushel—								
No. 1, northern spring, Chicago	1.178	1.228	1.274	1.282	129.1	134.4	139.5	140.4
No. 2, red winter, Chicago	1.177	1.273	1.325	1.238	119.3	129.1	134.4	125.5
No. 2, hard winter, Kansas City	1.139	1.175	1.188	1.213	129.9	134.0	135.4	138.3
No. 1, northern spring, Minneapolis	1.132	1.218	1.251	1.345	129.6	139.4	143.2	154.0
No. 1, hard white, Portland, Oreg.	1.270	1.440	1.515	1.358	136.7	155.0	163.1	146.2
(b) Live stock and poultry:								
Cattle, steers, per 100 pounds, Chicago—								
Choice to prime	12.240	12.619	12.438	10.317	137.1	141.3	139.3	115.5
Good to choice	10.245	10.500	10.581	9.438	120.4	123.4	124.4	110.9
Hogs, per 100 pounds, Chicago—								
Heavy	9.360	8.244	8.256	9.393	111.9	98.5	98.7	112.3
Light	9.430	8.206	8.269	9.727	111.5	97.1	97.8	115.1
Sheep, per 100 pounds, Chicago—								
Ewes, native, all grades	5.325	6.438	6.219	5.787	113.6	137.4	132.7	123.5
Lambs, western, good to choice	13.500	14.050	14.869	13.183	173.2	180.3	190.8	169.1
Wethers, fed, good to choice	6.525	7.906	7.544	7.304	122.0	147.9	141.1	136.6
Poultry, live fowls, per pound—								
Chicago	.176	.168	.168	.217	114.2	108.7	108.7	140.8
New York	.250	.211	.228	.269	149.3	126.2	136.2	160.7
(c) Other farm products:								
Beans, medium, choice, per 100 pounds, New York	7.150	7.906	7.625	7.616	179.2	198.2	191.1	190.9
Clover seed, contract grades, per 100 pounds, Chicago	19.400	20.220	20.120	20.115	117.5	122.4	121.8	121.8
Cotton, middling, per pound—								
New Orleans	.221	.255	.254	.204	173.8	200.8	200.3	160.6
New York	.228	.256	.257	.212	178.0	200.1	201.0	165.9
Cotton seed, per ton, average price at gin	31.790	40.180	42.930	35.039	145.9	184.4	197.0	160.8
Eggs, fresh, per dozen—								
Firsts, western, Boston	.441	.527	.551	.352	175.5	209.5	219.2	139.8
Firsts, Chicago	.346	.484	.475	.302	153.2	214.3	210.4	133.7
Extra firsts, Cincinnati	.438	.553	.503	.327	195.8	247.0	224.6	146.1
Candled, New Orleans	.325	.344	.355	.300	138.7	146.7	151.5	128.1
Firsts, New York	.429	.540	.531	.347	172.3	216.9	213.4	139.3
Extra firsts, western, Philadelphia	.475	.586	.554	.369	180.2	222.4	210.2	139.9
Extra pullets, San Francisco	.464	.486	.475	.322	173.2	181.5	177.4	120.2
Flaxseed, No. 1, per bushel, Minneapolis	2.385	2.495	2.625	2.477	176.8	185.0	194.6	183.6
Hay, per ton—								
Alfalfa, No. 1, Kansas City	23.000	23.875	23.350	20.423	162.1	168.3	164.6	144.0
Clover, mixed, No. 1, Cincinnati	14.875	15.875	15.875	16.730	95.5	101.9	101.9	107.4
Timothy, No. 1, Chicago	21.900	22.625	21.250	22.923	136.6	141.2	132.6	143.0
Hides and skins, per pound—								
Calfskins, No. 1, country, Chicago	.197	.189	.160	.160	104.2	100.1	84.8	85.0
Goatskins, Brazilian, New York	.993	.998	.983	.912	139.6	140.4	138.2	128.2
Hides, heavy, country cows, No. 1, Chicago	.145	.144	.124	.112	95.8	95.3	82.4	74.0
Hides, packers, heavy, native steers, Chicago	.227	.228	.204	.180	123.4	124.0	111.1	98.0
Hides, packers, heavy, Texas steers, Chicago	.207	.208	.185	.167	114.2	115.0	102.3	92.5
Hops, prime to choice, per pound—								
New York State, New York	.230	.230	.230	.253	86.4	86.4	86.4	94.8
Pacifics, Portland, Oreg.	.089	.090	.075	.139	51.8	52.4	43.6	81.0
Milk, fresh, per quart—								
Chicago, delivered	.055	.055	.056	.051	127.8	127.8	129.9	119.2
New York, delivered	.079	.079	.089	.073	178.1	178.1	200.7	164.3
San Francisco, delivered	.068	.068	.068	.068	158.1	158.1	158.1	158.1
Onions, fresh, yellow, per 100 pounds, Chicago	1.300	1.625	2.288	3.757	82.7	103.3	145.5	239.0
Peanuts, No. 1, per pound, Norfolk, Va	.038	.059	.061	.042	106.5	165.9	171.3	117.5
Potatoes—								
White, good to choice, per 100 pounds, Chicago	.915	.863	1.106	1.693	89.4	84.2	108.1	165.3
Sweet, No. 1, per five-eighth bushel, Philadelphia	.388	.442	.544	.892	80.3	91.5	112.7	184.9
Rice, per pound, New Orleans—								
Blue Rose, head, clean	.042	.040	.038	.044	(1)	(1)	(1)	(1)
Honduras, head, clean	.062	.062	.058	.059	122.3	122.1	114.6	116.4

[1] No 1913 base price.

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Farm products—Concluded.								
(c) Other farm products—Concluded.								
Tobacco, Burley, good leaf, dark red, per 100 pounds, Louisville, Ky	$27.500	$27.500	$27.500	$27.500	208.3	208.3	208.3	208.3
Wool, Ohio, per pound, Boston—								
Fine clothing, scoured	1.297	1.351	1.378	1.219	210.1	218.9	223.2	197.5
Fine delaine, scoured	1.310	1.357	1.357	1.238	238.4	247.0	247.0	225.2
Half blood, scoured	1.152	1.174	1.174	1.040	231.7	236.2	236.2	209.0
One-fourth and three-eighth grades, scoured	.836	.946	.946	.782	174.8	197.6	197.6	163.6
Foods.								
(a) Meats:								
Beef, fresh, per pound—								
Carcass, good native steers, Chicago	.155	.155	.155	.150	119.7	119.7	119.7	115.9
Sides, native, New York	.148	.137	.146	.138	118.2	109.3	116.9	110.1
Beef, salt, extra mess, per barrel (200 pounds), New York	14.700	11.750	12.125	13.312	77.7	62.1	64.1	70.3
Hams, smoked, per pound, Chicago	.232	.213	.206	.264	139.6	127.9	124.1	159.1
Lamb, dressed, per pound, Chicago	.231	.229	.239	.255	155.5	153.9	160.7	171.1
Mutton, dressed, per pound, New York	.110	.118	.148	.120	107.3	114.6	114.6	116.7
Pork, fresh, per pound—								
Loins, Chicago	.258	.185	.152	.214	173.3	124.5	102.3	143.9
Loins, western, New York	.293	.235	.193	.236	192.1	154.3	126.7	154.9
Pork, cured—								
Mess, salt, per barrel (200 pounds), New York	28.700	29.500	28.438	27.284	127.7	131.3	126.5	121.4
Sides, rough, per pound, Chicago	.133	.134	.134	.133	107.2	108.5	108.3	107.4
Sides, short clear, per pound, Chicago	.143	.140	.139	.141	112.5	109.7	109.2	110.3
Poultry, dressed, per pound—								
Hens, heavy, Chicago	.231	.216	.218	.247	159.8	149.6	150.4	170.9
Fowls, 48–56 pounds to dozen, New York	.293	.263	.256	.279	160.4	143.9	140.4	153.1
Veal, dressed, good to prime, per pound, New York	.300	.300	.300	.300	165.9	165.9	165.9	165.9
(b) Butter, cheese, and milk:								
Butter, creamery, extra, per pound—								
Boston	.450	.495	.541	.404	141.9	156.1	170.7	127.3
Chicago	.441	.498	.536	.390	142.1	160.3	172.8	125.8
Cincinnati [2]	.396	.455	.535	.367	(1)	(1)	(1)	(1)
New Orleans	.452	.500	.530	.431	134.5	148.8	157.7	128.1
New York	.461	.511	.542	.406	142.8	158.3	168.0	125.8
Philadelphia	.468	.516	.553	.414	143.4	158.4	169.7	127.1
St. Louis	.445	.499	.536	.396	144.0	161.4	173.4	128.2
San Francisco	.531	.482	.515	.433	167.6	152.0	162.4	136.6
Cheese, whole milk, per pound—								
American twins, Chicago	.237	.244	.265	.204	167.3	172.1	186.5	143.9
State, fresh flats, colored, average, New York	.249	.262	.270	.218	161.6	169.8	175.4	141.3
California flats, fancy, San Francisco	.263	.231	.248	.228	164.7	144.9	155.3	143.0
Milk, fresh. (See Farm products.)								
Milk, condensed, case of 48 14-ounce tins, New York	5.720	6.113	6.000	5.247	121.7	130.1	127.7	111.6
Milk, evaporated, case of 48 16-ounce tins, New York	4.440	4.881	4.925	4.137	125.6	138.1	139.3	117.0
(c) Other foods:								
Beans, medium, choice. (See Farm products.)								
Bread, per pound—								
Chicago	.076	.076	.076	.075	177.0	177.0	177.0	175.4
Cincinnati	.062	.062	.062	.062	174.7	174.7	174.7	174.7
New Orleans	.058	.058	.060	.061	190.8	190.8	196.7	199.7
New York	.074	.074	.074	.072	174.1	174.1	174.1	169.1
San Francisco	.069	.069	.069	.064	173.0	173.0	173.0	159.3
Cocoa, beans, Arriba, per pound, New York	.115	.109	.111	.116	74.9	71.5	72.4	75.6
Coffee, Rio, No. 7, per pound, New York	.102	.108	.111	.103	91.6	97.3	99.8	92.1
Copra, South Sea, sun dried, per pound New York	.044	.046	.048	.046	42.0	43.8	45.6	43.7
Eggs, fresh. (See Farm products.)								
Fish—								
Cod, large, shore, pickled, cured, per 100 pounds, Gloucester, Mass	7.000	7.000	7.000	6.708	104.4	104.4	104.4	100.0
Herring, large, split, per barrel (180–190 pounds), New York	7.500	7.500	7.500	7.500	113.2	113.2	113.2	113.2
Mackerel, salt, large, 3s, per barrel, Boston	12.870	12.870	12.870	14.438	116.0	116.0	116.0	130.1
Salmon, canned, Alaska, red, per dozen, factory	2.375	2.425	2.425	2.407	162.6	166.0	166.0	164.8

[1] No 1913 base price.

[2] As to score.

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Foods—Concluded.								
(c) Other foods—Concluded.								
Flour, rye, white, per barrel, Minneapolis	$4.860	$5.031	$5.138	$5.312	155.6	161.1	164.5	170.1
Flour, wheat, per barrel—								
Winter patents, Kansas City	6.381	6.475	6.510	6.848	159.1	161.4	162.3	170.7
Winter straights, Kansas City	5.719	5.706	5.860	6.130	148.7	148.3	152.3	159.3
Standard patents, Minneapolis	6.435	6.713	6.775	7.282	140.4	146.4	147.8	158.9
Second patents, Minneapolis	6.170	6.431	6.575	6.961	139.5	145.4	148.7	157.4
Patents, Portland, Oreg	7.016	7.436	7.646	7.769	156.1	165.4	170.7	172.8
Patents, soft, winter, St. Louis	5.913	6.263	6.330	6.358	129.5	137.1	138.6	139.2
Straights, soft, winter, St. Louis	5.319	5.563	5.725	5.716	125.1	130.8	134.6	134.4
Patents, Toledo	5.825	6.269	6.425	6.101	123.3	132.6	136.0	129.1
Fruit, canned, per case, New York—								
Peaches, California, standard 2½s	1.975	1.975	1.975	1.957	130.2	130.2	130.2	128.9
Pineapple, Hawaiian, sliced, standard 2½s	3.500	3.500	3.525	3.273	170.5	170.5	171.7	159.4
Fruit, dried, per pound, New York—								
Apples, evaporated, State, choice	(3)	.115	.114	.168	.....	160.7	158.5	234.3
Currants, uncleaned, barrels	(3)	(3)	(3)	.130	.....	.....	.....	189.3
Prunes, California, 60–70s	.115	.118	.116	.118	174.5	179.1	176.2	179.1
Raisins, coast, seeded, bulk	.111	.113	.113	.128	152.9	155.0	155.0	176.7
Fruit, fresh—								
Apples, Baldwins, per barrel, Chicago	2.750	4.250	4.500	6.713	86.7	133.9	141.8	211.5
Bananas, Jamaica, 9s, per bunch, New York	2.035	2.035	2.035	2.264	132.4	132.4	132.4	147.1
Lemons, California (300–360 count), per box, Chicago	10.300	11.125	8.719	6.760	178.4	192.7	151.0	117.1
Oranges, California, choice, per box, Chicago	8.700	7.375	5.156	7.849	196.8	166.9	116.7	177.6
Glucose, 42° mixing, per 100 pounds, New York	2.920	3.070	3.070	2.721	136.6	143.6	143.6	127 3
Hominy grits, bulk, carlots, per 100 pounds, f. o. b. mill	1.450	1.450	1.522	1.308	87.8	87.8	92.2	79.2
Lard, prime, contract, per pound, New York	.117	.121	.114	.115	105.8	109.9	103.5	104.3
Meal, corn, per 100 pounds—								
White, f. o. b. Decatur, Ill	1.400	1.400	1.472	1.258	87.5	87.5	92.0	78.6
Yellow, Philadelphia	1.880	2.086	1.977	1.778	131.2	145.5	137.9	124.0
Molasses, New Orleans, fancy, per gallon, New York	.475	.525	.525	.444	124.8	137.8	137.8	116.4
Oatmeal, carlots, in barrels (180 pounds), per hundredweight, New York	3.281	3.389	3.320	3.043	132.6	136.9	134.1	122.9
Oleomargarine, standard, uncolored, per pound, Chicago	.185	.192	.205	.183	113.8	118.3	126.2	112.8
Oleo oil, extra, per pound, Chicago	.106	.119	.132	.107	92.1	103.2	114.6	92.5
Pepper, black, Singapore, per pound, New York	.099	.099	.099	.101	91.1	91.1	91.2	92.7
Rice. (See Farm products.)								
Salt, American, medium, per barrel (280 pounds), Chicago	2.390	2.390	2.390	2.415	234.3	234.3	234.3	236.8
Sugar, per pound, New York—								
Granulated, in barrels	.066	.068	.069	.059	154.3	159.7	162.3	139.1
Raw, 96° centrifugal	.054	.056	.057	.047	154.9	160.0	162.6	133.1
Tallow, edible, per pound, Chicago	.079	.086	.085	.078	99.8	108.4	107.2	98.2
Tea, Formosa, fine, per pound, New York	.305	.310	.310	.302	122.8	124.8	124.8	121.8
Vegetables, canned—								
Corn, Maryland standard, per dozen, New York	.825	.825	.825	.909	130.1	130.1	130.1	143.3
Peas, State and western, No. 5, per dozen, New York	1.340	1.350	1.350	1.401	154.6	155.8	155.8	161.6
Tomatoes, New Jersey, standard, No. 3, per dozen, New York	1.500	1.500	1.650	1.550	115.4	115.4	126.9	119.2
Vegetables, fresh. (See Farm products.)								
Vegetable oil—								
Coconut, crude, per pound, Pacific coast	.080	.081	.086	.084	66.7	67.8	71.7	70.2
Corn, crude, in barrels, per pound, New York	.088	.097	.102	.101	145.5	160.5	167.5	166.2
Cottonseed, prime, summer, yellow, per pound, New York	.092	.094	.097	.101	127.4	129.8	134.2	138.8
Olive, edible, in barrels, per gallon, New York	1.800	1.800	1.800	1.787	106.6	106.6	106.6	105.8
Peanut, crude, per pound, mill	.085	.103	.120	.096	(1)	(1)	(1)	(1)
Soya bean, crude, in barrels, per pound, New York	.105	.105	.105	.109	171.6	171.6	171.6	178.1
Vinegar, cider, 40 grain, in barrels, per gallon, New York	.250	.220	.220	.276	224.0	197.1	197.1	247.1

[1] No 1913 base price.

[3] No quotation.

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Cloths and clothing.								
(*a*) Boots and shoes, per pair, factory:								
Children's—								
Little boys', gun metal, blucher	$1.615	$1.615	$1.615	$1.615	166.5	166.5	166.5	166.5
Child's, gun metal, polish, high cut	1.568	1.568	1.568	1.568	181.7	181.7	181.7	181.7
Misses', black, vici, polish, high cut	1.853	1.853	1.853	1.853	173.2	173.2	173.2	173.2
Youths', gun metal, blucher	1.473	1.473	1.473	1.473	143.4	143.4	143.4	143.4
Men's—								
Black, calf, blucher	6.350	6.350	6.350	6.506	204.0	204.0	204.0	209.0
Black, calf, Goodyear welt, bal	4.850	4.850	4.850	4.612	153.2	153.2	153.2	145.6
Black, dress, Goodyear welt, side leather	3.150	3.150	3.150	3.005	140.8	140.8	140.8	134.3
Gun metal, Goodyear welt, blucher	4.650	4.650	4.650	4.571	237.9	237.9	237.9	233.8
Mahogany, chrome, side, Goodyear welt, bal	3.600	3.600	3.600	3.484	223.3	223.3	223.3	216.0
Tan, dress, Goodyear welt, calf	4.850	4.850	4.850	4.742	153.2	153.2	153.2	149.8
Tan, dress, Goodyear welt, side leather	3.350	3.350	3.350	3.307	149.7	149.7	149.7	147.8
Tan, grain, blucher	1.645	1.645	1.692	1.649	122.2	122.2	122.3	125.7
Vici kid, black, Goodyear welt	5.750	5.750	6.000	5.833	200.6	200.6	209.3	203.5
Women's—								
Black, kid, Goodyear welt, 8½-inch lace	4.250	4.250	4.250	4.335	141.7	141.7	141.7	144.5
Colored, calf, Goodyear welt, lace oxford	4.000	4.000	4.000	4.000	183.9	183.9	183.9	183.9
Kid, black, McKay sewed, lace oxford	3.350	3.350	3.350	3.350	224.9	224.9	224.9	224.9
Patent leather pump, McKay sewed	3.600	3.600	3.600	3.600	261.8	261.8	261.8	261.8
(*b*) Cotton goods:								
Denims, Massachusetts, 2.20 yards to the pound, per yard, New York	.210	.232	.240	.203	163.5	180.5	186.7	157.9
Drillings, brown, per yard, New York—								
Massachusetts D standard, 30-inch	.147	.161	.167	.138	177.8	195.2	201.9	166.4
Pepperell, 29-inch, 2.85 yards to the pound	.151	.157	.160	.137	183.8	190.4	194.4	166.3
Flannels, per yard, New York—								
Colored, 2.75 yards to the pound	.170	.191	.200	.170	168.1	188.8	197.4	168.1
Unbleached, 3.80 yards to the pound	.142	.154	.157	.136	191.8	207.2	211.5	183.7
Ginghams, per yard—								
Amoskeag, 27-inch, 6.37 yards to the pound, New York	.126	.135	.135	.128	193.9	207.7	207.7	196.2
Lancaster, 26½-inch, 6.50 yards to the pound, Boston	.135	.135	.145	.136	218.4	218.4	234.6	219.9
Hosiery, per dozen pairs—								
Men's half hose, combed yarn, New York	1.650	1.650	1.750	1.650	205.1	205.1	217.5	205.1
Women's, cotton, silk mercerized, mock seam, New York	2.720	2.765	2.800	2.730	153.7	156.1	158.1	154.2
Women's combed yarn, 16-ounce, New York	1.725	1.760	1.800	1.717	178.8	182.3	186.6	178.0
Muslin, bleached, 4/4, per yard—								
Fruit of the Loom, New York	(3)	.185	.185	.171	.....	217.2	217.2	200.0
Lonsdale, factory	.157	.157	.157	.148	194.1	194.1	194.1	183.7
Rough Rider, New York	.150	.155	.160	.142	186.9	193.5	199.0	176.7
Wamsutta, factory	.265	(3)	(3)	.274	236.9	.....	.....	245.5
Print cloth, 27-inch, 7.60 yards to the pound, per yard, Boston	.072	.077	.077	.066	207.5	222.9	223.2	189.9
Sheeting, brown, 4/4 yard—								
Indian Head, 2.85 yards to the pound, Boston	.145	.145	.160	.129	172.2	172.2	190.0	153.0
Pepperell, 3.75 yards to the pound, New York	.135	.140	.140	.125	183.9	191.0	191.0	170.4
Ware Shoals, 4 yards to the pound, New York	.108	.117	.120	.103	176.4	190.1	195.6	168.4
Thread, 6-cord, J. & P. Coats, per spool, New York	.058	.058	.058	.058	148.7	148.7	148.7	148.7
Underwear—								
Men's shirts and drawers, per dozen garments, New York	7.500	7.500	7.500	7.500	176.5	176.5	176.5	176.5
Women's union suits, combed yarn, per dozen, New York	14.000	14.000	14.000	14.000	169.7	169.7	169.7	169.7
Yarn, per pound, Boston—								
Carded, white, mulespun, northern, 10/1 cones	.391	.420	.425	.361	176.5	189.7	191.9	163.0
Carded, white, mulespun, northern, 22/1 cones	.424	.452	.460	.397	171.2	182.6	186.0	160.5
Twisted, ordinary, weaving, 20/2	.405	.456	.466	.365	174.1	196.2	200.7	156.8
Twisted, ordinary, weaving, 40/2	.571	.629	.643	.549	149.2	164.2	167.7	143.3

[3] No quotation.

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Cloths and clothing—Concluded.								
(c) Woolen goods:								
Flannel, white, 4/4, Ballard Vale, No. 3, per yard, factory	$1.000	$1.000	$1.000	$0.937	215.8	215.8	215.8	202.0
Overcoating, soft faced, black, per yard, Boston	(2)	(2)	(2)	1.802	.....	.....	.....	131.3
Suitings, per yard—								
Clay worsted, diagonal, 12-ounce, factory	(2)	(2)	(2)	2.025	.....	.....	.....	172.0
Clay worsted, diagonal, 16-ounce, factory	2.958	3.038	3.038	2.715	214.0	219.8	219.8	196.5
Middlesex, wool-dyed, blue, 16-ounce, New York	3.285	3.420	3.420	3.101	212.6	221.4	221.4	200.7
Serge, 11-ounce, factory	2.456	2.520	2.520	2.271	217.2	222.9	222.9	200.9
Trousering, cotton warp, 11/11½ ounce, per yard, New York	1.500	1.600	1.650	1.579	132.6	141.4	145.8	139.6
Underwear—								
Merino, shirts and drawers, per dozen garments, factory	30.500	30.500	30.500	30.167	155.8	155.8	155.8	154.1
Men's union suits, 33 per cent worsted, per dozen, New York	29.400	29.400	29.400	27.930	299.5	299.5	299.5	284.4
Women's dress goods, per yard—								
Broadcloth, 9½-ounce, 54-56-inch, New York	2.093	2.093	2.093	1.976	159.1	159.1	159.1	150.2
French serge, 35-inch, factory	.655	.725	.725	.663	198.4	219.7	219.7	200.9
Poplar cloth, cotton warp, factory	.325	.350	.350	.329	171.1	184.2	184.2	173.3
Silician cloth, cotton warp, 50-inch, New York	.522	.615	.615	.532	161.3	190.2	190.2	164.6
Storm serge, double warp, 50-inch, factory	.824	.950	.950	.838	146.4	168.9	168.9	149.0
Yarn, per pound—								
Crossbred stock, 2/32s, Boston	1.500	1.650	1.650	1.413	193.1	212.4	212.4	181.9
Halfblood, 2/40s, Philadelphia	2.100	2.200	2.250	2.043	188.2	197.1	201.5	183.0
Fine domestic, 2/50s, Philadelphia	2.400	2.500	2.550	2.320	227.7	237.1	241.9	220.1
(d) Silk, etc.:								
Linen shoe thread, 10s, Barbour, per pound, New York	2.077	2.077	2.077	2.077	232.6	232.6	232.6	232.6
Silk, raw, per pound—								
China, Canton filature, extra extra A, New York	7.938	7.742	7.566	7.342	226.9	221.3	216.2	209.8
Japan, Kansai, No. 1, New York	8.330	7.889	8.232	7.219	228.9	216.8	226.2	198.4
Japan, special extra extra, New York	8.624	8.183	8.526	7.648	211.6	200.9	209.3	187.7
Silk yarn, per pound, New York—								
Domestic, gray spun, 60/1	4.361	4.488	4.508	4.352	149.5	153.9	154.6	149.2
Domestic, gray spun, 60/2, No. 1	5.341	5.400	5.439	5.344	154.1	155.8	156.9	154.2
Fuel and lighting.								
(a) Anthracite coal, per gross ton, New York, tidewater:								
Broken	10.240	10.240	10.340	10.233	230.3	230.3	232.6	230.2
Chestnut	10.530	10.520	10.635	10.599	198.2	198.0	200.1	199.5
Egg	10.433	10.418	10.621	10.405	206.0	205.7	209.7	205.5
Stove	10.526	10.521	10.632	10.622	208.0	207.9	210.1	209.9
(b) Bituminous coal:								
Mine run, per net ton, Chicago	6.663	6.138	5.875	5.877	(1)	(1)	(1)	(1)
Prepared sizes, per net ton, Chicago	7.513	7.450	7.450	6.587	(1)	(1)	(1)	(1)
Screenings, per net ton, Chicago	4.150	3.775	3.605	4.176	(1)	(1)	(1)	(1)
Mine run, Kanawha, per net ton, Cincinnati	6.390	6.390	5.890	5.203	290.5	290.5	267.7	236.5
Mine run, smokeless, New River, per net ton, Cincinnati	7.490	7.490	7.490	5.624	310.5	310.5	310.5	233.1
Mine run, Pocahontas, per gross ton, Norfolk, Va	7.000	7.500	7.960	6.322	233.3	250.0	265.3	210.7
Prepared sizes, Pittsburgh, per net ton	5.625	5.250	5.250	5.158	(1)	(1)	(1)	(1)
(c) Other fuel and lighting:								
Coke, Connellsville, furnace, per net ton, at ovens	9.800	7.188	7.000	7.136	401.7	294.6	286.9	292.5
Gasoline, motor, per gallon, New York	.245	.240	.228	.251	145.6	142.6	135.5	149.3
Matches, average of several brands, per gross, New York	1.540	1.540	1.540	1.540	189.7	189.7	189.7	189.7
Crude petroleum, per barrel, at wells—								
California, 20°	.630	.630	.630	.920	180.0	180.0	180.0	262.9
Kansas-Oklahoma	1.250	1.250	1.250	1.796	133.8	133.8	133.8	192.2
Pennsylvania	3.000	3.000	3.000	3.173	122.4	122.4	122.4	129.5
Refined, petroleum, per gallon, New York—								
Standard white, 110° fire test	.128	.138	.136	.126	147.7	159.3	157.0	145.8
Water white, 150° fire test	.215	.220	.220	.208	174.4	178.4	178.4	168.5

[1] No 1913 base price. [2] No quotation.

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Metals and metal products.								
(a) Iron and steel:								
Iron ore, per ton, lower lake ports—								
Mesabi, Bessemer, 55 per cent	$5.700	$5.700	$5.700	$5.921	137.3	137.3	137.3	142.7
Non-Bessemer, 51½ per cent	5.050	5.050	5.050	5.271	148.5	148.5	148.5	155.0
Pig iron, per gross ton—								
Basic, valley furnace	30.900	27.750	24.813	24.264	210.1	188.7	168.7	165.0
Bessemer, Pittsburgh	35.170	33.520	29.895	27.633	205.3	195.7	174.5	161.3
Foundry, No. 2, northern, Pittsburgh	33.570	29.645	27.395	27.029	209.7	185.2	171.1	168.8
Foundry, No. 2, Birmingham, Ala	26.800	23.500	22.875	19.712	229.2	201.0	195.7	168.6
Ferromanganese, per gross ton, seaboard	80.500	100.000	100.000	71.619	138.1	171.6	171.6	122.9
Spiegeleisen, 18 and 22 per cent, per gross ton, furnace	37.750	36.900	35.250	33.760	151.0	147.6	141.0	135.0
Bar iron, per pound—								
Best refined, Philadelphia	.030	.030	.030	.026	154.2	154.2	153.6	135.9
Common, f. o. b. Pittsburgh	.026	.026	.026	.023	157.6	157.6	157.6	137.6
Bars, reinforcing, per 100 pounds, Pittsburgh	2.125	2.075	2.075	1.733	154.5	150.8	150.8	126.0
Nails, wire, per 100 pounds, Pittsburgh	2.800	2.800	2.800	2.610	153.9	153.9	153.9	143.5
Pipe, cast-iron, 6-inch, per net ton, New York	54.500	54.500	54.750	51.435	233.2	233.2	234.3	220.1
Skelp, grooved, per 100 pounds, Pittsburgh	2.000	2.000	2.000	1.731	143.9	143.9	143.9	124.5
Steel billets, per gross ton, Pittsburgh—								
Bessemer	40.000	37.750	36.500	33.990	155.1	146.4	141.5	131.8
Open hearth	40.000	37.750	36.500	33.990	153.3	144.7	139.9	130.3
Steel, merchant bars, per 100 pounds, Pittsburgh	2.000	2.000	2.000	1.721	129.2	129.2	129.2	111.2
Steel plates, tank, per pound, Pittsburgh	.021	.020	.020	.017	142.6	134.5	131.8	116.9
Steel rails, per gross ton, Pittsburgh—								
Bessemer, standard	42.250	43.000	43.000	40.692	150.9	153.6	153.6	145.3
Open hearth, standard	42.250	43.000	43.000	40.692	140.8	143.3	143.3	135.6
Steel sheets, black, per pound, Pittsburgh	.035	.034	.033	.032	159.4	153.4	150.7	145.7
Steel, structural shapes, per 100 pounds, Pittsburgh	2.125	2.050	2.000	1.733	140.7	135.7	132.4	114.8
Terneplate, 8 pounds I. C., per base box (200 pounds), Pittsburgh	9.600	9.600	9.600	9.600	138.4	138.4	138.4	138.4
Tin plate, domestic, coke, per 100 pounds, Pittsburgh	4.750	4.750	4.750	4.736	133.5	133.5	133.5	133.1
Wire, per 100 pounds—								
Barbed, galvanized, Chicago	3.690	3.690	3.690	3.512	159.8	159.8	159.8	152.1
Plain, fence, annealed, Pittsburgh	2.450	2.450	2.450	2.310	162.0	162.0	162.0	152.7
(b) Nonferrous metals:								
Aluminum, per pound, New York	.201	.214	.223	.187	85.0	90.4	94.1	78.9
Copper, ingot, electrolytic, per pound, refinery	.137	.136	.141	.134	87.0	86.6	89.6	85.4
Copper, sheet, per pound, New York	.208	.208	.210	.203	97.9	97.9	99.0	95.6
Copper wire, bare, per pound, mill	.160	.160	.165	.156	95.6	95.6	98.3	93.1
Lead, pig, per pound, New York	.067	.072	.073	.058	151.6	164.5	165.5	131.6
Lead, pipe, per 100 pounds, New York	7.801	8.297	8.378	6.828	153.5	163.3	164.9	134.4
Quicksilver, per pound, New York	.950	.957	.965	.786	168.1	169.3	170.9	139.2
Silver, bar, fine, per ounce, New York	.684	.655	.643	.679	111.7	106.9	104.9	110.9
Tin, pig, per pound, New York	.346	.369	.377	.325	77.2	82.3	83.9	72.4
Zinc, sheet, per 100 pounds, factory	7.902	8.418	8.510	7.427	109.1	116.2	117.5	102.5
Zinc, slab, per pound, New York	.072	.075	.074	.061	124.0	128.5	127.3	104.3
Building materials.								
(a) Lumber:								
Douglas fir, per 1,000 feet, mill—								
No. 1 common, boards	19.500	19.500	19.500	15.250	211.8	211.8	211.8	165.6
No. 2 and better, drop siding	41.000	41.000	41.000	36.250	236.5	236.5	236.5	209.1
Gum, sap, first and seconds, per 1,000 feet, St. Louis	49.600	51.500	53.000	46.115	239.7	249.0	256.3	223.0
Hemlock, northern, No. 1, per 1,000 feet, Chicago	37.500	37.500	37.500	35.240	177.8	177.8	177.8	167.1
Maple, hard, No. 1 common, 4/4, per 1,000 feet, Chicago	58.500	60.900	63.250	52.962	194.1	202.0	209.8	175.7
Oak, white, plain, No. 1 common, 4/4, per 1,000 feet, Cincinnati	69.500	70.000	71.250	67.346	187.8	189.2	192.5	182.1
Pine, white, No. 2 barn, per 1,000 feet, Buffalo, N. Y	67.000	67.000	67.000	63.346	229.3	229.3	229.3	216.7
Pine, yellow, southern, per 1,000 feet, mill—								
Boards, No. 2 common, 1 x 8	24.960	24.830	24.430	21.607	196.0	195.0	191.8	169.7
Flooring, B and better	49.860	49.270	49.690	45.463	216.4	213.9	215.7	197.4
Timbers, square edge and sound	28.440	29.530	29.700	24.118	194.3	201.8	203.0	164.8
Poplar, No. 1 common, 4/4, per 1,000 feet, Cincinnati	56.000	63.750	67.500	59.471	169.5	193.0	204.3	180.1
Spruce, eastern, random, per 1,000 feet, Boston	32.800	36.375	37.500	32.664	151.3	167.8	173.0	150.7

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Building materials—Concluded.								
(a) Lumber—Concluded.								
Lath, yellow pine, No. 1, per 1,000 mill	$6.140	$5.690	$5.360	$4.980	202.0	187.2	176.3	163.8
Shingles—								
Cypress, 16 inches long, per 1,000, mill	5.750	5.750	5.750	5.438	162.4	162.4	162.4	153.5
Red cedar, 16 inches long, per 1,000, mill	3.520	3.600	3.180	3.298	179.0	183.0	161.7	167.7
(b) Brick, common building, per 1,000:								
Simple average of 82 yard prices	13.847	13.905	13.876	13.702	203.8	204.6	204.2	201.8
Run of kiln, f. o. b. plant, Chicago	8.970	8.700	8.750	8.705	181.7	176.2	177.2	176.3
(c) Structural steel. (See Metals and metal products.)								
(d) Other building materials:								
Cement, Portland, per barrel, f. o. b. plant—								
Simple average of 6 plant prices in Pa., Ind., Minn., Tex., and Calif	1.912	1.892	1.884	1.805	184.0	182.0	181.3	173.7
Buffington, Ind. (representative of eastern prices)	1.750	1.750	1.731	1.611	173.1	173.1	171.2	159.3
Crushed stone, 1½", per cubic yard, New York	1.650	1.650	1.650	1.692	183.3	183.3	183.3	188.0
Gravel, per ton, f. o. b. pit, average of 22 plant prices	.903	.887	.916	.892	182.7	179.4	185.2	180.4
Hollow tile, building, per block, Chicago	.081	.081	.067	.078	126.3	126.3	105.3	121.9
Lime, common, lump, per ton, f. o. b. plant, average of 15 plant prices	9.098	9.401	9.411	8.858	220.5	227.9	228.2	214.7
Sand, building, per ton, f. o. b. pit, average of 26 plant prices	.617	.619	.640	.605	162.1	162.6	168.1	158.7
Slate, roofing, per 100 square feet, f. o. b. quarry	9.500	9.500	9.500	9.540	205.4	205.4	205.4	206.3
Glass, plate—								
3 to 5 square feet, per square foot, New York	.440	.440	.440	.413	185.9	185.9	185.9	174.6
5 to 10 square feet, per square foot, New York	.610	.610	.610	.537	191.6	191.6	191.6	168.6
Glass, window, American, f. o. b. works—								
Single A, per 50 square feet	3.994	4.275	4.275	4.030	175.6	188.0	188.0	177.2
Single B, per 50 square feet	3.468	3.612	3.612	3.523	156.2	162.7	162.7	158.6
Linseed oil, raw, per gallon, New York	.880	.875	.886	.849	190.4	189.4	191.7	183.8
Putty, commercial, per pound, New York	.048	.048	.048	.048	179.2	179.2	179.2	179.2
Rosin, common to good (B), per barrel, New York	6.865	6.581	6.219	5.781	142.5	136.6	129.1	120.0
Turpentine, southern, barrels, per gallon, New York	1.530	1.578	1.403	1.150	357.6	368.7	327.8	268.8
White lead, American, in oil, per pound, New York	.105	.110	.111	.120	155.3	162.7	164.2	176.9
Zinc oxide (white zinc), per pound, New York	.063	.063	.063	.068	116.2	116.2	116.2	126.9
Pipe, cast-iron. (See Metals and metal products.)								
Copper, sheet. (See Metals and metal products.)								
Copper wire. (See Metals and metal products.)								
Lead pipe. (See Metals and metal products.)								
Nails. (See Metals and metal products.)								
Reinforcing bars. (See Metals and metal products.)								
Roofing tin (terneplate). (See Metals and metal products.)								
Zinc, sheet. (See Metals and metal products.)								
Chemicals and drugs.								
(a) Chemicals:								
Acids, per pound, New York—								
Acetic, 28 per cent	.029	.030	.032	.026	147.4	154.1	163.9	135.6
Muriatic, 20°	.011	.010	.010	.011	84.6	76.9	76.9	87.7
Nitric, 42°	.054	.053	.053	.060	111.5	107.6	107.6	122.1
Stearic, triple pressed	.111	.125	.125	.108	83.5	94.3	94.3	81.7
Sulphuric, 66°	.007	.007	.007	.008	73.0	70.0	70.0	76.0
Alcohol, per gallon, New York—								
Denatured, No. 5, 188 proof	.360	.360	.376	.334	98.4	98.4	102.8	91.3
Wood, refined, 95 per cent	.810	.930	1.070	.637	169.3	194.4	223.7	133.1
Alum, lump, per pound, New York	.035	.035	.035	.034	200.0	200.0	200.0	195.4
Ammonia, anhydrous, per pound, New York	.300	.300	.300	.300	120.0	120.0	120.0	120.0
Bleaching powder, per 100 pounds, New York	1.975	2.150	2.210	1.844	167.3	182.0	187.3	156.2
Borax, crystals and granulated, per pound, New York	.055	.055	.555	.055	146.7	146.7	146.7	146.7

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Chemicals and drugs—Concluded.								
(a) Chemicals—Concluded.								
Copper, sulphate, 99 per cent crystals, per per pound, New York	$0.058	$0.058	$0.058	$0.058	111.9	110.4	111.5	111.3
Copra, South Sea. (See Foods.)								
Formaldehyde, per pound, New York	.119	.135	.152	.100	140.8	160.1	179.5	118.9
Oil, vegetable—								
Coconut, crude. (See Foods.)								
Corn, crude. (See Foods.)								
Palm kernel, crude, per pound, New York	.082	.077	.082	.085	81.1	76.4	81.2	84.5
Soya bean, crude. (See Foods.)								
Potash, caustic, 88–92 per cent, per pound, New York	.064	.064	.063	.059	179.8	180.3	175.6	164.9
Sal soda, per 100 pounds, New York	1.100	1.100	1.100	1.233	183.3	183.3	183.3	205.5
Soda ash, 58 per cent, light, per 100 pounds, New York	1.950	1.950	1.950	1.964	334.3	334.3	334.3	336.8
Soda, bicarbonate, American, per pound, f. o. b. works	.018	.018	.018	.018	175.0	175.0	175.0	182.0
Soda, caustic, 76 per cent solid, per pound New York	.035	.035	.036	.036	237.0	241.8	243.8	247.9
Soda, silicate of, 40°, per 100 pounds, New York	.775	.775	.775	.808	121.9	121.9	121.9	127.2
Sulphur, crude, per gross ton, New York	14.000	14.000	14.000	14.077	63.6	63.6	63.6	64.0
Tallow, inedible, packers' prime, per pound, Chicago	.076	.082	.082	.071	106.9	115.8	115.7	100.0
(b) Fertilizer materials:								
Acid phosphate, 16 per cent basis, bulk, per ton, New York	7.750	8.375	9.750	8.889	100.7	108.8	126.9	115.5
Ammonia, sulphate, double bags, per 100 pounds, New York	3.575	3.550	3.540	3.375	114.3	113.6	113.2	108.1
Ground bone, steamed, per ton, Chicago	25.500	24.000	24.000	24.654	126.8	119.3	119.3	122.6
Muriate of potash, 80–85 per cent, K. C. L. bags, per ton, New York	32.950	35.550	35.550	33.519	86.8	93.5	93.5	88.1
Phosphate rock, 68 per cent, per ton, f. o. b. mines	2.750	2.750	2.700	3.067	80.7	80.7	79.2	90.0
Soda nitrate, 95 per cent, per 100 pounds, New York	2.369	2.463	2.574	2.535	96.0	99.7	104.3	102.7
Tankage, 9 and 20 per cent, crushed, per ton, f. o. b. Chicago	38.563	42.500	45.650	37.109	165.1	181.9	195.4	158.9
(c) Drugs and pharmaceuticals:								
Acid, citric, domestic, crystals, per pound, New York	.500	.500	.500	.466	115.0	115.0	115.0	107.1
Acid, tartaric, crystals, U. S. P., per pound, New York	.320	.320	.320	.307	105.1	105.1	105.1	100.8
Alcohol, grain, 190 proof, U. S. P., per gallon, New York	4.720	4.720	4.736	4.707	188.9	188.9	189.5	188.3
Cream of tartar, powdered, per pound, New York	.265	.265	.265	.267	111.2	111.2	111.2	112.0
Epsom salts, U. S. P., in barrels, per 100 pounds, New York	2.750	2.750	2.750	2.557	250.0	250.0	250.0	232.4
Glycerine, refined, per pound, New York	.185	.185	.185	.166	93.9	93.9	93.9	84.2
Opium, natural, U. S. P., per pound, New York	6.750	6.750	6.750	6.120	112.2	112.2	112.2	101.7
Peroxide of hydrogen, 4-ounce bottles, per gross, New York	7.500	7.500	7.500	7.510	187.5	187.5	187.5	187.7
Phenol, U. S. P. (carbolic acid), per pound, New York	.235	.338	.350	.176	213.7	307.3	318.4	160.3
Quinine, sulphate, manufacturers' quotations, per ounce, New York	.500	.500	.500	.542	227.7	227.7	227.7	246.9
House-furnishing goods.								
(a) Furniture:								
Bedroom—								
Bed, combination, per bed, factory	35.000	35.000	37.000	36.292	155.6	155.6	164.4	161.3
Chair, all gum, cane seat, per chair, factory	5.250	5.500	5.500	5.292	233.3	244.4	244.4	235.2
Chifforette, combination, per chifforette, factory	40.000	40.000	42.000	42.167	123.1	123.1	129.2	129.7
Dresser, combination, per dresser, factory	56.750	58.000	60.000	55.063	157.6	161.1	166.7	153.0
Rocker, quatered oak, per chair, Chicago	4.410	4.655	4.655	4.451	215.3	227.2	222.2	217.2
Set, 3 pieces, per set, Chicago	38.710	38.759	38.759	36.672	203.9	204.1	204.1	193.3

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Continued.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
House-furnishing goods—Concluded.								
(a) Furniture—Concluded.								
Dining room—								
Buffet, combination, per buffet, factory	$56.750	$56.750	$56.750	$55.688	132.0	132.0	132.0	129.5
Chair, all gum, leather slip seat, per 6, factory	31.500	33.000	33.000	31.750	210.0	220.0	220.0	211.7
Table, extension, combination, per table, factory	33.500	33.500	35.000	33.667	181.1	181.1	189.2	182.0
Living room—								
Davenport, standard pattern, per davenport, factory	61.500	64.500	64.500	62.600	178.3	187.0	187.0	179.7
Table, library, combination, per table, factory	34.000	34.000	35.500	34.125	170.0	170.0	177.5	170.6
Kitchen—								
Chair, hardwood, per dozen, Chicago	14.700	14.700	14.700	14.749	230.8	230.8	230.8	231.5
Refrigerator, lift top type, each, factory	16.200	16.200	16.200	16.200	156.8	156.8	156.8	156.8
Table, with drawer, per table, Chicago	3.773	3.773	3.773	3.670	265.5	265.5	265.5	260.3
(b) Furnishings:								
Blankets—								
Cotton, colored, 2 pounds to the pair, per pair, New York	1.266	1.370	1.370	1.268	209.2	226.4	226.4	209.5
Wool, 4 to 5 pounds to the pair, per pound, factory	1.250	1.250	1.250	1.166	163.3	163.3	163.3	152.4
Carpets, per yard, factory—								
Axminster, Bigelow	3.072	3.072	3.168	2.904	229.3	229.3	236.5	216.8
Brussels, Bigelow	2.832	2.880	2.880	2.768	219.2	222.9	222.9	214.2
Wilton, Bigelow	4.848	4.848	4.848	4.668	201.3	201.3	201.3	193.9
Cutlery—								
Carvers, 8-inch, per pair, factory	1.200	1.200	1.300	1.208	160.0	160.0	173.3	161.1
Knives and forks, per gross, factory	12.000	12.000	13.000	12.083	208.7	208.7	226.1	210.1
Pails, galvanized-iron, 10-quart, per gross, factory	22.645	22.667	20.976	20.423	154.4	154.6	143.0	139.2
Sheeting, bleached, 10/4—								
Pepperell, per yard, New York	.463	(1)	(1)	.445	193.6	.....	.....	186.2
Wamsutta, per yard, factory	.888	.888	.888	.904	272.7	272.7	272.7	277.4
Tableware—								
Glass nappies, 4-inch, per dozen, factory	.250	.250	.250	.263	227.3	227.3	227.3	238.6
Glass pitchers, ½-gallon, per dozen, factory	1.820	1.820	1.820	1.826	227.5	227.5	227.5	227.5
Glass tumblers, ¼-pint, per dozen, factory	.230	.230	.230	.208	191.7	191.7	191.7	172.9
Plates, white granite, 7-inch, per dozen, factory	.980	.980	.980	.980	211.5	211.5	211.5	211.5
Tea cups and saucers, white granite, per dozen, factory	1.260	1.260	1.260	1.260	221.0	221.0	221.0	221.0
Ticking, Amoskeag, A. C. A., 2.85 yards to the pound, per yard, New York	.250	.280	.280	.255	185.7	208.0	208.0	189.4
Tubs, galvanized-iron, No. 3, per dozen, factory	6.911	6.958	6.726	6.131	168.3	169.4	163.8	149.3
Miscellaneous.								
(a) Cattle feed:								
Bran, per ton, Minneapolis	22.000	22.625	24.063	20.123	119.8	123.2	131.0	109.6
Cottonseed meal, prime, per ton, New York	42.250	49.750	51.750	48.792	133.7	157.4	163.7	154.4
Linseed meal, per ton, New York	46.250	50.000	50.000	48.442	162.8	176.0	176.0	170.5
Mill-feed: middlings, standard, per ton, Minneapolis	23.150	23.500	24.031	21.115	119.0	120.8	123.5	108.6
(b) Leather:								
Calf, chrome, B grade, per square foot, Boston	.465	.450	.450	.443	172.5	166.9	166.9	164.1
Glazed kid, black, top grade, per square foot, Boston	.750	.750	.750	.704	299.5	299.5	299.5	281.2
Harness, Calif. oak, No. 1, per pound, Chicago	.480	.461	.461	.437	119.7	114.8	114.8	108.9
Side, black, chrome, B grade, per square foot, Boston	.285	.285	.285	.258	111.4	111.4	111.4	101.0
Sole, per pound—								
Hemlock, middle, No. 1, Boston	.350	.350	.350	.350	124.1	124.1	124.1	124.1
Oak, scoured backs, heavy, Boston	.535	.525	.525	.519	119.2	117.0	117.0	115.7
Union, middle weight, New York	.520	.535	.535	.491	129.6	133.3	133.3	122.4
(c) Paper and pulp:								
Paper—								
Newsprint, rolls, per pound, f. o. b. mill	.039	.039	.039	.037	190.0	190.0	190.0	178.4
Wrapping, manila, No. 1, jute, per pound, New York	.090	.091	.093	.088	183.4	187.1	189.6	181.1
Wood pulp, sulphite, domestic, unbleached, per 100 pounds, New York	2.635	2.675	2.675	2.562	118.4	120.2	120.2	115.1

[1] No quotation.

WHOLESALE PRICES OF COMMODITIES, OCTOBER TO DECEMBER, 1922, AND YEAR 1922—Concluded.

Commodity.	Average prices.				Index numbers. (1913=100.)			
	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.	Oct., 1922.	Nov., 1922.	Dec., 1922.	Year, 1922.
Miscellaneous—Concluded.								
(*d*) Other miscellaneous:								
Hemp, manila, fair, current shipment, per pound, New York	$0.073	$0.073	$0.080	$0.074	78.1	78.3	86.5	79.2
Jute, raw, medium grades, per pound, New York	.073	.068	.079	.066	108.4	100.9	117.8	99.0
Lubricating oil, paraffin, 903 gravity, per gallon, New York	.230	.230	.230	.230	161.4	161.4	161.4	161.4
Rope, pure manila, best grade, per pound, New York	.187	.182	.182	.187	127.7	124.0	124.0	127.2
Rubber, Para, island, fine, per pound, New York	.196	.219	.223	.183	24.2	27.1	27.6	22.6
Sisal, Mexican, current shipment, per pound, New York	.065	.064	.064	.065	151.2	147.7	149.1	149.5
Soap—								
Laundry, per 100 cakes, Cincinnati	3.960	3.960	3.960	3.960	128.4	128.4	128.4	128.4
Laundry, per 100 cakes, Philadelphia	4.900	4.900	4.900	4.900	138.9	138.9	138.9	138.9
Starch, laundry, bulk, per pound, New York	.051	.051	.051	.051	140.5	140.5	140.5	140.5
Tobacco—								
Plug, per pound, New York	.701	.701	.701	.701	180.2	180.2	180.2	180.2
Smoking, per gross 1-ounce bags, New York	9.920	9.920	9.920	9.920	175.9	175.9	175.9	175.9

Changes in Cost of Living in the United States.

THE Bureau of Labor Statistics has secured data on cost of living for December, 1922, the results of which are shown in the following tables. The information is based on actual prices secured from merchants and dealers for each of the periods named. The prices of food and of fuel and light (which include coal, wood, gas, electricity, and kerosene), are furnished the bureau in accordance with arrangements made with establishments through personal visits of the bureau's agents. In each city food prices are secured from 15 to 25 merchants and dealers, and fuel and light prices from 10 to 15 firms, including public utilities. All other data are secured by special agents of the bureau who visit the various merchants, dealers, and agents and secure the figures directly from their records. Four quotations are secured in each city (except in Greater New York, where five are obtained) on each of a large number of articles of clothing, furniture, and miscellaneous items. Rental figures are secured for from 375 to 2,000 houses and apartments in each city, according to its population.

Table 1 shows the changes in the total cost of living from June, 1920, and September, 1922, respectively, to December, 1922, in 32 cities, and in the United States, as determined by a consolidation of the figures for the 32 cities.

TABLE 1.—CHANGES IN TOTAL COST OF LIVING IN SPECIFIED CITIES FROM JUNE, 1920, AND FROM SEPTEMBER, 1922, TO DECEMBER, 1922.

City.	Per cent of decrease June, 1920, to December, 1922.	Per cent of increase September, 1922, to December, 1922.	City.	Per cent of decrease June, 1920, to December, 1922.	Per cent of increase September, 1922, to December, 1922.
Atlanta, Ga	21.5	1.1	New Orleans, La	16.4	0.7
Baltimore, Md	20.3	2.2	New York, N. Y	20.5	2.7
Birmingham, Ala	20.2	1.6	Norfolk, Va	23.5	1.1
Boston, Mass	21.6	2.6	Philadelphia, Pa	20.0	3.1
Buffalo, N. Y	21.5	1.7	Pittsburgh, Pa	19.5	2.1
Chicago, Ill	21.7	1.4	Portland, Me	21.0	1.6
Cincinnati, Ohio	22.6	1.2	Portland, Oreg	22.1	1.2
Cleveland, Ohio	21.4	2.8	Richmond, Va	20.0	2.1
Denver, Colo	19.1	3.0	St. Louis, Mo	21.4	1.7
Detroit, Mich	24.6	1.4	San Francisco and Oakland, Calif	19.0	1.1
Houston, Tex	20.6	1.8	Savannah, Ga	25.1	1.2
Indianapolis, Ind	20.9	1.5	Scranton, Pa	19.2	2.5
Jacksonville, Fla	22.5	1.7	Seattle, Wash	20.8	.1
Kansas City, Mo	23.0	1.8	Washington, D. C	20.8	1.7
Los Angeles, Calif	13.5	1.2			
Memphis, Tenn	19.0	.6	United States	21.7	1.9
Minneapolis, Minn	17.7	1.8			
Mobile, Ala	23.3	2.1			

Table 2 shows the changes from December, 1914, to December, 1922, by specified periods, in 19 cities.

In studying this and the following tables it should be borne in mind that the figures for the 19 cities in Table 2 are based on the prices prevailing in December, 1914, the figures for the 13 cities in Table 3 are based on the prices prevailing in December, 1917, while the figures for the United States, shown in Table 4, are a summarization of the figures in Tables 2 and 3, computed on a 1913 base.

It will be noted that from the beginning of the studies to June, 1920, there was, with an occasional exception, a steady increase in prices, becoming much more decided during the latter part of that period. From June to December, 1920, however, there was an appreciable drop in the figures representing the combined expenditures. While rents and fuel and light continued to advance considerably and miscellaneous items to a less extent, the large decrease in food and clothing and the somewhat smaller decrease in furniture and house furnishings had the effect of reducing the totals for December by from 2.5 to 10 per cent in the several cities below the price for June. The figures for the period from December, 1920, to May, 1921, show a larger decrease than the previous six-month period, ranging from 7.2 to 11.9 per cent. The small decrease in furniture and furnishings and the increase in fuel and light shown in the period from June to December, 1920, were changed to decided decreases in the period from December, 1920, to May, 1921, while the rapid decrease in food and clothing shown in the former period continued. However, housing made an appreciable advance while miscellaneous items increased only slightly.

In the period from May to September, 1921, the downward movement was not so rapid as during the two previous periods, the decreases ranging from nothing to 3.8 per cent, while the average for the United States was 1. 7 per cent.

The decrease from September to December, 1921, was also slight, ranging from nothing to 3 per cent, the average for the United States again being 1.7 per cent.

The decrease from December, 1921, to March, 1922, was more decided, ranging from 2.3 per cent to 5.9 per cent, the average for the United States being 4.2.

The changes from March to June, 1922, were very small, ranging from a decrease of 1.4 per cent to an increase of 1 per cent, the average based upon the figures for the 32 cities being a decrease of 0.2 per cent. In nearly all of the cities there was a small increase in the cost of food and a slight decrease in clothing, fuel and light, furniture, and miscellaneous. Housing showed a small increase in several cities and a decrease in others.

The changes from June to September, 1922, ranged from a decrease of 1.6 per cent to an increase of 1.4 per cent, the average for the 32 cities being a decrease of 0.2 per cent. In many of the cities the change was less than half of 1 per cent.

In nearly all the cities there was a small decrease in the cost of food, clothing, and miscellaneous items. The cost of furniture and house furnishings and of rents increased in some cities and decreased in others. As a result of the recent miners' strike the coal situation is more or less unsettled and as a consequence the figures in fuel and light are somewhat irregular. In a few instances the prices given are apparently those that were in effect before the scarcity of coal caused a rise in price. In other cities coal is such a small factor in the cost of fuel and light that the strike had no appreciable effect on this item.

In the period from September to December, 1922, an increase is shown in the total cost of living in each of the 32 cities. These increases range from 0.1 to 3.1 per cent, the average being 1.9 per cent.

In all cities the cost of food and of furniture has increased. Clothing and rents have increased slightly in some cities and decreased in others. The cost of fuel and light has increased in most cities. It should be borne in mind that this item is based on the prices of coal, wood, gas, electricity, and kerosene. In most cities where a decrease is shown in the cost of fuel and light, this is due to the fact that other items than coal enter largely into the question. In most cities miscellaneous items show no change or a slight decrease in cost.

During the year from December, 1921, to December, 1922, there was an average decrease of 2.8 per cent in the total cost of living in the United States.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO DECEMBER, 1922.

Baltimore, Md.

Item of expenditure.	Per cent of increase from December, 1914, to—													
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	[1] 4.1	20.9	64.4	96.4	92.5	110.9	75.6	43.4	48.6	46.9	38.3	39.9	39.4	46.1
Clothing	2.7	24.0	52.1	107.7	177.4	191.3	159.5	123.2	101.5	88.6	82.0	78.9	77.8	80.5
Housing	[1].2	.9	3.0	13.8	25.8	41.6	49.5	63.0	64.0	64.7	65.2	65.4	65.6	66.9
Fuel and light	.5	9.1	25.5	46.0	48.1	57.6	79.0	70.9	84.9	85.5	85.5	84.8	90.9	94.9
Furniture and furnishings	5.6	26.4	60.8	122.3	167.0	191.8	181.9	147.5	128.7	123.7	115.0	113.3	114.2	116.6
Miscellaneous	[1] 1.4	18.5	51.3	78.7	99.4	111.4	112.9	111.8	112.2	108.6	106.9	104.4	103.8	102.6
Total	[1] 1.4	18.5	51.3	84.7	98.4	114.3	96.8	77.4	76.5	73.2	67.9	67.6	67.2	70.9

Boston, Mass.

Food	[1] 0.3	18.0	45.8	74.9	80.8	105.0	74.4	41.9	52.1	50.4	34.3	32.5	37.4	44.9
Clothing	6.6	21.9	47.5	117.5	192.4	211.1	192.7	150.3	118.8	106.3	98.9	96.7	92.4	92.0
Housing	[1].1	.1	[1].1	2.8	12.2	16.2	25.8	29.8	31.6	33.8	33.9	34.4	34.9	36.7
Fuel and light	1.1	10.5	29.2	56.6	63.2	83.6	106.0	97.8	94.4	98.5	93.9	92.5	91.7	99.9
Furniture and furnishings	8.4	26.3	58.4	137.6	198.7	233.7	226.4	171.2	139.5	136.9	128.1	124.2	124.0	133.6
Miscellaneous	1.6	15.7	38.1	62.0	81.1	91.8	96.6	96.2	94.6	93.0	91.6	89.5	89.3	87.8
Total	1.6	15.7	38.1	70.6	92.3	110.7	97.4	74.4	72.8	70.2	61.2	59.6	60.9	65.1

Buffalo, N. Y.

Food	2.4	30.1	64.1	87.8	94.7	115.7	78.5	37.7	49.9	50.8	39.4	38.5	41.2	48.8
Clothing	8.9	29.6	58.5	123.1	190.8	210.6	168.7	131.6	102.4	96.5	87.7	83.6	79.4	81.4
Housing	1.2	4.7	9.4	20.7	29.0	46.6	48.5	61.1	61.7	61.7	61.9	64.7	64.7	64.9
Fuel and light	1.3	9.3	23.5	49.3	55.7	69.8	74.9	73.9	79.5	79.7	78.8	78.8	122.1	115.7
Furniture and furnishings	7.1	24.1	50.2	106.3	165.4	199.7	189.2	151.3	130.9	124.7	115.5	108.0	107.8	112.8
Miscellaneous	3.5	24.4	51.1	76.0	90.3	101.9	107.4	107.8	105.7	103.0	99.5	97.9	97.9	97.5
Total	3.5	24.4	51.1	80.9	102.7	121.5	101.7	80.3	78.4	76.8	69.9	68.6	71.0	73.9

Chicago, Ill.

Food	2.7	25.2	53.4	78.7	93.1	120.0	70.5	41.9	51.3	48.3	38.3	41.6	40.7	44.8
Clothing	7.5	24.2	50.6	138.9	224.0	205.3	158.6	122.7	86.0	74.3	66.8	63.0	65.8	67.5
Housing	[1].1	.7	1.4	2.6	14.0	35.1	48.9	78.2	79.8	83.9	84.1	87.4	87.6	88.9
Fuel and light	[1].9	6.6	19.3	37.1	40.1	62.4	83.5	65.3	67.1	69.4	54.8	55.4	64.3	65.6
Furniture and furnishings	5.9	20.0	47.5	108.9	176.0	215.9	205.8	162.4	138.0	133.7	114.5	108.5	107.5	120.4
Miscellaneous	3.0	19.5	41.8	58.7	84.3	87.5	96.5	98.5	97.5	94.5	92.7	87.9	87.3	85.7
Total	3.0	19.5	41.8	72.2	100.6	114.6	93.3	78.4	75.3	72.3	65.1	65.0	65.6	68.0

Cleveland, Ohio.

Food	1.4	26.4	54.3	79.4	92.9	118.7	71.7	37.4	47.7	40.9	29.8	34.6	32.3	41.1
Clothing	2.0	18.0	43.7	102.6	171.2	185.1	156.0	124.0	90.8	85.8	77.4	72.4	69.5	70.9
Housing	.1	.9	11.3	16.5	39.9	47.3	80.9	88.1	82.8	81.2	72.0	69.6	70.1	74.0
Fuel and light	.3	10.0	26.8	51.9	62.9	90.3	94.5	89.6	91.9	103.8	102.2	102.2	113.5	116.3
Furniture and furnishings	4.7	19.7	47.8	102.4	112.3	129.1	121.3	86.8	67.9	60.5	50.5	50.0	53.6	63.6
Miscellaneous	1.4	19.1	42.9	67.1	85.9	117.9	134.0	129.6	123.4	123.2	111.1	110.7	109.4	109.4
Total	1.4	19.1	42.9	71.4	95.1	116.8	104.0	84.7	79.9	76.4	66.2	66.6	65.8	70.4

[1] Decrease.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO DECEMBER, 1922—Continued.

Detroit, Mich.

Item of expenditure.	Per cent of increase from December, 1914, to—													
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	4.1	26.5	59.7	82.5	99.5	132.0	75.6	41.1	54.3	47.3	36.5	43.1	39.8	44.8
Clothing	2.3	18.9	46.7	113.8	181.8	208.8	176.1	134.1	99.9	92.5	82.7	81.4	81.2	79.9
Housing	2.1	17.5	32.6	39.0	60.2	68.8	108.1	101.4	96.6	91.1	88.0	86.9	87.6	92.1
Fuel and light	1.6	9.9	30.2	47.6	57.9	74.9	104.5	83.6	81.9	77.5	74.0	75.2	90.3	92.8
Furniture and furnishings	8.7	24.5	50.4	107.3	172.6	206.7	184.0	134.0	102.9	96.8	82.6	76.0	80.0	81.1
Miscellaneous	3.5	22.3	49.9	72.6	100.1	141.3	144.0	140.1	131.9	130.7	126.3	121.3	122.2	121.5
Total	3.5	22.3	49.9	78.0	107.9	136.0	118.6	93.3	88.0	82.4	74.6	75.3	75.6	78.0

Houston, Tex.

Food	[1] 1.0	19.9	57.3	86.1	97.5	107.5	83.2	45.6	49.7	50.1	40.2	38.9	38.5	45.0
Clothing	2.7	25.0	51.5	117.3	192.0	211.3	187.0	143.4	111.5	104.9	98.8	98.4	97.8	98.2
Housing	[1] 2.3	[1] 7.3	[1] 7.7	[1] 1.7	13.4	25.3	35.1	39.4	39.4	39.8	39.5	38.5	38.1	37.3
Fuel and light	[1] .9	8.3	22.7	47.5	60.0	55.1	74.2	46.0	39.0	39.4	34.4	32.9	35.7	39.2
Furniture and furnishings	6.1	29.6	62.3	119.9	181.8	213.9	208.2	173.7	156.7	148.2	137.5	133.7	131.8	140.4
Miscellaneous	[1] .3	16.4	44.9	67.6	88.2	90.4	103.9	100.8	100.0	99.0	96.0	94.0	93.0	93.0
Total	[1] .3	16.4	44.9	75.7	101.7	112.2	104.0	79.7	75.0	73.6	67.2	65.9	65.4	68.4

Jacksonville, Fla.

Food	[1] 0.3	17.6	50.8	76.2	80.9	90.1	65.6	32.6	43.1	40.6	30.0	30.6	28.9	34.8
Clothing	10.5	33.7	71.9	130.5	217.2	234.0	209.3	167.5	131.1	117.9	104.8	99.9	99.1	99.3
Housing	[1] 6.9	[1] 18.2	[1] 18.7	5.9	22.0	28.9	34.1	36.5	37.7	38.3	37.6	35.3	34.2	35.1
Fuel and light	[2]	2.3	15.1	55.2	64.1	72.6	92.6	80.7	68.1	68.9	61.6	58.9	58.9	65.7
Furniture and furnishings	15.1	43.4	73.7	126.5	186.2	224.2	222.3	182.7	140.9	134.9	122.0	115.3	117.7	127.1
Miscellaneous	1.3	14.7	41.6	60.5	80.9	102.8	105.6	107.5	100.9	99.3	98.7	95.5	95.5	94.7
Total	1.3	14.7	41.6	71.5	101.5	116.5	106.2	85.8	78.7	75.1	68.0	65.7	65.0	67.8

Los Angeles, Calif.

Food	[1] 4.1	0.4	33.4	61.8	71.0	90.8	62.7	33.2	39.3	38.4	27.5	30.6	34.0	39.4
Clothing	2.8	14.3	45.0	109.1	167.6	184.5	166.6	127.4	98.3	94.3	84.4	81.3	78.2	78.0
Housing	[1] 2.7	[1] 2.5	[1] .6	4.4	26.8	42.6	71.4	85.3	86.0	90.1	96.0	95.6	94.4	94.8
Fuel and light	.4	2.3	10.4	18.3	35.3	53.5	53.5	52.7	52.7	52.7	48.4	39.1	35.9	35.6
Furniture and furnishings	6.3	23.1	56.4	118.5	175.5	202.2	202.2	156.6	148.4	143.2	133.7	128.8	128.1	138.1
Miscellaneous	[1] 1.9	7.7	28.9	52.0	76.9	86.6	100.6	96.8	98.8	99.6	104.0	103.8	102.2	101.2
Total	[1] 1.9	7.7	28.9	58.0	85.3	101.7	96.7	78.7	76.8	76.4	72.4	72.5	72.4	74.5

Mobile, Ala.

Food	[1] 1.0	19.9	57.3	80.6	98.4	110.5	73.5	39.1	43.7	42.4	32.3	33.2	32.9	39.1
Clothing	2.0	9.0	38.8	86.0	123.7	137.4	122.2	90.6	68.1	57.7	50.3	49.7	51.0	50.8
Housing	[1] 1.9	[1] 4.3	[1] 3.6	11.2	29.6	34.6	53.6	53.3	53.1	49.9	48.4	47.7	47.3	43.8
Fuel and light	[2]	8.8	27.1	57.1	75.6	86.3	122.3	102.1	97.2	98.2	86.1	84.4	90.9	96.4
Furniture and furnishings	4.1	15.3	42.8	108.3	163.3	177.9	175.4	140.7	124.3	116.9	98.2	97.8	93.1	97.9
Miscellaneous	[1] .4	13.8	43.2	72.4	87.0	100.3	100.7	96.9	96.1	94.3	89.6	87.5	87.3	91.0
Total	[1] .4	13.8	43.2	71.4	94.5	107.0	93.3	70.8	67.2	63.6	55.8	55.3	55.5	58.8

[1] Decrease. [2] No change.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO DECEMBER, 1922—Continued.

New York, N. Y.

Item of expenditure.	Per cent of increase from December, 1914, to—													
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	1.3	16.3	55.3	82.6	91.0	105.3	73.5	42.5	50.3	51.8	36.5	40.0	38.8	49.5
Clothing	4.8	22.3	54.2	131.3	219.7	241.4	201.8	159.5	131.5	117.8	107.1	103.0	98.1	98.3
Housing	[1].1	[1].1	2.6	6.5	23.4	32.4	38.1	42.2	44.0	53.7	54.5	55.7	56.2	56.7
Fuel and light	[1].1	11.0	19.9	45.5	50.6	60.1	87.5	95.9	92.4	90.7	89.4	89.0	97.7	95.7
Furniture and furnishings	8.4	27.6	56.5	126.5	172.9	205.1	185.9	156.5	136.7	132.0	122.3	118.3	117.9	121.6
Miscellaneous	2.0	14.9	44.7	70.0	95.8	111.9	116.3	117.6	117.8	116.9	113.2	112.8	112.4	111.6
Total	2.0	14.9	44.7	77.3	103.8	119.2	101.4	81.7	79.7	79.3	69.9	70.7	69.7	74.2

Norfolk, Va.

Food	0.8	22.4	63.9	86.2	91.5	107.6	76.3	45.4	50.2	43.4	31.9	33.5	32.4	38.6
Clothing	.8	6.0	31.6	94.6	158.4	176.5	153.6	121.6	93.9	90.2	81.8	77.6	74.6	73.2
Housing	.1	[1] 1.7	[1] 1.7	39.0	63.3	70.8	90.8	94.6	94.6	93.4	91.7	88.1	82.5	77.2
Fuel and light	[2]	17.0	33.3	74.6	89.9	110.6	128.9	97.3	98.1	91.6	93.5	87.7	97.8	106.5
Furniture and furnishings	.6	8.7	39.0	105.5	143.6	165.0	160.5	129.0	110.5	106.1	95.0	88.4	86.7	89.1
Miscellaneous	.6	14.7	45.2	76.8	97.5	108.4	106.3	106.3	112.5	109.3	102.6	100.8	100.6	99.6
Total	.6	14.7	45.2	80.7	107.0	122.2	109.0	88.1	83.9	79.2	71.3	69.5	68.1	69.9

Philadelphia, Pa.

Food	0.3	18.9	54.4	80.7	87.2	101.7	68.1	37.8	44.6	43.9	34.4	38.1	32.7	43.4
Clothing	3.6	16.0	51.3	111.2	190.3	219.6	183.5	144.7	112.2	104.6	96.2	89.5	87.4	87.6
Housing	[1].3	[1].7	2.6	8.0	16.7	28.6	38.0	44.2	47.1	48.1	48.7	49.6	51.1	52.9
Fuel and light	[1].8	5.4	21.5	47.9	51.3	66.8	96.0	85.6	89.3	92.0	89.7	85.7	86.3	93.0
Furniture and furnishings	6.9	19.9	49.8	107.7	162.8	187.4	183.4	135.5	109.1	101.6	91.7	90.0	89.1	96.9
Miscellaneous	1.2	14.7	43.8	67.5	88.6	102.8	122.3	119.2	116.4	116.2	113.8	112.3	111.5	110.7
Total	1.2	14.7	43.8	73.9	96.5	113.5	100.7	79.8	76.0	74.3	68.2	68.2	65.5	70.7

Portland, Me.

Food	[1] 2.0	18.6	49.8	86.8	91.9	114.5	78.7	46.7	56.8	54.8	39.2	39.9	44.5	49.
Clothing	2.1	9.7	32.8	85.8	148.5	165.9	147.8	116.3	96.6	88.1	81.0	76.7	74.8	74.8
Housing	.2	.6	2.4	2.5	10.7	14.5	20.0	23.1	23.3	26.6	27.0	24.8	26.3	30.7
Fuel and light	.4	11.4	28.9	67.7	69.8	83.9	113.5	96.8	90.9	94.0	93.8	96.1	96.7	94.7
Furniture and furnishings	6.2	20.9	43.5	110.8	163.7	190.3	191.2	152.2	139.1	123.6	110.6	108.1	106.4	114.2
Miscellaneous	[1].4	13.8	38.0	65.6	83.2	89.4	94.3	94.1	94.1	91.2	89.5	88.2	88.0	88.0
Total	[1].4	13.8	38.0	72.2	91.6	107.6	93.1	72.1	72.0	69.2	60.7	59.7	61.5	64.1

Portland, Oreg.

Food	[1] 3.8	9.8	42.2	70.6	81.6	107.1	60.9	26.0	35.9	33.1	24.6	26.5	30.1	34.3
Clothing	3.0	15.8	44.4	96.6	142.1	158.6	122.1	91.2	70.4	65.3	55.5	53.2	53.4	54.9
Housing	[1] 10.9	[1] 19.6	[1] 22.2	12.3	27.7	33.2	36.9	42.9	43.3	43.3	43.2	43.3	43.7	43.6
Fuel and light	[1] 1.0	3.4	20.2	30.9	42.3	46.9	65.9	67.1	58.9	59.4	56.2	50.3	59.0	65.7
Furniture and furnishings	2.9	18.0	54.5	109.0	145.1	183.9	179.9	148.0	126.9	121.9	104.6	101.9	100.3	102.9
Miscellaneous	[1] 3.1	6.1	31.2	57.9	71.6	79.7	81.1	81.1	80.9	80.0	78.9	78.5	80.5	79.4
Total	[1] 3.1	6.1	31.2	64.2	83.7	100.4	80.3	62.2	60.5	58.3	52.3	52.1	54.2	56.1

[1] Decrease. [2] No change.

TABLE 2.—CHANGES IN COST OF LIVING IN 19 CITIES FROM DECEMBER, 1914, TO DECEMBER, 1922—Concluded.

San Francisco and Oakland, Calif.

Item of expenditure.	Per cent of increase from December, 1914, to—												
	Dec., 1915.	Dec., 1916.	Dec., 1917.	Dec., 1918.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	[1] 4.3	9.6	35.9	66.2	74.2	93.9	64.9	33.3	40.6	40.4	29.6	31.1	34.6	38.8
Clothing	2.5	14.5	43.6	109.0	170.4	191.0	175.9	140.9	110.1	106.3	97.8	90.7	86.1	85.4
Housing	[1] .7	[1] 2.5	[1] 4.0	[1] 3.9	4.7	9.4	15.0	21.7	23.6	25.8	27.7	29.4	30.3	30.0
Fuel and light	[1] .1	4.6	14.4	30.1	41.3	47.2	66.3	63.3	65.3	65.3	59.5	52.0	52.5	
Furniture and furnishings	6.0	21.7	48.2	103.4	143.8	180.1	175.6	143.9	121.7	113.9	105.6	104.4	103.8	105.4
Miscellaneous	[1] 1.7	8.3	28.6	50.5	74.7	79.6	84.8	84.4	87.4	86.8	84.4	83.7	83.5	84.2
Total	[1] 1.7	8.3	28.6	57.8	87.8	96.0	85.1	66.7	64.6	63.6	57.5	56.8	57.1	58.8

Savannah, Ga.

Food	[1] 0.3	17.6	50.8	76.2	80.9	91.7	63.5	28.7	36.8	33.7	16.7	22.7	13.4	20.8
Clothing	.8	24.1	56.6	133.6	195.9	212.1	171.5	133.2	101.3	84.2	74.1	71.7	77.4	76.2
Housing	[1] 1.4	[1] 3.0	[1] 4.3	5.9	22.0	33.5	58.6	61.9	60.6	60.9	58.8	57.8	56.5	52.7
Fuel and light	[1] 1.3	[1] 1.7	[1] 21.1	37.5	52.2	65.3	94.4	74.2	66.4	66.1	65.3	55.2	60.6	68.3
Furniture and furnishings	1.8	12.8	50.7	128.6	182.1	207.2	206.6	175.9	150.2	133.7	126.0	120.1	121.6	123.8
Miscellaneous	[1] .2	14.5	42.5	67.3	82.0	83.8	91.5	93.0	88.0	87.4	84.6	81.1	80.9	79.5
Total	[1] .2	14.6	42.5	75.0	98.7	109.4	98.7	77.6	71.3	66.2	56.9	56.8	55.0	56.8

Seattle, Wash.

Food	[1] 2.8	8.5	38.7	72.5	80.9	102.3	.54.1	27.1	34.9	30.5	27.1	30.0	31.6	33.9
Clothing	1.2	11.3	36.4	88.0	154.5	173.9	160.5	128.7	93.5	88.7	79.8	78.0	73.9	74.2
Housing	[1] 2.4	[1] 5.4	[1] .6	44.3	71.5	74.8	76.7	74.8	71.3	69.2	67.0	64.7	63.4	63.1
Fuel and light	[1] .2	2.9	23.9	51.8	63.8	65.8	78.7	78.7	77.3	69.0	67.5	64.0	62.7	59.6
Furniture and furnishings	8.5	27.4	52.3	141.5	201.0	221.2	216.4	177.2	151.7	149.9	142.4	137.3	134.7	136.1
Miscellaneous	[1] 1.0	7.4	31.1	58.5	86.8	90.4	95.5	105.5	105.5	102.6	99.2	97.6	97.4	96.4
Total	[1] 1.0	7.4	31.1	69.9	97.7	110.5	94.1	80.2	75.5	71.5	67.4	67.0	66.5	66.7

Washington, D. C.

Food	0.6	15.7	61.1	90.9	[3] 93.3	108.4	79.0	47.4	59.1	51.1	40.8	44.3	42.5	49.2
Clothing	3.7	23.2	60.1	112.6	165.9	184.0	151.1	115.9	89.8	87.1	79.8	77.5	75.5	74.8
Housing	[1] 1.5	[1] 3.7	[1] 3.4	[1] 1.5	5.4	15.6	24.7	28.8	29.1	30.4	31.3	31.4	32.1	32.6
Fuel and light	[2]	7.3	24.9	40.9	42.8	53.7	68.0	57.1	57.6	49.9	47.1	44.5	49.0	55.1
Furniture and furnishings	6.3	30.5	72.1	127.4	159.3	196.4	194.0	149.0	132.1	122.4	110.4	108.1	109.3	112.6
Miscellaneous	.4	15.3	44.3	55.9	62.7	68.2	73.9	72.0	70.5	75.8	73.7	73.7	73.7	72.0
Total	1.0	14.6	47.3	73.8	87.6	101.3	87.8	67.1	66.2	63.0	56.8	57.6	56.9	59.5

[1] Decrease. [2] No change. [3] Figures in this column are for November, 1919.

Table 3 shows the changes in the cost of living from December, 1917, to December, 1922, in 13 cities. The table is constructed in the same manner as the preceding one and differs from it only in the base period, and in the length of time covered.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO DECEMBER, 1922.

Atlanta, Ga.

Item of expenditure.	Per cent of increase from December, 1917, to—											
	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	19.0	18.0	27.9	34.0	12.8	[1] 8.9	[1] 5.8	[1] 7.2	[1] 11.9	[1] 10.5	[1] 12.3	[1] 8.9
Clothing	29.1	40.7	66.9	80.5	56.5	35.2	13.6	8.3	1.9	.4	3.1	2.8
Housing	14.0	14.5	32.6	40.4	73.1	78.8	77.0	75.4	72.2	68.1	63.2	62.7
Fuel and light	17.0	17.9	30.8	61.0	66.8	56.1	46.6	43.7	34.8	39.1	58.7	57.6
Furniture and furnishings	24.9	30.1	49.9	65.0	58.4	38.0	25.3	23.0	16.1	15.2	13.9	17.4
Miscellaneous	14.8	21.5	31.7	34.6	39.7	40.5	39.4	39.7	36.1	34.5	34.2	34.1
Total	19.7	23.3	37.9	46.7	38.5	25.2	20.7	18.7	13.8	13.7	13.9	15.1

Birmingham, Ala.

Food	17.7	18.3	26.5	36.4	11.9	[1] 9.1	[1] 6.2	[1] 8.5	[1] 1.0	[1] 13.1	[1] 14.5	[1] 9.9
Clothing	23.9	29.8	57.6	66.4	45.1	24.8	6.7	[1] .4	[1] 5.2	[1] 6.1	[1] 1.2	[1] 1.7
Housing	8.1	12.8	34.9	40.3	68.5	77.4	76.5	70.9	67.5	67.0	66.0	62.3
Fuel and light	22.8	31.9	39.8	55.3	74.2	54.3	53.1	44.1	29.8	25.0	40.0	49.9
Furniture and furnishings	19.4	20.2	45.1	55.6	48.1	32.0	15.0	12.0	3.0	3.3	5.4	8.9
Miscellaneous	13.8	16.3	26.8	28.7	30.4	33.8	35.9	35.5	31.8	30.4	29.6	29.6
Total	17.0	19.8	34.3	41.9	33.3	22.1	19.6	16.2	11.0	10.7	11.4	13.2

Cincinnati, Ohio.

Food	15.3	18.1	22.9	38.7	10.3	[1] 7.4	[1] 2.2	[1] 8.3	[1] 12.4	[1] 8.9	[1] 12.7	[1] 10.4
Clothing	33.8	48.3	84.2	96.7	73.5	49.0	22.6	13.9	6.7	4.9	5.5	5.5
Housing	.2	.8	12.8	13.6	25.0	27.6	28.2	28.5	30.3	31.0	33.6	35.2
Fuel and light	10.0	5.6	11.0	26.9	34.1	15.7	15.6	42.4	35.6	35.2	58.2	61.0
Furniture and furnishings	25.7	30.5	51.1	75.5	66.7	39.7	25.2	22.3	16.7	15.8	15.7	17.2
Miscellaneous	20.4	21.8	40.3	47.6	53.4	52.3	48.2	47.3	44.4	44.0	43.6	42.7
Total	17.3	21.1	35.2	47.1	34.7	21.7	18.3	15.3	11.8	12.7	12.5	13.8

Denver, Colo.

Food	20.0	20.7	26.0	41.5	7.9	[1] 13.1	[1] 7.8	[1] 8.8	[1] 17.6	[1] 14.2	[1] 17.2	[1] 9.0
Clothing	40.1	53.2	82.1	96.8	78.3	53.9	33.7	27.7	18.3	15.3	15.9	16.6
Housing	12.8	21.8	33.5	51.9	69.8	76.9	80.1	82.6	84.4	84.8	85.0	86.9
Fuel and light	8.1	8.4	19.6	22.3	47.1	37.5	40.0	39.7	33.1	32.8	41.4	40.7
Furniture and furnishings	22.6	31.3	46.3	60.2	58.9	42.5	32.5	27.9	21.1	20.4	20.0	21.2
Miscellaneous	14.8	17.7	32.3	35.4	38.8	42.8	44.1	43.1	40.2	38.1	37.7	37.6
Total	20.7	25.3	38.2	50.3	38.7	26.9	26.1	24.5	18.5	18.8	18.1	21.6

Indianapolis, Ind.

Food	17.8	16.4	28.2	49.0	11.0	[1] 10.1	[1] 2.1	[1] 8.4	[1] 13.4	[1] 9.9	[1] 13.2	[1] 11.1
Clothing	32.4	40.1	73.8	87.9	72.3	45.8	21.5	16.2	10.9	7.9	8.3	8.6
Housing	1.6	2.6	11.6	18.9	32.9	37.4	41.4	43.8	42.2	41.3	41.7	44.1
Fuel and light	19.8	16.7	27.3	45.6	60.3	49.4	47.5	42.5	34.8	44.9	71.3	73.4
Furniture and furnishings	18.9	24.8	48.4	67.5	63.0	35.3	25.0	22.5	13.9	13.7	14.2	16.7
Miscellaneous	21.9	26.8	38.2	40.5	47.5	47.4	46.5	46.2	45.8	45.4	46.0	46.7
Total	19.1	21.1	36.5	50.2	37.6	23.9	22.6	19.3	15.3	16.4	17.1	18.8

[1] Decrease.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO DECEMBER, 1922—Continued.

Kansas City, Mo.

Item of expenditure.	Per cent of increase from December, 1917, to—											
	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	17.3	15.1	24.5	44.9	10.2	[1] 8.3	[1] 4.3	[1] 6.6	[1] 5.7	[1] 3.5	[1] 6.1	[1] 2.0
Clothing	40.7	44.7	89.9	104.5	76.3	52.3	27.9	24.1	17.4	15.9	14.7	14.6
Housing	5.4	6.7	26.0	29.4	63.9	65.0	66.2	69.7	64.8	59.4	57.8	61.4
Fuel and light	18.0	9.6	27.5	35.2	55.1	43.3	43.7	42.6	36.0	36.3	47.1	40.2
Furniture and furnishings	31.1	37.9	61.8	73.0	68.7	50.0	32.8	26.2	15.2	11.6	10.3	12.1
Miscellaneous	15.6	20.8	31.5	37.1	40.3	40.4	38.2	37.6	33.1	32.3	32.4	33.3
Total	19.6	20.6	38.2	51.0	39.5	27.3	23.9	22.5	15.3	15.0	14.2	16.2

Memphis, Tenn.

Food	20.3	22.7	28.4	38.8	7.0	[1] 14.2	[1] 9.2	[1] 11.2	[1] 16.1	[1] 15.1	[1] 17.7	[1] 14.9
Clothing	27.7	38.3	66.2	77.5	59.0	36.1	20.2	15.3	9.3	7.3	7.0	6.7
Housing	[2]	8.2	23.1	35.9	66.2	79.7	77.7	77.3	75.5	74.8	73.9	72.5
Fuel and light	26.8	23.4	34.1	49.7	105.4	64.5	66.1	67.1	61.8	56.3	70.4	69.2
Furniture and furnishings	25.4	30.7	53.2	67.1	53.9	29.9	19.2	14.7	8.9	6.8	7.8	12.2
Miscellaneous	16.1	20.9	28.3	38.8	43.2	42.9	42.2	42.3	39.9	37.8	37.8	37.4
Total	18.3	23.3	35.2	46.4	39.3	26.7	25.1	23.2	19.2	18.2	17.9	18.6

Minneapolis, Minn.

Food	17.7	21.4	34.1	50.0	13.0	[1] 7.9	[1] 3.5	[1] 4.9	[1] 10.0	[1] 6.0	[1] 9.9	[1] 5.3
Clothing	33.5	40.1	67.0	76.7	63.6	41.0	18.4	14.3	9.7	7.9	6.0	6.5
Housing	[1] 1.1	[1] 2.0	8.0	10.7	36.8	39.0	44.0	46.7	46.7	44.6	46.2	46.8
Fuel and light	14.7	13.4	22.4	36.9	60.3	52.8	50.5	50.2	43.7	43.7	44.8	47.0
Furniture and furnishings	18.1	23.6	45.6	65.5	65.8	43.3	30.5	27.9	21.9	21.4	21.3	22.5
Miscellaneous	12.3	15.9	25.4	31.3	37.6	37.9	37.3	37.4	34.5	32.6	32.5	32.6
Total	15.8	18.8	32.7	43.4	35.7	23.7	21.6	20.7	17.0	17.3	15.9	18.0

New Orleans, La.

Food	16.6	17.4	21.1	28.6	10.7	[1] 10.7	[1] 6.4	[1] 9.3	[1] 12.0	[1] 12.8	[1] 13.7	[1] 10.5
Clothing	36.8	48.8	83.2	94.9	69.4	45.0	29.2	24.9	18.9	15.6	15.4	16.2
Housing	[2]	.1	10.8	12.9	39.7	46.7	49.5	57.9	58.2	58.5	58.7	54.7
Fuel and light	19.7	20.8	24.7	36.3	41.5	29.2	36.2	40.4	31.8	33.4	30.7	38.5
Furniture and furnishings	23.8	30.0	57.7	75.9	63.9	47.7	30.7	28.5	20.8	17.9	17.7	26.2
Miscellaneous	15.9	17.5	35.1	42.8	57.1	58.2	61.0	60.2	59.1	58.6	55.6	51.9
Total	17.9	20.7	33.9	41.9	36.7	23.8	23.8	22.7	19.9	18.9	17.8	18.6

Pittsburgh, Pa.

Food	18.8	16.2	25.1	36.5	14.3	[1] 8.8	[1] 3.0	[1] 5.6	[1] 14.4	[1] 12.2	[1] 11.7	[1] 5.4
Clothing	35.9	45.3	82.8	91.3	75.4	50.7	27.2	23.6	19.3	17.3	14.0	13.1
Housing	7.6	13.5	15.5	34.9	35.0	55.5	55.5	55.3	55.3	56.7	56.7	56.7
Fuel and light	9.2	9.4	9.8	31.7	64.4	59.8	55.6	66.2	66.0	66.0	73.0	72.8
Furniture and furnishings	26.3	34.1	63.1	77.4	78.1	58.2	36.2	31.6	23.7	20.1	22.0	25.1
Miscellaneous	16.3	16.7	28.3	41.2	46.3	48.6	47.6	48.0	44.4	43.4	42.8	42.8
Total	19.8	21.8	36.2	49.1	39.3	27.7	24.4	22.8	17.4	17.8	17.6	20.1

[1] Decrease. [2] No change.

TABLE 3.—CHANGES IN COST OF LIVING IN 13 CITIES FROM DECEMBER, 1917, TO DECEMBER, 1922—Concluded.

Richmond, Va.

Item of expenditure.	Per cent of increase from December, 1917, to—											
	Dec., 1918.	June, 1919.	Dec., 1919.	June, 1920.	Dec., 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	20.5	20.6	23.1	36.1	11.9	[1]7.4	[1]1.0	[1]2.9	[1]10.2	[1]7.8	[1]10.8	[1]6.3
Clothing	33.8	42.3	78.6	93.6	69.0	43.8	24.2	21.2	15.9	12.9	10.6	10.6
Housing	1.0	3.6	9.8	12.5	25.9	29.4	33.0	34.1	34.2	34.5	35.4	35.3
Fuel and light	11.8	11.4	18.7	36.1	62.2	47.1	46.7	46.8	36.7	33.4	44.5	54.2
Furniture and furnishings	26.3	28.6	55.9	75.4	70.0	48.8	36.0	33.0	28.1	27.6	27.5	29.4
Miscellaneous	9.0	13.5	24.0	32.4	36.0	38.7	38.4	38.4	35.5	34.7	34.6	33.5
Total	17.9	20.6	32.0	43.8	33.3	20.2	19.5	18.3	12.9	13.2	12.1	14.4

St. Louis, Mo.

Food	18.0	16.1	26.2	46.2	8.8	[1]10.1	[1]4.5	[1]11.6	[1]14.0	[1]12.1	[1]13.8	[1]9.5
Clothing	32.4	39.3	78.1	89.7	70.0	43.8	21.2	17.2	9.1	7.9	6.2	6.3
Housing	2.7	3.8	16.8	29.8	42.4	52.5	61.2	63.8	64.1	65.7	67.0	68.0
Fuel and light	4.8	3.7	8.2	19.6	42.6	30.9	29.5	33.4	30.9	32.3	44.3	48.9
Furniture and furnishings	21.8	32.5	52.9	73.1	70.2	43.5	25.1	19.2	14.3	12.8	12.3	14.9
Miscellaneous	14.5	15.7	30.3	37.6	43.2	42.1	42.0	40.6	34.7	33.2	33.1	33.4
Total	16.7	17.9	34.2	48.9	35.4	23.1	22.0	18.5	14.7	15.1	15.0	17.0

Scranton, Pa.

Food	21.3	18.1	26.9	41.4	17.8	[1]4.0	2.8	4.1	[1]6.8	[1]6.7	[1]9.0	[1]2.1
Clothing	34.4	49.6	82.1	97.7	76.5	54.3	31.3	29.1	25.2	24.2	21.1	20.7
Housing	.5	6.2	2.4	17.2	18.5	41.5	42.2	44.6	46.6	52.8	53.1	53.6
Fuel and light	24.7	25.7	31.5	43.5	67.3	62.8	64.8	67.1	65.8	68.0	69.3	68.6
Furniture and furnishings	27.0	35.6	48.9	62.8	62.0	48.6	34.6	30.7	25.7	24.2	25.4	28.5
Miscellaneous	21.4	24.9	34.7	47.9	50.4	54.6	53.8	52.4	50.1	49.9	49.3	49.3
Total	21.9	25.0	37.1	51.5	39.1	28.2	26.3	26.3	20.4	20.9	19.4	22.4

[1] Decrease.

The following table shows the changes in the cost of living in the United States from 1913 to December, 1922. These figures are a summarization of the figures for the 32 cities which appear in the preceding tables, computed on a 1913 base.

TABLE 4.—CHANGES IN COST OF LIVING IN THE UNITED STATES, 1913 TO DECEMBER, 1922.

Item of expenditure.	Per cent of increase from 1913 (average) to—														
	Dec. 1914.	Dec. 1915.	Dec. 1916.	Dec. 1917.	Dec. 1918.	Dec. 1919.	June, 1920.	Dec. 1920.	May, 1921.	Sept., 1921.	Dec., 1921.	Mar., 1922.	June, 1922.	Sept., 1922.	Dec., 1922.
Food	5.0	5.0	26.0	57.0	87.0	97.0	119.0	78.0	44.7	53.1	49.9	38.7	41.0	39.8	46.6
Clothing	1.0	4.7	20.0	49.1	105.3	168.7	187.5	158.5	122.6	92.1	84.4	75.5	72.3	71.3	71.5
Housing	(1)	1.5	2.3	.1	9.2	25.3	34.9	51.1	59.0	60.0	61.4	60.9	60.9	61.1	61.9
Fuel and light	1.0	1.0	8.4	24.1	47.9	56.8	71.9	94.9	81.6	80.7	81.1	75.8	74.2	83.6	86.4
Furniture and furnishings	4.0	10.6	27.8	50.6	113.6	163.5	192.7	185.4	147.7	124.7	118.0	106.2	102.9	102.9	108.2
Miscellaneous	3.0	7.4	13.3	40.5	65.8	90.2	101.4	108.2	108.3	107.8	106.8	103.3	101.5	101.1	100.5
Total	3.0	5.1	18.3	42.4	74.4	99.3	116.5	100.4	80.4	77.3	74.3	66.9	66.6	66.3	69.5

[1] No change.

WAGES AND HOURS OF LABOR.

Wage Rates on American and Foreign Cargo Steamships, 1922.

THE American Steamship Owners' Association has furnished the Bureau of Labor Statistics with statements of wage rates paid on 60 cargo steamships, of which 28 were foreign.

The nationality and dates of report are as follows:

NATIONALITY OF VESSELS AND DATE OF REPORTS.

Nationality.	Number of vessels.	Date of report.
United States:		
Shipping Board	17	July 24 to Sept. 7.
Other	15	July 31 to Aug. 22.
Belgian	2	Aug. 12 and 17.
British	8	Aug. 10 to Sept. 11.
Danish	3	Aug. 12 and 14.
Dutch	7	Aug. 8 to Sept. 5.
French	1	Aug. 12.
Spanish	5	June 9 to July 12.
Swedish	2	Aug. 25.
Total	60	

From these reports a table has been prepared by the Bureau of Labor Statistics showing the different rates paid and the number of vessels paying the specified rates.

Braces are used when any vessel pays more than one rate.

The wage rates for foreign vessels are stated in the reports both in the money of the country and in United States money. The United States money equivalent only is here presented.

The money equivalent varies slightly in the different reports as follows:

Belgian franc	$0.08⅓
British pound	$4.45– 4.47
Danish kroner	.20
Dutch florin	.39– .40
French franc	.09
Spanish peseta	.1583– .16
Swedish krona	.265
Hongkong tael	.58
Hongkong dollar	.54
Indian rupee	.29– .30

A separate tabulation is given for the rates for Lascars and Chinese.

A few minor and infrequent occupations are omitted from this table.

RATES OF WAGES PER MONTH AND NUMBER OF VESSELS REPORTED AS PAYING SAME, 1922.

Occupation.	American.				Belgian.		British.		Danish.		Dutch.		French.		Spanish.		Swedish.	
	Shipping Bd.		Other.															
	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.
First mates	1	$135	1	$135.00	2	$63.70	1	$91.23	1	$145.00	1	$84.63	1	$63.99	1	$88.00	1	$106.00
	1	150	1	140.00			1	95.89	2	155.00	1	108.00			1	94.98	1	113.95
	1	155	4	150.00			1	100.13			1	112.32			1	96.00		
	6	160	7	165.00			1	104.58			1	115.20			1	118.73		
	8	165	1	170.00			1	109.27			1	128.00			1	120.00		
			1	175.00			1	118.46			1	134.00						
							1	138.26			1	124.80						
							1	151.64										
Second mates	1	115	1	115.00	2	58.24	2	73.43	3	115.00	1	76.05	1	49.50	1	63.32	2	87.41
	1	130	1	125.00			1	80.28			1	78.00			2	64.00		
	1	135	4	130.00			1	89.00			1	79.20			1	79.15		
	7	140	8	140.00			1	93.66			1	81.90			1	80.00		
	7	145	1	145.00			1	96.11			1	84.24						
							1	122.65			2	96.00						
							1	127.11										
Third mates	1	95	1	95.00	2	50.96	2	57.85	2	80.00	1	50.70	.....	.....	.....	.....	1	54.33
	1	110	1	105.00			1	64.67			1	52.00					1	66.25
	2	120	2	110.00			1	77.88			1	59.67						
	5	130	2	115.00			1	78.05			1	61.20						
	7	125	8	125.00			1	78.23			1	66.30						
	1	140	1	130.00			1	102.58			2	68.00						
							1	104.81										
Radio operators	17	90	3	80.00	.....	.....	1	49.17	3	77.00	2	68.00	1	42.75	.....	.....	.....	.....
			3	85.00			1	53.52										
			9	90.00														
Boatswains	1	55	5	50.00	2	31.85	1	51.18	3	50.00	1	50.70	1	34.20	1	30.87	1	49.03
	15	65	1	52.50			1	51.29			1	52.00			1	31.20	1	51.68
	1	70	1	55.00			1	57.85			1	54.00						
			4	65.00			1	60.21			1	56.55						
			1	70.00							1	62.40						
											1	70.00						
											1	74.00						

RATES OF WAGES PER MONTH AND NUMBER OF VESSELS REPORTED AS PAYING SAME, 1922—Continued.

Occupation.	American.				Belgian.		British.		Danish.		Dutch.		French.		Spanish.		Swedish.	
	Shipping Bd.		Other.															
	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.
Able seamen	1	$45.00	4	$40.00	2	$27.00	1	$44.50	3	$36.00	1	$44.85	1	$29.70	1	$21.60	2	$42.40
	1	47.50	2	42.00			1	44.60			1	46.00			1	26.12		
	15	55.00	1	45.00				46.83			1	50.70			1	26.40		
			6	47.50				44.60			2	52.00			1	31.66		
			2	50.00			1	45.48			1	52.00			1	32.00		
								53.52				54.00						
								54.84										
							1	53.40										
Ordinary seamen	1	35.00	4	30.00			1	24.53			1	25.35			1	19.20	1	29.15
	14	40.00	5	35.00			1	31.22			1	26.00			1	23.75		31.80
	1	45.00	2	40.00			1	44.50			1	26.52			1	24.00	1	29.15
			1	47.50							2	30.00			1	28.49		34.45
											1	46.00			1	28.80		
Chief engineers	1	220.00	1	185.00	2	87.36	1	104.58	3	190.00	1	134.00	1	66.60	1	128.00	1	127.20
	8	230.00	1	235.00			1	117.93			1	146.25			1	158.30	1	153.70
	7	240.00	3	250.00			1	126.83			1	157.95			1	160.00		
	1	250.00	1	255.00			1	136.03			1	164.00			1	174.13		
			2	260.00			1	158.33			1	185.25			1	176.00		
			2	285.00			1	158.69			2	190.00						
			5	295.00			1	196.24										
							1	205.16										
First assistant engineers	1	130.00	1	135.00	2	58.24	1	91.23	1	145.00	1	92.00	1	54.90	1	88.00	1	78.18
	1	150.00	1	140.00			1	100.13	2	155.00	1	97.20			1	94.98	1	91.43
	2	155.00	4	150.00			1	104.58			1	99.45			1	96.00		
	7	160.00	7	165.00			1	104.81			2	105.30			1	118.76		
	6	165.00	1	170.00			1	118.19			1	120.00			1	120.00		
			1	175.00			1	118.46			1	128.00						
							1	138.26										
							1	147.18										
Second assistant engineers	1	115.00	2	115.00	2	50.96	1	71.20	3	120.00	1	64.35	1	45.00	1	63.32	1	58.30
	1	130.00	1	125.00			1	73.43			1	66.00			2	64.00	1	71.55

	1	135.00	3	130.00			1	80.28			1	66.60			1	79.15		
	7	140.00	8	140.00			1	95.89			1	72.15			1	80.00		
	7	145.00	1	145.00			1	96.11			1	77.20						
							1	100.13			1	80.00						
							1	113.73			1	96.00						
							1	118.19										
Third assistant engineers	1	95.00	1	95.00	2	50.96	2	57.85	2	80.00	1	32.00						
	1	120.00	1	105.00			1	64.67			1	36.00						
	7	125.00	2	115.00			1	78.05			1	59.67						
	6	130.00	8	125.00			1	78.23			1	62.40						
	1	140.00	1	130.00			1	91.23			1	64.00						
							1	93.66			1	68.00						
							1	102.58										
							1											
Oilers	1	50.00	2	50.00	2	30.58	1	48.95			1	52.00			1	33.60	2	45.05
	1	55.00	2	52.50				57.85			1	55.58			1	37.99		
	15	65.00	10	55.00														
			1	60.00														
Firemen	1	47.50	4	40.00	2	29.12	1	46.73	3	37.00	1	46.80	1	32.40	1	24.00	2	42.40
	1	50.00	2	45.00			1	{ 55.63			1	48.00			1	27.70		
	15	57.50	1	47.50				{ 57.85			1	{ 48.00			1	28.00		
			7	50.00								{ 54.00			1	{ 28.49		
			1	55.00							1	56.55			1	{ 33.24		
															1	33.60		
Coal passers	1	35.00	2	30.00					3	37.00	1	40.00	1	29.70	1	23.75	2	29.15
	1	40.00	2	40.00								{ 36.00			1	24.00		
	5	50.00									1	{ 44.00			1	28.80		
												{ 46.00						
Stewards	1	100.00	1	95.00	2	43.68	2	64.53	3	99.00	1	35.10	1	33.75	1	33.24	1	74.20
	15	105.00	3	100.00			1	66.90			1	56.55			1	33.60	1	82.15
	1	115.00	5	105.00			1	73.43			1	58.50			1	37.99		
			6	110.00			1	73.59			1	60.00						
							1	78.23			1	68.00						
							1	102.58			1	70.00						
							1	104.81			1	76.00						
Cooks	1	65.00	4	80.00	2	43.68	1	60.08	3	50.00	1	52.65	1	36.00	2	14.25	1	51.68
	4	70.00	9	90.00			1	64.67			1	60.00			1	{ 14.40	1	54.33
	11	90.00	1	95.00			1	68.98			2	62.40				{ 17.60		
	1	100.00									1	64.00			1	24.00		
											1	70.00			1	33.24		
															1	33.60		

RATES OF WAGES PER MONTH AND NUMBER OF VESSELS REPORTED AS PAYING SAME, 1922—Concluded.

Occupation.	American.				Belgian.		British.		Danish.		Dutch.		French.		Spanish.		Swedish.	
	Shipping Bd.		Other.															
	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.	Number of vessels.	Wages per month.
Second cooks	1	$45.00	3	$65.00	2	$30.58	1	$37.83	.....	.....	1	$15.60	1	$27.00	.....	.....	1	$33.13
	1	65.00	7	70.00			1	46.83			2	20.00						
	9	70.00					1	51.18			1	15.60 27.30						
											1	31.20						
											2	36.00						
Waiters	1	50.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	27.00	1	$16.00 12.80	.....	.....
															1	15.83 17.41		
															1	16.00 17.60		
Mess boys	1	25.00	1	20.00	.....	.....	.....	.....	3	$20.00	1	10.14 10.53 11.70	1	10.80 13.50	.....	.....	1	7.95
	1	26.50	1	26.50													1	11.93 18.55
	1	30.00	11	30.00														
	14	35.00									1	11.70						
											1	14.00						
											1	15.60						
											1	24.00						
Messmen	1	32.50	1	30.00	.....	.....	1	33.38	.....	.....	1	16.00	.....	.....	1	7.20 12.00	.....	.....
	1	35.00	1	32.50														
			2	35.00											1	14.25 17.42		
			9	40.00														
Carpenters	3	70.00	4	50.00	.....	.....	1	55.63	3	41.00	2	56.55	1	33.30	1	24.00	1	49.03
			1	55.00			1	55.75			1	64.00			1	29.29	1	51.68
			2	57.50			1	57.98			1	70.00			1	29.60		

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			2	65.00			1	64.53							1	35.20		
			4	70.00			1	64.67							1	37.99		
							1	64.82										
							1	75.82										
Wipers	7	50.00	1	30.00							1	35.10			1	20.40		
			4	35.00											1	23.75		
			5	40.00														
Water tenders	6	65.00	1	50.00											1	38.40		
			1	55.00														
Utility men	1	50.00	2	50.00							1	14.00						
											1	16.00						
Quartermasters			4	45.00			1	66.90			1	52.65	1	40.50	1	26.40		
			1	52.50											1	37.99		
															1	38.40		
Deck engineers			3	60.00							1	40.00	1	34.65	1	37.99		
			1	70.00							1	52.00						
											1	58.00						
Storekeepers			4	50.00			1	71.36							1	27.70		
			3	55.00											1	28.00		
Second stewards							1	37.83										
							1	46.83										
							1	50.06										
							1	80.28										
Donkey men							1	51.18			1	50.70			1	30.87	1	49.03
															1	31.20		

RATES OF WAGES PER MONTH AND NUMBER OF VESSELS REPORTED AS PAYING SAME TO LASCAR AND CHINESE EMPLOYEES.

British vessels.

Occupation.	Number of vessels.	Wages per month.
Lascars.		
Carpenters	1	$36.00
Donkey men	3	8.12
	2	10.50
Oilers	1	7.54
	1	9.60
Stewards	1	27.00
Cooks	2	21.75
	1	23.20
	2	25.50
Second cooks	2	11.60
	1	13.05
	1	13.50
	1	22.50
Messmen	1	10.50
Quartermasters	2	15.95
	1	16.50
	1	20.70
Storekeepers	1	7.25
	1	10.80
	1	13.50
Trimmers	2	5.22
	1	7.20
Mess boys	1	9.86
Coal passers	1	5.22
	1	7.20
Waiters	2	10.15
Mess boys	1	6.67
		10.15
	1	10.50
Firemen	1	6.67
		13.50
	2	6.67
	1	9.00
Seamen	1	9.00
		10.50
	1	11.10
		13.20
		22.50
		7.25
		6.38
		6.09
		5.80
		7.25
		6.67
	1	6.38
		5.80
		5.22
		5.22
		5.80
	1	6.38
		6.67
		6.96
		7.25
Lascars—Concluded.		
Seamen	1	$7.50
		6.60
	1	7.50
		8.40
		9.30
Cassab	1	8.12
	2	8.12
		8.70
	1	8.70
	1	10.50
Tapass (cleaners)	2	6.38
	1	6.60
	1	6.67
		6.38
	1	8.70
Serang (boatswains)	3	17.40
	1	18.00
	1	22.50
Tindal (boatswain's mates)		8.12
	2	8.70
		10.15
		10.73
		9.00
	1	11.10
		17.11
	1	10.73
		10.15
		11.10
	1	13.20
		13.80
Chinese.		
Cooks	1	12.76
Donkey men	1	22.04
		22.91
		20.88
		22.04
Firemen	1	22.91
		23.49
		30.16
Storekeepers	1	22.91
Oilers	1	22.91

Dutch vessels.

Chinese.		
Firemen	1	$37.05
		39.00
		42.90
		40.00
	1	42.00
		44.00
		48.00
		40.80
		42.00
	1	44.00
		46.00
		50.00
Chinese—Concluded.		
Oilers	1	$37.05
	2	42.00
Mess boys	1	10.80
		10.80
	1	12.80
		14.80

Wages in Machine Shops in Cleveland District.[1]

THE following averages, taken from wage statistics for the Cleveland, Ohio, district, are fairly representative of the averages in the largest districts of the country represented in the National Metal Trades Association. The comparison is given to indicate the changes in wages applied to the more important classifications. The maximum and minimum hiring rates at present are 20 per cent above to 20 per cent below the average. In 85 per cent of all reports, the minimum or maximum rates paid do not vary over 10 per cent from the above averages in Cleveland.

AVERAGE HOURLY RATES OF WAGES FOR SPECIFIED OCCUPATIONS IN MACHINE SHOPS, 1915, 1920, 1922, and 1923.

Occupation.	Average hourly rate, February, 1915.	Average hourly rate at peak, 1920.	Average hourly rate, January 1, 1922.	Average hiring rate, January, 1923.
Toolmakers	$0.40	$0.79	$0.61	$0.65
Machinists	.35	.72	.50	.575
Lathe hands, under 24-inch	.325	.65	.45	.515
Lathe hands, over 24-inch	.375	.61	.50	.565
Planer hands, under 36-inch	.30	.72	.45	.52
Planer hands, larger	.35	.705	.50	.57
Grinders, rough	.25	.50	.30	.36
Scrapers	.30	.69	.50	.55
Floor hands	.35	.65	.50	.51
Bench hands	.30	.62	.35	.40
Drill press, ordinary	.25	.54	.30	.40
Drill press, radial	.30	.59	.35	.45
Boring mill	.375	.72	.55	.56
Screw machine, hand	.25	.555	.35	.46
Screw machine, automatic	.30	.65	.40	.50
Turret lathe	.325	.65	.40	.50
Milling machine, hand	.25	.56	.40	.43
Milling, plain	.275	.63	.45	.50
Milling, universal	.30	.58	.50	.58
Blacksmiths, forgemen	.30	.70	.50	.60
Blacksmiths, hammermen	.30	.71	.50	60
Patternmakers, wood	.35	.92	.70	.75
Helpers	.25	.54	.30	.40
Polishers	.30	.60	.45	.54
General labor	.20	.45	.30	.38

[1] Iron Trade Review, Jan. 4, 1923, p. 29.

Weekly Wages in Certain Occupations in Colorado.

THE following wage data are taken from the eighteenth biennial report of the Bureau of Labor Statistics of Colorado, 1921-1922:

WEEKLY WAGES IN CERTAIN OCCUPATIONS IN COLORADO IN 1918, 1920, AND 1922.

Occupation.	Weekly wages.		
	1918	1920	1922
Department stores.			
Male workers:			
Buyers	$80.00	$135.00	$125.00
Salesmen	18.00	25.00	22.50
Floor manager	17.50	27.50	25.00
Porters	14.00	22.00	18.50
Wagon boys	9.00	18.00	15.00
Female workers:			
Saleswomen	8.00	20.00	17.50
Elevator conductors	12.00	22.00	20.00
Wrappers	7.00	12.00	12.00
Cash girls	5.00	10.00	10.00
Garment manufacturing.			
Male workers:			
Cutting	45.00	50.00	45.00
Shipping	15.00	18.00	20.00
Salesmen	25.00	30.00	30.00
Female workers:			
Forewomen	22.00	25.00	25.00
Ironers	20.00	20.00	22.50
Machine girls	18.00	18.00	24.00
Markers	12.00	18.00	22.00
Laundries.			
Male workers:			
Drivers	20.00	29.00	30.00
Engineers	25.00	35.00	37.50
Foremen	24.00	35.00	30.00
Markers	30.00	30.00	26.00
Washers	14.00	22.00	25.00
Wringers	15.00	20.00	22.50

Occupation.	Weekly wages.		
	1918	1920	1922
Laundries—Concluded.			
Female workers:			
Finishers	$9.00	$15.00	$15.00
Ironers	9.00	15.00	15.00
Mangle girls	8.00	13.00	12.50
Office	12.00	16.00	12.50
Seamstresses	12.00	15.00	15.00
Sorters	12.00	18.00	15.00
Starchers	8.00	16.00	15.00
Washers	13.50	16.00	15.00
Wrappers	12.00	15.00	14.50
Restaurants.			
Male workers:			
Cooks	20.00	40.00	35.00
Second cooks	14.00	22.00	27.50
Dishwashers	10.00	15.00	17.50
Bus boys	12.00	13.50	13.50
Store room	20.00	25.00	24.00
Waiters	12.00	15.00	17.50
Female workers:			
Cooks	18.00	20.00	20.00
Second cooks	12.00	15.00	15.00
Dishwashers	9.00	12.00	12.00
Waitresses	9.00	12.00	14.00
Counters	10.00	14.00	17.50
Pantries	8.00	14.00	17.50
Cashiers	8.00	12.00	15.00

International Comparison of Real Wages.

SINCE the termination of the war the industrial countries of the world have been engaged in a fierce competitive struggle for a share in the world's trade. It is therefore only natural that American manufacturers have of late been keenly interested in wage rates abroad, since in the case of most industrial products wages form the principal factor in the cost of production. Consequently the United States Bureau of Labor Statistics, being charged with the duty of collecting and issuing information concerning the levels of wages and prices at home and abroad, has been in receipt of an unusually large number of inquiries as to how wages at home compare with wages in some foreign country. These inquiries usually take some such form as: "How do the wages of machinists in the United States compare with the wages of machinists in Germany?" To such an inquiry the bureau may cautiously respond: "In May, 1922, the union time rate of a machinist was, on the average, 77 cents per hour in the United States and 21 marks in Germany."

In most instances the inquirer is, however, not satisfied with this reply and will renew his question with: "Thank you for the information, but I want to know what are the wages of the German machinists in American money. Will you please give me a plain answer to a plain question?"

When the inquirer is told that several plain answers, but unfortunately all of them different, can be given to the plain question even with the data which the bureau has on hand, and that still other answers could be given were better data available, he is disappointed and forms an uncomplimentary opinion about the efficiency of Government research agencies in general and that of the Bureau of Labor Statistics in particular.

The above situation—applied to statistical organizations in Great Britain, but equally applicable to this bureau—is cited in an article, "Comparative real wages in Great Britain, France, Germany, Belgium, and the United States," by John Hilton, director of statistics of the British Ministry of Labor, published on October 26, 1922, in the "Reconstruction in Europe" supplement (section 9) to the Manchester Guardian Commercial. The inquirer, it is stated, and with him the general public, makes the great mistake of assuming that there exists in every civilized country a Government agency in possession of accurate, up-to-date information concerning current wages and prices, and that the data are everywhere collected, collated, and presented in a manner that insures comparability with the corresponding data for other countries. That, unfortunately, is not the case. As a rule the information needed to attempt a comparison of either nominal (money) or real wages for a given trade or occupation is either wholly lacking or too imperfect for use. Until the various countries come to recognize that labor statistics are of importance and agree to collect, compile, and publish them in close accordance with some agreed method, this initial disability will continue.

Difficulties in Comparing Wages in Different Countries.

THE writer makes an attempt to indicate some of the handicaps, problems, and pitfalls that lie in wait for any one desirous of giving a conscientious answer to a question of the above order. To make the discussion definite and practical he takes as the question to be answered: "What were the comparative wages in April-May, 1922, of bricklayers, carpenters, machinists, hand compositors (book), and unskilled metal workers in the United Kingdom, Germany, France, Belgium, and the United States?"

These five occupations and five countries were not chosen haphazard, but were rather carefully selected. They are occupations and countries for which the information available is "less than usually defective." The rather indefinite period April-May, 1922, was taken because corresponding data of a varied kind for a number of countries are seldom available for any recent date or for any particular day or week. Also it was necessary to use a somewhat elastic period dating prior to the latest depreciation of the German mark, "for since that time the movements in prices and wages in Germany have been so rapid as to overwhelm the statistician in his endeavor to record them."

In describing the difficulties encountered in making international comparisons of wages, the author says:

In attempting comparisons even of nominal money wages difficulties arise from the fact that in some countries excellent information is obtainable as to the standard time rates of wages, while in others the best information relates to average earnings. Rates and earnings can not, of course, be treated as though they were directly comparable. Occupations, again, are not always quite the same in one country and another; while working conditions may differ to a quite material degree. These difficulties can, however, in many cases, be satisfactorily met.

But when it is sought to make a comparison of real wages, i. e., the real value in terms of goods and services of the worker's reward for a given period or amount of labor, the difficulty is immensely increased in that, as well as the comparable wage information, there is needed comparable information as to what the money wages will buy. True, most countries of industrial importance issue statistics of price changes, but the differences between one country and another in the method of collecting and compiling such statistics are great. There are issued in many countries index numbers of the movements in both wholesale and retail prices; and it may be regarded in some quarters as an open question whether international comparisons of real wages should be computed with reference to the wholesale or the retail price changes. For the moment, we shall assume that retail price index numbers are deemed to be the more appropriate.

The accuracy of retail price index numbers depends, first, upon the extent and accuracy of the price returns received by the statistical bureau; secondly, upon the accuracy of the information as to the relative consumption of each commodity or service, information necessary for "weighting" purposes; and, thirdly, upon the method employed in working up the material into an index number. In these respects the index numbers of the five countries with which we are here concerned exhibit marked differences. The British index number is calculated upon a prewar standard budget, arrived at by taking the average of some 2,000 working-class family budgets obtained in 1904, supplemented by the results of an inquiry into the cost of living in 1912. The United States index is calculated upon a war-time standard budget based on records collected from some 12,000 working-class families in 1917 and 1918. In the German and French index numbers the relative importance of the various commodities is determined not with reference to actual family budgets but from a hypothetical budget intended to reflect a postwar standard. The Belgian index number is not based on any family budget, either hypothetical or typical, and the consideration given to the relative importance of the various items entering into working-class consumption is somewhat arbitrary.

Comparability of the retail price index numbers is further affected by differences in the extent to which the budget employed covers the whole range of items that enter into the cost of living of working-class families. House rent, for instance, does not appear in the Belgian list of commodities. Many other differences of material and method could be indicated, but enough has been said to show that caution must be observed in weighing the results of international wage comparisons in which indices of movements in prices have to be employed.

Methods of Making International Comparisons.

NOTWITHSTANDING these dissimilarities in material and method, it is stated, "interesting and perhaps useful conclusions can be reached from comparisons based on such wages and prices information as is available, provided the material is handled with due thought and reasonable care."

* * * Assuming that the comparison is to be of standard time rates prevailing in similar occupations in two countries, and that the prices data used shall relate to retail prices, the answer to our question might be attempted along four lines:

(1) The money wages of the worker in one country, as paid in the currency of that country, may be converted, at the rate of exchange prevailing at the time, into the currency of the other country, and the two sums compared. The results obtained by this method, which enjoys much popularity, are almost meaningless and extremely deceptive, particularly at the present time, when the exchanges are subject to the most violent fluctuation.

(2) A comparison of the real wages obtaining in the two countries may be made by reducing the money wages in each country to their pre-war purchasing power in the ratio indicated by the published "cost-of-living" index number for the country. Were it correct to assume that a given quantity and fineness of coined gold would purchase in all countries before the war the same quantity of goods and services entering into working-class consumption, this method, subject to the reservations and qualifications mentioned above, would be statistically sound.

(3) Since, however, it is known that before the war this internal purchasing power parity did not obtain, and certain information indicating roughly what adjustments should be made in this respect is extant, a calculation can be made which allows for both the reduced purchasing power of the national currency since before the war and the internal purchasing power of that currency relative to other currencies prior to the war. This method, when it is applicable, gives, within the reservations and qualifications already noted, a valid basis for a comparison of real wages.

(4) The comparison may take the form of a statement of the number of hours which must be worked in similar occupations to earn the money required to purchase a given list of necessaries. This method sidetracks foreign exchanges, cost-of-living index numbers and pre-war purchasing power parities, and gives by far the cleanest basis for a true international comparison of real wages. The two main obstacles to its use are the differences in the typical budgets of the several countries, and the inadequacy of information as to the actual prices prevailing in the various countries for identical commodities.

Practical Application of the Various Methods.

THE rates of money wages for 48 hours' work (the hourly rate multiplied by 48 irrespective of the hours actually constituting a normal week) in the five occupations and countries mentioned above in April–May, 1922, are shown in Table 1 below in the currency in which they are paid and spent. In this and in succeeding tables the arithmetical mean of the wage rates in the five occupations is given for each country, but "it should be recognized that in the absence of figures which could be used for weighting the rates according to the relative importance in each country of the trades to which they relate the means can not be taken to represent true averages."

TABLE 1.—RATES OF MONEY WAGES FOR 48 HOURS' WORK IN SELECTED OCCUPATIONS IN FIVE COUNTRIES, APRIL–MAY, 1922.[1]

Occupation.	Great Britain.	Germany.	France.	Belgium.	United States.
	s. *d.*	*Marks.*	*Francs.*	*Francs.*	
Bricklayer	88 0	1,008	130	120.0	$60.00
Carpenter	88 0	1,003	166	116.0	54.00
Machinist	79 0	1,048	120	108.0	36.96
Compositor (bookwork)	95 0	933	144	120.0	51.00
Unskilled metal worker	61 0	987	96	84.0	14.40
Arithmetical mean	82 2	997	131	109.6	43.27

[1] The wages shown in this table are based as far as possible on minimum hourly rates fixed by collective agreement. Those for Great Britain relate to London, those for Germany to Berlin, those for France to the industrial North, those for Belgium to Brussels, Antwerp, Mons, and St. Nicholas, and those for the United States to New York City. The sources used are: Great Britain—Ministry of Labor Gazette; Germany—Wirtschaft und Statistik, No. 9, 1922, France—Bulletin du Ministère du Travail, April–June, 1922, and L'Imprimerie Française, Jan. 16, 1922; Belgium—Revue du Travail, January, March, and June, 1922; United States—MONTHLY LABOR REVIEW, March, April, and June, 1922, and Industrial Relations, Boston, Aug. 26, 1922.

If the first method of comparison described above is applied, the foreign wages shown in Table 1 must be converted into a common currency—in the article under review, into English money—at the rates of exchange current at the period to which the figures relate. The rates of exchange used in the article were: Germany, 1,286 marks;

France, 48.28 francs; Belgium, 52.54 francs; and United States, $4.43 to the pound sterling. The results are set out below in Table 2.

TABLE 2.—INTERNATIONAL COMPARISON OF MONEY WAGE RATES FOR 48 HOURS' WORK CONVERTED INTO ENGLISH CURRENCY AT THE CURRENT RATES OF FOREIGN EXCHANGE, APRIL–MAY, 1922.

Occupation.	Money wage rates.					Index numbers (Great Britain=100).				
	Great Britain.	Germany.	France.	Belgium.	United States.	Great Britain.	Germany	France.	Belgium.	United States.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*					
Bricklayer	88 0	15 8	53 6	45 8	270 11	100	18	61	51	308
Carpenter	88 0	15 8	68 9	44 2	243 10	100	18	78	50	277
Machinist	79 0	16 4	49 9	41 1	166 10	100	21	63	52	211
Compositor (book)	95 0	14 6	59 8	45 8	230 3	100	15	62	48	242
Unskilled metal worker	61 0	15 4	39 7	32 0	65 0	100	25	65	52	107
Arithmetical mean	82 2	15 6	54 4	42 9	196 4	100	19	66	51	229

This kind of comparison was legitimate enough before the war, when an effective gold standard secured a certain stability of the exchanges, and when the internal and external purchasing power parities of the various currencies were not seriously discordant, as they are at the present time. From such a comparison, in existing conditions, fantastic conclusions can be and are drawn. It can be used to "demonstrate," for example, that wages in the United Kingdom were in April–May last 5 times higher and in the United States 12 times higher than in Germany. Comparisons made on this basis are misleading and apt to be mischievous. They have a certain utility for definite purposes when used in conjunction with other material; otherwise they are meaningless.

To reach an opinion as to how the real wages of foreign workers compare with those of corresponding workers in this country [Great Britain] at the present time, the third method indicated above may be adopted. Under this method the transfer from foreign to British currency is effected without reference to the present fluctuating rates of foreign exchange. The method is roundabout. It consists of ascertaining for each country the pre-war monetary equivalent of the present money wages in that country, and comparing those pre-war equivalents in the light of such information as is available as to what retail purchasing power a given sum then represented in the several countries. For each foreign wage quoted in the table we have, in the first place, computed the sum which represented the equivalent purchasing power in the country to which it relates in 1914. This is done by dividing the wage by the coefficient of the rise in the cost of living in that country, as shown by its official index number. The sum thus arrived at has next been converted into shillings at parity of exchange. The sum resulting from this conversion has then been adjusted to the conditions of the English pre-war market by applying such indices as are available as to the relative "cost of living" [1] in the different countries in 1913. Finally, by the use of the British "cost-of-living" index, that sum is found which represents the purchasing power in this country at the date to which the figures relate of each of the foreign wage rates quoted in the table.

The cost-of-living index numbers used in the article under review were the means for April and May, 1922, except in the case of France (Paris) and the United States, for which the figures are computed quarterly. The figure for the second quarter was taken for France, and that for June, 1922, for the United States. The actual figures used were: Great Britain, 182; Germany, 3571; France, 302; Belgium, 366; United States, 167. (Pre-war=100.)

For effecting the necessary adjustment to British pre-war conditions "so as to make allowance for difference in the cost-of-living levels between country and country before the war," the only existing

[1] "Cost of living" is used here and elsewhere in the article as a contraction for "level of retail prices of commodities entering into working-class household consumption."

indexes available were those obtained in a series of investigations carried out by the Labor Department of the Board of Trade, in the various countries, in the period 1905–1909, the results of which were carried down to the year 1913 in a report issued in 1914 by the South African Government entitled "Report of the Economic Commission." The conclusion reached in the latter report (which, it is to be noted, covered food and rent only) was that the working-class cost of living in Great Britain being represented by the figure 49, the corresponding figure for France was 54, for Germany 56, for Belgium 45, and for the United States 71. In other words, 49s. spent in Great Britain would procure the same supply of household commodities as the par equivalent of 54s. spent in France, 56s. spent in Germany, and 71s. spent in the United States.

By applying the method just described to the figures in Table 1, the results shown below in Table 3 are obtained. In this table each foreign wage rate is expressed as a sum corresponding approximately to its purchasing power in Great Britain (as regards commodities consumed by the working classes). The use of English currency as a common denominator makes possible a comparison of real wages in the various countries in a number of selected occupations in the spring of 1922. The general effect of this comparison becomes even clearer when shown in the form of index numbers.

TABLE 3.—INTERNATIONAL COMPARISON OF REAL WAGES FOR 48 HOURS' WORK EXPRESSED IN ENGLISH CURRENCY, APRIL–MAY, 1922.

Occupation.	Real wages.					Index numbers (Great Britain=100).				
	Great Britain.	Germany.	France.	Belgium.	United States.	Great Britain.	Germany.	France.	Belgium.	United States.
	s. d.	s. d.	s. d.	s. d.	s. d.					
Bricklayer	88 0	44 2	56 11	52 0	188 1	100	50	65	59	214
Carpenter	88 0	44 2	72 8	50 3	169 3	100	50	83	57	192
Machinist	79 0	45 11	52 6	46 9	115 10	100	58	66	59	147
Compositor (book)	95 0	40 11	63 0	52 0	139 10	100	43	66	55	168
Unskilled metal worker	61 0	43 3	42 0	36 5	45 2	100	71	69	60	76
Arithmetical mean	82 2	43 8	57 5	47 6	135 8	100	54	70	58	159

In order to make clear the precise meaning of the real wage rates shown in the preceding table the author gives an example of the manner in which a particular rate, that of a German unskilled metal worker, is arrived at. This figure is obtained as follows:

> The [money wage] rate for unskilled laborers in the Berlin metal trades in April–May, 1922, was 958 marks for a 46½-hour week. This represents approximately 987 marks for 48 hours. * * * The German cost-of-living index for April–May was 3,571 (1913–14=100); it follows that a sum of 987 marks had in April–May, 1922, about the same purchasing power in Germany, as, say one thirty-sixth of that sum (viz, 27½ marks) had before the war. At par of exchange (11.8d. to the mark) 27½ marks represented 27s. 2d. But the cost of living was found to be higher in Germany than in this country [Great Britain] before the war, in the proportion 8 (Germany) to 7 (United Kingdom). A proportionately smaller sum (i. e., seven-eighths of 27s. 2d.), viz, 23s. 9d. would therefore have been needed in this country [Great Britain] to purchase at retail the necessaries which it would have required 27½ marks to purchase in Germany. But what could be got for 23s. 9d. before the war in this country [Great Britain] would have cost 82 per cent more in April–May when our [the British] cost-of-living index stood at 182 (July, 1914=100). This gives 43s. 3d.—the figure shown in the table.

The fourth method, "more direct but less widely practicable," of measuring the relative real value of the remuneration obtained by labor for a given service in different countries is that of making a calculation of the number of hours' labor required to be worked in order to earn the money needed to purchase a given supply of household provisions of everyday use.

The ideal here would be to have a list of commodities which enter into working-class consumption in about the same proportions in all the countries compared, a list which would be representative as regards price movements of the full working-class budget. Unfortunately, that ideal is unattainable in the present state of international statistical development. There are, however, a few articles of food which enter largely into the household consumption of all working-class families, irrespective of nationality the retail prices of which can be ascertained; and a selection of these has been made for our present calculation. Not enough is known of the proportionate part played by these items in the household budgets of the different countries, and therefore no attempt has been made to "weight" them in accordance with any accepted regimen. The articles it is proposed to take are one 4-pound loaf of household bread, 7 pounds of wheaten flour, 1 pound of fresh butter, 1 quart of fresh milk, and half a dozen eggs (other than new laid).

In the following table are shown the average retail prices prevailing in June, 1922, for specified quantities of each of these articles in the various countries so far as obtainable from published official sources:

TABLE 4.—AVERAGE RETAIL PRICES OF CERTAIN ARTICLES OF FOOD IN FIVE COUNTRIES, JUNE, 1922.[1]

[1 kilogram=2.2046 pounds; 1 liter=1.0567 quarts.]

Article of food.	Great Britain.		Germany.		France.		Belgium.		United States.	
	Unit.	Price.	Unit.	Price.	Unit.	Price.	Unit.	Price.	Unit.	Price.
		s. d.		*Marks.*		*Francs.*		*Francs.*		*Cents.*
Bread	4 lbs.	0 10½	Kilo.	8.20	Kilo.	1.05	Kilo.	0.95	Lb.	8.9
Wheat flour	7 lbs.	1 6	Kilo.	9.60	Kilo.	1.35	Kilo.	1.20	Lb.	5.4
Butter, fresh	Lb.	1 10	Kilo.	144.00	Kilo.	12.55	Kilo.	12.50	Lb.	44.6
Milk, fresh	Qt.	0 5½	Liter.	10.00	Liter.	0.80	Liter.	1.25	Qt.	13.0
Eggs	½ doz.	0 10½	½ doz.	33.00	½ doz.	2.50	½ doz.	2.52	½ doz.	20.8

[1] The prices for Great Britain are averages for the whole country. The other prices are averages for the capital only (in the United States for the largest city, New York).

From the money wage rates shown in the original currency (Table 1), used in conjunction with the above table of retail prices, are obtained the figures given below in Table 5 "which reflect inversely the relative value of the worker's labor time" in the occupations and countries compared.

TABLE 5.—INTERNATIONAL COMPARISON OF THE RELATIVE REAL VALUE OF WORKERS' WAGES IN APRIL-MAY, 1922, MEASURED BY THE NUMBER OF HOURS OF LABOR REQUIRED TO EARN THE SUM NEEDED TO PURCHASE A CERTAIN SUPPLY OF FOODSTUFFS.

Occupation.	Number of hours of labor.					Relative real value of wages (Great Britain=100).				
	Great Britain.	Germany.	France.	Belgium.	United States.	Great Britain.	Germany.	France.	Belgium.	United States.
Bricklayer	3	7½	5½	6	1	100	41	55	50	300
Carpenter	3	7¼	5	6	1¼	100	41	60	50	240
Machinist	3¼	7¼	6	6¾	2	100	45	54	48	163
Compositor (book)	3	7¾	5	6	1½	100	39	60	50	240
Unskilled metal worker	4½	7¼	7¾	8¾	5¼	100	62	58	51	86
Arithmetical mean	3⅓	7⅓	5¾	6¾	2½	100	46	57	50	206

It is pointed out that the differences in the results obtained in Tables 3 and 5 need cause no surprise. Had the data used in working the third and fourth methods been comprehensive and accurate the ratios arrived at in Tables 3 and 5 would have been identical. It will be seen that they are not. In Table 5 the position of the German, French, and Belgian workers shows to greater disadvantage as compared with those of Great Britian than in Table 3, and that of the American workers to greater advantage. "How far the divergences are due to shortcomings in the official retail price index numbers and in the measures of pre-war retail purchasing power parity which we have used, and how far they are due to the fact that in our fourth method only certain articles of food are taken into account, to the exclusion of rent, clothing, fuel, household gear, etc., it is not possible to say. Taken in conjunction, the two sets of results would seem to indicate that the real wages of German workers were in the spring of this year somewhere about half, those of the Belgian workers something more than half, those of the French workers something like two-thirds, and those of the United States workers from one and a half to twice those of the British worker." The abnormally low position in the two tables of the unskilled laborer in the United States indicates that the pronounced tendency in Europe of greater equalization of the wages of skilled and unskilled workers has not yet made itself felt to the same extent in the United States.

Wages and Hours of Labor in Sydney and Melbourne, Australia, June 30, 1922.[1]

IN THE June, 1922, number of the MONTHLY LABOR REVIEW (pp. 82 and 83) data showing the minimum weekly rates of wages and the general hours of labor of adult workers in specified occupations in Sydney and Melbourne in July, 1914, and on December 31, 1921, were published. Similar data as fixed by the award, determination, or agreement in force June, 30 1922, are given in the table which follows:

MINIMUM RATES OF WAGES AND ORDINARY HOURS OF LABOR OF ADULT WORKERS PER WEEK, IN SYDNEY AND MELBOURNE, JUNE 30, 1922, BY SEX, INDUSTRY, AND OCCUPATION.

[Shilling at par=24.3 cents; penny=2.03 cents.]

Sex, industry, and occupation.	Sydney.		Melbourne.	
	Wages.	Hours.	Wages.	Hours.
Males.				
Bakeries.	s. d.		s. d.	
Bakers	96 6	44	94 0	48
Board hands	100 6	44	120 0	48
Ovenmen	105 6	44	120 0	48
Building trades:				
Bricklayers	113 2½	44	110 0	44
Carpenters	107 3	44	102 8	44
Gas fitters	113 6	44	102 8	44
Laborers	100 10	44	97 2	44
Masons, stone	109 7	40	115 0	44

[1] Australia. Bureau of Census and Statistics. Labor and industrial branch. Statement showing minimum rates of wages and ordinary hours of labor for adult male workers in Sydney and Melbourne, Australia, at June 30, 1922. Melbourne, Oct. 7, 1922.

MINIMUM RATES OF WAGES AND ORDINARY HOURS OF LABOR OF ADULT WORKERS PER WEEK, IN SYDNEY AND MELBOURNE, JUNE 30, 1922, BY SEX, INDUSTRY, AND OCCUPATION—Continued.

Sex, industry, and occupation.	Sydney.		Melbourne.	
	Wages.	Hours.	Wages.	Hours.
Males—Continued.				
Building trades—Concluded.	*s.* *d.*		*s.* *d.*	
Painters	111 3½	44	96 3	44
Paper hangers	111 3½	44	96 3	44
Plasterers	110 11	44	110 0 and 118 3	44
Plumbers	107 3	44	102 8	44
Clothing, ready-made:				
Cutters	100 0	44	102 6	44
Pressers, coat	102 6	44	102 6	44
Tailors	102 6	44	102 6	44
Metal trades:				
Blacksmiths	106 3	44	103 8	44
Boilermakers	107 8½	44	110 0	48
Fitters	106 3	44	103 8	44
Linemen	100 6	44	103 6	48
Molders, iron	103 7 and 107 8½	44	89 0 and 104 0	48
Molders, steel	107 8½	44	88 0 to 102 0	48
Pattern makers	113 10	44	109 10	44
Turners	106 3	44	103 8	44
Personal service:				
Cooks, hotel	85 0 to 143 6	48	75 0 to 130 0	48
Waiters, hotel	85 0	48	74 0	48
Printing and bookbinding:				
Bookbinders	99 0	44	106 0	48
Compositors, job	102 0	44	106 0	48
Compositors, newspaper—				
Day work	114 0	44	120 0	44
Night work	124 0	42	140 0	44
Linotype operators, job	108 2	44	115 0	42
Machinists, newspaper—				
Day work	114 0	44	111 7	44
Night work	124 0	42	129 3	44
Stereotypers, newspaper—				
Day work	106 6	44	105 9	42
Night work	111 6	42	116 1	42
Textiles, woolen:				
Carders	83 0	44	84 0	48
Spinners	82 6	44	85 0	48
Transportation:				
Locomotive engineers—				
First class	130 0	48	123 0	48
Second class	124 0	48	114 0 and 117 0	48
Third class	106 0 to 118 0	48	102 0 to 111 0	48
Locomotive firemen—				
First class	100 0	48	96 0	48
Second class	94 0	48	93 0	48
Third class	88 0	48	87 0 and 90 0	48
Street-car conductors—				
First year	85 0	44	88 6	48
Second year	88 0	44	91 6	48
Third year	91 0	44	94 6	48
Street-car motormen—				
First year	91 0	44	88 6	48
Second year	94 0	44	91 6	48
Third year	97 0	44	94 6	48

MINIMUM RATES OF WAGES AND ORDINARY HOURS OF LABOR OF ADULT WORKERS PER WEEK, IN SYDNEY AND MELBOURNE, JUNE 30, 1922, BY SEX, INDUSTRY, AND OCCUPATION—Concluded.

Sex, industry, and occupation.	Sydney.		Melbourne.	
	Wages.	Hours.	Wages.	Hours.
Males—Concluded.				
Wood working:	s. d.		s. d.	
Cabinet makers	101 9	44	101 6	48
Coopers	110 0	44	110 0	44
Sawyers, band or jig	97 6 and 99 6	44	93 0 and 99 0	44
Sawyers, circular	89 6 to 97 6	44	90 0 and 96 0	44
Females.				
Clothing, ready-made:				
Machine operators, coats	49 9	44	49 9	44
Machine operators, trousers and vests	48 3	44	48 3	44
Tailoresses, coats	49 9	44	49 9	44
Tailoresses, trousers and vests	46 9	44	46 9	44
Paper trades:				
Box makers	43 6	44	48 0 and 53 6	48
Personal service:				
Waitresses, hotels	51 0	48	45 0	48
Printing and bookbinding:				
Folders	44 0	44	48 0	48
Sewers	46 0 and 48 0	44	50 6	48
Textiles, woolen:				
Weavers, loom	53 3	44	46 0	48

Wages and Production in Belgian Coal Mines, 1919 to 1921, and September, 1922.

A REPORT of the Belgian National Joint Mining Commission, published in the Revue du Travail (Brussels), November, 1922 (pp. 1709–1711) gives the average wages, output per worker, selling price of coal, and the per cent which the wages form of the prices of salable coal in the different mining sections of the country for the years 1919 to 1921 and for September, 1922.

The average daily wages quoted are for all workers except those not directly concerned with the operation of the mines, such as those engaged in the construction of buildings, setting up machines, etc. The wages as reported include all bonuses, and no deduction is made of fines and the tax for the mutual aid and insurance funds. Payments for sickness, accidents, and the value of the coal either given outright to the workers or sold at a discount are not added to the wages. By salable coal is meant all coal produced during the period which was not used in the operation of the mines or distributed free to the workers.

The following table shows the average daily wages, average output per employee, labor cost per salable ton of coal, average selling price per ton of salable coal, and the percentage which wages form of the selling

price of the coal in the principal coal-mining sections of Belgium for September, 1922, as compared with the years 1919, 1920, and 1921.

AVERAGE DAILY WAGES, OUTPUT PER EMPLOYEE, LABOR COST, SELLING PRICE OF COAL, AND PERCENTAGE WHICH THE LABOR COST FORMS OF THE SELLING PRICE IN THE PRINCIPAL COAL MINING SECTIONS OF BELGIUM IN 1919, 1920, 1921, AND SEPTEMBER, 1922.

[1 franc at par = 19.3 cents.]

Date and locality.	Average daily wages.	Output per worker per day.	Cost of labor per ton.	Average selling price per ton.	Per cent labor cost is of selling price.
Couchant de Mons:	*Francs.*	*Short tons.*	*Francs.*	*Francs.*	
1919	12.59	0.39	35.81	64.34	55.7
1920	22.88	.40	62.45	93.64	66.7
1921	23.29	.40	64.44	90.20	71.4
September, 1922	19.36	.40	54.01	74.66	72.4
Centre:					
1919	13.02	.43	33.09	63.85	51.8
1920	22.53	.44	56.56	91.80	61.6
1921	22.72	.42	59.84	90.38	66.2
September, 1922	19.52	.41	52.06	76.93	67.7
Charleroi:					
1919	12.94	.46	31.31	63.53	49.3
1920	22.08	.48	51.03	89.97	56.8
1921	22.47	.48	52.00	86.00	60.5
September, 1922	19.65	.49	43.88	73.24	59.9
Namur:					
1919	12.52	.46	29.85	61.25	48.7
1920	22.25	.49	50.19	88.00	57.0
1921	22.91	.49	51.08	78.24	65.3
September, 1922	20.18	.49	45.36	66.69	68.0
Liege (exclusive of Herve):					
1919	11.90	.39	33.85	66.44	51.0
1920	22.03	.41	59.68	94.06	63.5
1921	22.55	.38	64.87	94.56	68.6
September, 1922	19.10	.41	51.28	88.72	57.8
Herve:					
1919	12.02	.53	24.83	59.78	41.5
1920	21.85	.55	44.02	87.63	50.2
1921	22.70	.53	46.81	86.40	54.2
September, 1922	19.79	.56	39.26	75.78	51.8
Bassin du Sud:					
1919	12.60	.42	32.70	64.74	50.5
1920	22.34	.44	55.85	91.62	61.0
1921	22.74	.43	58.13	89.50	65.0
September, 1922	19.46	.42	51.03	77.13	66.2

Wages and Hours of Labor in Canada, 1922.

THE following tables are taken from a bulletin entitled "Wages and Hours of Labor in Canada, 1921 and 1922," published by the Department of Labor of Canada.

Table 1 presents index numbers of rates of wages per hour in important occupational classes. The table shows that the level of wages in the trades brought into the average in 1920 stood 92.1 per cent above the average for 1913. The index number decreased to 186.1 in 1921 and to 176.8 in 1922.

Table 2, which presents rates of wages per hour and hours of labor per week in 1922, is copied from the bulletin but is abridged as to occupations and very much abridged as to cities.

Table 3 presents average wages and hours in certain occupations, computed from reports from individual establishments shown separately in the bulletin. In computing these averages, the wages and hours for the several plants are added and divided by the number of plants. No weighting could be made, as the number of employees is not shown in the bulletin.

TABLE 1.—INDEX NUMBERS OF RATES OF WAGES PER HOUR FOR VARIOUS CLASSES OF LABOR IN CANADA, 1901 TO 1922.

[1913=100.]

Year.	Building trades.	Metal trades.	Printing trades.	Electric railways.	Steam railways.	Coal mining.	Average.	Common factory labor.	Miscellaneous factory trades.	Lumbering.
1901	60.3	68.6	60.0	64.0	70.8	82.8	67.8	.....	.....	.....
1902	64.2	70.2	61.6	68.0	73.6	83.8	70.2	.....	.....	.....
1903	67.4	73.3	62.6	71.1	76.7	85.3	72.7	.....	.....	.....
1904	69.7	75.9	66.1	73.1	78.6	85.1	74.8	.....	.....	.....
1905	73.0	78.6	68.5	73.5	78.9	86.3	76.5	.....	.....	.....
1906	76.9	79.8	72.2	75.7	80.2	87.4	78.7	.....	.....	.....
1907	80.2	82.4	78.4	81.4	85.5	93.6	83.6	.....	.....	.....
1908	81.5	84.7	80.5	81.8	86.7	94.8	85.0	.....	.....	.....
1909	83.1	86.2	83.4	81.1	86.7	95.1	85.9	.....	.....	.....
1910	86.9	88.8	87.8	85.7	91.2	94.2	89.1	.....	.....	.....
1911	90.2	91.0	91.6	88.1	96.4	97.5	92.5	94.9	95.4	93.3
1912	96.0	95.3	96.0	92.3	98.3	98.3	96.0	98.1	97.1	98.8
1913	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1914	100.8	100.5	102.4	101.0	101.7	101.9	101.4	101.0	103.2	94.7
1915	101.5	101.5	103.6	97.8	101.7	102.3	101.4	101.0	106.2	89.1
1916	102.4	106.9	105.8	102.2	104.9	111.7	105.7	110.4	115.1	109.5
1917	109.9	128.0	111.3	114.6	110.1	130.8	117.5	129.2	128.0	130.2
1918	125.9	155.2	123.7	142.9	133.2	157.8	139.8	152.3	146.8	150.5
1919	148.2	180.1	145.9	163.3	154.2	170.5	160.4	180.2	180.2	169.8
1920	180.9	209.4	184.6	194.2	186.6	197.7	192.1	215.3	216.8	202.7
1921	170.5	186.8	193.3	192.1	165.3	208.3	186.1	190.6	202.0	152.6
1922	162.5	173.7	192.3	184.4	155.1	197.8	176.8	183.0	189.1	146.7

TABLE 2.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN CANADA, 1922.

[Canadian money.]

Occupation.	Month in 1922.	Quebec.		Montreal.		Ottawa.	
		Rate.	Hours.	Rate.	Hours.	Rate.	Hours.
Building trades:							
Bricklayers	June..	$0.75	54	$0.90	44–50	$0.85	44
Carpenters	...do...	$0.40– .50	48–60	$0.50– .65	44–60	.70	44
Painters	...do...	.35– .47	54	.60– .65	50	.65	44
Plumbers	...do...	.50– .60	48–60	.60– .70	44–50	$0.75– .80	44
Plasterers	...do...	.70	54	.80– .90	44–50	.85	48
Ordinary laborers	...do...	.25– .30	48–60	.25– .30	50–60	.45– .50	44–50
Metal trades:							
Blacksmiths	Ap...	.50– .65½	55	.52½– .65	50–60	.51– .60	44–50
Boiler makers	...do...	.....	.....	.55– .63	50–58	.70– .75	50
Machinists	...do...	.55	55	.50– .70	50–60	.50– .60	44–50
Iron molders	...do...	.40– .50	55–60	.60– .70	50–60	.50– .60	45–50
Pattern makers	...do...	.44– .50½	55–60	.60– .72	50–60	.54– .70	44–50
Sheet-metal workers	...do...	.....	.....	.60– .65	44–55	.75	44–50
Auto mechanics	June.	.45– .60	48–60	.35– .65	50–54	.46– .59	54
Printing trades:							
Compositors, hand, newspaper	Apr...	[1] 29.00	48	[1] 36.00	48	[1] 38.00	45½
Compositors, hand, job	...do...	[1] 29.00	48	[1] 36.00	48	[1] 35.00	44–48
Compositors, linotype, newspaper	...do...	[1] 29.00	48	[1] 36.00	48	[1] 38.00	45½
Pressmen, cylinder, job	...do...	[1] 24.00	48	[1]36.00–40.00	48	[1]35.00–37.84	44–48
Pressmen, web, newspaper	...do...	[1]25.00–29.00	48	[1]36.00–40.70	48	[1] 35.00	44–48
Electric railways:							
Conductors and motormen	June..	.45	60	.48	60	.48	54
Linemen	...do...	.40	70	.48	60	.48	54
Trackmen	...do...	.33⅓	60	.30	60	.42	54

[1] Rates per week.

TABLE 2.—RATES OF WAGES PER HOUR AND HOURS OF LABOR PER WEEK IN CANADA, 1922—Concluded.

Occupation.	Month in 1922.	Toronto.		Winnipeg.		Vancouver.	
		Rate.	Hours.	Rate.	Hours.	Rate.	Hours
Building trades:							
Bricklayers	June..	$1.00	44	$1.15	44	$1.06½	44
Carpenters	...do...	$0.80–.90	44	$0.85–.90	44	.81¼	44
Painters	...do...	.65–.75	44	.70–.75	44	.75	44
Plumbers	...do...	.90	44	.90	44	$0.90 – 1.00	44
Plasterers	...do...	1.00	44	1.07½	44	1.00 – 1.04½	44
Ordinary laborers	...do...	.45	44	.40–.45	44–60	.40 – .50	44–50
Metal trades:							
Blacksmiths	Apr...	.60–.65	44–50	.67–.70	44–50	.70 – .83½	44–48
Boiler makers	...do...	.60–.70	48	.72–.74	50	.67½–.83½	44–48
Machinists	...do...	.50–.70	44–50	.55–.70	44–50	.67½–.83	44–48
Iron molders	...do...	.50–.70	44–50	.54–.72	44–50	.60 – .75	44
Pattern makers	...do...	.60–.75	44–50	.65–.72	40–50	.76½	44
Sheet-metal workers	...do...	.60–.75	44–49½	.65–.75	44–48	.87½	44
Auto mechanics	June.	.55–.65	44–55	.60–.75	49–54	.60 – .75	44
Printing trades:							
Compositors, hand, newspaper	Apr...	[1] 38.00	48	[1] 47.50	46	[1]40.50–44.10	45
Compositors, hand, job	...do...	[1]32.00–38.00	44–48	[1]35.00–48.00	44–48	[1] 39.60	44
Compositors, linotype, newspaper	...do...	[1]38.00–43.00	45–48	[1] 47.50	46	[1]40.50–44.10	45
Pressmen, cylinder, job	...do...	[1] 36.00	48	[1] 36.00	45–48	[1] 39.60	44
Pressmen, web, newspaper	...do...	[1] 37.00	48	[1] 44.00	48	[1] 40.50	48
Electric railways:							
Conductors and motormen	June..	.60	48	.56	50	.58½	48
Linemen	...do...	.72–.78	48	.78–.91	48	.87½	44
Trackmen	...do...	.45–.62	48	.40–.44	48	.40 – .54	44

[1] Rates per week.

TABLE 3.—AVERAGE RATES OF WAGES AND HOURS OF LABOR FOR SPECIFIED OCCUPATIONS IN CANADA, 1922.

[Canadian money. The figures shown are simple averages of reports from individual establishments.]

Occupation.	Month in 1922.	Wages.		Average hours worked per week.
		Time unit.	Average amount.	
Meat packing:				
Slaughterers	June	Hour	$0.492	51.7
Butchers, cutters, and trimmers	...do...	...do...	.467	50.6
Saw mills:				
Band sawyers	...do...	Day	7.42	57.7
Edgers	...do...	...do...	4.17	57.8
Pilers and stackers	...do...	...do...	3.14	57.8
Coal mining:				
Nova Scotia—				
Contract miners [1]	September	...do...	5.94	[2] 8
Hand miners [3]	...do...	...do...	4.85	[2] 8
Laborers, underground	...do...	...do...	3.35	[2] 8
Laborers, surface	...do...	...do...	3.25	[2] 8
Alberta—				
Contract miners	...do...	...do...	[4] 9.00	[2] 8
Machine miners [3]	...do...	...do...	8.02	[2] 8
Hand miners [3]	...do...	...do...	7.05	[2] 8
Laborers, underground	...do...	...do...	6.89	[2] 8
Laborers, surface	...do...	...do...	6.58	[2] 8
Vancouver—				
Contract miners	...do...	...do...	7.23	[2] 8
Machine miners [3]	...do...	...do...	5.48	[2] 8
Hand miners [3]	...do...	...do...	5.13	[2] 8
Laborers, underground	...do...	...do...	4.78	[2] 8
Laborers, surface	...do...	...do...	4.30	[2] 8

[1] Average earnings per day worked on contract.
[2] Per day.
[3] Minimum rate per day when not working on contract, per ton, yard, etc.
[4] Estimated.

TABLE 3.—AVERAGE RATES OF WAGES AND HOURS OF LABOR FOR SPECIFIED OCCUPATIONS IN CANADA, 1922—Concluded.

Occupation.	Month in 1922.	Wages.		Average hours worked per week.
		Time unit.	Average amount.	
Cotton manufacturing:				
Carders	April	Hour	$0 294	51.7
Mule spinners	do	do	.352	51.7
Ring spinners	do	do	.237	51.3
Loom fixers	do	do	.462	52.0
Warpers	do	do	.269	52.0
Weavers	do	do	.300	51.9
Spoolers	do	do	.222	51.4
Woolen manufacturing and knitting:				
Carders	do	do	.341	51.7
Spinners	do	do	.278	51.7
Loom fixers	do	do	.453	51.8
Warpers	do	do	.261	52.7
Weavers	do	do	.277	53.4
Wool sorters	do	do	.306	52.1
Dye-room employees	do	do	.423	51.9
Boots and shoes:				
Cutters	do	Week	26.21	49.9
Lasters	do	do	27.00	50.0
Stitchers	do	do	[5] 20.37	50.0
Treers	do	do	23.49	50.0
Welters	do	do	33.27	49.6
Machine operators	do	do	[5] 21.16	49.8
Finishers	do	do	22.15	50.1
Sash and doors:				
Bench hands	June	Hour	.551	50.3
Machine hands	do	do	.506	50.3
Furniture:				
Band sawyers	do	do	.439	50.8
Cabinet makers	do	do	.431	50.9
Finishers and polishers	do	do	.397	50.9

[5] Including both males and females.

Real Value of Salaries and Wages in Hamburg, Germany, 1920 to 1922.

OWING to the enormous depreciation of German money, statistics of actual wages paid in Germany in postwar times have very little meaning for the American student of economic conditions in Germany. Hourly wage rates of from 40 to 50 marks for skilled and semiskilled workers, daily wage rates of nearly 400 marks for unskilled labor, and monthly salaries of 14,750 marks for Government employees of medium rank look very big if we compare these rates with pre-war rates, but what the worker is interested to know is the present purchasing value of these salaries and wages as compared with their pre-war purchasing value. Some light on this subject is shed by a recent publication of the Statistical Office of the free State of Hamburg [1] which contains detailed statistics as to money wages and salaries paid in Hamburg in 1920, 1921, and 1922, and their actual value as compared with wages and salaries current on July 1, 1914.

Nominal (Money) Salaries and Wages.

IN THE following two tables are shown the money salaries and wages of Government employees and of typical skilled, semiskilled, and unskilled workers in 1914, 1920, 1921, and 1922, and their increase is illustrated by index numbers with July 1, 1914, as

[1] Germany (Hamburg). Statistisches Landesamt. Der Wert der Gehälter und Löhne in Hamburg. Hamburg, 1922. Statistische Mitteilungen über den Lamburgischer Staat, Nr. 13.

a base. The salaries quoted are those fixed by the civil service salaries laws of 1912, 1920, and 1921, while the wage rates quoted for manual workers are the minimum wage rates fixed by collective agreements.

In Table 2 a wider range of dates is given and the order of the table has been arranged so as to show the course of wages for workers according to their degree of skill.

TABLE 1.—MONEY SALARIES AND WAGES OF GOVERNMENT EMPLOYEES AND MANUAL WORKERS IN HAMBURG, 1914 AND 1920 TO 1922.

[1 mark at par=23.8 cents.]

Occupation.	July 1, 1914.	Apr. 1, 1920.	Dec. 1, 1921.	Aug. 15, 1922.
	Monthly salaries.			
Government employees: [1]	*Marks.*	*Marks.*	*Marks.*	*Marks.*
Statutory, high rank	814.08	2,594.42	5,955.00	22,589.17
Statutory, medium rank	329.92	1,741.25	3,387.50	14,750.00
Statutory, low rank	204.25	1,353.75	2,510.00	11,654.17
Temporary	166.67	1,276.67	2,590.00	11,898.75
	Weekly wage rates.			
Printers	34.38	139.38	518.00	1,533.00
Bakers	36.00	188.00	420.00	2,308.50
Truck drivers	35.00	215.00	600.00	2,470.00
Freight handlers	30.00	208.00	570.00	2,370.00
Laborers, distilleries	33.00	175.00	590.00	1,950.00
Chauffeurs	35.00	235.00	620.00	2,470.00
	Daily wage rates.			
Laborers, grain elevators, warehouses, etc	5.00	36.20	94.00	394.00
Ship cleaners	5.00	36.20	94.00	394.00
Stevedores	5.40	37.20	95.00	395.00
Laborers, coal trade	5.70	23.20	96.80	397.00
	Hourly wage rates.			
Upholsterers	0.75	3.25	12.00	42.25
Masons	.90	4.35	12.80	51.00
Machinists	.75	5.20	11.70	44.15
Furriers	.60	2.75	12.00	36.00
Tailors	.65	2.70	9.00	40.00
Plumbers	.80	5.20	12.60	50.55
Shoemakers	.60	2.60	8.50	38.00
Cabinet makers	.65	3.10	12.20	43.50
Workers in chemical factories	.50	2.85	10.75	45.00
Textile workers	.60	3.20	8.20	36.00
Excavation workers	.50	4.25	12.40	49.00

[1] These employees are given a special allowance based on the number of children. These salaries include this allowance for three children.

TABLE 2.—INDEX NUMBERS OF MONEY SALARIES AND WAGES OF GOVERNMENT EMPLOYEES AND MANUAL WORKERS IN HAMBURG, 1920 TO 1922.

[July 1, 1914=100.]

Occupation.	Apr. 1, 1920.	Apr. 1, 1921.	Oct. 1, 1921.	Jan. 1, 1922.	Apr. 1, 1922.	July 1, 1922.	Aug. 15, 1922.
Government employees:[1]							
Statutory, high rank	319	375	731	797	949	1827	2775
Statutory, medium rank	528	632	1027	1188	1580	2974	4471
Statutory, low rank	663	809	1224	1489	2072	3844	5706
Temporary	766	992	1554	1873	2587	4805	7139
Skilled workers:							
Printers	405	799	1097	1507	2248	4052	4517
Upholsterers	433	800	947	1760	2193	4333	5633
Masons	483	756	1000	1511	2744	4078	5667
Machinists	693	867	1133	1560	2373	4000	5887
Furriers	458	1000	1500	2167	3333	5000	6000
Tailors	415	962	1192	1938	2462	3692	6154
Plumbers	650	825	1100	1625	3031	4556	6319
Shoemakers	433	933	1167	2083	2667	4083	6333
Bakers	522	833	922	1653	2333	3833	6413
Cabinet makers	477	969	1292	2031	2877	5154	6692
Semiskilled workers:							
Workers in chemical factories	570	1150	1350	2150	3300	5400	9000
Truck drivers	614	886	1100	1714	2457	3994	7057
Textile workers	533	1083	1367	2100	3000	4167	6000
Workers in distilleries	530	909	1164	1788	2682	4485	5970
Unskilled workers:							
Excavation workers	850	1340	1720	2640	4740	7070	9800
Laborers, grain elevators, warehouses, etc.	724	1100	1280	1880	2680	4540	7880
Ship cleaners	724	1100	1280	1880	2680	4540	7880
Laborers, coal trade	407	1014	1242	1698	2400	4035	6965
Stevedores	689	1037	1204	1759	2500	4222	7315
Freight handlers	693	1000	1250	1900	2700	4560	7900

[1] These employees are given a special allowance based on the number of children. The salaries on which these index numbers are based include this allowance for three children.

The preceding two tables give a clear picture of the rise of money salaries and wages in Hamburg in postwar as compared with pre-war times. They show above all that the lower the salary or wage was in pre-war times, the greater has been the proportionate rise of both salaries and wages. In addition the tables bring out another very important fact. Before the war the remuneration of intellectual and manual work was with a few unimportant exceptions governed by the character of the work. The higher the qualifications demanded by the work the greater was the remuneration for it, and intellectual work was therefore better paid than purely manual labor. The movement of salaries and wages in postwar times, as shown in the preceding tables, indicates, however, that after the war the remuneration for work which requires technical training has lagged relatively far behind that for manual labor which requires no occupational training at all.

A comparison of the salaries of Government employees for July 1, 1914, and August 15, 1922, shows that the average salary of employees in statutory positions of high rank, inclusive of allowances for their children, was 28 times as great on August 15, 1922, as on Jnly 1, 1914; those of employees of medium and of low rank, 45 times and 57 times as great, respectively; while that of workers of nonstatutory grade was 71 times as great as comparable pre-war rates.

In the case of manual workers the wages of skilled workers performing highly qualified work have risen much less in proportion than those of semiskilled and unskilled workers. The wages of printers, who have always been considered the elite of skilled workers, indicate the smallest per cent of increase. On August 15, 1922, they

were 45 times as great as on July 1, 1914. The wages of masons who do work of a more manual character, show a relatively greater rise, having increased to 57 times the amount paid in July, 1914. Still greater was the relative increase in the case of other skilled workers, such as machinists, furriers, tailors, plumbers, shoemakers, bakers, and cabinet makers.

The relatively great wage increase in the case of semiskilled workers—i. e., of unskilled workers who have undergone a brief period of training in the attendance of machines, etc.—is also noticeable. Of this class of workers, those in chemical factories received the largest wage increase, their wages in August, 1922, being ninety times as great as they were in July, 1914. In the case of other semiskilled workers, wages had increased to 60 to 70 times the pre-war wages.

Unskilled workers, especially those who performed the heaviest manual labor, obtained the greatest wage increases during the period under review. The increase obtained by excavation workers exceeded that of all other wage workers listed in the preceding tables, their wage in August, 1922, being nearly one hundred times their pre-war wage. The wages of other unskilled workers increased in a somewhat lesser extent, but still their wages had risen to from 70 to 79 times their pre-war amount.

During the last three years the pay of the unskilled workers has approached that of the highly qualified workers. The phenomenal increase in the cost of living made it necessary that the salaries and wages of the former be increased at a higher rate than those of the latter.

Real Value of Salaries and Wages.

MONEY wages do not, however, convey an idea of the real value of wages. This value becomes evident only when money wages are compared with the prices for the necessaries of life. The real value of salaries and wages is expressed in their purchasing power.

In order to compute the real value of salaries and wages in Hamburg, the Statistical Office of that State has assumed that the real value of the mark is in the same relation to its nominal value as the pre-war cost-of-living index (100) is to the cost-of-living index for the point of time in question (for instance, the index 100 as of July 1, 1914, increased to 7019 on August 15, 1922). The real value of the mark on August 15, 1922, as compared with par in 1914 was thus obtained by dividing 100 by 7019 = 0.014, making 1 mark of August 15, 1922, equal to only 0.014 mark of July 1, 1914. The real value of salaries and wages was then calculated by multiplying the money salary or wage by the real value of the mark obtained by the procedure described above. To illustrate: The average monthly salary of a Government employee of medium rank, inclusive of allowance for three children, was 329.92 marks on July 1, 1914, and 14,750 marks on August 15, 1922. The real value of the 14,750 marks is found by multiplying that amount by 0.014. By doing so it is found that his salary on August 15, 1922 (14,750 marks), has a purchasing value of only 206.50 marks as of July 1, 1914, or 62.6 per cent of its pre-war purchasing value.

In this manner the Statistical Office has computed the real value of salaries and wages for April 1, 1920, and for each month of 1921 and 1922 up to August, 1922, and has shown this value in marks and expressed in index numbers. Figures for a few representative months were selected from the original tables and are reproduced below.

Table 3 shows real salaries and wages according to method of payment and Table 4 indicates the relative value compared with July 1, 1914, according to the degree of skill of the workers.

TABLE 3.—REAL VALUE OF SALARIES AND WAGES OF GOVERNMENT EMPLOYEES AND MANUAL WORKERS IN HAMBURG, 1914 AND 1920 TO 1922.

[1 mark at par=23.8 cents.]

Occupation.	July 1, 1914.	Apr. 1, 1920.	Dec. 1, 1921.	Aug. 15, 1922.
	Monthly salaries.			
Government employees: [1]	*Marks.*	*Marks.*	*Marks.*	*Marks.*
Statutory, high rank	814.08	281.55	348.33	316.17
Statutory, medium rank	329.92	188.91	198.17	206.50
Statutory, low rank	204.25	146.91	146.83	163.08
Temporary	166.67	138.50	151.50	166.50
	Weekly wage rates.			
Printers	34.38	15.12	30.30	21.74
Bakers	36.00	20.40	24.57	32.32
Truck drivers	35.00	23.33	35.10	34.58
Freight handlers	30.00	22.57	33.35	33.18
Laborers, distilleries	33.00	18.99	34.52	27.58
Chauffeurs	35.00	25.50	36.27	34.58
	Daily wage rates.			
Laborers, grain elevators, warehouses, etc	5.00	3.92	5.50	5.48
Ship cleaners	5.00	3.92	5.50	5.48
Stevedores	5.40	4.04	5.56	5.53
Laborers, coal trade	5.70	2.52	5.66	5.58
	Hourly wage rates.			
Upholsterers	.75	.35	.70	.59
Masons	.90	.47	.75	.71
Machinists	.75	.56	.68	.62
Furriers	.60	.30	.70	.50
Tailors	.65	.29	.53	.56
Plumbers	.80	.56	.74	.71
Shoemakers	.60	.28	.50	.53
Cabinetmakers	.65	.34	.71	.61
Workers in chemical factories	.50	.31	.63	.63
Textile workers	.60	.35	.48	.50
Excavation workers	.50	.46	.73	.69

[1] These employees are given a special allowance based on the number of children. These salaries include this allowance for three children.

TABLE 4.—REAL VALUE OF SALARIES AND WAGES OF GOVERNMENT EMPLOYEES AND MANUAL WORKERS IN HAMBURG, 1920 TO 1922, EXPRESSED BY INDEX NUMBERS.

[July 1, 1914=100.]

Occupation.	Apr. 1, 1920.	Apr. 1, 1921.	Oct. 1, 1921.	Jan. 1, 1922.	Apr. 1, 1922.	July 1, 1922.	Aug. 15, 1922.
Government employees:[1]							
Statutory, high rank	34.6	39.9	60.3	44.7	30.5	42.7	38.8
Statutory, medium rank	57.3	67.3	84.7	66.6	50.7	69.6	62.6
Statutory, low rank	71.9	86.2	101.4	83.5	66.5	90.0	79.8
Temporary	83.1	105.7	128.2	105.1	83.0	112.5	99.9
Skilled workers:							
Printers	44.0	85.1	90.5	84.5	72.2	94.8	63.2
Upholsterers	46.7	85.3	78.7	98.7	70.7	101.3	78.7
Masons	52.2	80.0	82.2	84.5	87.8	95.6	78.9
Machinists	74.7	92.0	93.3	88.0	76.0	93.3	82.7
Furriers	50.0	106.7	123.3	121.7	106.7	116.7	83.3
Tailors	44.6	103.1	98.5	109.2	78.5	86.2	86.2
Plumbers	70.0	87.5	91.3	91.3	97.5	106.3	88.8
Shoemakers	46.7	100.0	96.7	107.7	85.0	95.0	88.3
Bakers	56.7	88.8	80.2	92.7	74.9	89.7	89.8
Cabinetmakers	52.3	103.1	106.2	113.8	100.0	120.0	93.8
Semiskilled workers:							
Workers in chemical factories	62.0	126.0	112.0	120.0	106.0	126.0	126.0
Truck drivers	66.7	92.0	90.7	96.1	64.6	93.5	98.8
Textile workers	58.3	115.0	113.3	118.3	96.7	98.3	83.3
Workers in distilleries	57.5	100.1	96.0	100.3	86.1	104.9	83.6
Unskilled workers:							
Excavation workers	92.0	142.0	142.0	148.0	152.0	166.0	138.0
Laborers, grain elevators, warehouses, etc.	78.4	117.2	105.6	105.4	86.0	106.2	109.6
Ship cleaners	78.4	117.2	105.6	105.4	86.0	106.2	109.6
Laborers, coal trade	44.2	108.1	102.5	95.3	77.1	94.4	97.9
Stevedores	74.8	110.4	99.3	98.7	80.2	98.9	102.4
Freight handlers	75.2	106.5	103.1	106.6	86.7	106.7	110.6

[1] These employees are given a special allowance based on the number of children. The salaries on which these index numbers are based include this allowance for three children.

The preceding two tables bring out the following facts:

1. The great increase in money salaries and wages has in most instances been more than offset by the extraordinary increase of the cost of living.

2. The real value of salaries and wages has undergone great fluctuations because of the fact that salary and wage increases were, as a rule, granted only after the real value of salaries and wages had been considerably decreased through increases in the cost of living. The fluctuations therefore indicate that prices rose so rapidly that salary and wage increases could not keep step with them.

3. The real value of salaries, and of wages in many cases, has considerably decreased as compared with pre-war times.

4. The tendency to remunerate unskilled labor, requiring only physical effort, at a much higher rate than skilled and intellectual workers, shown in the above discussion of money salaries and wages, is revealed even more clearly in considering the real value of salaries and wages. While part of the manual workers, especially the unskilled workers, were on the whole able to adjust their wages to the increased cost of living, and a few of them received wages having an even greater purchasing value than in pre-war times, the salaries of the intellectual workers as well as the wages in a number of skilled trades have in an increasing measure lagged behind the increase in the prices of all necessaries of life.

In judging the fluctuations of the real value of salaries and wages, it should be remembered that the figures given in the preceding tables represent average values. Owing to the socially and eco-

nomically unsound wage policy now prevailing in Germany, which allows the same pay to a young single workman if he is over 21 years of age as to a married workman who has to provide for a wife and children, there is considerable difference in the standard of living. The young single workman is to-day in receipt of a wage which allows him to live essentially better than in pre-war times and to use his earnings for luxuries, such as alcoholic beverages, tobacco, and amusements, while the father of a large family suffers greatly under the present high cost of living and has to struggle more now with economic distress and worries of all kinds than before the war.

In comparing the wages of manual workers with the salaries of Government employees, it should be kept in mind that the wage rates of manual workers given in the preceding tables are the minimum wage rates fixed by collective agreements. A considerable number of manual workers receive higher wages than the minimum rates and their earnings are also frequently increased by overtime work and by piecework premiums. The earnings of manual workers, especially the unskilled workers, are therefore in many instances considerably greater than those shown in the tables. Government employees, on the other hand, as a rule do not have any subsidiary earnings, and their salaries represent their whole income from work. When these facts are considered, the picture of the economic situation of Government employees assumes a still more hopeless aspect.

Wage Rates and Employment in the British Railway Service.

THE British Ministry of Transport has recently published statistics [1] showing the number of persons employed by 33 British railway companies during the weeks ending March 19, 1921, and March 25, 1922, and giving a comparison of the weekly wages paid a number of the principal groups of railway workers on January 1, 1921, and July 1, 1922. The data relative to the numbers employed include all persons actually employed during the weeks indicated, both by the railway companies and by the railway clearing house, except those who were paid for time amounting to less than three days in the week and those employed by contractors.

[1] Ministry of Labor Gazette, London, December, 1922, p. 473.

PERSONS EMPLOYED ON BRITISH RAILWAYS, BY OCCUPATION AND SEX, MARCH 19, 1921, AND MARCH 25, 1922.

Occupation.	Number of persons employed [1] in the week ending—			
	Mar. 19, 1921.		Mar. 25, 1922.	
	Males.	Females.	Males.	Females.
Capstanmen	1,835	.....	1,735	.....
Carters and vanguards	17,673	.....	17,354	.....
Chain boys and slipper lads	50	.....	26	.....
Checkers	12,726	8	11,807	5
Clerks	78,768	11,565	76,442	9,291
Coach cleaners	7,163	967	5,735	926
Coach and freight-car inspectors	5,756	.....	4,972	.....
Coach and freight-car oilers and greasers	2,749	13	2,398	.....
Cranemen	2,116	4	2,019	.....
Crossing tenders	1,766	1,363	1,600	1,235
Engine cleaners	20,359	5	14,925	4
Engineers and motormen	37,400	.....	35,854	.....
Firemen	35,888	.....	35,411	.....
Guards:				
Freight	18,095	.....	16,188	.....
Passenger	9,074	.....	7,886	.....
Inspectors	8,759	1	8,086	10
Laborers	44,785	93	37,732	57
Lampmen	2,002	.....	1,958	.....
Loaders and sheeters	5,223	.....	5,056	.....
Mechanics and artisans	113,670	1,060	101,056	1,015
Messengers	2,510	94	2,347	69
Number takers	3,161	.....	2,986	.....
Permanent way men	68,377	.....	63,021	.....
Police inspectors	246	.....	227	.....
Policemen	2,945	6	2,761	5
Porters:				
Freight	23,530	31	20,032	16
Passenger	32,761	51	27,538	14
Shunt horse drivers [2]	1,098	.....	912	.....
Signal box lads	1,587	.....	1,301	.....
Signal fitters and telegraph wiremen	5,070	.....	4,659	.....
Signalmen	30,724	12	29,795	3
Station and yard masters, etc	7,928	20	6,660	16
Switchmen:				
Pointsmen [3]	435	.....	422	.....
Shunters	19,080	1	17,685	.....
Ticket collectors	5,927	27	5,507	21
Watchmen	1,000	.....	934	.....
Working foremen	1,505	7	1,554	.....
Miscellaneous	74,724	12,077	76,781	10,753
Total	708,465	27,405	653,362	23,440

[1] Excluding those employed by the Manchester Ship Canal, who numbered 1,415, March, 1921, and 1,303, March, 1922.
[2] Drivers of horses used in switching.
[3] In charge of switches.

The wage rates quoted in the following table are standard rates plus bonuses, if any, paid at the dates used for bases of comparison. Those for January 1, 1921, include the cost of living sliding scale bonus and in addition certain special advances granted in May, 1920. During the period January 1, 1921, and July 1, 1922, the reductions under the sliding scale which changed with the changing cost-of-living index, amounted to 17s. ($4.14, par) per week, and in addition the special advances granted to different grades of workers were wholly or partly withdrawn, with the provision that certain minimum standard rates should be maintained. The rates given for July 1, 1922, are still operative. In the case of some grades of railway workers it is customary to fix different rates of wages for (a) London, (b) industrial areas, and (c) rural areas. The lower rates in the ranges of wages given in the table apply generally to the rural areas; the higher rates to London.

PREVAILING RATES OF WEEKLY WAGES ON BRITISH RAILWAYS, JANUARY 1, 1921, AND JULY 1, 1922, BY OCCUPATION.

[1 shilling at par=24.3 cents; 1 penny=2.03 cents.]

Occupation.	Standard wage rates plus bonuses, if any, under sliding scale payable on—	
	Jan. 1, 1921.	July 1, 1922.
	s. d. s. d.	s. d. s. d.
Carters, freight:		
Carters	70 6–77 6	51 0–56 6
Carters, head	71 6–79 6	52 0–58 6
Drivers, electric vehicles	76 0–80 6	57 0–59 6
Drivers, petrol or steam vehicles	78 0–82 0	58 0–61 0
Checkers, freight	72 6–79 6	53 0–58 6
Engine cleaners:		
Engine cleaners	65 0	46 0
Foremen—		
Fewer than 30 engines	77 0 / 80 0	60 0
More than 30 engines	84 0 / 87 0	66 0
Guards, freight and passenger:		
First and second years	73 0	52 0
Third and fourth years	76 6	55 6
Fifth year	80 0	60 0
Sixth year and over	83 6	65 0
Laborers:		
Locomotive shed hands	69 0 / 71 6	50 0 / 50 6
Signal and telegraph hands	68 0–75 0	49 0–54 0
Locomotive engineers and motormen:		
First and second years	89 0	72 0
Third and fourth years	95 0	78 0
Fifth year	101 0	84 0
Sixth year and over	107 0	90 0
Locomotive firemen:[1]		
First and second years	71 0	57 0
Third and fourth years	77 0	63 0
Fifth to tenth years	80 0	66 0
Eleventh year and over	89 0	72 0
Permanent way men:		
Gangers	73 6–86 6	54 0–65 6
Subgangers	70 0–79 6	51 0–58 6
Undermen	68 0–76 0	49 0–55 0
Porters, freight and passenger:		
Freight handlers	67 0–73 6	48 0–52 6
Traffic—		
Grade 1	70 6 / 72 6	51 0 / 51 6
Grade 2	66 0–70 0	47 0 / 49 0
District relief porters	69 6 / 72 0	50 0 / 51 0
Horse and coach porters	70 6 / 73 0	51 0 / 52 0
Head porters	68 0–72 6	49 0–51 6
Letter sorters—		
Headquarters	76 0	55 0
Others	73 0	53 0
Parcel porters—		
Head	76 0 / 78 6	56 0 / 57 6
Others	71 6 / 74 0	52 0 / 53 0
Shunters, freight and passenger:		
Class 1	83 6	65 0
Class 2	77 0 / 80 0	60 0
Class 3	76 6	55 6
Class 4	70 6 / 73 0	51 0 / 52 0
Yard foremen—		
Class 1	94 6	75 0
Class 2	91 0	70 0
Signalmen	68 0–96 6	49 0–75 6
Vanmen:		
Electrically-driven vehicles	76 6–80 6	57 0–59 6
Petrol and steam driven vehicles	78 0–82 0	58 0–61 0
Horse-drawn vehicles	70 6–77 6	51 0–56 6

[1] Extra pay when mileage in any turn of duty exceeds 125 miles.

Leave with Pay in British Industries.[1]

IN PRE-WAR days the granting of leave with pay to wage earners in British industries was unusual. The factory and workshop act of 1901 did, it is true, provide that vacations amounting to six days a year must be granted, either on the public holidays or on other days or half days, to women and to all workers under 18 years of age employed in workshops and factories, and while men over 18 years of age were not mentioned in the act they were usually granted the leave provided under its terms.

In addition to the statutory holidays many firms granted other holidays, but as a rule only clerks, foremen, apprentices, and other small classes of employees on "standing wages" (those considered to be regularly employed) were paid for these holidays. The principal exceptions to this rule were the railway service, the public utilities (gas, water, electricity, tramway, etc., services, and the road, sanitary, etc., services of local authorities), and the newspaper printing industry, in each of which the majority of the wage earners were granted annual leave of from 3 to 12 days, with pay.

Since the beginning of 1919 there has been a noticeable extension of this practice of leave giving. In 1920 there were 58 collective agreements, 20 of which were general, and 38 district agreements under whose provisions arrangements for leave with pay in the case of wage earners were made. It was estimated at that time that about 2,000,000 workpeople were covered by these agreements. In the recent arrangements, leave with pay is granted, in most instances, exclusive of legal holidays.

A study made by the Ministry of Labor of the period August, 1920, to the present time shows that notwithstanding the depression through which British industry has been passing, the number of collective agreements including this condition of employment has steadily increased to over 100, of which 20 are general agreements and 93 are district agreements. Included among the general agreements are the railway service (traffic section), printing and bookbinding (except newspapers, London), paint and varnish manufacture, flour milling, tramway undertakings, cocoa, chocolate, confectionery, fruit preserving industries, etc. Specific instances of industries and occupations covered in the district agreements are wholesale textile warehouses, baking, butchering, brewing, and clothing trades, shoe and slipper manufacture, compositors, machine managers, etc., on newspapers (London), employees of cooperative societies in various towns, and wholesale grocers' assistants.

Considerable variation exists in the length of the periods of leave granted, the qualifying service required, and the amount of payment made. According to the table shown in the Ministry of Labor Gazette, December, 1922 (p. 474), leave with pay covers from 3 days to 21 days (one instance); the number of months of service required in the industries concerned ranges from no specified time to three years (two instances).

The majority of the formal agreements provide that payment shall be made for statutory holidays, and in addition for a certain period varying in different cases

[1] Labor Gazette, London [now the Ministry of Labor Gazette], August, 1920, pp. 421, 422, and December 1922, pp. 474, 475.

usually from 3 to 12 days in each year. Payment for this period, however, is generally conditional on the employee having had 6 or 12 months' service, and in some cases the amount of holiday varies according to the length of service. In the case of time-workers payment is generally at the full weekly rates of wages, and in some instances provision is made for the payment of pieceworkers on the same basis. In the paper bag making trade and in the printing trade in the provinces pieceworkers receive an amount equivalent to the average of their weekly earnings in the previous six months, but in the case of compositors in London they receive payment at the rate of their average earnings, less overtime payments, as shown on their income tax returns for the preceding year. In the paint, color, and varnish trades pieceworkers are paid at their average weekly earnings for the previous month. In the cement industry the average of three months is taken, and in the pen-making trade the average of the first four of the five weeks preceding the holiday. In the match manufacturing industry payment is based on the average weekly hours in the year preceding the holiday.

Many of the agreements specify that leave with pay shall be taken on consecutive days or during the summer months. Payment is withheld in some cases when workmen are absent without sufficient cause for seven days during the preceding year or if they fail to report for a full day's work on the day following their vacation. Some industries make additional payments to workers who leave their positions before taking their leave. "In the paper-bag making, printing, and copper-plate engraving (London) trades an employee who leaves after six months' service without having had his holiday receives one day's pay for each two months of service. Newspaper printers in London who leave their employment before March 31 receive one-twelfth of two weeks' wages for each month's service since the previous October. An employee in the paint, color, and varnish trades who leaves within a month prior to the date fixed for his holiday receives the holiday payment."

Many agreements with individual firms also contain provisions for annual leave for wage workers. The brush and broom trade board has recommended the granting of one week's holiday with pay to all employees in this industry who have given a year's service, while the Wholesale Clothing Manufacturers' Federation has announced its approval of payment for a week's leave but has left the matter to the discretion of the districts and the individual employers. Employers in the tin box making trade are in favor of granting their employees 1 week's holiday with pay after 12 months' service, 6 days' leave after 9 months' service, and 5 days' leave at the completion of 6 months' service. All these cases seem to indicate an increasing tendency on the part of employers generally to recognize the value of a few days' freedom to workers who could not afford to "lay off" unless their wages were continued.

Wages in Tokio in September and October, 1922.

A CONSULAR report dated November 29, 1922, gives the following data, compiled by the Tokio Chamber of Commerce, regarding the daily wages in effect in Tokio in September and October, 1922. Of the 49 occupations listed 9 show increases and 8 reductions in the wages in October over those of the preceding month.

DAILY WAGES IN VARIOUS OCCUPATIONS IN TOKIO IN SEPTEMBER AND OCTOBER, 1922.

[1 yen at par=49.85 cents.]

Occupation.	September.	October.	Occupation.	September.	October.
	Yen.	*Yen.*		*Yen.*	*Yen.*
Silk reelers, female	[1] 0.95	[1] 0.95	Soy brewers	1.50	1.50
Cotton spinners, female	[1] 1.02	[1] 1.04	Sugar refiners	1.64	1.64
Silk yarn spinners, female	[1] 1.16	[1] 1.16	Millers, flour	2.08	2.08
Silk loom operators, hand	3.00	2.50	Confectioners	[1] 1.67	[1] 1.67
Cotton weavers, female	[1] 1.00	[1] 1.00	Canners	1.50	1.60
Hoisery weavers, male	1.60	1.60	Woodworkers	4.00	4.00
Hoisery weavers, female	1.06	1.06	Wire-rope workers	2.50	2.50
Lathe operators	3.68	4.63	Bookbinders	2.50	2.50
Finishers	2.68	3.39	Typesetters	2.95	2.95
Wood engravers	3.64	3.78	Carpenters	[1] 3.30	[1] 3.30
Smelting workers	4.12	4.72	Masons (plastering, etc.)	5.00	5.00
Blacksmiths	3.18	3.33	Stonemasons	4.50	4.50
Porcelain workers	2.20	2.20	Painters	2.50	2.50
Glassworkers	2.65	2.50	Tile layers	4.20	4.20
Cement workers	2.91	2.92	Bricklayers	4.00	4.00
Brick molders	1.76	1.74	Mat makers	[1] 3.00	[1] 3.00
Tile molders	2.70	2.70	Joiners	[1] 2.80	[1] 3.00
Japanese paper workers	1.20	1.20	Shoemakers	2.23	1.84
Foreign paper workers	1.51	1.50	Tailors (foreign dress)	[1] 3.40	[1] 3.20
Lacquer painters	3.00	3.00	Coolies, male	2.06	2.06
Matchmakers, male	2.10	2.10	Coolies, female	1.19	1.19
Matchmakers, female	.95	.95	Lumber workers	3.10	3.05
Oil pressers	1.50	1.50	Fishermen	[1] 1.10	[1] 1.10
Chemical medicine workers	2.30	1.70	Maidservants	[1] 1.07	[1] 1.07
"Sake" distillers	[1] 1.75	[1] 1.75			

[1] Includes cost of meals.

Wages of European Workers in South Africa.

THE standard or average wages paid to European adult male workers in various industrial areas in the Union of South Africa, as of December 31, 1921, are shown in the fourth number, 1922, of Social Statistics, published by the South African Office of Census and Statistics. These figures are shown below:

STANDARD OR AVERAGE WAGES OF EUROPEAN ADULT MALE WORKERS IN CERTAIN INDUSTRIAL AREAS IN SOUTH AFRICA, DECEMBER 31, 1921, BY INDUSTRY AND OCCUPATION.

[Shilling at par=24.3 cents; penny=2.03 cents.]

Industry and occupation.	Standard or average wages of European adult male workers in—								
	Cape Peninsula.	Port Elizabeth.	East London.	Kimberley.	Pietermaritzburg.	Durban.	Pretoria.	Witwatersrand.	Bloemfontein.
	Per day.								
Engineering and metal working.	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*	*s.* *d.*
Blacksmiths	25 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28 0
Boiler makers	28 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28 0
Brass finishers	28 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28
Coppersmiths	28 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28
Fitters	25 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28
Molders	25 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28
Pattern makers	25 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28 0
Turners	25 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28 0
Electricians	28 0	25 4	25 4	30 0	30 0	30 0	29 4	28 0	28 0

STANDARD OR AVERAGE WAGES OF EUROPEAN ADULT MALE WORKERS IN CERTAIN INDUSTRIAL AREAS IN SOUTH AFRICA, DECEMBER 31, 1921, BY INDUSTRY AND OCCUPATION—Concluded.

Industry and occupation.	Standard or average wages of European adult male workers in—								
	Cape Peninsula.	Port Elizabeth.	East London.	Kimberley.	Pietermaritzburg.	Durban.	Pretoria.	Witwatersrand.	Bloemfontein.
	Per hour.								
Building.									
Bricklayers	3 6	3 2	3 2	2 11	3 2	3 6½	3 10	3 10	3 10
Carpenters	3 6	3 6	3 2	3 3	3 2	3 6½	3 10	3 10	3 10
Masons	3 6	3 2	3 2	2 11	3 2	3 6½	3 10	3 10	3 10
Painters, glaziers, paper hangers, and sign writers	2 2	2 8½	2 8½	2 11	2 8½	3 1½	3 10	3 10	3 4
Brush hands	2 2	2 8½	2 8½	2 11	2 8½	3 1½	3 10	3 10	3 4
Plasterers	3 6	3 2	3 2	2 11	3 2	3 6½	3 10	3 10	3 10
Plumbers	3 6	3 2	3 1	2 11	3 2	3 6½	3 10	3 10	3 10
Street railways.									
Conductors and motormen:									
First year	1 6 to 1 7	1 7 to 1 8	1 9 to 2 0	2 6	2 0 to 2 1¼	[1] 16 0 to [1] 18 6	2 8½	3 0	1 5 to 1 6
Second year	1 9	1 10	2 3	2 6	2 3¾	[1] 18 6	2 10½	3 0	1 7 to 1 8
Third year	1 11	1 11½	2 3	2 6	2 3¾	[1] 19 3	3 1½	3 3	1 9 to 1 10
Fourth year	2 1½	.....	2 3	2 6	2 3¾	[1] 20 0	3 1½	3 6	2 3
Fifth year	.....	2 2½	2 3	2 6	2 3¾	[1] 20 0	3 1½	3 6	2 3
Sixth year	2 3	2 3	2 3	2 6	2 3¾	[1] 20 0	3 1½	3 6	2 3
	Per week.								
Printing, bookbinding, etc.									
Bookbinders and rulers	138 6	138 6	138 6	149 3	138 6	149 3	170 6	170 6	160 0
Lithographers	138 6	138 6	138 6	149 3	138 6	149 3	170 6	170 6	160 0
Compositors	138 6	138 6	138 6	149 3	138 6	149 3	170 6	170 6	160 0
Machine operators (day work)	152 3	152 3	152 3	164 3	152 3	164 3	187 6	187 6	176 0
Machine operators (night work)	167 6	167 6	167 6	180 9	167 6	180 9	206 6	206 6	193 6
Machinists	138 6	138 6	138 6	149 3	138 6	149 3	170 6	170 6	160 0
Stereotypers	138 6	138 6	138 6	149 3	138 6	149 3	170 6	170 6	160 0
General manufacturing.									
General average [2]	102 6	105 11	101 11	145 5	123 6	137 0	142 11	148 5	125 11
Miscellaneous.									
Salesmen, mercantile establishments [3]	125 3	116 0	117 7	131 6	133 3	140 3	144 4	162 11	131 2
Clerical occupations	158 9	153 3	146 0	168 7	146 11	153 10	169 11	183 2	156 11
Cooks, barmen, and hotel porters [4]	97 1	95 1	83 9	96 9	108 0	97 1	131 5	127 10	107 5
Sanitary inspectors	144 9	151 9	130 3	184 3	142 8	177 9	199 9	219 9	157 0
Farriers	80 0	60 0	69 10	80 0	96 0	111 7	141 2	123 11	103 4
Hairdressers	110 8	98 9	84 3	108 6	122 8	163 3	122 11	160 9	116 0
Firemen [5]	92 1	107 7	89 3	96 10	91 7	97 5	127 1	138 6	92 4

[1] Per day.
[2] General average of certain occupations in baking, boot and shoe making, brewing, coach and wagon building, furniture manufacturing, leather working, tailoring, and woodworking.
[3] General average wage, including commission on sales.
[4] Average wage includes estimated cost of board and lodging.
[5] Quarters are provided free.

LABOR AGREEMENTS, AWARDS, AND DECISIONS.

Hat and Cap Industry—St. Louis.

THE St. Louis local of the United Cloth Hat and Cap Makers of North America has signed a working agreement with eight St. Louis firms, according to information reaching this bureau. The agreement went into effect September 1, 1922, and is to continue for the period of one year. In case any change in the agreement is desired by either party at the expiration of the contract such party must give written notice 30 days before the agreement expires.

The agreement provides for a closed union shop, for the division of work during slack periods, for a 44-hour week, a weekly pay day, for six legal holidays with pay, and for admission to the factory at all times of the business representative of the union.

The manufacturers agree not to give out work to be done in non-union shops, nor to compel employees to do work for any other manufacturer involved in a strike or lockout. All complaints, disputes, or grievances are to be taken up for adjustment between the manufacturer and the union's business representative.

Employees must give one week's notice before leaving their jobs. Discharge of employees without sufficient cause until an opportunity has been given for joint investigation of the reason is forbidden.

The rate of wages remains unchanged.

The agreement carries an employment guaranty as follows:

> The party of the first part guarantees to employ its employees not less than 48 weeks to the year, not to include overtime; and the employees agree to work overtime when necessary, for the same rate of pay received for straight time. When unable to supply 48 weeks per year, the party of the first part agrees to pay its employees time and one-quarter for overtime.

The arrangements for employment of workers in case the union is unable to furnish competent ones are also of interest.

> At such times that the party of the second part is unable to furnish the party of the first part with competent employees the party of the first part shall have the privilege of securing employees, to be designated as apprentices, the rate of wages for such employees for the first 30 days of their employment to be determined by the party of the first part, and the number of such employees to be agreed upon between the party of the first part and the business representative of the union. Apprentices, after the first 30 days of their employment, shall become members of the union, and their wages shall be not less than $12 per week for the first four weeks of their employment as members of the union, and their wages shall be increased at the rate of $1 per week each month for a period of six months.

Men's Clothing Industry—Boston.

THE Boston joint board of the Amalgamated Clothing Workers has concluded agreements with manufacturers and contractors in the trades controlled by the Amalgamated in the Boston market.

The agreements provide for the 44-hour week and a closed union shop. New help hired in case the union can not supply a sufficient number of workers must join the Amalgamated Clothing Workers after the expiration of one week.

All matters in controversy are first to be taken up by the shop chairman and the employer; should the parties be unable to agree on the matter, it is to be referred to the manager of the joint board for him to adjust with the employer.

Any question of a general nature such as a change in the hours of work, wages or working conditions and the introduction of new machinery in the shops of the clothiers, as well as other matters, must be jointly agreed upon or arbitrated.

Somewhat unusual are the features of the agreements relating to the employment of contractors, which are as follows:

> The employer further agrees in consideration of the employees aiding in the proper manufacture of clothing that he will employ only such contractors as may be mutually agreed upon between the parties to this agreement; it being the intention of the parties in making this arrangement to stabilize and standardize the clothing industry of this city.
>
> The employer further agrees that for the present he will only have the work made with the following contractors who are duly registered in the office of the joint board: [names of contractors].

The agreements are continuing, to remain in force for one year from date and from year to year thereafter unless either party desires to cancel the agreement, in which event notice must be given 30 days before the expiration of each yearly period.

As a guaranty against the violation of these agreements, says the Advance,[1] each contractor is to give cash security to the association with which he is affiliated, the association to make a deposit with the union.

Railroads—Decisions of the Railroad Labor Board.

Maintenance of Way—Rules.

THE disputes between the carriers and the maintenance of way men embodied requests for increased compensation and for certain changes in rules and working conditions. In decision No. 1267 (summarized in the MONTHLY LABOR REVIEW for December, 1922, p. 117) the board disposed of the dispute relative to wages; decision No. 1450, effective January 1, 1923, hereinafter noted, determines the disputes relating to rules and working conditions.

The Railroad Labor Board in decision No. 501 (MONTHLY LABOR REVIEW for February, 1922, pp. 86–92) promulgated rules and working conditions for this class of workers, but the employees

[1] Advance, New York, Sept. 22, 1922, p. 1.

requested reconsideration of certain rules contained therein and the addition of certain others. Rules promulgated in decision No. 501, it will be remembered, revised the war-time maintenance of way national agreement. The outstanding features of this revision included provisions for the payment of punitive overtime after the tenth hour, instead of after the eighth hour, on continuous service, as had been the case under the national agreement, and for the revision of other rules so that the subjects involved might be left open for local adjustment. The present ruling continues in effect the sections of decision No. 501, involving scope of the rules (article I); discipline and grievances (article IV); hours, service, overtime, and calls (article V); and general rules (article VI), except that the following sections were added to article V:

SEC. (c-1). * * *
Employees' time will start and end at designated assembling points for each class of employees.
SEC. (h). * * *
Supervisory forces shall be compensated on the same overtime basis as the men supervised when the general force is required to work in excess of eight (8) hours per day.
SEC. (k-1). Where special work, not within the scope of this agreement, is done outside of regular work period and extra compensation agreed upon, overtime will not apply.[1]
SEC. (r). Except as provided in these rules no compensation will be allowed for work not performed.[1]

In practically all the submissions filed in this case the employees requested that a rule be incorporated in the agreement which would prohibit the carrier from contracting its work to outside concerns. It was the opinion of the board that its position on this question had been so clearly and definitely set out in numerous recent decisions, that a further reiteration of its position was unnecessary.

* * * the Labor Board does not feel that it is necessary to incorporate in the several agreements a rule relating to this subject. Should a question arise which can not be satisfactorily settled in conference between the interested parties in regard to the question of contracts, the matter should be submitted to the Labor Board in conformity with the provisions of the transportation act, 1920.

Numerous other questions were submitted to the board in this case in connection with which there were no corresponding rules in either the national agreement or decision 501. Such questions are remanded for further conference between the interested parties in an effort to reach an agreement.

Certain carriers raised the issue in this case that a portion of the employees embraced in the classes involved in this decision were on strike and therefore not entitled to be heard before the board at this time. On this point the board says:

* * * The fact that some of these employees are on a strike does not preclude the organization from presenting a dispute in behalf of those employees who are actually in the service of the carrier. The employees in the service can not equitably be deprived of their right to appear before the Labor Board because others are out on a strike.

[1] This section appeared in the war-time national agreement.

The new rules promulgated by the board at this time are as follows:

ARTICLE I—*Scope.*

No change from Decision No. 501.

ARTICLE II—*Seniority.*

SECTION (a). Seniority begins at the time the employee's pay starts.

SEC. (b). Rights accruing to employees under their seniority entitle them to consideration for positions in accordance with their relative length of service with the railroad, as hereinafter provided.

SEC. (c-1). Seniority rights of employees are confined to the subdepartment in which employed.

SEC. (d-1). Seniority rights of laborers, as such, will be restricted to their respective gangs, except that when force is reduced laborers affected may displace laborers junior in service on their seniority district.

SEC. (d-2). Seniority rights of laborers to promotion will be restricted to the territory under the jurisdiction of only one supervisor or other corresponding officer, except that for laborers in the mechanical department such rights will be confined to the place where employed.

SEC. (e) Seniority rights of supervisory forces in the bridge and building department will extend over the territory under the jurisdiction of one division superintendent.

Seniority rights of supervisory forces in the track and roadway departments will extend over the territory under the jurisdiction of one roadmaster.

Seniority rights of supervisory forces over laborers in the maintenance of equipment department will extend over the territory under the jurisdiction of one master mechanic.

SEC. (f). Employees assigned to temporary service may, when released, return to the position from which taken without loss of seniority.

SEC. (g). Seniority rosters of employees of each subdepartment by seniority districts will be separately compiled. Copies will be furnished foremen and employees' representatives and be kept at convenient places available for inspection by employees interested.

SEC. (h). Seniority rosters will show the name and date of entry of the employees into the service of the railroad, except that names of laborers will not be included and their seniority rights will not apply until they have been in continuous service of the railroad in excess of six (6) months.

SEC. (i). Rosters will be revised in January of each year and will be open to correction for a period of sixty (60) days thereafter.

SEC. (j). Employees given leave of absence in writing by proper authority of the railroad, for six (6) months or less, will retain their seniority. Employees failing to return before the expiration of their leave of absence will lose their seniority rights, unless an extension has been obtained.

SEC. (k). When employees laid off by reason of force reduction desire to retain their seniority rights, they must file with the officer of the subdepartment notifying them of the reduction, their address, and renew same each sixty (60) days. Failure to renew the address each sixty (60) days, or to return to the service within seven (7) days after being so notified, will forfeit all seniority rights.

SEC. (l). Employees temporarily transferred by direction of the management, from one seniority district to another, will retain their seniority rights on the district from which transferred.

SEC. (m). In case of change in seniority districts a relative proportion of the total employees affected will be transferred to, and their seniority rights adjusted in, the revised districts, by the management, with a properly constituted committee representing the employees.

SEC. (n). Employees accepting positions in the exercise of their seniority rights will do so without causing extra expense to the railroad, except as provided in these rules.

ARTICLE III.—*Promotions.*

SECTION (a). Promotions shall be based on ability, merit and seniority. Ability and merit being sufficient, seniority shall prevail, the management to be the judge.

SEC. (b). In transferring employees to fill vacancies or new positions, the provisions of section (a) of this article will apply.

SEC. (c). Employees are entitled to promotion only on the district and in the subdepartment over which their seniority rights prevail.

SEC. (d). Employees declining promotion shall not lose their seniority, except to the employee promoted and only in the next higher rank of service.

SEC. (e). Employees accepting promotion and failing to qualify within thirty (30) days may return to their former positions.

SEC. (f). New positions and vacancies will be bulletined within thirty (30) days previous to or following the dates such vacancies occur, except that temporary vacancies need not be bulletined until the expiration of thirty (30) days from the date such vacancies occur.

SEC. (g). Promotions to new positions or to fill vacancies will be made after bulletin notice has been posted for a period of ten (10) days at the headquarters of the gangs in the subdepartment of employees entitled to consideration in filling the positions, during which time employees may file their applications with the official whose name appears on the bulletin. The appointment will be made before the expiration of thirty (30) days from the date the bulletin is posted and the name of the employee selected will then be announced. New positions or vacancies may be filed temporarily, pending permanent appointment.

SEC. (h). The general rule of promotion and seniority will not apply to positions of track, bridge and highway crossing watchmen and flagmen at railway (noninterlocked) crossings, but, when practicable, such positions will be filled by incapacitated employees from any department, and preference in filling and retaining these positions will be determined by the degree to which incapacitated for other work, seniority in the service of the railroad and ability to perform the work.

A dissenting opinion by one of the labor members of the board and a supporting opinion by the chairman accompany this majority decision. The dissenting opinion is directed at the rules adopted by the majority relative to pro rata payment for overtime and Sunday and holiday work. In the supporting opinion the chairman defends the majority ruling but concurs to a partial extent in the dissenting opinion in his dissatisfaction with the rule providing pro rata rate of pay for Sunday work. He says:

I believe that the principle embraced in the Sunday rule of the shop crafts, as set out in decision No. 222—namely, that time and one-half should be paid for Sunday work, except such work as is unavoidably and regularly performed on Sundays, and which is absolutely essential to the continuous operation of the railroads—should obtain in the case of the maintenance-of-way employees.

Telegraphers' Wages.

Upon application of 11 western carriers, the Railroad Labor Board in its decision No. 1448, effective January 1, 1923, decided that the inequalities heretofore existing in the rates of pay of employees in station and telegraph service of the carriers party to this decision should be eliminated.

The labor board pointed out that for some years prior to 1917 telegraphers employed by the carriers were paid a monthly salary to cover the full calendar days of the month, i. e., 28, 30, or 31. On some roads overtime was paid on Sundays and holidays after regularly assigned hours. Some agreements provided for payment on a working-day basis, in which case the monthly rates were less than rates applying to employees working on a calendar-month basis. Late in 1917 telegraphers in the service of these carriers received an increase in wages of 12 per cent and the calendar month basis was changed to a working-day month basis. Thereafter the rate formerly applying for service performed on the calendar days of the month applied for the working days of the month and additional compensation was paid for service on other than working days, i. e., on Sundays and holidays.

In December, 1918, the Railroad Administration in supplement No. 13 to general order No. 27 ruled that telegraphers should be paid on an hourly basis to be determined as follows:

(b) To determine the hourly basis for positions held by monthly paid employees, multiply by 12 the regular monthly rate in effect as of January 1, 1918, prior to the application of general order No. 27 (exclusive of all compensation for extra services), divide by 306 (number of working days for the year), and apply provisions of section (e) of this article.[1]

In the application of this ruling the question arose, on the roads where the 26-day month was in vogue, as to what would be included in the "regular monthly rate" and what constituted the "extra services" to be excluded. The employees claimed that the earnings within the regularly assigned hours of the calendar days of the month should be the basis upon which the increases should be applied, i. e., that not only earnings of the 26 days but also of the regularly assigned Sunday and holiday work should be included in computing the regular monthly rate. The carriers protested this and contended that supplement No. 13 was never intended to include compensation for Sunday and holiday services where such service was paid for as overtime.

The differences in the rates which would result from these interpretations of supplement No. 13 are brought out in the minority opinion of a labor member of the board accompanying the decision, as follows:

The following examples show three employees—A, B, and C—each receiving $85 per month on a 26-day basis, working the hours shown in the example:

Employee.	Prior to January 1, 1918.				
	Week-day hours.	Sunday hours.	Monthly rate.	Sunday rate.	Total compensation.
A	8	0	$85.00	.....	$85.00
B	8	2	85.00	$3.28	88.28
C	8	4	85.00	6.56	91.56

Under supplement No. 13 to general order No. 27, their rates, notwithstanding that "B" regularly received $88.28 per month, and "C" received $91.56 per month, were figured on an $85 a month basis.

This dispute was submitted to the Board of Railroad Wages and Working Conditions of the Railroad Administration and interpretation No. 8 was promulgated, which provided that the "total amount of salary earned from the railroad within the regular assigned hours on the calendar days of the month shall be considered the basic rate" upon which supplement No. 13 was to be applied. The hourly rates in the adjustment under interpretation No. 8 and including the increases provided in supplement No. 13 were as follows:

Employee.	Basing rate.	New hourly rate under supplement No. 13.
A	$85.00	$0.5675
B	88.28	.5850
C	91.56	.6000

[1] Section (e) of Article I refers to employees paid on a basis of 10 hours or more to constitute a day's work.

Supplement No. 13 provided that the monthly rate should be multiplied by 12 (months) and divided by 306 (days) which is 365 days less 52 Sundays and 7 holidays. To demonstrate our contention, let us assume that our employees were paid on a daily basis instead of a 26-day month basis. Under this assumption our daily rate would have been multiplied by 365 (days) and divided by 306 (days) and by 8 (hours) to ascertain the new hourly rate, but in the application of the wage order our 26-day month is the same as the daily basis. It is clear that if the employees were paid on a daily basis and worked on Sundays they would be paid extra for Sundays.

The employees further state that—

After the interpretation was issued, conferences ensued between the representatives of the telegraphers and the carriers at which the employees said that they admitted the fact that the interpretation established inequalities, and suggested the advisability of distributing the total amount of the increase accruing from interpretation No. 8 equitably to all positions to eliminate the inequalities, but this proposition of the employees was declined and the interpretation placed in effect in accordance with the language thereof.

The employees contend that when supplement 13 to general order No. 27 was applied to the employees in telegraph and station service working on the 26-day month basis, no recognition was given to the fact that the schedule wage was for 26 days per month, but the salary shown in the schedule was arbitrarily considered as being for 365 days per annum, the same as on other railroads, working the calendar days of the month; that interpretation No. 8 was a compromise settlement through which the carriers have profited at the expense of the employees for three years, and did not give the employees the full amount they were entitled to; furthermore, that the inequalities would not now exist had a correct application of supplement 13 been made in accordance with the employees' contentions in the first instance, and that the request of the carriers now presented is merely for the purpose of securing a wage reduction through a subterfuge.

It was the contention of the carriers involved (Chicago & Northwestern Railway Co., Chicago, Burlington & Quincy Railroad Co., Chicago, Milwaukee & St. Paul Railway Co., Chicago, Rock Island & Pacific Railway Co., Chicago, St. Paul, Minneapolis & Omaha Railway Co., Great Northern Railway Co., Illinois Central Railroad Co., Minneapolis & St. Louis Railroad Co., Minneapolis, St. Paul & Saulte Ste. Marie Railway, Northern Pacific Railway Co., and Southern Pacific Co., Pacific system) that inequalities produced by the application of this interpretation not only created an additional expenditure of over $1,000,000 per annum, but also created a very disturbing situation in that agents previously receiving a substantial differential over telegraphers were by this order receiving less than the telegraphers working at the same stations, notwithstanding the fact that the class of work and responsibility remained unchanged.

It was stated that on some roads where prior to the promulgation of interpretation No. 8 there were 30 rates of pay, there were as a result of this order 172 rates of pay, and that on lines represented in this controversy 11,008 employees received increases and 4,027 received no increases. The carriers contended that this resulted in old experienced agents holding responsible positions taking assignments of less responsibility where rates of pay were increased under interpretation No. 8, and agents of less experience accepting the important stations, thereby impairing the efficiency of the service.

The majority of the board decided that, effective January 1, 1923, the inequalities in rates of pay of employees in station and telegraph service of the carriers party to this decision should be eliminated by reducing the hourly rate of said employee an amount equivalent to the increase resulting from the application of interpretation No. 8 to supplement No. 13.

This decision, the telegraphers claim, will result in an average reduction of $114 per annum for the 11,008 telegraphers directly affected.

A dissenting opinion was filed by one of the labor members of the board who states that he submitted the following proposed decision, which was rejected by a vote of 5 to 3:

The Labor Board therefore decides that the increases accruing to the employees through the application of interpretation No. 8 to supplement No. 13 were not improper; but in the application of the increases certain inequalities were created which should be eliminated by distributing to the employees in station and telegraph service on the carriers parties hereto, the aggregate amount of the increase accruing through the application of said interpretation.

Conference shall be held on or before December 10, 1922, for the purpose of arranging the details of the distribution in a manner mutually agreeable to the employees and the carrier, and effective December 16, 1922.

"This proposed decision," says the dissenting opinion, "would have resulted in adjusting any existing improper differentials without adding one additional penny to the pay rolls of the carrier. The decision of the majority arbitrarily puts into effect differentials that were in effect during the year 1917, and every practical railroad man must admit that this decision will create a multitude of unjustifiable differentials in rates of pay, and that the existing dissatisfaction and discontent of these employees will be augmented by this impracticable decision, the only effect of which is to bring about another reduction in wages veiled by a thinly spread smoke screen which simply emphasizes the desire of the majority to deny the employees an opportunity to meet the respective carriers in conference and work out an equitable adjustment of any existing improper differentials."

Soft-Drink Workers—Portland.

IN CONFORMITY with the plan of this bureau to publish in full, from time to time, in this section of the MONTHLY LABOR REVIEW, significant agreements which show the trend of industrial relations in the industries where such contracts are made, the following contract between local union No. 320 of the United Brewery, Flour, Cereal, and Soft Drink Workers of America, with certain manufacturers and firms of Portland, Oreg., and vicinity, is reprinted herewith.

The United Brewery, Flour, Cereal, and Soft Drink Workers of America, it will be remembered, is industrial in structure and affiliated with the American Federation of Labor.

SECTION 1. Only members in good standing of said local union No. 320 shall be employed in and around all cereal, beverage, and soft drink establishments and malt houses. Men engaged to watch property exclusively, and doing no employees' work in manufacturing department, are exempt.

In cases of vacancies arising, all employees shall be employed through the free employment office of the union, the employers to have the right of selection from the list of all the employees out of employment.

SEC. 2. Should the union be unable to furnish help during the busy season, from April 1st to October 1st, extra help may be employed, as long as such employment does not cause any lay-off to the union men. All such extra help shall have a permit card issued by local union No. 320 before they can go to work. A permit card is

good for one month only, but can be renewed again, excepting when a good standing member of the International Union of United Brewery, Flour, Cereal, and Soft Drink Workers reports for work, then the last permit card man put to work shall, at the last day of the month, upon which his card expires, be laid off and the union member shall take his place.

If a vacancy in the regular force takes place, and no union member is out of work, the oldest permit card man in point of service shall fill such vacancy if capable.

Permit card men shall receive the wages paid to union men in the department in which they are employed, except as otherwise provided in this agreement.

SEC. 3. No member shall be discharged or discriminated against for upholding union principles. A man who works under the instruction of the union, or who serves on a committee, shall not lose his position or be discriminated against for this reason. The necessary time to discharge these duties shall be granted him.

Any member of the union shall have the right to lay off from his work in case he has some business to attend pertaining to the union. He must, however, notify the manager or superintendent of the necessity to lay off and inform him of the probable length of his absence, in order to provide for a substitute, if necessary. He shall not receive any pay during his absence unless the work is done by him at the request of the employer. In cases where there is not sufficient work in a department to employ an additional man, a union man from another department may help out temporarily, providing that such work does not last longer than one week.

In case an employee lays off with the consent of the manager or superintendent, or if he becomes sick, his place may be filled temporarily by a competent out-of-work member until his return, if necessary.

MANUFACTURING DEPARTMENT.

SEC. 4. Eight (8) consecutive hours with one (1) hour interval for meals shall constitute a day's work, and six (6) days a week's work, except as otherwise provided. The regular working day shall not commence before 7 a. m. and shall not continue after 5 p. m.

The following shall be considered as the work of the manufacturing department. All maltster's work in the malthouse and all work in the brewhouse, cellars, washhouse and pitch house. The men employed in the malthouse connected with cereal beverage plants shall receive work in other departments after malting season closes, whenever possible.

DELIVERY DEPARTMENT.

SEC. 5. Hours of work shall be the same as in the manufacturing department except at the option of the employer, work may terminate at 6 p. m.

BOTTLING DEPARTMENT.

SEC. 6. Hours of work shall be the same as in the manufacturing department.

Class A. The machine men, regular packers, headers, wrappers, soaker men, offbearers shall be considered bottlers, also the extract mixer and draught pumper, as well as truck checkers.

Class B. Truckers, helpers, and other men not included in Class A shall be considered as bottlers' helpers.

Class C. Permit card men shall be considered as temporary men employed under section 2 and working in the bottling department.

YARDMEN.

SEC. 7. Yardmen will work the same hours as those employed in the manufacturing department. Yardmen may, in emergencies, be employed directly by the employing firm, and if not already a member of the said local union, they shall at once apply for membership and shall only be put to work after depositing initiation fee with the secretary of the union. Section 12 of this contract shall not apply to yardmen. They may be laid off by the employer without any restriction.

WAGES.

SEC. 8. The following wages are to be paid during the term of this contract, per week:

Manufacturing department: Brewers	$31.50
Delivery department: Drivers	31.50
Bottling department:	
Class A bottlers	30.00
Class B bottlers	27.00
Class C bottlers	27.00
Yardmen	27.00

Wages are to be paid weekly in full in legal currency.

OVERTIME.

SEC. 9. All work done in excess of the eight (8) hours shall be considered overtime: *Provided, however*, That the night man or night men in the brewhouse shall work eight (8) consecutive hours, interrupted by one (1) hour for meals; their working time shall begin according to mutual understanding between the employer and employees concerned: *Also provided*, That overtime for first hour of overtime for delivery department shall be at regular time.

All work on Sundays and holidays mentioned in this contract shall be considered and paid for as overtime, including work in the malthouse. The following days shall be considered holidays: New Year's Day, First of May, Decoration Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas. The employer shall not lay the employee off on other holidays unless mutually agreed upon.

Overtime must be paid for and shall not be taken out. All overtime to be equally divided among employees, if possible. It shall be expressly understood that no overtime shall be worked when other members are being laid off except in cases of emergency. Overtime shall be worked only in case of necessity.

The following rate per hour for overtime shall be paid:

Manufacturing department: Brewers	$0.99
Delivery department: Drivers	.66 and $0.99
Bottling department:	
Class A	.93
Class B	.84
Class C	.84
Yardmen	.84

SEC. 10. The wage and overtime scales listed above shall not be reduced.

SEC. 11. In case of sickness, the employee shall be reemployed upon recovery.

SEC. 12. Should dullness of trade necessitate reduction of working force, the employee shall be laid off in an impartial way in rotation. No employee shall be laid off for longer than one week at a time.

SEC. 13. Each firm shall put at the disposal of the employees a room which can be heated, wherein to change and dry their clothes. In case an employee is changed from hot to cold, or from cold to hot department, the time shall be given him to change his clothes.

No employee shall be compelled to varnish casks or storage tanks without proper safety guards, and without being furnished with safety devices, such as mask, etc., according to the existing State law. To avoid accidents, no employee shall be compelled to work on or around casks or tanks under unusual pressure.

If a cooper is employed at the cereal beverage plant, he shall have charge of all the cooper work, the repairing and casks for varnishing whenever special cooper work is required.

SEC. 14. The union label of the International Union of United Brewery, Flour, Cereal and Soft Drink Workers of America shall be supplied to all firms that comply with the provisions of this contract. Union-made materials, sirup, and machinery shall have preference.

SEC. 15. The employer shall provide emergency bandages and medicines free of charge in his shop to be used in case of accident.

SEC. 16. Any and all differences that may arise as to the interpretations of this agreement, as well as any and all other differences that may arise between an employer and the employee shall be referred to a board of arbitration, consisting of two members of the Union No. 320 and two representatives of the firm concerned; shall

these four fail to agree they shall elect a fifth disinterested person, and the decision of the majority of the whole shall be final and binding on all parties.

No shop strike shall be ordered before submitting the differences between the employer and employee to arbitration, and whenever a written request is made for arbitration or any matter whatsoever, such request will be acted upon without any unnecessary delay, and no excuse, that the matter is not subject for arbitration, shall be presented by either party, but such arbitration must be had forthwith.

SEC. 17. This agreement shall continue and remain in force from the 16th day of May, 1923, inclusive.

Notice of the intention of either party desiring any change to be made in this agreement before the renewal thereof, shall be given by the party desiring the change to be made to the other party, together with a copy of the proposed new agreement, at least thirty (30) days before the expiration of this contract. In case no such written notice and copy of the proposed new agreement be given, then it is hereby expressly agreed and understood that this agreement shall be and is hereby renewed and extended in full force and effect to the 15th day of May, A. D. 1924.

WOMEN IN INDUSTRY.

Working Women in Missouri and Alabama.

THE Women's Bureau of the United States Department of Labor has recently issued preliminary reports on investigations dealing with working women, made in Missouri and Alabama in 1922. In Missouri the inquiry was undertaken in order to secure facts for the newly appointed minimum wage commission and dealt mainly with hours and wages. In Alabama it was made in response to requests from the Alabama League of Women Voters and the Alabama Federation of Women's Clubs, and dealt with "the conditions under which women were employed in the industries of the State of Alabama." For both States the reports are given tentatively, with reservations as to possible corrections when the detailed studies are published, but in both cases it is believed that such corrections will not materially affect the data now given out.

The study in Missouri, made in May and June, 1922, dealt with 15,363 white and 1,537 colored women, and covered 160 establishments in 23 cities and towns. Of the white women, the largest groups were employed in the manufacture of men's shirts and overalls, in the manufacture of shoes, and in general mercantile stores, these three groups comprising practically half of the entire number studied. Over half of the colored women (53 per cent) were found in the manufacture of food products, 17.9 per cent were in tobacco factories, and 23.4 per cent in laundries.

The Missouri law limits the employment of women in factories and similar establishments to 9 hours a day and 54 hours a week. The scheduled hours of the establishments visited were for the most part well within these limits, none having more than 54 hours per week, and only one having more than 9 hours a day. The distribution of women by scheduled daily hours was as follows:

Hours per day.	Per cent.
Under 8 hours	1.3
8 hours	21.2
Over 8 and under 9 hours	25.4
9 hours	52.0
Over 9 and under 10 hours	.1

The custom of shortening the day on Saturday was quite general, but the number of hours thus deducted from the week's work varied considerably. About one-third (32.2 per cent) of the women had a scheduled week of 48 hours or less, for 20.9 per cent it was over 48 but under 50, for 34.5 per cent it was 50 but under 52, for 2.6 per cent it was 52 and under 54, and for 9.7 per cent it was 54. The women working a 54-hour week were mainly employed in the manufacture of food products and of shoes, in general mercantile establishments, and in laundries. The report calls attention to the fact that schedules of 48 hours a week or less were established by 29.5 per cent of

the firms, employing 32.3 per cent of the women, a fact which may be regarded as casting doubt on the necessity for longer schedules.

The establishment of reasonable hours for such large groups of women shows that the drain on strength and vitality caused by too long hours is not essential to successful production, and indicates the practicability of including all women in the groups of those whose working hours are not so long as to be a menace to health and efficiency.

Wages were studied in detail, the actual earnings for a normal week being taken for the whole group, and special studies being made of actual earnings for a year and of the relation of earnings to time worked. The difference in the earnings of colored and white women is so great that the facts are presented separately for the two groups. For the normal week studied, the distribution of the women by earnings groups was as follows:

DISTRIBUTION, BY EARNINGS FOR ONE WEEK, OF WHITE AND COLORED WOMEN IN MISSOURI FOR WHOM INFORMATION WAS SECURED.

Week's earnings.	White women earning each specified amount.		Colored women earning each specified amount.	
	Number.	Per cent.	Number.	Per cent.
Under $5	787	5.1	587	38.2
$5 and under $10	3,323	21.6	643	41.8
$10 and under $12	2,561	16.7	159	10.3
$12 and under $15	3,630	23.6	89	5.8
$15 and under $18	2,554	16.6	49	3.2
$18 and under $20	1,036	6.7	9	.6
$20 and over	1,472	9.6	1	.1
Total	15,363	100.0	1,537	100.0

The median earnings for white women were $12.65, for colored women $6 per week. For white women the median earnings ranged from $15.90 for those employed in manufacturing electrical products to $9.80 for those in 5 and 10 cent stores. For colored women the range is from $9.80 for those in laundries to $4.60 for those in the manufacture of food products. The data concerning earnings of time and piece workers are thus summed up:

Of the white women who worked practically full time during the week—48 or more hours or on 5 days or more — one-half earned less than $13.60 or $13.90, respectively. The negro women who worked practically full time received much less than the white women, the medians of their earnings for these groups being $11.05 and $7.75.

Earnings of pieceworkers were in general somewhat higher than those of time workers, but the difference was not great enough to result in a very large median, the highest found for pieceworkers being $16.25 for the 149 women who were employed in the manufacture of electric products.

When the figures on earnings are considered separately for St. Louis, Kansas City, and other places in the State, it appears that earnings on the whole are higher in St. Louis than in Kansas City, and that the other places in the State rank lower than either of the two cities. This does not always hold true for the more detailed figures showing earnings by industry.

The investigation in Alabama, the field work for which was done in February, March, and April of 1922, covered 4,966 white and 760 colored women employed in 131 establishments, all sections of the State being covered. The inquiry included manufacturing establish-

ments of various kinds, retail stores, printing establishments, and laundries.

Sixty and eight-tenths per cent of the women scheduled worked in textile mills, 18.7 per cent in retail stores, and 8.5 per cent in laundries. An overwhelming majority of the textile workers—92.9 per cent—were white; and of the 7.1 per cent who were negroes the majority did cleaning work in the mills; 85.1 per cent of the women in power laundries were negroes who worked chiefly on flat-work machines, at hand and machine pressing, and occasionally on extractors.

Alabama has no legal restrictions on the length of the working day, and the proportion of women working long hours was larger than was the case in Missouri. By scheduled daily hours their distribution was as follows:

Hours per day.	Per cent.
8 hours or under	8.2
Over 8 and under 9 hours	14.7
9 hours	9.5
Over 9 and under 10 hours	13.5
10 hours	37.4
Over 10 and including 11 hours	15.4
Irregular	1.4
	100.0

The weekly hours were also long. About one-eighth of the women (12.6 per cent) had scheduled weekly hours of 48 or under; for 26.6 per cent the hours were over 48, running up to and including 54; and for 60.4 per cent they were 55 or more. For 13.2 per cent they were 60 or over, the majority of these women being employed in the textile mills. Night work was also found.

During the course of this survey 299 women were reported to be working on night shifts in the factories investigated. This number represents only 5 per cent of the women who worked during the daytime. One hundred and seventy of these women worked 11 hours a night and 55 hours a week. The next largest number, 78, worked a 12-hour night and a 60-hour week. In establishing by law the abolishment of night work for all women—a standard which at present obtains for 95 per cent of the women in the plants visited—Alabama would register officially the stand in regard to night work which industry has already taken in that State.

The survey was made during a period of industrial depression, and perhaps because of this the hours actually worked differed widely from the scheduled hours. For 1,985 of the women it was possible to secure figures showing the hours actually worked during the week for which earnings were taken.

Fifty-two and one-half per cent of the women whose actual hours were reported had worked less than full time. That undertime was considerable as well as widespread is shown by the fact that for almost one-tenth of the women working less than scheduled hours, undertime was 30 hours or more a week, and for 66.5 per cent of them undertime amounted to 10 hours or more a week.

Actual earnings for a week, taken from establishment pay rolls for 4,868 white women, showed that one-half of these earned less than $8.80. By industries the median earnings ranged from $6.85 in the manufacture of hosiery to $17.30 in the printing and publishing industry, in which, however, only 29 women included in the survey were employed. The next highest median—$12.45—was found among the 780 women employed in general mercantile establish-

ments. For 2,247 white women covered by the Alabama study both hours and earnings were secured, showing the following results:

Hours worked.	Number of women.	Median earnings.
Under 30 hours	265	$3.70
30 and under 44 hours	390	6.40
44 and under 48 hours	303	8.25
48 and under 50 hours	127	9.80
50 and under 55 hours	250	9.35
55 hours	650	10.00
Over 55 and under 60 hours	94	10.70
60 hours and over	168	10.70

This shows fully two-fifths (42.6 per cent) of the women working less than 48 hours per week, a situation which is plainly abnormal, and which shows that these earnings can not be considered indicative of conditions when employment is at its usual level. It is worth noticing, however, how little connection there seems to be between the hours worked and the earnings. The median for those working 48 and under 50 hours is only 20 cents less than for those working 55 hours, and not a dollar less than for those working 60 hours or over. This, the report holds, seems to show that there is no standard length of working week in the State, so that "although a woman does not get a full week's wage until she has worked 55 hours in one plant, in another she gets her full wage for 50 and in another for 48 hours of work."

The survey of working conditions shows a wide variation in the provisions made for the health and comfort of workers. Perhaps the outstanding fact is that legal requirements along this line are few and that the employer who tries to safeguard his workers against unnecessary strain and discomfort and risk is in direct competition with the employer who cares for none of these things. The report gives considerable attention to the matter of correct posture while at work. From the standpoint of health it is highly desirable that a woman should be able to alternate between sitting and standing, but when this is not possible on account of the nature of the work, it is all the more important that chairs designed to meet the health needs of specific occupations should be provided.

> Each woman who sits at work needs a chair of a height which permits her to operate with least strain, with a back which supports her spine in moments of relaxation, with a broad, slightly saddle-shaped seat round edged in front, and with a foot rest if her feet do not rest squarely on the floor. Each woman who stands at work needs a chair with a back, so that in stated rest periods or while waiting for material she may be relieved and renewed after the strain of standing.

Many of the establishments visited were far from meeting this standard. In the textile mills the majority of the women worked at standing jobs, and for them little provision had been made for any period of relaxation.

> In one mill girls sat on window sills or leaned against posts; in another they used the edge of trucks; in another they were perched on beams of cotton thread; and in still another some had brought low boxes for themselves which they used with the wall for a back. Only one of the 16 mills employing weavers supplied chairs. Seven of them supplied no seats whatever.

In power laundries, with few exceptions, the workers "stood continuously more or less in one spot, and in a majority of cases on a cement floor. Over two-thirds of the laundries had supplied no

seats for any of their workers." Five of the stores visited supplied seats with backs; thirteen supplied stools; one supplied no seats whatever.

A study was also made of conditions in regard to lighting, ventilation, rest rooms, sanitary accommodations, supply of drinking water, and the like. Wide variations were found in all these respects. In fact, the feature which stands out most prominently in this preliminary survey is the lack of any generally accepted standard. In some establishments thoroughly up to date and healthful conditions were found; in others, conditions were almost incredible. Thus, in regard to sanitary accommodations, establishments employing at least 50 per cent of the women met all the requirements of health and decorum, while in others accommodations ranged progressively downward to nine establishments, employing 68 women, which failed to provide separate toilets for men and women. Thirty-five plants provided rest rooms, but in 97 there was no place for the women to lie down but the floor in the toilet room. Fifteen plants supplied cool drinking water with individual cups or angle jet bubblers, but in 38 a common drinking cup was in use, in 39 no cups at all were supplied, and 3 supplied a bucket and dipper. Twenty-one plants had suitably equipped lunch rooms, 6 supplied hot food at cost, and 12 others provided gas plates on which the women could heat food or make a cup of tea, but in 99 there were no lunch rooms or cooking facilities. Similar variations are noted in regard to other conditions, and the conclusion is reached that there is decided need for spreading the gospel of healthful conditions.

In certain plants, of course, the working conditions are good and their cumulative effect promotes health; but, on the whole, a much higher standard of working conditions is necessary throughout Alabama if the standards in practice for women in plants under thoughtful employers are to be established for all women in all plants.

Survey of Office Cleaners in New York City.

THE Consumers' League of New York, in its bulletin for December, 1922, has an article on office cleaners in Lower New York, based on a neighborhood survey made by one of the churches in the district. Records were obtained for 308 woman office cleaners, largely foreigners. Of these, 270 have been in the country over five years, but only 76 are citizens, while 37 others have their first papers. The age level is rather high, only 9 being under 20, and 175 being over 30. The hours worked vary, several recognized schedules being in use, and these being further complicated by the fact that one woman may work two, or even three shifts in the 24 hours.

Several schedules of hours are found. The commonest is to have one-half of the work done at night and the other half in the morning. This means that women come, in some instances, from five or six to eight o'clock at night and again from four or five to eight o'clock in the morning. When this split shift is used, the sweeping and cleaning of baskets is done at night, and the dusting in the morning. In this way the dust raised in sweeping is allowed to settle before dusting, and offices used at night may be cleaned before 9 a. m. In one building visited the work is done in one three-hour-and-fifty-minute shift, from 4 to 7.50 a. m. The superintendent stated that he made the change from the double to the single schedule of hours during the war when

labor was scarce, in order to attract married women, and that he had found it just as effective as the split trick.

Ten dollars a week is the standard wage. In some cases women were receiving $12 a week for the regular shift of four or five hours, but this was the upper limit of wages found. This does not differ widely from the figures set by the Massachusetts Minimum Wage Commission, which in 1920 set the minimum wage for office cleaners, if employed less than 42 hours a week, at 37 cents an hour, amounting to $8.88 for a four-hour and $11.10 for a five-hour shift six days a week. The amount of work expected of the women seems considerable.

The amount of floor space which each woman is required to cover varies from 5,500 to 9,000 square feet in the buildings visited. This means approximately 12 to 23 rooms with the desks and chairs and, in some cases, a flight of stairs and a lavatory. The heavy sweeping and window cleaning and occasional vacuum cleaning is done by men for the most part. The women are not paid for overtime. In no cases do they receive increased wages with length of service. New employees receive the same amount as a woman who has been at it for 20 years.

Generally speaking, the work is undertaken from necessity. The peculiar arrangement of hours fits into the exigencies of a married woman's home life better than a schedule which requires her to be away from home for eight or nine consecutive hours, and the insufficient earnings of the men make it necessary for the women to bring in something.

The most striking economic factor in the situation is the inability of the majority of the husbands and other male members to earn wages in any sense adequate to support themselves and their dependents. The men work on the docks, in the restaurants, and in the buildings of the neighborhood as porters, window cleaners, or elevator operators or starters. In many cases they are totally unskilled and receive meager pay; in the rest, their work is so irregular that, although their hourly rate of wages is on the whole fairly good, their yearly income is very low.

EMPLOYMENT AND UNEMPLOYMENT.

Employment in Selected Industries in December, 1922.

REPORTS concerning the volume of employment in December, 1922, were made to the Bureau of Labor Statistics by 3,294 representative establishments in 43 manufacturing industries, covering 1,587,708 employees, whose total wages during the one-week pay-roll period reported amounted to $40,174,295.

The same establishments reported only 1,551,080 employees in November, and total pay rolls of $39,017,717. Therefore in December, in the 43 industries combined, there was an increase over November of 2.4 per cent in the number of employees and of 3 per cent in total pay rolls.

Increases in the number of employees in December, 1922, as compared with employees for identical establishments in November, 1922, are shown in 33 of the 43 industries and decreases in the remaining 10 industries.

Pottery, owing to the resumption of work after the settlement of the strike, shows the greatest increase, 29.9 per cent, agricultural implements following with an increase of 14.8 per cent. Car building, foundry and machine shops, men's clothing, and shipbuilding show increased employment ranging from 4 to nearly 8 per cent.

Fertilizers show decreased employment of 11.4 per cent, and flour, brick, and chewing and smoking tobacco of from 3 to 6 per cent.

Increases in the total amount of the pay rolls in December, 1922, as compared with November, 1922, are shown in 33 of the 43 industries, leaving only 10 industries which show decreased pay-roll totals. The greatest increase, 25.7 per cent, is shown in the pottery industry, followed by agricultural implements, 18.4 per cent, shipbuilding, 10.2 per cent, and men's clothing and foundry and machine shops, each 9.3 per cent.

The greatest decreases in the total pay rolls in December, as compared with November, are shown in women's clothing, 9.3 per cent, fertilizers, 7.9 per cent, and flour, 5.5 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK[1] IN NOVEMBER AND IN DECEMBER, 1922.

Industry.	Establishments reporting for November and December.	Number on pay roll in—		Per cent of increase (+) or decrease (−).	Amount of pay roll in—		Per cent of increase (+) or decrease (−).
		November, 1922.	December, 1922.		November, 1922.	December, 1922.	
Agricultural implements	51	16,026	18,395	+14.8	$396,846	$469,838	+18.4
Automobiles	111	165,762	170,229	+2.7	5,551,731	5,352,947	−3.6
Automobile tires	67	36,936	38,137	+3.3	968,469	1,024,712	+5.8
Baking	141	23,099	22,549	−2.4	591,399	564,956	−4.5
Boots and shoes	111	70,101	71,457	+1.9	1,572,283	1,678,820	+6.8
Brick	150	13,862	13,268	−4.3	330,919	316,093	−4.5
Carriages and wagons	17	1,547	1,608	+3.9	35,261	36,924	+4.7
Carpets	23	19,322	19,600	+1.4	526,243	537,209	+2.1
Car building and repairing	84	73,726	76,803	+4.2	2,108,289	2,192,656	+4.0
Chemicals	40	14,025	14,058	+.2	333,243	345,819	+3.8
Clothing, men's	114	41,363	43,587	+5.4	1,041,020	1,138,316	+9.3
Clothing, women's	92	9,856	9,608	−2.5	292,032	264,971	−9.3
Cotton finishing	19	14,455	14,853	+2.8	323,311	339,765	+5.1
Cotton manufacturing	124	97,846	99,002	+1.2	1,625,813	1,682,020	+3.5
Electrical machinery, apparatus and supplies	70	58,222	60,124	+3.3	1,438,294	1,510,159	+5.0
Fertilizers	22	2,220	1,968	−11.4	38,205	35,206	−7.9
Flour	30	5,602	5,423	−3.2	154,538	146,067	−5.5
Foundry and machine shops	188	88,662	92,671	+4.5	2,412,193	2,635,352	+9.3
Furniture	92	19,543	20,083	+2.8	478,243	496,936	+3.9
Glass	101	27,624	27,771	+.5	667,099	698,356	+4.7
Hardware	21	18,179	18,814	+3.5	412,508	431,380	+4.6
Hosiery and knit goods	117	48,794	49,180	+.8	825,761	828,394	+.3
Iron and steel	133	190,728	195,602	+2.6	5,319,324	5,474,043	+2.9
Leather	120	26,989	27,182	+.7	632,046	646,268	+2.3
Lumber, millwork	119	17,060	16,836	−1.3	405,792	403,218	−.6
Lumber, sawmills	176	56,597	55,291	−2.3	1,024,804	998,167	−2.6
Millinery and lace goods	18	2,926	3,078	+5.2	62,287	64,887	+4.2
Paper boxes	58	9,806	9,903	+1.0	204,781	211,892	+3.5
Paper and pulp	104	38,713	39,030	+.8	945,736	953,327	+.8
Petroleum	28	41,903	42,693	+1.9	1,276,976	1,359,364	+6.5
Pianos	11	4,485	4,580	+2.1	130,682	132,413	+1.3
Pottery	17	2,330	3,027	+29.9	54,984	69,136	+25.7
Printing, book and job	89	15,667	16,432	+4.9	534,034	564,475	+5.7
Printing, newspapers	99	27,436	28,095	+2.4	991,035	1,029,138	+3.8
Shipbuilding	16	11,550	12,437	+7.7	322,275	355,121	+10.2
Shirts and collars	73	21,046	21,495	+2.1	297,310	323,765	+8.9
Silk	127	39,804	40,804	+2.5	786,597	805,040	+2.3
Slaughtering and meat packing	74	84,799	88,829	+4.8	1,915,045	2,009,328	+4.9
Stamped ware	11	6,354	6,268	−1.4	141,488	142,077	+.4
Stoves	22	7,059	7,056	(2)	198,487	201,536	+1.5
Tobacco, chewing and smoking	8	1,438	1,353	−5.9	23,511	23,229	−1.2
Tobacco, cigars and cigarettes	105	26,032	26,039	(3)	483,189	478,779	−.9
Woolen manufacturing	101	51,583	52,490	+1.8	1,143,634	1,202,296	+5.1

[1] In previous months the pay-roll period in each industry has been tabulated on the basis used by the majority of establishments in the industry in their reports to this bureau, pay-roll periods of other lengths being brought to the length obtaining in the majority of the establishments. This has resulted in 39 industries being reported on a weekly basis, and two each on a half-monthly and bi-weekly basis. Beginning with this month, for the sake of uniformity, all industries will be tabulated on a weekly basis.

[2] Decrease of less than one-tenth of 1 per cent.

[3] Increase of less than one-tenth of 1 per cent.

Comparative data relating to identical establishments in 13 manufacturing industries for December, 1922, and December, 1921, appear in the following table. The number of employees increased in the year in 10 industries and decreased in 3.

Automobiles, car building, and iron and steel, as in the last two months, show largely increased employment, the per cent of increase in 1922 being 31.5, 28.7, and 26, respectively.

Men's clothing continues to show largely decreased employment, the percentage being 12.3.

The total of the pay rolls was considerably increased in 1922 in 10 of the 13 industries, iron and steel and automobiles leading with 65.8

and 63.2 per cent, respectively, and car building and woolen following with 26.2 and 18.5 per cent, respectively.

Men's clothing shows a decrease in pay-roll total of 19.8 per cent.

COMPARISON OF EMPLOYMENT IN IDENTICAL ESTABLISHMENTS DURING ONE WEEK IN DECEMBER, 1921, AND IN DECEMBER, 1922.

Industry.	Establishments reporting for December, both years.	Number on pay roll in—		Per cent of increase (+) or decrease (−).	Amount of pay roll in—		Per cent of increase (+) or decrease (−).
		December, 1921.	December, 1922.		December, 1921.	December, 1922.	
Automobiles	46	96,091	126,333	+31.5	$2,528,627	$4,126,486	+63.2
Boots and shoes	75	57,613	60,005	+4.2	1,325,925	1,425,871	+7.5
Car building and repairing	55	42,615	54,836	+28.7	1,211,766	1,528,975	+26.2
Clothing, men's	43	32,716	28,681	−12.3	983,627	789,059	−19.8
Cotton finishing	16	13,191	13,926	+5.6	294,797	316,683	+7.4
Cotton manufacturing	52	43,218	45,546	+5.4	742,780	786,059	+5.8
Hosiery and knit goods	62	31,828	31,048	−2.5	548,050	523,043	−4.6
Iron and steel	105	116,132	146,358	+26.0	2,428,833	4,027,559	+65.8
Leather	33	12,182	13,407	+10.1	262,926	308,806	+17.5
Paper and pulp	51	23,651	26,106	+10.4	568,273	639,505	+12.5
Silk	43	18,112	17,548	−3.1	397,119	377,991	−4.8
Tobacco, cigars, and cigarettes	54	16,689	17,071	+2.3	303,156	321,981	+6.2
Woolen manufacturing	22	20,991	23,253	+10.8	470,255	557,246	+18.5

COMPARISON OF PER CAPITA EARNINGS IN DECEMBER, 1922, WITH THOSE IN NOVEMBER, 1922.

Industry.	Per cent of increase (+) or decrease (−) in December, 1922, as compared with November, 1922.	Industry.	Per cent of increase (+) or decrease (−) in December, 1922, as compared with November, 1922.
Shirts	+6.6	Furniture	+1.1
Tobacco, cigars, and cigarettes	+5.0	Hardware	+1.1
Boots and shoes	+4.7	Printing, book and job	+.8
Foundry and machine shops	+4.5	Carpets	+.7
Petroleum	+4.5	Carriages and wagons	+.7
Glass	+4.1	Lumber, millwork	+.7
Fertilizers	+4.0	Iron and steel	+.4
Clothing, men's	+3.8	Slaughtering and meat packing	+.2
Chemicals	+3.5	Paper and pulp	[1]
Woolen manufacturing	+3.3	Brick	−.2
Agricultural implements	+3.2	Car building and repairing	−.2
Automobile tires	+2.5	Silk	−.2
Paper boxes	+2.5	Lumber, sawmills	−.3
Cotton finishing	+2.3	Hosiery and knit goods	−.5
Shipbuilding	+2.3	Pianos	−.8
Cotton manufacturing	+2.2	Tobacco, cigars, and cigarettes	−.9
Stamped ware	+1.8	Millinery and lace goods	−1.0
Electrical machinery, apparatus, and supplies	+1.7	Baking	−2.1
Stoves	+1.6	Flour	−2.4
Leather	+1.5	Pottery	−3.2
Printing, newspapers	+1.4	Automobiles	−6.1
		Clothing, women's	−6.9

[1] No change.

Wage adjustments occurring between November 15 and December 15 were reported by various establishments in 38 of the 43 industries included in this report, although the total number of such wage changes was considerably less than the total in any one of the three monthly periods preceding.

All of the changes reported were increases except one each in the brick, leather, and sawmill industries, and two in the women's clothing industry. From one to four establishments, only, reported in-

creases in the several industries, except in foundry and machine shops and glass (each 14), leather (8), sawmills (7), furniture (6), and newspaper printing, paper boxes, and woolen manufacturing (each 5).

WAGE ADJUSTMENTS OCCURRING BETWEEN NOVEMBER 15 AND DECEMBER 15, 1922.

Industry.	Number of establishments.	Per cent of increase (+) or decrease (−).	Per cent of total employees affected.
Agricultural implements	1	+10	15
Automobiles	1	+10	9
Automobile tires	1	+18	2
	1	+10	5
Baking	1	(a)	8
Boots and shoes	1	+7	100
	1	+5	66
Brick	1	+5	100
	1	(1)	100
Car building and repairing	1	+7	3
	1	+6	12
	1	+5	6
Carriages and wagons	1	+12.5	37
Chemicals	1	+9	3
	1	+8	93
	1	+7	100
Clothing, men's	1	+10	13
	1	+5	20
	1	+5	18
Clothing, women's	1	+10	94
	1	−15	43
	1	−37	16
Cotton finishing	1	+10	100
Cotton manufacturing	1	+10	100
	1	+10	95
Electrical machinery, apparatus, and supplies	1	+12	8
	1	+6.3	17
	1	+1.8	9
Flour	1	(2)	67
Foundry and machine shops	1	+15	18
	1	+15	10
	1	+15	2
	1	+11	26
	1	+11	3
	1	+10	3
	1	+8.5	100
	1	+8.5	30
	1	+8.2	12
	1	+7.2	9
	1	+6.3	3
	1	+5	77
	1	+4.6	3
	1	+3	16
Furniture	1	+10	11
	1	+10	3
	1	+5	38
	1	(3)	15
	1	(4)	3
	1	+1	1
Glass	1	+10	100
	1	+10	94
	1	+10	88
	1	+10	77
	2	+10	72
	2	+10	71
	1	+10	67
	1	+10	63
	1	+10	59
	1	+8.7	27
Glass	1	+5	100
	1	+3	2
Hardware	1	+10	3
Hosiery and knit goods	1	+10	7
	1	(a)	2
Iron and steel	1	+13.4	10
	1	+10	44
	1	+6.8	96
	1	+5	30
Leather	1	+21	1
	1	+15	78
	1	+11	2
	1	+9.5	6
	1	+8.5	3
	1	+6-7	15
	1	+1	100
	1	+1	9
	1	−10	100
Lumber, millwork	1	+12.5	3
	1	+5-7.5	38
	1	(a)	100
Lumber, sawmills	1	+10	100
	1	+10	(5)
	2	+10	2
	1	+7.5	69
	1	+5	8
	1	(a)	100
	1	−6	14
Millinery and lace goods	1	+15	2
Paper boxes	3	+10	5
	1	+5-10	3
	1	+5	57
Paper and pulp	1	+10	48
	1	+10	16
Petroleum	1	(6)	37
Musical instruments	1	+7	3
Printing, book and job	1	+24	2
	1	+5	17
	1	+5	2
Printing, newspapers	1	+20	25
	1	+10	18
	1	+10	10
	1	+8	4
	1	+7.3	37
Shirts and collars	1	+5	65
Silk	1	+15	14
	1	+12.5	83
	1	+10	6
	1	+10	1
Slaughtering and meat packing	1	+6	10
	1	(7)	33
Stamped ware	1	+12.5	14
	1	+9	3
Stoves	1	+10	4
	1	+6	4
Tobacco, chewing and smoking	1	+4	20
Woolen manufacturing	1	+15	50
	1	+9	3
	1	+7	15
	2	+5	100

a Increase; per cent not reported.
1 Decrease; per cent not reported.
2 Increase of 5 to 10 cents per hour.
3 Increase of 2 to 4 cents per hour.
4 Increase of 2½ cents per hour.
5 All but salaried employees.
6 Increase to 40 cents per hour to laborers.
7 Increase of 2 cents per hour.

Extent of Operation of Bituminous Coal Mines, December 2 to 23, 1922.

CONTINUING a series of tables which have appeared in previous numbers of the MONTHLY LABOR REVIEW, the accompanying table shows for a large number of mines in the bituminous coal fields the number of mines closed the entire week and the number working certain classified hours per week from December 2 to December 23, 1922. The number of mines reporting varied each week and the figures are not given as being a complete presentation of all mines, but are believed fairly to represent the conditions as to regularity of work in the bituminous mines of the country. The mines included in this report ordinarily represent from 55 per cent to 60 per cent of the total output of bituminous coal. The figures are based on data furnished the Bureau of Labor Statistics by the United States Geological Survey.

WORKING TIME IN BITUMINOUS COAL MINES IN THE UNITED STATES, BY WEEKS, DECEMBER 2 TO DECEMBER 23, 1922.

(The mines included ordinarily represent from 55 to 60 per cent of the total output.)

[Prepared by the Bureau of Labor Statistics from data furnished by the United States Geological Survey.]

Week ending—	Number of mines reporting.	Mines—													
		Closed entire week.		Working less than 8 hours.		Working 8 and less than 16 hours.		Working 16 and less than 24 hours.		Working 24 and less than 32 hours.		Working 32 and less than 40 hours.		Working 40 and less than 48 hours.		Working full time of 48 hours or more.	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
Dec. 2...	2,190	96	4.3	233	10.6	623	28.4	526	24.0	282	12.9	199	9.1	183	8.4	48	2.2
Dec. 9...	2,178	131	6.0	204	9.4	602	27.6	426	19.6	304	14.0	167	7.7	180	8.3	164	7.5
Dec. 16...	2,091	92	4.4	245	11.7	606	29.0	480	23.0	238	11.4	170	8.1	180	8.6	80	3.8
Dec. 23...	2,104	81	3.8	236	11.2	706	33.6	427	20.3	213	10.1	168	8.0	156	7.4	117	5.6

Recent Employment Statistics.

California.

ACCORDING to the findings of a survey conducted by the State Bureau of Labor Statistics in cooperation with the United States Employment Service, published in Employment Bulletin No. 7 of the Bureau of Labor Statistics of California, the number of persons employed by 521 industrial establishments in California in November, 1922, was 107,724, as compared with 91,269 in the corresponding month of the previous year—an increase of 18 per cent.

Of the 38 industries reporting, all but 5 had more workers on their pay rolls in November, 1922, than were reported for the same month in 1921, the volume of employment having increased 30 or more

per cent in 12 industries, among which the following were the most important from the viewpoint of numbers employed:

	Per cent of increase.
Sawmills and logging camps	30
Gas engines, pumps, boilers	33.3
Brick, stone, and clay products	46.1
Mineral oil refining	49.4
Tin cans	49.9
Foundry and machine shops	50.1
Canning, drying, and preserving	50.2
Iron and steel forgings	71.9
Structural and ornamental steel	75.1
Wagons and autos, including bodies	94.5

The percentage decreases in two of the five industries showing reduction of employment were very slight. The other decreases were:

	Per cent of decrease.
Railroad repair shops	9.6
Shipbuilding, including naval repairs	16.3
Tobacco products	22.8

Private Employment Offices.

Certain data with regard to private and public employment offices in California are shown in a typewritten summary of the 18th biennial report of the California Bureau of Labor Statistics. According to this summary, in 1920–21, the fees collected by 192 private employment offices totaled, in round numbers, $1,024,632, an average of $5,337 per agency. In the following year the collections by 184 agencies amounted to $1,026,177, an average of $5,577 per agency. Nearly two-thirds of the fees in 1921–22 were collected from male applicants for employment. In that year the agencies for teachers averaged the largest amounts in collected fees. The next highest collections were made by the agencies for hotel workers. Approximately 67 per cent of the commercial agencies charge fees ranging from 25 to 50 per cent of the first month's salary of the applicant. The fee of teachers' agencies is generally 5 per cent of the applicant's first month's salary, while hotel and domestic and oriental agencies usually charge 10 per cent, but when board and room are not included in the salary sometimes only 8 or 9 per cent of the amount received by the applicant for his first month's work is charged.

Higher fees are charged in months in which work is relatively slack than in the summer when more jobs are available.

The number of licenses issued to private employment offices in 1914 was 355. After the creation of free public employment offices in the State in 1915 the number of private employment offices began to decrease and in 1919 there were only 184. Since 1920, however, the number of licenses for private employment agencies has increased, 240 such licenses having been issued in 1922.

Investigation of misrepresentations.—During the biennial period 1920–21 and 1921–22, 1,352 misrepresentation cases were investigated by the bureau, and as an outcome of its findings reimbursements aggregating $5,096.71 were made by private employment agencies to applicants for positions.

Public Employment Offices.

During 1920–21 and 1921–22 the free public employment offices furnished 345,410 jobs to 146,054 persons who applied for work—an average of 2.36 jobs per applicant. Of these 345,410 positions 61,039 were furnished to women.

According to a conservative estimate, the free public employment system has saved the workers of California $439,880 during the two years ending June 30, 1922.

Colorado.

THE following figures on the activities of public employment offices in Colorado for 1921 and 1922 are taken from the 18th biennial report of the Bureau of Labor Statistics of that State:

APPLICATIONS FOR EMPLOYMENT, POSITIONS SECURED, AND APPLICATIONS FOR HELP IN THE FIVE STATE FREE EMPLOYMENT OFFICES, 1921 AND 1922. [1]

Item.	1921	1922	Total.
Applications for employment	51,796	44,699	96,495
Positions secured	21,302	20,474	41,776
Applications for help	30,305	23,272	53,577

[1] Years beginning December, 1920, and December, 1921.

The per capita cost, 62.7 cents, for placements in Colorado is said to be "very much less than in other States similarly situated."

Private employment agencies.—The total number of positions secured through private employment agencies from July, 1921, to November, 1922, inclusive, was 47,200. The registration fee for professional employees is limited to $2 and for common labor, to $1. A fee must be returned on request if the applicant does not secure work through the employment agency within 5 days.

While at present private offices do not seem to be detrimental to the workers of Colorado, yet in some cases the agencies handling only professional positions "unnecessarily encourage labor turnover by placing clients in a position, charging a fee, and then in a short time offering the same person a place commanding a higher salary and, of course, charging another and higher commission."

Connecticut.

THE report of the Connecticut Bureau of Labor for the month ending December 31, 1922, on the activities of the five State employment offices is here summarized:

OPERATIONS OF CONNECTICUT PUBLIC EMPLOYMENT OFFICES, DECEMBER, 1922.

Item.	Males.	Females.	Total.
Applications for employment	2,206	1,497	3,703
Applications for help	1,927	1,533	3,460
Situations secured	1,670	1,312	2,982
Per cent of applicants supplied with positions:			
November, 1922	79.8	88.6	84
December, 1922	75.7	80.8	80.5

In November, 1922, help was furnished to 89.4 per cent of those applying for workers, and in the following month to 86.1 per cent.

New York.

THE gain in employment in the manufacturing industries of New York State from November to December, 1922, amounted to 1 per cent, and the total gain since December of 1921, to 15 per cent, according to a statement issued by the Labor Department of New York, based on reports from manufacturers and taken from their actual pay-roll records.

The net increase in the number of workers between November and December in the State as a whole was about 15,000. About 27,000 employees were added to the pay rolls, mostly in the metal trades, the wood manufacturing industries, the shoe factories, the printing establishments, and the silk mills. At the same time about 12,000 employees were released. The industries in which the largest number of workers was dropped were the women's apparel shops, the canneries, the candy factories, the biscuit factories, and the brick yards. In most cases these reductions were seasonal and therefore temporary. The number of workers in the manufacturing industries of New York State is still over 200,000 less than the number employed at the peak of activity in March, 1920.

Practically all the metal working trades added to the number of their employees. The railway equipment factories, where employment has been high for some time, added the largest number of workers.

The general improvement in business conditions is shown in the additional forces employed in the manufacture of typewriters, cash registers, computing machines, and similar articles. The factories making office furniture have also been increasing the number of their employees. The furniture factories as a whole and the piano makers again added more workers.

In the paint factories employment rose slightly. Of the other builders' supplies, the cement mills, the cut-stone yards, and the brick yards reduced employment somewhat in December.

There was another large increase in December as in November in the manufacture of dyes. In the drug factories and the factories making chemicals for industrial purposes, employment rose slightly.

Among the paper-products industries the end of the Christmas demand showed itself in the reduced employment in the making of paper boxes. The wall-paper factories, the makers of paper patterns, and the shops making calendars added more workers. There were numerous increases in employment in the printing industry. On the whole the tendency of employment in the plants making pulp and paper was downward.

In the textile mills the general tendency was upward. The largest increase was in the manufacture of broad silks. The carpet factories continue to add to their forces. In the felt mills, especially in those making hats, employment rose, following reductions last month. In the cotton and the knitting mills, employment remained about the same as in November.

The clothing industry as a whole reported the largest proportionate gains from November to December. This was due entirely to the seasonal increase in employment in the men's clothing factories, and the expansion in the factories making men's shirts and furnishings.

The food products industries were the only large industrial group to report general reductions in employment and these were all seasonal. There was a small reduction in the flour and feed mills, and a heavier one in the plants making biscuits and crackers.

HOUSING.

Federal, State, and Municipal Aid to Housing, 1918 to 1922: A Selected Bibliography.

By Ellen Agnes Hoffman.

Bibliographies.

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Housing problem. Indiana University, extension division bulletin Jan. 1921.
A study outline which includes a selected bibliography, p. 22-30.

Bolander, L. H.
A list of references on the housing problem on file in the New York municipal reference library. New York public affairs information service, Mar. 28, 1922. (Typewritten.)
Government aid: Federal, State, and municipal, p. 31-37.

Housing Betterment. Quarterly. N. Y.
"A journal of housing advance issued by the National Housing Association."—Subtitle.
Bibliographies in various issues from Feb. 1919 to Sept. 1921.

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Selected bibliography of industrial housing in America and Great Britain during and after the war.
(*In* United States Department of Labor, bureau of industrial housing and transportation. Report of the United States housing corporation, 1919, v. 2, p. v–xix.)
Governmental aid, p. vii–x, xviii. Annotated. Also printed separately.

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Character and scope of government and municipal aid in the erection or purchase of workmen's homes.
Library school, University of Wisconsin, June, 1918. (Typewritten.)
Entries annotated.

General References.

Ackerman, F. L.
Government housing—Federal, State, municipal—is it desirable?
(*In* National conference on housing. Proceedings (1918), v. 7, p. 70–81, discussion on p. 292–296.)
"Proposes that adequate homes for all the people and the land upon which these homes are to be built, be made a basis of Government credit."—Article.

Aronovici, Carol.
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Brigham, H. R.
How to meet the housing situation.
Atlantic, Mar., 1921, v. 127, p. 411–413.
The author, who was formerly counsel for the United States Housing Corporation, argues against Government or municipal financial aid.

COMEY, A. C.
New mortgages for old.
National Municipal Review, Dec., 1920, v. 9, p. 777–780.
Arguments for a Federal mortgage bank to stabilize building loans at low rates. Outlines essential features and the necessary mechanism.

HAIG, R. M.
Exemption of mortgage interest as a solution of the housing problem.
(*In* National tax association, State and local taxation, 1920, v. 13, p. 226–235.)
Also printed separately.
See also Architectural Forum, Jan. 1920, v. 32, p. 48; Housing Betterment, June, 1921, v. 10, p. 126–127.

HAMILTON, J. A.
The need for permanent housing boards.
Survey, Oct. 16, 1920, v. 45, p. 92–93.
Author is chairman of the housing committee of the New York State Reconstruction Commission.

HARRINGTON, JOHN.
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HART, J. K.
[Questions on the housing problem in the social studies column of the Survey.]
Survey, Oct. 16, 30, 1920, v. 45, p. 109, 173.
These questions are on the economic aspects of housing and housing remedies. Books for reference are also suggested.

HOOVER, H. C.
Cooperation of Department of Commerce in national housing problems.
United States Bureau of Foreign and Domestic Commerce, Commerce Reports, May 13, 1921, No. 111, p. 883–886.
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THE HOUSING FAMINE; HOW TO END IT. Dutton, 1920.
"Triangular debate between J. J. Murphy, who speaks for the free functioning of private enterprise; Mrs. E. E. Wood, for State and municipal aid; and F. L. Ackerman, for a complete change in our industrial life which will eliminate profits and price competition and incidentally settle the housing difficulty."—American City.
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IHLDER, JOHN.
Extent of the housing shortage in the United States.
National Municipal Review, Nov., 1921, v. 10, p. 558–562.
"Its economic and social effects, resources available in dealing with it."—Subtitle.

LA FARGE, C. G.
The case of Government housing.
New Republic, Jan. 18, 1919, v. 17, p. 335–337.
Warns against the real-estate speculator.

LAND AND TAXATION.
(*In* Ontario Housing Committee report, 1919, p. 44–51.)
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See also United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, May, 1918, v. 6, p. 1316–1325.

MILLER, F. T.
The housing situation in England and the United States. New York, F. W. Dodge Co., 1920. (Pamphlet.)
General survey including analysis of legislative results.
Reviewed in Housing Betterment, May, 1920, v. 9, p. 99.

MUNICIPAL HOUSING.
Housing Betterment, May, 1920, v. 9, p. 135–137; June, 1921, v. 10, p. 108–110.
Present status of municipal housing; also discusses constitutional limitations.

NATIONAL CONFERENCE ON HOUSING. New York, National Housing Association, 1918–date, v. 7–date.
See index.

THE NEED OF PROPER MANAGEMENT.
Housing Betterment, June, 1921, v. 10, p. 209.
Government housing policy involves not merely building of houses but the responsibility of managing such property.

NEW INTERNATIONAL YEARBOOK. New York, Dodd, 1918–1921. 4 v.
See each volume under the heading "Housing"; also under "Architecture" in the 1921 volume.

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"Public policy in housing."
(*In* its report, 1919, p. 22–43.)
Analyzes conditions in Canada, United States, New Zealand, and South Africa, with emphasis on the responsibility of municipalities.

PRIVATE BUILDING VERSUS GOVERNMENT BUILDING.
Housing Betterment, Apr., 1922, v. 11, p. 128–129.
Brief statement giving seven reasons for private building.

PURDY, LAWSON.
Constitutionality of tax exemption laws.
Housing Betterment, Apr., 1922, v. 11, p. 241–244.
Reports conditions in New York, New Jersey, and other States. Cites cases.

SIMON, R. E.
Exemption from taxation and other subsidies.
(*In* National housing association. Proceedings, 1921, v. 8, p. 227–234.)
Opposes exemptions; favors Federal bureau for housing information.

STABLER, WALTER.
Income tax versus the housing shortage.
National Municipal Review, Apr., 1920, v. 9, p. 204–206.
Author believes that there is vastly more need for tax exemption on city mortgages for housing of urban population than there is for exemption of farm loan bonds. The author is connected with the Metropolitan Life Insurance Co.

STATE AND MUNICIPAL AID FOR HOUSING.
American City, Nov., 1920, v. 23, p. 463.
Three constructive proposals: Use of State or municipal credit, tax exemption on new buildings for dwellings, and creation of housing boards.

SUGGESTED REGULATIONS WHICH MIGHT GOVERN PUBLIC LOANS TO CONTRACTORS OR COMMERCIAL BUILDING COMPANIES.
(*In* Ontario Housing committee report, 1919, p. 123–124.)

UNITED STATES. *Bureau of Labor Statistics.*
Legal aspects of the housing problem.
(*In* its MONTHLY LABOR REVIEW, May, 1921, v. 12, p. 925–933.)
Discussion includes account of State aid in various States.

—— *Department of Commerce.* The housing shortage; a problem for community action. Washington, 1922.
A mimeographed circular stating certain facts which need to be determined for each community.

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Reviewed in American City, Aug., 1920, v. 23, p. 231; Housing Betterment, Feb., 1920, v. 9, p. 45–46.

WHY IS MUNICIPAL HOUSING NECESSARY?
Women and the City's Work, Oct. 26, 1920. Women's municipal league of the city of New York. (Pamphlet.)
Possibilities: Four opinions by housing experts—C. H. Whitaker, C. Stein, F. L. Ackerman, S. Browne.

WILLIAMS, F. B.
Must we await constitutional amendments before cities can engage in housing?
American City, Feb., 1919, v. 20, p. 185–187.
Presents arguments for the negative and cites court decisions.

WOOD, E. E.
Housing of the unskilled wage-earner. Macmillan, 1919. (American social progress series.)
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Also reviewed in the American Journal of Sociology, Jan., 1920, v. 25, p. 507; Dial, Sept. 20, 1919, v. 67, p. 274.

PART I.—FEDERAL AND STATE AID.

United States.

Federal Activities During the War.

ACKERMAN, F. L.
Houses and ships.
American City, Aug., 1918, v. 19, p. 85–86.
Gives account of the housing work of the United States Shipping Board.

—— War-time housing.
American City, Feb., 1918, v. 18, p. 97–100.
Outlines a program for the United States which includ es a commission to study the final disposition of these Government properties.

BRIGHT, J. I.
Congress and the United States Housing Corporation.
Housing Betterment, May, 1920, v. 9, p. 145–148.
Refutation of report (Dec. 16, 1919) of the Senate investigating committee.
Similar article in Outlook, Mar. 3, 1920, v. 124, p. 394–395.

CAWCROFT, ERNEST.
The present and future government of war-created communities.
National Municipal Review, Jan., 1919, v. 8, p. 52–60.
"Deals with the general principles of government which ought to be observed in the war communities; special reference to the towns of the Shipping Board with which Mr. Cawcroft was connected."—Kimball.

CHILDS, R. S.
The Government's model villages.
Survey, Feb. 1, 1919, v. 41, p. 585–592.
Constructive criticism, advocates a permanent housing bureau; illustrated.

CHILDS, R. S.
Group ownership of housing.
New Republic, Mar. 30, 1918, v. 14, p. 257–259.
Suggests that "the Government gradually sell all the real estate intact to the communities which would thus eventually own their underlying land and all the buildings."

—— What will become of the Government housing?
National Municipal Review, Jan., 1919, v. 8, p. 48–52.
Suggests a solution; lists principal permanent housing projects with brief description of each.

CONYNGTON, MARY (and LEIFUR MAGNUSSON).
Government residence halls, Washington, D. C.
(*In* United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Oct., 1919, v. 9, p. 997–1003.)
Gives provisions, cost, and maintenance; illustrated.
See also Review of Reviews, Dec., 1919, v. 60, p. 603.

CRAWFORD, A. W.
Standards set by the new Federal war suburbs and war cities.
American Civic Association bulletin, Oct., 1918. Series 2, No. 12. (Pamphlet.)
"A critical general consideration by a leading town-planning lawyer of the standards in governmental housing, more particularly the Shipping Board projects, but also the Housing Bureau standards."—Kimball.

FEDERAL HOUSING.
United States Bureau of Labor Statistics MONTHLY REVIEW, Feb., 1918, v. 6, p. 456–460.
Account of the movement in the United States.

GOVE, GEORGE.
Community values in Government housing.
American City, Jan., 1920, v. 22, p. 1–7.
Account, with illustrations, of some Government towns, including Yorkship village. Author is housing adviser, American City Bureau.
See also American City, Jan., 1919, v. 20, p. 23–25; Housing Betterment, Dec., 1921, v. 10, p. 311–314.

GOVERNMENT HOUSING IN PRACTICE.
Housing Betterment, Dec., 1921, v. 11, p. 305–310.
Cases cited to show the difficulty of renting and operating these houses on an economic basis.

IHLDER, JOHN.
Card houses: can the Federal Government afford to abandon its industrial villages?
Survey, Jan. 18, 1919, v. 41, p. 519–521.
"Spirited account of the hearings before the Senate and House Committees in regard to the continuation of the work of the United States Housing Corporation after the signing of the armistice."—Housing Betterment.

—— Uncle Sam as an auctioneer.
Survey, Feb. 8, 1919, v. 41, p. 659–660.
"What is the Federal Government going to do with its housing projects?"—Subtitle.
Other references to the sale of these projects are in Housing Betterment, Sept., 1919, v. 8, p. 42–45; Dec., 1919, v. 8, p. 64; Feb., 1920, v. 9, p. 48; Apr., 1922, v. 11, p. 247; Nation, Jan. 18, 1919, v. 108, p. 84–85.

KNOWLES, MORRIS.
What about the Government housing program?
Engineering News-Record, Feb. 13, 1919, v. 82, p. 329–331.
"Urges that Government housing projects should be made into 'going concerns' before relinquishment by the Government."—Kimball.

OLMSTED, F. L.
Lessons from housing developments of the United States Housing Corporation.
United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, May, 1919, v. 8, p. 1253–1264; also p. 564–569.
Includes illustrations and plans.
Also printed separately.

PRIOR, J. C. (AND H. P. GREEN).
Keeping the costs of building the Government houses.
Engineering News-Record, Aug. 7, 1919, v. 83, p. 252–271.
System of reporting progress and cost that was used by the United States Housing Corporation. Tables and diagrams.
Similar account in Crowell's Government war contracts (Carnegie Endowment for International Peace. Preliminary economic studies of the war, No. 25), p. 263.

SHANNON, W. E.
Government housing at home and abroad.
American Industries, Sept., 1919, v. 20, p. 25–27.
Opposed to Government control and the adoption of foreign plans.

UNITED STATES. *Department of Labor. Bureau of Industrial Housing and Transportation.*
Report of the United States Housing Corporation, 1919–1920. 2 v.
v. 1. Organizations, policies, transactions.
v. 2. Houses, site-planning, utilities.
See also Housing Betterment, June, 1919, v. 8, p. 60.

—— —— *Housing Corporation.*
(*In* Report of the Secretary of Labor. 1918, p. 132–136; 1919, p. 187–196; 1920, p. 156–160; 1921, p. 18–21.)
Explains organization, work accomplished, disposal of records, and sale of the properties.

—— —— Standards recommended for permanent industrial housing developments.
(*In* its report, 1919, v. 2, p. 505–509.)
Also printed separately.
See the discussion of these standards by John Nolen (*in* National conference on housing. Proceedings (1918) v. 7, p. 118–127).

—— *Shipping Board.*
Annual report, 1918–1921. 4 v.
See index under housing projects.

VEILLER, LAWRENCE.
Government's standards for war housing.
Housing Betterment, May, 1918, v. 7, p. 1–18.
Reprinted from Architectural Record, Apr., 1918, v. 43, p. 344–359.

WAR HOUSING IN THE UNITED STATES.
Housing Betterment, Feb., 1919, v. 8, p. 6–13.
Includes tabulated résumés of the housing projects of the Emergency Fleet Corporation and the United States Housing Corporation.

Federal Activities Since the War.

CHILD, STEPHEN.
How the United States can help build homes.
National Municipal Review, Jan., 1921, v. 10, p. 16–22.
"A defense of the war housing work of the Federal Government and a proposal to capitalize the war experience."—Subtitle. Favors the Tinkham bill.

CONGRESS AIDS BUILDING AND LOAN ASSOCIATIONS.
Housing Betterment, Jan., 1922, v. 11, p. 104–105.
Tax exemption.

CONGRESS AND HOUSING.
Housing Betterment, June, 1921, v. 10, p. 106–108.
Brief statement of bills introduced by Senator Calder (S. 1152, S. 1807, S. 690, S. 1836, S. 797, S. 575) and Representative Kelly (H. R. 14, 855).

CONGRESS MAY ACT TO HELP BUILDING.
Housing Betterment, Feb. 1919, v. 8, p. 24–25.
Tentative plan provides for the establishment of home loan banks.

CONGRESSIONAL INQUIRY ON HOUSING.
Housing Betterment, May, 1920, v. 9, p. 12–121.
Text of Calder resolution (S. Res. 350).

FEDERAL AID TO HOUSING IN THE UNITED STATES.
Housing Betterment, Sept. 1919, v. 8, p. 41–42; Dec. 1919, v. 8, p. 34.
Account of S. 1469, Senator Calder's bill known as "Federal home loan act"; H. R. 6371 (substitute bill by Representative J. I. Nolan) known as "Federal building loan bank act"; and S. 168, Senator Kenyon's bill.

FEDERAL COMMISSION TO STUDY FINANCING OF HOUSING.
Housing Betterment, Feb. 1919, v. 8, p. 14.
Summarizes Senator Kenyon's bill (S. 5581, Feb. 12, 1919) to establish a temporary commission to report on best methods for providing credit for housing.

FEDERAL GOVERNMENT AND HOUSING.
National Municipal Review, Mar. 1919, v. 8, p. 197–198.
Discusses the possible creation of a Federal agency to deal with industrial housing, town planning, and municipal affairs.

GOVERNMENT AID TO HOUSING.
Housing Betterment, Feb. 1919, v. 8, p. 14–24.
Considers adaptation of Canadian plan to the United States.

GOVERNMENT DUTY IN THE HOUSING CRISIS.
Literary Digest, Oct. 23, 1920, v. 67, p. 20.
Quotes opinions from various newspapers.

GOVERNMENT HOUSING BUREAU.
Housing Betterment, Sept. 1921, v. 10, p. 245–246.
Account of appropriations and personnel of the new division of building and housing organized under the Bureau of Standards of the Department of Commerce.

GOVERNMENT URGED TO BUILD HOMES.
Housing Betterment, Dec. 1921, v. 10, p. 310–311.
Suggestion made by the American Association of University Women.

HOOVER BUILDING CODE COMMITTEE.
Housing Betterment, Dec. 1921, v. 10, p. 349–352.
Account of research being done by this committee. *See also* Housing Betterment, Dec. 1921, v. 10, p. 314–323; Apr. 1922, v. 11, p. 164–177.

HOOVER'S PLAN TO PROVIDE MORE HOMES.
Literary Digest, Aug. 20, 1921, v. 70, p. 12.
Diversion of savings bank funds to home building use.

HOUSING AND HOME LOANS.
Survey, June 7, 1919, v. 42, p. 407.
Proposals for Federal legislation submitted by a committee of the Conference on Social Agencies and Reconstruction, Nov. 1918.

HOUSING POST-MORTEM IN THE SENATE.
American City, Feb. 1920, v. 22, p. 110.
Suggests a Federal Housing Bureau which would make available the valuable information obtained by the United States Housing Corporation.

JAMES, HARLEAN.
Lessons from Government experience in housing.
National Municipal Review, Aug. 1921, v. 10, p. 427–433.
Includes discussion of Calder-Tinkham bill (S. 1152, H. R. 5227).

KELLY, M. C.
Let Congress solve the housing problem.
Searchlight, Feb. 1921, v. 5, p. 16–18.
Sketches a plan to create the United States Home Loan Board at Washington which shall have general supervision of postal savings banks and their deposits.

LABOR DEPARTMENT IN "OWN YOUR OWN HOME" CAMPAIGN.
Housing Betterment, June 1919, v. 8, p. 32–34.
Discusses benefits and lists chairmen. The Labor Department favors home loan banks.

NEWMAN, B. J.
Government housing a failure.
Housing Betterment, Dec. 1921, v. 10, p. 311–314.
"A business venture which was legitimate at one time but which can not be justified as a peace-time proposition."—Article.

NO NATIONAL HOUSING CONFERENCE.
Housing Betterment, Apr. 1922, v. 11, p. 249–251.
Reviews results accomplished by the Department of Commerce and indicates future plans.

REHOUSING OF WASHINGTON ALLEY DWELLERS.
Housing Betterment, Dec. 1919, v. 8, p. 62–63.
Under Senate bill 2084, the United States may become landlord in the District of Columbia.

SECRETARY HOOVER TAKES UP HOUSING.
Housing Betterment, June 1921, v. 10, p. 99–106, 111; Dec. 1921, v. 10, p. 346–349.
The Department of Commerce seeks to cooperate with the building industry in the reduction of waste and increase of stability in operation. Secretary Hoover explains the services which a division of building and housing could render.

TINKHAM, G. H.
Urgent need for a Federal bureau of housing and living conditions in Department of Labor.
American City, Mar. 1920, v. 22, p. 222–223.
Arguments presented by Congressman Tinkham for the creation of such a bureau which will conduct research and experimentation and serve as a clearing house of information. (H. R. 7014.) *See also* Housing Betterment, Sept. 1919, v. 8, p. 45–48; Review of Reviews, Dec. 1919, v. 60, p. 597–598.

TO PROMOTE RURAL DEVELOPMENT.
Housing Betterment, May 1920, v. 9, p. 157.
Brief explanation of Senate bill 3477 to aid people in acquiring rural homes at reasonable cost.

UNCLE SAM OPENS MODEL VILLAGE FOR NEGROES.
Housing Betterment, Dec. 1919, v. 8, p. 47.
At Truxton, Virginia.

UNITED STATES. *Congress.*
A bill to create a bureau of housing and living conditions in the Department of Labor. 66 Cong., 1st sess., July 8, 1919. H. R. 7014.
Known as the Tinkham bill.

—— —— A bill authorizing the Secretary of Commerce to establish in the National Bureau of Standards a division to be known as the division of construction and housing. 67 Cong., 1st sess., May 26, 1921.
Known as the Calder bill.
Data acquired by the United States Housing Corporation and the Emergency Fleet Corporation may be transferred to this division which would be a national clearing house of statistical and technical information.

—— —— A bill to encourage home ownership and to stimulate the buying and building of homes; to create a standard form of investment based on building association mortgages, to create Government depositories and financial agents for the United States, to furnish a market for Government bonds. 67 Cong., 1st sess. 1921.
Reintroduced by Senator Calder as S. 797, also by Representative J. I. Nolan as H. R. 229. Known as the "Federal home loan bank act."

—— —— *Committee on commerce.*
Report No. 84 to accompany S. 1890, to establish the division of construction and housing. 67 Cong., 1st sess. 1921. (Pamphlet.)
Gives merits of the bill.

UNITED STATES *Congress.*

Hawaiian homes commission act, 1920. 67 Cong., 1st sess. S. 1881.

Authorizes commission to lease to native Hawaiians the right to the use and occupancy of certain lands, to be exempt from all taxes for first five years. Establishes "Hawaiian home loan fund."

—— *Bureau of Labor Statistics.*

The Calder report on the building situation.
(*In* its MONTHLY LABOR REVIEW, June, 1921, v. 12, p. 1212–1216.)

Summary of Senate report No. 829 (66th Cong., 3d sess.) of the Committee on Reconstruction and Production. States ten recommendations including loans and tax exemptions.
Discussed in Housing Betterment, Apr. 1921, v. 10, p. 48–55; Survey, Apr. 2, 16, 1921, v. 46, p. 20–21, 86–87.

VEILLER, LAWRENCE.

The housing situation and the way out. National Housing Association publications, 1920, No. 55.

Proposes creation of a new Federal bureau charged with the sole duty of grappling with the situation. Does not advocate Government housing or Government-aided housing.
Reprinted from Architectural Record, Dec. 1920, v. 48, p. 531–534.

WHY A DIVISION OF HOUSING IS NEEDED.

Housing Betterment, June 1921, v. 10, p. 102–106.

A discussion of the Federal bill providing for a division of building and housing under the Department of Commerce.

State Aid.

ACKERMAN, F. L.

Housing in New York; the special session of the New York State legislature.
Journal of the American Institute of Architects, Nov. 1920, v. 8, p. 379–384.

Analyzes the situation and comments on the acts of commission and omission.

CALIFORNIA.

An act directing the commission of immigration and housing to investigate and propose legislation for the acquisition and building of homes for workingmen, with the financial assistance of the State of California. Statutes, 1921, ch. 142, p. 143.

This commission is to report to the 1923 legislature a bill or bills embodying a plan and the method of carrying it out.

CHENERY, W. L.

The Untermeyer revelations.
Survey, Jan. 1, 1921, v. 45, p. 491–495.

Gives an account of the investigations of the Joint Legislative Housing Committee of the New York Legislature.

DANA, S. T.

How Pennsylvania is building up forest communities.
(*In* United States Dept. of Agriculture Bulletin No. 638, 1918, p. 8.)

Buildings owned and rented by the State.

DODD, W. F.

Housing legislation in Illinois.
Survey, Oct. 22, 1921, v. 47, p. 115.

History of the bills proposed by the Illinois Housing and Building Commission.

FIVE GOVERNORS TAKE UP HOUSING.

Housing Betterment, Feb. 1919, v. 8, p. 28–31.

Excerpts from speeches by the Governors of Massachusetts, New York, New Jersey, Illinois, and Iowa.

HOUSING LEGISLATION IN THE UNITED STATES.

American Architect, Sept. 29, 1920, v. 118, p. 408.

Enabling acts of various States discussed by a member of the New York bar.

INGERSOLL, R. V.

New York Legislature acts on housing.
National Municipal Review, Dec. 1920, v. 9, p. 762–765.

Explains tax exemption of new buildings planned and used for dwelling purposes.

IOWA, GOVERNOR OF.

Home financing.
(*In* his Message, 1921, p. 24–26.)

Suggests that the State should establish a fund to aid home building.
See also Housing Betterment, Dec. 1919, v. 8, p. 81–82.

KANSAS STATE SUBSIDY FOR FARM HOMES.
Housing Betterment, Sept. 1921, v. 10, p. 268–269.
Constitutional amendment to create and maintain a fund.

KILHAM, W. H.
Housing by the Commonwealth of Massachusetts.
(*In* Whitaker's The housing problem in war and in peace, 1918, p. 94–97.)
Includes the act and plans.

LOW COST HOUSING IN CALIFORNIA.
Housing Betterment, Apr. 1922, v. 11, p. 239–240.
Developed through the initiative of the State Commission of Immigration and Housing.
See also Housing Betterment, Feb. 1918, v. 7, p. 56–57; Apr. 1921, v. 10, p. 90–91; Sept. 1921, v. 10, p. 251–252.

MASSACHUSETTS. *Homestead Commission.*
Annual report, 1919.
Reviews the work of the commission including the Lowell project, which was the first public housing project in the United States.

—— *Public Welfare Department. Division of housing and town planning.*
Housing experiment at Lowell.
(*In* its annual report, 1920, p. 9.)
Table giving financial status.

NORTH DAKOTA. *Industrial commission.*
Home Building Association.
(*In* its North Dakota industrial program, 1921, p. 53–56. (Pamphlet.))
Explains operations of this association which is under the control of the Industrial Commission.
See also Housing Betterment, Sept. 1919, v. 8, p. 83–85.

PENNSYLVANIA. *Commission on Constitutional Amendment and Revision.*
Housing problem.
(*In* its Proceedings, 1919–1920, v. 3, p. 469–477; or in its Brief folio, No. 38.)
Constitutional changes necessary to solve.

THE PHILIPPINES.
Housing Betterment, Apr. 1921, v. 10, p. 40.
Legislative appropriations proposed.

PURDY, LAWSON.
[Constitutionality of tax exemption laws.]
Housing Betterment, Apr. 1922, v. 11, p. 241–244.
Reports conditions in New Jersey, New York, and other States. Cites cases.

SMITH, A. E.
Housing policy for New York.
Survey, Oct. 2, 1920, v. 45, p. 3–4.
The author, Governor of New York, explains the law recommended by him.

—— Housing problems and ways of promoting home ownership.
(*In* Conference of governors of the United States. Proceedings, 1920, p. 112–138.)
Describes conditions in New York, also the findings of the Lockwood Investigating Committee.

STATE AID ADVOCATED.
Housing Betterment, Feb. 1920, v. 9, p. 59–60.
Plan, suggested by Senator Lord, to aid salaried workers in Minnesota who wish to build homes.

STEIN, C. S.
Housing crisis in New York.
Survey, Sept. 1, 1920, v. 44, p. 659–662.
Gives the recommendations of the State Reconstruction Commission, favoring constitutional amendment for extension of State loans to aid building of low-priced homes.
See also American City, Nov. 1920, v. 23, p. 463.

WANT STATE AID EXTENDED IN MASSACHUSETTS.
Housing Betterment, Feb. 1918, v. 7, p. 78–79; May, 1918, v. 7, p. 43.
Requests of four cities, which the legislature failed to grant.

THE WAY OF THE REFORMER IS HARD.
Housing Betterment, Jan. 1922, v. 11, p. 98–103.
Attempts of the Louisiana State Housing Commission to secure tax exemption.

British Empire.

Great Britain and her possessions, except Canada.

ACKERMAN, F. L.
Housing.
National Municipal Review, Apr. 1920, v. 9, p. 201–203.
"The turn of affairs in England."—Subtitle.

ADDISON, CHRISTOPHER.
Housing.
Nineteenth Century, Sept. 1921, v. 90, p. 369–382.
The author was formerly Minister of Health and directed Government housing in England.

AN ARCHITECTURAL HORNET'S NEST.
Housing Betterment, Apr. 1922, v. 11, p. 139–140.
"The architect must face the prime responsibility of the financial disaster of the great State housing scheme."—Sir Charles Ruthen, present Director-General of Housing of the Ministry of Health and also President of the Society of Architects.

BEMIS, A. F.
Britain's attempt to solve the housing and land problem.
(*In* National Civic Federation commission on foreign inquiry. Labor situation in Great Britain and France, 1919, p. 367–398.)
This report followed an investigation in Great Britain.

BRINSTINGL, H. J.
Housing in England.
Architectural Forum, Oct. 1921, v. 35, p. 136–140.
"The failure of the Government's post-war housing enterprise."—Subtitle. Illustrations and plans.

BRITISH HOUSING NATIONALIZATION: AN EXPENSIVE FAILURE.
Engineering News-Record, Sept. 15, 1921, v. 87, p. 436.
Similar article in United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Sept. 1921, v. 13, p. 653.

THE BUBBLE BURSTS.
Housing Betterment, Jan. 1922, v. 11, p. 1–14, 21–22.
Discusses causes of the failure of England's housing policy.

THE BUILDING GUILDS.
Housing Betterment, June 1921, v. 10, p. 217–220.
Explains the Government plan of giving guild subsidies.

COLLAPSE OF THE NATIONAL HOUSING SCHEME.
(*In* People's Yearbook and Annual of the English and Scottish Wholesale Societies, 1922, p. 228–236.)
Survey of the year.
See also the same Yearbook for 1920 and 1921.

COOPERATIVE WHOLESALE SOCIETIES LIMITED, ENGLAND.
(*In* National housing after the war, annual, 1918, p. 251–261.)
Emphasizes the part that these societies can take in providing homes.

GREAT BRITAIN. *House of Commons.*
Civil services estimates, 1921–1922, for the Ministry of Health.
(*In* its Parliamentary debates, 1921, 5th ser., v. 144, p. 2458–2570.)
"Interesting discussion in which all phases of the Government's housing policy were subjected to the most minute examination and consideration."—Housing Betterment.

—— *Local Government Board.*
Manual on the preparation of State-aided housing schemes, 1919, London, His Majesty's stationery office. (Pamphlet.)
Detailed discussion of standards and summary of steps to be taken by local authorities. Includes terms of financial assistance to public utility societies.

—— *Ministry of Health.*
Report of the Departmental Committee on the High Cost of Building Working-class Dwellings. [Cmd. 1447] 1921. London, His Majesty's stationery office. (Pamphlet.)
Contains comparative diagram showing relative percentage increase in cost of living and cost of completed houses in Great Britain and the United States.
Report summarized in United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Nov. 1921, v. 13, p. 1098–1100.

GREAT BRITAIN. *Ministry of Reconstruction. Advisory Council. Women's Housing Subcommittee.*
Final report. [Cmd. 9232] 1919.
Discusses requirements necessary to secure health and convenience of tenants, especially the housewife.
Digest of report in United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, May, 1919, v. 8, p. 1534. Also reprinted as supplement to Journal of the American Institute of Architects, May 1919.

—— —— *Housing (Financial Assistance) Committee.*
Final report. [Cmd. 9238] London, His Majesty's stationery office, 1919.
Considers loan and credit facilities, also subsidies to bodies and persons other than public utility societies and housing trusts.

HOUSING IN ENGLAND.
Housing Betterment, May 1918, v. 7, p. 18–20; June 1919, v. 8, p. 13–14; Sept. 1919, v. 8, p. 4–6, 12–15, 19–23; Dec. 1919, v. 8, p. 13–14; Feb. 1920, v. 9, p. 1–3; May 1920, v. 9, p. 89–98; Apr. 1921, v. 10, p. 1–17; June 1921, v. 10, p. 188–194, 208; Apr. 1922, v. 11, p. 126–127.
Read chronologically, these articles give a general survey.
See also American City, May 1920, v. 22, p. 493–496.

IN EGYPT.
Housing Betterment, Jan. 1922, v. 11, p. 314.
Houses built by the Government for its employees.

IN ENGLAND.
Housing Betterment, Apr. 1922, v. 11, p. 117–126.
Discussion of the Geddes Economy Report which suggests that Government-built houses be sold at an average price equivalent to 50 per cent of their cost.

IRISH HOUSING GRANTS.
Housing Betterment, May 1920, v. 9, p. 101–102.
Specifies terms of money grants.

MEHERN, E. J.
British Government's huge housing scheme.
Engineering News-Record, July 29, 1920, v. 85, p. 217–218.
Summary of plan by the editor of this magazine.

MORAL OF THE HOUSING FIASCO.
New Statesman, July 23, 1921, v. 17, p. 433–435.
Frank discussion of the housing situation in England by an English periodical.

NATIONAL HOUSING AND TOWN PLANNING COUNCIL.
Inter-allied housing and town planning congress, London.
(1) Memorandum relative to the preparation and carrying into effect of housing schemes under the housing and town planning act of July 1919.
(2) Memorandum relative to the choice of tenants, the fixing of rents and other points arising in regards to the administration of housing schemes by local authorities under the Government housing policy.
(3) Memorandum on difficulties in carrying the housing schemes of local authorities into effect.

These three pamphlets were published in 1920 by the National Housing and Town Planning Council, 41 Russel Square, London, W. C. 1.

A NATIONAL HOUSING POLICY.
Garden Cities and Town Planning, Mar. to Nov. 1921, v. 11 (new series) See index.
These articles on housing in Great Britain include a discussion of the necessary administrative and legislative action.

NATIONAL MISMANAGEMENT: THE HOUSING PROBLEM.
Spectator, Nov. 22, 1919, v. 123, p. 681–683; Dec. 13, 1919, v. 123, p. 800–801; May 8, 1920, v. 124, p. 607–608.
The English situation as viewed by an English periodical.

NOLEN, JOHN.
Types of England's war housing.
American City, Feb. 1918, v. 18, p. 100–101.
Descriptive account.

PATMORE, R. W.
How Great Britain attempted to solve the housing problem.
Industrial Management, Feb. 1922, v. 63, p. 74–76.
General survey of the situation.

SMITH, L. S.
World housing and town planning congress (London, 1920) and the English housing program, 1920. (Pamphlet.)
The author, who was the Wisconsin delegate, is professor of city planning and highway engineering at the University of Wisconsin.

UNITED STATES. *Bureau of Labor Statistics.*
Administration of the Woolwich (Well Hall, Eltham, Kent) Government housing scheme.
(*In* its MONTHLY LABOR REVIEW, Oct. 1918, v. 7, p. 1094–1096.)
States conditions.
Plans of Well Hall (in Whitaker's The housing problem in war and in peace, p. 78–82.)

—— —— Housing in Great Britain.
(*In* its MONTHLY LABOR REVIEW, Aug. 1920, v. 11, p. 356–369.)
Much source material, listed in a note, was the basis for this article. Reviews extent of assistance and control by the Government.

—— —— Housing situation in England.
(*In* its MONTHLY LABOR REVIEW, Jan. 1921, v. 12, p. 213–221.)
Outlines the policy of the Government and presents the charges as to responsibility for delay.

—— —— Progress of the Government housing program in Scotland.
(*In* its MONTHLY LABOR REVIEW, Sept. 1921, v. 13, p. 653–655.)
Summarizes report of Scottish Board of Health on State-aided housing.
See also Housing Betterment, Jan. 1922, v. 11, p. 22 which gives statistics.

—— —— Public utility societies, England.
(*In* its MONTHLY LABOR REVIEW, Nov. 1918, v. 7, p. 1422–1425; June 1919, v. 8, p. 1911; Aug. 1920, v. 11, p. 367–368.)
Detailed explanation of the advantages to be gained by having the Government work with these societies.

VEILLER, LAWRENCE.
How England is meeting the housing shortage.
Housing Betterment, Sept. 1920, v. 9, p. 207–312.
"Accurate and detailed information including consideration of the needs, the means adopted, the difficulties, and the results."—American City.
Also reviewed in Saturday Evening Post, Nov. 13, 1920, v. 193, p. 34+; Survey, Jan. 29, 1921, v. 45, p. 626–627; United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Aug. 1921, v. 13, p. 393–394.

WHAT THE TENANTS OF THE ENGLISH GOVERNMENT HOUSES THINK OF THEM.
Housing Betterment, Apr. 1922, v. 11, p. 143–144.
General consensus is favorable.

Canada.

ADAMS, THOMAS.
Housing developments as a post-war problem in Canada.
(*In* United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, July 1919, v. 9, p. 248–255.)
Address delivered before the National Conference of Social Work, June 7, 1919, by the housing and town planning adviser to the Canadian Government.
Other articles covering the same general ground are American City, Apr. 1919, v. 20, p. 323; Housing Betterment, Feb. 1919, v. 8, p. 14–24; May 1920, v. 9, p. 118–120; Apr. 1921, v. 10, p. 40–42; National Municipal Review, July 1919, v. 8, p. 353–359.

—— Town planning in relation to land taxation; cities should have agricultural zones; examples of Canadian cities.
National Municipal Review, Mar. 1919, v. 8, p. 109–113.
"If governments would give us the right kind of legislation to control land development, it will be a great aid toward the solution of the housing problem. Given this legislation and a proper organization to begin with, financial aid can produce better results."—Article.

BUCKLEY, ALFRED.
Government housing in Canada.
National Municipal Review, Aug. 1920, v. 9, p. 481–484.
Results of the Canadian housing act after being in operation one year.

CANADA. *Commission of Conservation.*
Federal and provincial housing schemes.
(*In* its Conservation of Life, Jan. 1919; July 1919.)
"Most practicable step toward the provision of good housing by Federal cooperation which has yet been taken in any country."—C. S. Taylor, project engineer with Mann & MacNeile Co., New York, advisers to the United States Government on housing projects.

CANADA. *Commission of Conservation.*
Partner-ownership building societies: their object and methods of organization.
(*In* its Conservation of Life, Oct. 1919, v. 5, p. 69–79.)
Explains the Canadian provision that public money may be advanced for building houses.

—— *Department of Labor.*
Report of the housing committee of the Dominion cabinet.
(*In* its Labor Gazette, 1919, v. 19, p. 447–450.)
Statement of general principles including conditions on which loans will be granted. More explanation of loans is given in the Ontario Housing Committee's Report, 1919, p. 105–110.

DIXON, M. B.
Another Canadian Province to engage in housing.
American City, Jan. 1920, v. 22, p. 54.
New Brunswick complies with the Government prerequisites for a loan and adopts housing act.

DOMINION OF CANADA HOUSING LOAN.
(*In* United States Bureau of Foreign and Domestic Commerce, Commerce Reports, Mar. 9, 1919, No. 52, p. 1001.)
Public comment has been favorable. Quotes amounts available for each Province.

FRYER, S. T. J.
Dominion of Canada housing loan.
Architectural Forum, Aug. 1919, v. 31, p. 41–45.
Complete account by a Canadian architect. Plans and illustrations.

IN THE PROVINCE OF QUEBEC.
Housing Betterment, Apr. 1921, v. 10, p. 44–47.
Varying opinions expressed as to the success of the plan.
See also Housing Betterment, Dec., 1919, v. 8, p. 17.

LEAKE, A. H.
Housing problem and its solution.
(*In* Ontario Housing Committee Report, 1919, p. 131–149.)
This first-prize essay emphasizes need for education through the Federal and Provincial Commissions and the schools.

ONTARIO. *Housing Committee.*
Report including standards for inexpensive houses for Ontario and typical plans.
Toronto, 1919.
Summarized in United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, June 1919, v. 8, p. 1844–1847.

—— —— Rural housing.
(*In* its report, 1919, p. 62–79.)
Describes conditions in Canada and concludes that financial assistance from the Government should be as available to farmers as to city lot owners.

Belgium.

HOUSING IN BELGIUM.
Housing Betterment, Feb. 1920, v. 9, p. 45; May 1920, v. 9, p. 114.
States conditions of loan.

Czechoslovakia.

UNITED STATES. *Bureau of Labor Statistics.*
Housing measures in Czechoslovakia.
(*In* its MONTHLY LABOR REVIEW, Apr. 1921, v. 12, p. 846–849.)
Includes loans and tax exemptions. *See also* Housing Betterment, Apr. 1921, v. 10, p. 35–36; Survey, June 11, 1921, v. 46, p. 350.

Denmark.

BJERRE, A.
Housing in Denmark.
Housing Betterment, Feb. 1920, v. 9, p. 15–16.
Percentage rate of State loans given.

BOLDSEN, F. C.
Housing problem in Denmark.
Garden Cities and Town Planning, Oct. 1921, v. 11, p. 239.
Government provides loans.

HOUSING IN DENMARK.
Housing Betterment, Jan. 1922, v. 11, p. 45–46.
"The housing act provides for subsidies and State aid is being extended from year to year until the housing shortage has been met."—Article.

France.

BEMIS, A. F.
France's determined efforts to house her people.
(*In* National Civic Federation commission on foreign inquiry. Labor situation in Great Britain and France, 1919, p. 399–414.)
This report followed an investigation in France.

FRANCE EMBARKING ON A VAST SCHEME.
Housing Betterment, Jan. 1922, v. 11, p. 34–35.
Annual grants or subsidies are given by the Government to public committees and private societies.
See also Housing Betterment, Dec. 1919, v. 8, p. 20–22; Apr. 1921, v. 10, p. 24–25; June 1921, v. 10, p. 224–228.

SELLIER, HENRI.
Housing problem and public action in France.
Garden Cities and Town Planning, Sept. 1921, v. 11, p. 208–214. Map and illustrations.
"Careful study by a leading housing expert and public official."—Housing Betterment.

UNITED STATES. *Bureau of Labor Statistics.*
State loans for cheap dwellings in France.
(*In* its MONTHLY LABOR REVIEW, Feb. 1920, v. 10, p. 557–559.)
Includes a tabulation of maximum annual rental of apartments for the construction of which State loans are granted.

Holland.

CHILD, STEPHEN.
Housing and Town Planning in Holland.
American City, Feb. 1922, v. 26, p. 103–106.
Housing activity is very marked. State subsidies.

Hungary.

UNITED STATES. *Bureau of Labor Statistics.*
Housing in Hungary.
(*In* its MONTHLY LABOR REVIEW, Feb. 1921, v. 12, p. 428–429.)
Government contemplates setting aside a sum for construction of houses.

Italy.

ITALY.
Housing Betterment, June 1921, v. 10, p. 237–238; Apr. 1922, v. 11, p. 158–161.
"Has probably gone further in furnishing Government aid than almost any other nation of Europe."—Article.

MELANI, ALFREDO.
Workingmen's houses in Italy.
Architectural Record, Aug. 1919, v. 16, p. 176–185; Sept. 1919, v. 16, p. 243–250.
Government aid through loans and tax exemption. Detailed account with illustrations and plans.

Jugoslavia.

A HOUSING BOOM IN JUGOSLAVIA.
Housing Betterment, Apr. 1922, v. 11, p. 161–163.
National tax exemption laws.

Norway.

UNITED STATES. *Bureau of Labor Statistics.*
Norwegian experiments in house construction.
(*In* its MONTHLY LABOR REVIEW, Nov. 1921, v. 13, p. 1102–1103.)
Experiments made by the Technical University at Trondhjem, with grants from the general Government and the municipality.

Spain.

THE SITUATION IN SPAIN.
Housing Betterment, Apr. 1921, v. 10, p. 36–37.
Tax exemption.

Sweden.

HOUSING IN SWEDEN.
Housing Betterment, June 1921, v. 10, p. 235–237.
Grants State funds to local authorities; special State housing loan fund; and direct subsidies.

PART II.—MUNICIPAL AID.

United States.

BOSTON. *Committee on housing.*
Report of the committee appointed by Mayor Peters on housing, 1918 (City document 121).
Recommends public assistance toward building multiple dwellings at low rental.
Reviewed in Housing Betterment, Feb. 1919, v. 8, p. 31–39. *See also* Housing Betterment, Feb. 1918, v. 7, p. 64–66; Dec. 1919, v. 8, p. 43.

CONYNGTON, MARY.
Effect of the tax exemption in New York City on housing.
(*In* United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Apr. 1922, v. 14, p. 631–640.)
Analysis which presents both the disadvantages and the advantages.
See also Nation, Nov. 2, 1921, v. 113, p. 495–496; New York Legislative document, No. 60, 1922, p. 243–244; United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Aug. 1921, v. 13, p. 392.

CURRAN, H. H.
One hundred million dollars in new housing under tax exemption.
National Municipal Review, Oct. 1921, v. 10, p. 502–505.
Describes what is being done in New York City to provide homes under the law granting tax exemption for new houses.

HAMILTON, J. A.
Need for permanent housing boards.
Survey, Oct. 16, 1920, v. 45, p. 92–93.
Proposes the establishment of local housing boards in New York State.

HOUSING PROGRAM FOR AMERICAN MUNICIPALITIES.
Modern City, Sept. 1921, p. 12–13.
Résumé of report prepared by the civic development department of the Chamber of Commerce of the United States.

MILWAUKEE. *Association of Commerce. Committee of twenty-one.*
Garden Homes Co.
(*In* the committee's Report on unemployment, 1921, p. 7–8.)
Recommends that the Association of Commerce and the city of Milwaukee buy stock in this company, which was organized under chapter 402, Laws of Wisconsin, 1919. Typewritten report.
See also Housing Betterment, May 1920, v. 9, p. 166–167; Survey, June 19, 1920, v. 44, p. 412–413.

—— *Housing Commission.*
Report, Nov. 30, 1918.
Suggestions for State legislation.

MUNICIPAL HOUSING.
Housing Betterment, May 1920, v. 9, p. 135–137.
Summary of conditions in Massachusetts, New Jersey, New York, and Minnesota. Gives the draft of a proposed amendment to the New York State constitution.

MUNICIPAL HOUSING FOR PATERSON [N. J.].
Housing Betterment, Feb. 1920, v. 9, p. 46–47.
City to become a municipal landlord; constitutional difficulties involved.

MUNICIPAL HOUSING [IN PITTSBURGH] DECLARED UNCONSTITUTIONAL.
Housing Betterment, Dec. 1919, v. 8, p. 38–39, 45–46.
Suggests substitute plan.

MUNICIPAL RECONSTRUCTION AND HOUSING.
Housing Betterment, Feb. 1919, v. 8, p. 48–49.
Program of the Bureau of Municipal Research of Rochester, N. Y. Refers to State or Federal aid in the form of long-term loans at low rates of interest.

MUNICIPAL TAX EXEMPTION STIMULATES HOME BUILDING.
American City, Jan. 1922, v. 26, p. 10.
Summarizes effect in New York State on building and vacant lots.
See also Housing Betterment, Apr. 1921, v. 10, p. 64–66.

NEW YORK REAL ESTATE BOARD.
Recommendations on legislation to relieve the housing shortage. New York, 1920. (Pamphlet.)
Opposes State or municipal housing, tax exemption; favors mortgage interest exemption.

SCHUCHARDT, W. H.
Copartnership housing in Milwaukee.
Housing Betterment, Sept. 1921, v. 10, p. 284–287; Jan. 1922, v. 11, p. 72.
The Common Council of Milwaukee purchased stock in Garden Homes Co. Objectives of the plan are explained.

TAX EXEMPTION OF NEW DWELLINGS.
Housing Betterment, Dec. 1921, v. 10, p. 341–346.
Includes the New York enabling act, the city ordinance, and statistics.

UNITED STATES. *Bureau of Labor Statistics.*
Municipal and cooperative housing law in Wisconsin.
(*In* its MONTHLY LABOR REVIEW, Sept. 1919, v. 9, p. 959–961.)
"This law makes it possible for municipalities to engage in housing or for interested individuals to organize themselves to form cooperative housing companies."—Article.
See also American City, Feb. 1920, v. 22, p. 156–157; American Architect, Mar. 24, 1920, v. 117, p. 377–378; World Almanac, 1920, p. 361.

British Empire.

Great Britain and her possessions, except Canada.

THE FIRST MUNICIPAL HOUSES.
Municipal Journal [London], Dec. 5, 1919, v. 28, p. 1237. (Illustrated.)
"Concrete cottages at Poole [England]."—Subtitle.

GLASGOW'S MUNICIPAL HOUSING.
American Architect, June 2, 1920, v. 117, p. 702.
"Shows what the one thoroughly successful exponent of municipal management has accomplished during the fifty years of the continuance of the experiment."—Article.
See also Housing Betterment, May, 1920, v. 9, p. 103–105.

HOLLAND, BERNARD.
Municipal housing in England.
Edinburgh Review, Oct., 1919, v. 230, p. 309–325.
Presents pre-war period, changes due to the war, and the present and future policies.

HOUSING.
(*In* New South Wales Official Yearbook, 1920, p. 737–742.)
History and statistics, State schemes, including loans, municipal housing.
See also Housing Betterment, Dec., 1919, v. 8, p. 19–20; June, 1921, v. 10, p. 240–252; January, 1922, v. 11, p. 53–54.

HOUSING IN INDIA.
Housing Betterment, Sept., 1919, v. 8, p. 38–39.
Bombay grants loans to cooperative building societies.

HOUSING IN NEW ZEALAND.
Housing Betterment, Apr., 1921, v. 10, p. 38–39.
Terms of Government subsidy; municipal aid is also given.
See also United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, July, 1921, v. 13, p. 189.

LONDON'S HOUSING NEEDS.
Housing Betterment, April, 1921, v. 10, p. 19.
Summary of account in Housing, the publication issued by the Ministry of Health, for Dec. 6, 1920.

MUNICIPAL LOANS IN [GOOD HOPE] AFRICA.
Housing Betterment, May, 1920, v. 9, p. 117.
The City of Good Hope is empowered to grant building loans to persons of limited means.
See also National Municipal Review, February, 1920, v. 9, p. 107.

THE MUNICIPALITIES AS LANDLORDS.
Municipal Journal [London], Aug. 22, 1919, v. 28, p. 835–836.
"The passing of the speculative builder and house owner—new problems created by emergency housing."—Subtitle.

SAVORY, E. W.
Survey of the Bristol [England] housing scheme.
Bristol Times and Mirror Office. June, 1920. (Pamphlet.)
Written by the chairman of the Bristol Housing and Town Planning Committee. Plans.

STATE PREPARATION: A MODEL VILLAGE IN LONDON.
Municipal Journal [London], Jan. 17, 1919, v. 28, p. 61–62.
"Describes the village to be erected by the British Government as a model for after-war community developments."—Kimball.

TENANTS FOR MUNICIPAL HOUSES IN LEEDS [ENGLAND].
(*In* United States Bureau of Foreign and Domestic Commerce, Commerce Reports, Oct. 16, 1919.)
Gives method of choosing tenants; brief statement about the loan voted by the Leeds City Council.

UNITED STATES. *Bureau of Labor Statistics.*
Housing after the war in Scotland.
(*In* its MONTHLY LABOR REVIEW, May, 1918, v. 6, p. 287–289; Feb., 1921, v. 12, p. 429.)
Reviews plan by which municipalities are to receive State aid; the plan in Dundee is explained in the second reference.
See also Housing Betterment, Feb., 1918, v. 7, p. 69–71.

—— —— [Municipal] housing in Nottingham, England.
(*In* its MONTHLY LABOR REVIEW, May, 1921, v. 12, p. 1090.)

Canada.

ADAMS, THOMAS.
Housing and town planning in Great Britain.
(*In* Ontario Housing Committee Report, including standards for inexpensive houses, 1919, p. 111–121.)
Concludes with discussion of financial results of municipal dwellings.

CITY BUILDS HOMES TO SOLVE HOUSING PROBLEM.
San Francisco Municipal Record, Mar. 31, 1921.
Brief statement about the erection of 100 cottages by Walkerville, Ontario.

MONTREAL TAKES ADVANTAGE OF GOVERNMENT AID.
Housing Betterment, June, 1919, v. 8, p. 42–43.

ONTARIO. *Housing Committee.*
Town planning.
(*In* its Report, 1919, p. 80–87.)
Recommends that town planning be made obligatory for all urban municipalities.

—— *Bureau of Municipal Affairs.*
Report re housing for 1919, including reports of officials, statements as to operations of housing commissions, plans, etc., 1920.
Includes plans with architects' and town planners' comments.

QUEBEC PROPOSES A MEMORIAL CITY.
Housing Betterment, Dec., 1919, v. 8, p. 16–17.
The building of this proposed model suburb is to be aided by a Government loan.

SISSONS, C. B.
Why Ontario has become a landlord.
Housing Betterment, June, 1919, v. 8, p. 48–51; Sept., 1919, v. 8, p. 30–32.
Emphasizes responsibilities of municipalities; lists municipalities which have taken advantage of the law. The author is secretary of the Ontario Housing Committee.

UNITED STATES. *Bureau of Labor Statistics.*
Aid by Canadian Government for provincial housing schemes.
(*In* its MONTHLY LABOR REVIEW, Feb., 1919, v. 8, p. 569–570.)
Terms of the loans to provincial governments to aid them in making loans to municipalities. Text of the order in council which was passed in December, 1918.

WETHERELL, MRS. J. E.
The Ontario housing problem: An attempt at its solution.
(*In* Ontario Housing Committee Report, 1919, p. 150–155.)
Suggests steps in organizing municipal building.

THE WORK OF THE PROVINCE OF ONTARIO.
Housing Betterment, Apr. 1921, v. 10, p. 43–44.
Reviews the report of the director of the Bureau of Municipal Affairs.

Argentina.

UNITED STATES. *Bureau of Labor Statistics.*
Municipal housing scheme in Buenos Aires.
(*In* its MONTHLY LABOR REVIEW, Nov. 1921, v. 13, p. 1097; Mar. 1922, v. 14, p. 550–551.)
Ordinance permitting use of real estate, unimproved or occupied by inadequate structures, as sites for modern houses. Tax exemption granted.
Similar article in Housing Betterment, Jan. 1922, v. 11, p. 57–58.

Austria.

CHAPMAN, H.
Housing situation in Vienna.
Garden Cities and Town Planning, Dec. 1921, v. 11, p. 270–273. Illustrations and tables.
Financial assistance has been promised by the State and the municipality

Brazil.

IN RIO DE JANEIRO.
Housing Betterment, Jan. 1922, v. 11, p. 57.
Tax exemption law revived.
See also Housing Betterment, Apr. 1921, v. 10, p. 38.

Denmark.

DENMARK'S HOUSING SHORTAGE.
Housing Betterment, Feb. 1290, v. 9, p. 23.
Brief statement of aid given by Copenhagen.

Finland

UNITED STATES. *Bureau of Labor Statistics.*
Housing in Finland.
(*In* its MONTHLY LABOR REVIEW, Aug. 1920, v. 11, p. 374–376; Apr. 1921, v. 12, p. 843–844; Nov. 1921, v. 13, p. 1101.)
Government plan includes subsidies in the form of interest-free loans.
Terms of the loans to municipalities and public utility companies are explained in Housing Betterment, Apr. 1921, v. 10, p. 33–34.

France.

DAVIDSON, H. M. AND L. R.
Municipal apartments of Paris help solve the housing problem.
American City, Jan. 1922, v. 26, p. 52–53.
Fourteen municipally owned and operated apartment houses designed to favor families with children.
Same article in Housing Betterment, Apr. 1922, v. 11, p. 153–155. *See also* United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Nov. 1921, v. 13, p. 1101–1102; Housing Betterment, Apr. 1921, v. 10, p. 30–31.

Germany.

GERMAN HOUSING PLANS.
In United States Bureau of Foreign and Domestic Commerce, Commerce Reports, Aug. 10, 1918.
Reviews the activity of the towns, also proposals of the Reichstag committee.
See also New International Yearbook, 1921, p. 326.

Holland.

UNITED STATES. *Bureau of Labor Statistics.*
Improvement in housing conditions in the Netherlands.
(*In* its MONTHLY LABOR REVIEW, July 1921, v. 13, p. 188–189.)
Government subsidies are given to municipalities, building societies, and private individuals.
See also Housing Betterment, Feb. 1920, v. 9, p. 25–26; June 1921, v. 10, p. 233.

Italy.

BIG BUILDING PROGRAM FOR ROME.
Housing Betterment, May 1920, v. 9, p. 114–115.
Loans from the Italian Government.

UNITED STATES. *Bureau of Labor Statistics.*
State aid to solve housing problems in Italy.
(*In* its MONTHLY LABOR REVIEW, Oct. 1919, v. 9, p. 1270–1271; May 1920, v. 10, p. 1269–1270.)
Loans are granted to building organizations, cooperative societies, and municipalities. Imported building materials are exempted from custom duties.

Japan.

JAPAN.
Housing Betterment, June, 1921, v. 10, p. 242–243.
Municipal building by two cities; Government loan.

Norway.

HOUSING IN NORWAY.
Housing Betterment, May, 1920, v. 9, p. 110–114; Apr. 1921, v. 10, p. 32–33.
State subsidies; also refers to municipally built houses.
See also United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Aug. 1920, v. 11, p. 374; Apr. 1921, v. 12, p. 844–845.

Peru.

UNITED STATES. *Bureau of Labor Statistics.*
Dwellings for public employees in Peru.
(*In* its MONTHLY LABOR REVIEW, Oct. 1919, v. 9, p. 1271; Apr. 1921, v. 12, p. 852.)
Outlines plan of the law giving municipal aid.

Sweden.

UNITED STATES. *Bureau of Labor Statistics.*
Housing situation in Sweden.
(*In* its MONTHLY LABOR REVIEW, Apr. 1921, v. 12, p. 845–846.)
Municipally owned or managed houses rent for less than other dwellings. Table given.
The 1920 bill regarding the State housing loan fund is outlined in United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Aug. 1920, v. 11, p. 373–374.

Switzerland.

SITUATION IN SWITZERLAND.
Housing Betterment, June 1921, v. 10, p. 233–235; Apr. 1922, v. 11, p. 155–156.
Restrictions have been placed upon the granting of subsidies; municipal building.
See also United States Bureau of Labor Statistics MONTHLY LABOR REVIEW, Aug. 1920, v. 11, p. 373.

UNITED STATES. *Bureau of Labor Statistics.*
Housing activities in the municipality of Zurich, Switzerland.
(*In* its MONTHLY LABOR REVIEW, Mar. 1922, v. 14, p. 551–554.)
Municipally owned dwellings; State, cantonal, and municipal subsidies.

Continuity of Employment in the Building Trades.

THE building situation in Cleveland has two recent developments, described in the American Contractor for December 16, 1922, in both of which an improvement in continuity of employment for the workers is one of the results. One is a new organization, the Home Builders' Exchange, formed during the past summer and made up of the interests specially concerned in building houses. The organization is developing along a number of lines, but one which has already shown good results is a plan for keeping hold of the labor supply already on hand. A contractor belonging to the exchange who finds that work of a given kind on his job is approaching completion sends notice to the central office that he will soon lay off such and such workmen. Thereupon every contractor belonging to the organization is notified, and usually a place is ready for the men as soon as they are laid off. This not only saves the employee from the loss of time involved in looking for jobs, but enables the contractors to attract and hold a good class of workers. A special effort is made to find places which will suit the individual needs of the men concerned.

Usually work can be found for the men close by their own homes, and much wasted effort in traveling can thus be eliminated. Because of the ability of this group of small builders to keep men steadily employed by finding work for them through the exchange they are able to hold a class of carpenters and masons on the job who would otherwise seek and obtain work on big buildings where more continuous employment usually exists.

The other development is in connection with the erection of a huge office building which will be one of the four leading buildings of the country, having a net rentable floor area of 1,173,700 square feet. Construction was begun on August 1, 1922, and it is hoped that the building will be finished by or before April 1, 1924. This means that work will be carried on through the severest periods of two winters. The cost of winter construction is estimated at from 3 to 10 per cent higher than that of similar work done in moderate weather, owing to the extra work and arrangements needed to keep materials in workable condition, the decrease of labor efficiency, the greater danger of accidents, and so on. Nevertheless, the policy of continuous work has been adopted, mainly because of the heavy carrying charges on the investment, but partly, also, because the company undertaking this job considers it advantageous to keep its force together. It holds that there is a decided gain in efficiency when the workmen become well acquainted and accustomed to working together.

Each foreman has some strong and some weak points. Because they have worked together and know each other's capacity, there is no experimenting done in times of stress. Somebody on the job knows just what to do under every difficulty, and this person is the one that steps in to do it, by common consent.

The same is true of the craftsmen and semiskilled workmen. Labor turnover is kept at a minimum and each foreman, knowing the capacity of his men, is able to pick out the proper person to handle any important section of the job.

From the point of view of the contractor winter work is valuable as it allows management methods to be introduced which prevent labor turnover and encourage this important item of coordination.

Housing Situation in South America.

THE problems arising from a shortage of hygienic houses at rentals within the means of the working classes have presented themselves in varying degrees of intensity in the countries of South America. Government aid has taken various forms, principally rent regulation, remission of customs duties on building materials used for workmen's homes, exemption from building taxes and current rates or from general taxation for a term of years, loans to cooperative and other associations and to individuals for building workmen's homes, and actual building programs. It is the purpose of this article, so far as information is available, to note the principal lines of activity and achievements of these countries in solving their housing problems.

Argentina.[1]

THE most serious housing problems in Argentina have arisen in the capital of the Republic, though other cities have felt the effects of the housing shortage to some extent. The loss of population on account of the emigration of foreigners from Buenos Aires during the war was more than offset by the great influx of workmen to that city on account of the war-time prosperity and activity. This increase in population brought on a serious state of affairs as regards suitable and sufficient housing at a rent the working class could pay.

Another difficulty arose from the fact that there was a preponderance of houses of a medieval type, occupying much valuable space without affording proportionate housing capacity. The ordinary dwelling house of Buenos Aires is said to be a one-story structure of massive brick walls with a large interior "patio" or open courtyard. The consequence is that on a ground area which in a modern American city district would comfortably provide space for six families in a three-story apartment, in Buenos Aires barely provides for six persons.

Still another cause of housing shortage and high rents was the cessation of building construction during the war, which had made it difficult and costly to secure building materials, most of which had to be imported. The number of building permits issued by the municipality of Buenos Aires dropped from 14,142 in 1913 to 6,813 in 1915 and averaged less than 6,000 for the next four years. The number then increased to 9,729 in 1920 and to 13,536 in 1921, almost equal to the 1913 figure. Most of the permits issued during the war years were for business premises and warehouses.

As will be noted from the following table, showing the increases in the prices of various building materials from 1911 to April, 1922, there was in general a considerable decline from 1920 and 1921 prices in April, 1922, though the prices of most of the articles were still above the 1911 and 1915 levels.

[1] The data on which this section is based are from Argentina, VI Memoria de la Comisión Nacional de Casas Baratas, 1921–1922, Buenos Aires, 1922; Argentina, Crónica Mensual del Departamento Nacional del Trabajo, Buenos Aires, June, July, 1922; Argentina, Boletín Oficial, Buenos Aires, Oct. 12, 1915 (p. 181), April 30, 1917 (p. 635), and Jan. 19, 1918 (p. 333); Review of the River Plate, Buenos Aires, July 28, 1922 (p. 211); and The American Review of Reviews, New York, August, 1922, pp. 177–180, "Government housing in Argentina," by Adeline K. Brady.

CHANGES IN PRICES OF BUILDING MATERIALS IN BUENOS AIRES, 1911 TO 1922.

[1 paper peso at par=42.45 cents.]

Material.	Unit.	1911	1915	1918	1919	1920	1921	April, 1922
		Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
Lime, Cordoba	Metric ton.	50.00	45.00	70.00	59.00	69.00	75.00	65.00
Lime, Azul	...do	26.00	26.00	50.00	55.00	47.00	52.00	36.00
Sand	Cu. meter.	6.00	5.50	6.50	7.00	9.00	9.00	8.50
Brick, common	1,000	30.00	27.00	22.00	30.00	45.00	42.00	42.00
Brick, machine-made	...do	43.00	45.00	48.50	50.00	65.00	60.00	74.00
Iron I-beams	Metric ton.	90.00	160.00	450.00	477.00	440.00	318.00	227.27
Lumber:								
White pine boards, No. 5	Sq. ft	.30	.33	.60	.60	.60	.68	.68
Spruce boards and planks	...do	.14	.16	.43	.50	.40	.37	.37
Ordinary pine beams	...do	.15	.16	.40	.46	.35	.30	.32
Cedar boards	...do	.22	24	.40	.50	.40	.43	.43
Hard wood	Cu. meter.	60.00	65.00	90.00	130.00	135.00	130.00	130.00
Glass, double strength	Sq. meter.	3.50	3.50	10.50–17.00	12.00	12.00	9.50	8.50
Gypsum, white, domestic	Metric ton.				45.00	45.00	50.00	48.00
Gypsum, coarse or black, domestic	...do				40.00	40.00	40.00	41.00
Portland cement	Barrel	7.50	12.00	36.00	32.00	16.00	23.00	12.00
Marble, common white:								
0.04 meter thick	Sq. meter.	24.00	26.00	28.00	33.00	32.00	45.00	27.00
0.02 meter thick	...do	16.00	18.00	20.00	24.00	22.00	28.00	16.30
Doors, transoms, and windows, cedar	...do	24.00	28.00	34.00	40.40	40.00	40.00	33.00
Roofing tiles, foreign, Sacoman type	1,000	120.00	150.00	450.00	450.00	540.00	570.00	.....
French paving tiles for floors	...do	65.00	80.00	140.00	120.00	195.00	260.00	130.00
Tile, white glazed, 0.15 x 0.15 meter	...do	132.00	110.00	300.00	180.00	180.00	115.00	200.00
Kalsomining, 3 coats, plain surface	Sq. meter.	.12	.12	.15	.15	.20	.30	.25
Oil, foreign	Drum [1]	16.00	.....	.....	45.00	25.00	23.00	18.00
White lead	Jar [1]	3.00	.....	.....	9.00	8.20	7.20	8.00
Turpentine	Case [1]	24.00	.....	.....	50.00	75.00	45.00	43.00
Varnish, spar	Gal.	11.00	.....	.....	18.00	10.20	9.30	12.00
Paving blocks, wood	1,000	.....	56.00	48.00	55.00	70.00	88.00	88.00
Electricity installations	(2)	30.00	33.00	50.00	50.00	30.00	25.00	22.00

[1] Quantity not given. [2] Per connection.

The increased cost of labor in construction work during the same period, as shown in the following table, was another factor that had a deterrent effect on building:

AVERAGE DAILY WAGES IN BUILDING TRADES IN BUENOS AIRES, 1911 TO 1922.

[1 paper peso at par=42.45 cents.]

Occupation.	1911	1915	1920	1921	April, 1922.
	Pesos.	*Pesos.*	*Pesos.*	*Pesos.*	*Pesos.*
Carpenters	4.00	3.50	7.00–7.50	7.50	8.00–9.20
Iron workers	4.50	3.50	7.00–7.50	9.00	9.00
Marble workers	5.00	4.00	7.00–8.00	8.00	8.00–9.00
Masons	4.50	3.50	6.00–7.00	7.50	7.00–7.20
Painters	4.00	3.00	6.00–7.00	7.50	7.00–8.00
Plasterers	5.00	4.00	7.00–7.50	8.50	8.00
Laborers	2.20	2.00	4.00–4.50	5.00–5.50	4.50–5.00

The rapid increase in population and the great decrease in the amount of building resulted in overcrowding that seriously menaced the health of all concerned. It was the general rule, it is stated, to rent only one room of a house to a family, the washing and cooking being done in the common courtyard. These houses became known as "conventillos," meaning "little convents."

Another result was greatly increased rents. An investigation made by the National Department of Labor of the average rent of one room in a tenement house showed a period of decline from 1914 to 1916, followed by increasing rents till 1920, with a very slight decrease in 1921. Index numbers showing the changes from 1914 to 1921 are as follows:

1914	100
1915	83
1916	71
1917	95
1918	101
1919	129
1920	170
1921	169

Legislation.

The conditions just described led to the enactment of a housing law (No. 9677) in 1915, regulations for which were issued in April, 1917. In December of the latter year the benefits of the law were extended to workmen employed in the arsenals and workshops operated by the Army and Navy. The law provides for a National Commission on Low-priced Houses (*Comisión Nacional de Casas Baratas*), consisting of five members, whose function it is to study and promote the construction and sanitation of low-priced houses, as well as to engage in the actual construction of such houses. Such houses are to be sold at cost to reliable persons with families, who are to be chosen by lot from among skilled and unskilled laborers and salaried employees. Such persons shall not have property worth more than 3,000 pesos ($1,274, par) or an equivalent income. The buyer will make monthly payments on principal and interest, the rate of interest being 3 per cent and the period of amortization 20 years. Import duties on materials for all such houses will be remitted. The commission may issue temporary life insurance policies to those buying homes under these conditions. Where a house is erected for the owner's personal use and does not cost more than 10,000 pesos ($4,245, par), the import duties will be remitted and the property will be exempt from the land tax for 10 years. Benefit and cooperative societies and societies which build only low-priced houses or lend money for building such houses are declared exempt from "fiscal" taxes (*impuestos fiscales*) if their plans are approved by the commission. The regulations contain detailed provisions as to the location, construction, and sanitation of such houses, ample toilets, baths, and washrooms being required. To offset the scantiness of the furniture in the average laborer's home, it is specified that cupboards and other pieces be built into the houses. The National Postal Savings Fund may lend the commission up to 50 per cent of its deposits at 5 per cent interest.

Mention should also be made of the measures enacted late in 1921 to limit rents for two years to the January 1, 1920, rate, and to regulate leases and evictions, and also of the amendment to the retirement law for employees on Government-controlled railroads permitting loans from the retirement and pension fund to employees who wish to buy or build homes.[2] The municipal government of

[2] MONTHLY LABOR REVIEW, December, 1921 (p. 161), and November, 1922 (pp. 202, 203).

Buenos Aires has passed several ordinances on the subject of housing, two of which have been noted in the MONTHLY LABOR REVIEW.[3] The most recent effort on the part of the municipality to provide more homes for the working class was the reviving (with slight modifications) on July 25, 1922, of an ordinance that had been passed in 1913, authorizing the construction of 10,000 houses for salaried employees and workmen. The outbreak of the World War prevented the concessionaire company from carrying out its contract. The company is now to undertake the construction of 10,000 dwellings at the rate of at least 1,000 per annum. The houses are to be assigned by lot to salaried employees and workmen whose salaries are not more than 400 pesos national currency ($170, par) per month, preference being given to those having the largest families. The selling price is to be at the rate of 85 pesos, national currency ($36, par), per month until the debt is canceled, this payment to include the stipulated profit of the contracting company on each house.

Building Activities of the National Commission on Low-priced Houses.

After a period of study and investigation of housing conditions the National Commission on Low-priced Houses began its building activities in 1919. The first housing venture was a four-story tenement house (*casa colectiva*), of brick and concrete stucco, consisting of sixty-seven 2 and 3 room apartments and costing 806,509.41 pesos, national currency ($342,363, par). The rents were fixed at 47, 45, 42, 40, 38, and 35 pesos ($20, $19, $18, $17, $16, and $15, par) per month. This tenement is of the general type that is to be used by the commission for crowded city districts. Such tenements are built primarily for families with many children, and each tenement fronts on a park or playground. While the plans do not retain the open patio for each apartment, they include a large courtyard, the area of which is required by law to be not less than 50 square meters in the case of four-story buildings.

The first tenement was not completed till about the middle of 1921, but before it was ready for occupancy 2,318 families had petitioned for quarters. Formal applications were limited to families with an income of less than 200 pesos ($85, par) per month, preference being given to the largest families. The final list from which the drawing was made contained 570 names. Exceptional preference and direct assignment were made in the case of 15 laborers, each with a wife and 10 children and having a small income, who at the time of the lottery were each occupying one or two rooms in the "conventillos" and paying 40 to 60 pesos ($17 to $25, par) per month for rent.

The next building operation undertaken by the commission was a group of 160 individual houses, consisting of three and four rooms each, besides bathroom and kitchen, which rent for 45 and 55 pesos ($19 and $23, par) per month, respectively. This community of laborers' homes when completed will consist of 300 houses. This community group system is considered a decided departure in South American housing, inasmuch as the architects completely abandoned the old Spanish and Moorish styles. The ground plan is a direct

[3] November, 1921 (p. 153), and March, 1922 (p. 140).

copy of the community housing plan so much used in the United States during the last few years. The houses are two stories in height and built of brick and stucco with Spanish tile roofs.

Another tenement consisting of eighteen 3-room and twenty-three 2-room apartments, renting for 60 and 50 pesos ($25 and $21, par) per month, respectively, has been completed. At the close of the period covered by the report of the commission (June, 1922) plans were being made for 80 more houses, which will form part of a new community group of 501 houses, and sites had been obtained for 1,000 more dwellings, though funds were not then available for construction work.

The commission has also approved plans for 64 individual houses and a tenement house to be constructed by the Unión Popular Católica Argentina.

The provincial governments are to some extent following the lead of the National Government in undertaking to improve and increase housing facilities. For example, the Province of Santa Fé has a housing commission called Junta Provincial de Fomento de Casas Baratas, with main offices in Rosario and Santa Fé. The national commission also has honorary subcommissions at various points in the interior.

It is said that little building is being done by private initiative because those who would ordinarily build houses to rent feel that the terms of the rent law make such an investment unprofitable. Therefore in spite of the efforts of the national commission and the municipality of Buenos Aires, there is still a serious housing shortage in the national capital, which was estimated to be from 30,000 to 40,000 dwellings in July, 1922. It is believed, however, that sufficient building has been done to alleviate the conditions in the worst of the "conventillos." It is said that the most important accomplishment of the commission has been the breaking down of the barriers of tradition and the introduction of a modern style of housing more suitable to a great city.

Chile.[4]

THE housing problems of Chile have not been confined entirely to the cities but have arisen also in the nitrate fields of the north and the coal-mining regions of the south. In the nitrate fields, where the housing is necessarily of a more or less temporary character, the Government, with the cooperation of the operators, has succeeded in materially improving housing conditions since the report of the Government commission in 1917. Considerable improvement in the housing facilities at the coal mines has been noted since the investigation made by a Government commission during the coal strike of 1920. It is said that the serious shortage of suitable houses has compelled the authorities to permit the continued use of many dwellings that are insanitary and uninhabitable under the law and that should be condemned and torn down.

At Arica, one of the nitrate ports, work has been started on the first of three workmen's apartment houses to be erected by the

[4] The data on which this section is based are from Chile, Ley y ordenanza sobre habitaciones para obreros, con las modificaciones * * *, Santiago, 1919; Chile, La Revista de la Habitación, Santiago, March and April, 1922; El Mercurio, Santiago, Sept. 5–20, 1922, and report of United States consul at Arica, Nov. 13, 1922.

municipal government. The buildings will be 1-story high, and each will contain 60 apartments of identical size, consisting of 4 bedrooms, kitchen, covered patio (court, dining, and sitting room), open patio, and toilet facilities. The central court, or patio, will contain flower beds and facilities for washing clothes. Later on bath houses are to be installed. The rents are to be no higher than are necessary to cover interest, expenses, depreciation, and sinking fund and will include electric lights and water. It is stated that the principal railroad entering the city plans to erect similar structures for its employees on the same street.

Legislation.

The Chilean law relating to workmen's houses (No. 1838) was passed in 1906 and amended in 1909, 1911, 1912, and 1916. Under the terms of this law a housing commission called the Consejo Superior de Habitaciones para Obreros was created to supervise the work of the commissions in the Departments and also to serve as the commission for the Department of Santiago. The duties of these commissions are (1) to promote the construction of cheap hygienic houses for sale or for rent to the working class, (2) to look after the sanitation of workers' homes, (3) to approve plans and fix conditions for receiving aid from the commission in building houses for workers, (4) to engage in actual building enterprises, and (5) to encourage the organization of building societies.

A period of 20 years is allowed for paying for houses sold to workmen. The Mortgage Loan Fund (*Caja de Crédito Hipotecario*) may loan up to 75 per cent of the value of the property on building operations that have been approved by the commission. The President is authorized to build houses for workmen and low-salaried employees in Government industrial establishments.

As amended in 1916 the law provides that houses which have been declared "hygienic" by the housing commission and whose monthly rental value is not more than 80 pesos [5] need pay only half the regular taxes and shall enjoy low water rates. All these concessions stop if the house ceases to be "hygienic" or is unoccupied. Building and cooperative societies, factory owners, stock companies, etc., which build such houses shall also enjoy the benefits allowed by the law.

The great defect of the law is said to be that it does not provide funds.

Housing Exposition and Conference.

An exposition of economical housing (*exposición de la habitación económica*) was held in Santiago September 3 to 28, 1922, and in connection with it a conference which lasted from September 4 to 16. The exposition consisted of exhibits of building materials of all sorts, drawings, pictures, and plans of low-priced houses that would meet the requirements of health and sanitation. The conference was attended by Government officials, architects, and others interested in building, trade-union members, and private individuals interested in housing and welfare work. A number of Buenos Aires architects

[5] Presumably paper pesos, which are normally worth about 20 cents in United States money. The gold peso at par is worth 36.5 cents.

and housing specialists were present and took part. The general subjects of discussion were the political and social influence of housing, the relation between the value of property and the rent, the relation of the State to the housing problem, building materials and methods of construction, application of a decreasing mixed life insurance for buying small holdings, minimum hygienic requirements in economical housing, relation of rent for cheap houses to wages and salaries, and sanitation, heating, and lighting.

The report given on the work of the housing commissions and the municipalities from 1906 to 1921 showed that 1,415 owners had been compelled to demolish 13,630 rooms, where 35,374 people lived, and repairs had been required on 507 properties containing 847 rooms, inhabited by 22,718 persons. In Santiago the commission had built, on 162 sites, 3,418 houses, containing 8,274 rooms.

Rents are reported to be high because of the scarcity of houses. The housing shortage is due, in turn, to the high cost of building materials and labor, as well as to the poor public lighting system, bad paving, lack of easy communications, and high cost of sewerage, gas, etc.

The director of the Chilean Labor Office urged the creation of a social museum, such as exists in Argentina and Brazil, to study social problems, and it is thought likely that this suggestion will be carried out, and a part of the exhibits retained as a nucleus for a museum.

Other Countries.[6]

FROM the little information that is available concerning the housing situation in the other countries of South America, it is evident that in most of them the Governments are taking steps to improve and increase the facilities for housing the working classes. The Colombian law of August 31, 1921, concerning hygienic measures in the petroleum industry [7] requires the companies to construct sanitary dwellings for their workmen. The Paraguayan housing law and the issuance of bonds by the Peruvian Government for building workmen's dwellings in Lima and Callao have already been noted in the MONTHLY LABOR REVIEW.[8]

Uruguay.—A reference to the construction of over 100 homes by the Uruguayan Government in 1921 indicates that most of them were constructed according to models in the United States, Germany, and Norway, thus showing a tendency in Uruguay, as well as in Argentina, to break away from the Spanish and Moorish types of architecture.

To check the rapidly rising rents a law was passed June 20, 1921, making the rate on December 31, 1919, the legal maximum rate for all dwellings in the towns and cities of Uruguay for a period of three years from the date of promulgation of the law.[9]

Brazil.—In 1921 a considerable shortage of houses in Rio de Janeiro was reported. In Pernambuco the municipal prefect was calling for bids for the construction of 2,500 workmen's houses.

[6] The data on which this section is based are from Bulletin of the Pan American Union, Washington, August, 1920, February and July, 1921; report of United States consul at Rio de Janeiro, Sept. 5, 1922.
[7] MONTHLY LABOR REVIEW, February, 1922, p. 139.
[8] April, 1921 (p. 136), and March, 1922 (p. 157).
[9] MONTHLY LABOR REVIEW, November, 1921, p. 159.

The decree of August 21, 1922, authorizes the construction of not more than 5,000 homes for Government employees and laborers. The cost of each is not to exceed 10 contos ($5,462, par). The Government is also authorized to make loans to Government employees and laborers who possess land and who desire to construct residences. Such loans may not exceed 25 contos ($13,654, par). Easy payments in monthly installments that may extend over a period of 15 years are provided for. Money will be advanced to army and navy officers and Government employees for the purpose of purchasing or building residences. The amounts so advanced will be based on the pensions and salaries of the officers and upon the pensions of the Federal Government employees. One per cent of the total advance of the Government must be deposited each month.

The Government is authorized to negotiate a loan of 30,000 contos ($16,386,500, par) for 20 years, to waive or reduce import duties on such material as may be necessary for the construction of the houses, barring articles of luxury, to waive stamp and other taxes, and to facilitate the construction of houses through the sale of property at reasonable prices and through other means.

INDUSTRIAL ACCIDENTS AND HYGIENE.

Safety Activities of the United States Government.[1]

By Ethelbert Stewart, United States Commissioner of Labor Statistics.

THERE can be no question that the United States Government from its very beginning has fully appreciated its responsibility along those lines now covered by the somewhat general term "safety work."

The first tangible application of the idea involved in this phrase by Governments anywhere was the erection of lighthouses and shore signals of various types to protect life and property at sea. The Massachusetts colony of Boston built the first lighthouse in America, celebrating its completion September 15, 1716, an early date for modern lighthouse development; the Eddystone, England's first lighthouse, was built in 1699, only 17 years before.

Other colonies followed the example of Boston, building lighthouses and installing buoys and other signals, paying for their maintenance by the levy of a tax of 1 penny per ton on the cargoes of incoming and outgoing vessels. When the United States Government was formed in 1789 there were transferred to it by the colonies all such structures then existing, which consisted of 12 lighthouses, 1 fog signal and 10 buoys, thus marking the first consolidation of control of "those numerous works for the protection of navigation and the safeguarding of life and property which now place the coasts of the United States among the best lighted and marked in the world."

In June, 1921, the United States Lighthouse Service maintained 16,456 aids to navigation of all kinds, including 5,756 lights of all classes, 593 fog signals, of which 48 were submarine signals. These figures do not include 152 whistling buoys and 386 bell buoys. At that date the service maintained light vessels on 49 stations and had for this purpose 64 such vessels, 15 of which were for relief work. Practically 6,000 persons were employed; and the maintenance cost of the service in 1921 was $9,594,466. Three radio fog signal stations, the first in this country, were placed in commission by the Lighthouse Service in May, 1921.

Closely allied to this is the romantic work of the Coast Guard, which on June 30, 1922, had 235 active stations, 42 inactive stations (made so by lack of funds), and 77 vessels guarding coasts and harbors, employing in this capacity 4,200 men and expending practically ten millions of dollars a year. This bald statement of equipment leaves out of account the picturesque patrol of 10,000 miles of coast by young men walking up and down the beach, dressed and equipped to plunge instantly into the sea to rescue drowning bathers or to

[1] Reprinted from the National Safety News, Chicago, January, 1923, pp. 27, 28.

hasten to signal stations to report the sighting of rowboats, fishing craft, or larger vessels in distress.

During the fiscal year ending June 30, 1922, 2,954 human lives were saved by the Coast Guard, while assistance was rendered to 14,531 persons on board ships in distress.

Then comes the Steamboat Inspection Service, which during the fiscal year, 1922, inspected 13,131 vessels, and I say vessels because while the law requires careful inspection of boilers the actual inspection includes examination of engines and all other parts of the machinery of boats.

The Government many years ago recognized its duty to assist in rendering the mines of the country more safe. For this purpose the Bureau of Mines was established to promote safety in the mining and metallurgical industries. The work of this bureau is far-reaching in its scope, covering studies of explosive gases, investigational work along safety lines, including mine ventilation problems, testing of permissible explosives and approved electrical mine equipment, development of oxygen-breathing apparatus, and studies of the explosion hazards in coal mines and the explosibility of coal dust. During the year ending June 30, 1922, the 10 mine rescue cars and 10 safety stations of the United States Bureau of Mines trained 16,289 persons in first-aid and mine rescue work. Adding to these the 61,607 persons trained in previous years, we get a total of 77,896 persons trained in first-aid and mine rescue work. Assistance was rendered at 24 mine accidents. All mines in which explosions or fires occurred during the year were investigated and recommendations made to the mine operators. Cooperation in this work was maintained with the United States Public Health Service in studying health conditions in mines and with the National Safety Council in the use of safety devices and safe practices. Practically half a million dollars per year is expended by this bureau.

The toll of life and limb on railroads put upon our statute books a law which sought in the first instance to protect railroad men by the installation of safety couplers on freight cars.

The Bureau of Locomotive Inspection during the fiscal year ending June 30, 1922, made 60,812 locomotive inspections; and here again the inspection is not confined to the boilers alone but covers the entire machinery of the engine. During the year this service expended $290,000. In addition, there is the Bureau of Safety, which, starting out to inspect the safety-appliance equipment on railroads, really inspects every part of cars, both passenger and freight. The latest available figures for this bureau are for 1921, and show 865,858 freight cars inspected, 20,082 passengers cars, 21,353 locomotives, with a total of 56,584 defects of all classes discovered and corrected.

I wonder if the million and over of our citizens who visited the national parks last year realize that the National Park Service maintains over 200 men for four months of the year in these parks to provide for the safety and comfort of the visiting million? I wonder how many noticed the parapets at dangerous places along the road or knew that approximately $300,000 was spent on these safety precautions in addition to the $180,000 required to maintain the force of 200 guides and guards and rangers? In addition the Public Health

Service keeps a detail of inspectors in the national park to look after the sanitary conditions.

The Post Office Department in its efforts to provide safety devices for catching the mail by flying trains, and by improving the construction of railway mail cars, has reduced to a minimum the accidents from falls and falling objects.

The Government Printing Office with its 14,000 machines equipped with the most approved safety devices is another example of the Government's regard for safety.

The Bureau of Engraving and Printing moved into a building ideally constructed. In this plant are individual motor-driven machines equipped with automatic electric-control, and, in addition, automatically controlled "start," "stop," "safe," "ready," pilot stations. The printing presses are equipped with electrically connected safety bars so coupled with motor controllers that any displacement of a safety bar by accidental or intentional contact with an operative will instantly stop the press—a press can not be operated unless all the safety devices are in place ready for emergency service; it is wellnigh a model plant.

If we construe the term "safety work" as applying to all activities as well as to all methods and devices which have for their ultimate purpose the conservation of human life, limb, and property, then we must include a large proportion of the work of the Department of Agriculture.

For instance, the Meat Inspection Division of the Bureau of Animal Industry with its system of labeling meats as healthful has regained for us markets from which our pork products had been excluded under suspicion of trichina and has put the whole slaughtering and meat-packing industry of the country upon a level of cleanliness and safety of which the country may well be proud. During the fiscal year 1921 inspections were conducted in 892 establishments in 265 cities and towns, and this inspection covered 62,055,485 animals. The dairy and market milk stations, the work done in the interest of sanitation on live-stock farms, the control of Texas fever and other cattle diseases by this bureau are simply staggering in their detail and a mere list would occupy more space than can be devoted to this entire article.

The administration of the food and drugs act, which is being more than liberally construed by that department in its administration, not only enables it to check the manufacture and sale of deleterious foods, but has inspired an enormous amount of constructive work along the lines of adding to the items of possible human food and the better and more healthful preparation of all food. As being directly in the line of safety work, the Bureau of Chemistry in the Department of Agriculture has jurisdiction over all plants where grain or vegetable dusts become a source of danger to human life through possibility of explosion.

The Forest Service employs large numbers of men and expends great sums of money annually in the prevention of forest fires and in the work of extinguishing them when they do occur. Few realize that during the past half century over 3,000 lives have been lost in forest fires. During the year 1921 there were 6,000 forest fires. Over 375,000 acres of national forest land were burned over; $532,811

was spent by the Government to fight these fires, and the total damage done amounted to $200,000.

The Weather Bureau, embodying the practical application of meteorological science to the daily affairs of life, now shoots by wireless telegraphy across the sea warnings to vessels of dangerous storms, outlining hurricane areas, and the general weather conditions, which mean so much to safety on the seas. The value of this service to our shipping interests, particularly along the coast line, has been more appreciated since the warning issued for the hurricane that passed over New Orleans on September 29, 1915, resulted in great saving of life and property. However, there is very little public appreciation as yet of the safety value of the Weather Bureau. With the entrance of the airplane into our social life not only for the purposes of the Post Office Department, but sooner or later for commercial purposes, the services of the bureau grow in value as they come to be appreciated.

No effort is here made to give anything bordering upon a complete list or census of the governmental activities that might properly be classified as safety work. Only the names can be mentioned of such important functions as that of the Hydrographic Office of the Navy Department, which has for its object "the improvement of the means for navigating safely the vessels of the Navy and of the mercantile marine," the Bureau of Standards, where practically all of the work must be so classified, since to standardize is to "safetyize."

I should like to talk about the work of the Children's Bureau and what it has done along the lines of safety in reducing the hazards of being born, in reducing infant mortality, and in saving the lives of mothers in that first and greatest work of the human race. I would like to say something of the work of the Bureau of Labor Statistics in its attempts early and late to systematize and standardize the reporting of accidents so that the subject of accident prevention can be intelligently studied. I should like to mention the work of the Government bureaus and departments in aiding the development of standard codes to the end that we may intelligencize (I don't care whether Webster knew of this word or not) factory inspection.

In this group working toward uniform codes I also find the Navy Department through its interest in the navy yards, the War Department through its interest in the effect of such codes upon the arsenals, the Public Health Service through its interest in sanitation and hygienic conditions of industry, the Bureau of Standards through its interest in standardization, the Department of Labor through its interest in men.

Some day a complete list of all governmental activities bearing directly or indirectly upon the development of that great human impulse which in its surgings has been called "safety" should be made in order to develop an appreciation of the magnitude of what the Government is doing to voice its sincerity of interest, and thus inspire our citizens with more enthusiasm for safety effort.

Coke-oven Accidents in the United States During 1921.

A REPORT, by William W. Adams, of the United States Bureau of Mines (Technical Paper 318), of the accidents at coke ovens during the calendar year 1921 shows a lower fatality rate than in any year since 1915 and, with the exception of 1920, a lower nonfatal injury rate for the same period. A reduction in the number of accidents was to be expected because of the industrial depression during the year, which had resulted in a reduced number of employees and a smaller aggregate number of shifts, but that the accident rates were actually lower in proportion to the amount of work done was considered to be a decidedly encouraging feature of a year of depression.

According to the reports which are voluntarily furnished to the Bureau of Mines by owners and operators of coke ovens, there were 17 men killed and 1,853 injured during the year, the accident rates being 1.23 killed and 133.62 injured per thousand full-time or 300-day workers. The average working force was 16,204 men, who worked on an average 257 days per man.

The reports for 1921 covered the operations of 6,881 by-product ovens and 17,509 beehive ovens. The by-product industry employed 10,193 men and the time worked averaged 325 days per man. Among these workers 12 were killed and 1,517 were injured, showing rates of 1.09 and 137.50, respectively, per 1,000 300-day workers, while in the beehive ovens 6,011 men were employed at an average of 141 days per man and there were 5 fatal accidents and 336 injuries, resulting in a rate of 1.76 killed and 118.52 injured per thousand employed.

The following table shows the number and classification of injuries reported to the bureau for the six-year period 1916 to 1921:

NUMBER AND CLASSIFICATION OF INJURIES IN COKE OVENS OF THE UNITED STATES, 1916 to 1921.

Item.	1916	1917	1918	1919	1920	1921
Fatalities	45	76	73	53	49	17
Serious injuries (time lost, more than 14 days):						
Permanent disability—						
Total[1]	2	2	2	2	3	.....
Partial[2]	81	72	73	121	76	24
Other	686	735	969	790	722	318
Slight injuries (time lost, 1 to 14 days, inclusive)	4,468	5,904	6,748	3,118	2,614	1,511
Total injuries	5,237	6,713	7,792	4,031	3,415	1,853
Total fatalities and injuries	5,282	6,789	7,865	4,084	3,464	1,870
Men employed	31,603	32,417	32,389	28,741	28,139	16,204

[1] Permanent total disability: Loss of both legs or arms, one leg and one arm, total loss of eyesight, paralysis, or other condition permanently incapacitating a workman from doing any work in a gainful occupation.
[2] Permanent partial disability: Loss of one foot, leg, hand, eye, one or more fingers, one or more toes, any dislocation where ligaments are severed, or any other injury known in surgery to be permanent partial disability.

The accident rates shown in the following table are based on the number of 300-day workers employed. The table shows the number of men employed, the average days of labor per year, the fatalities and injuries, and the rates per 1,000 300-day workers for the calendar years 1916 to 1921.

NUMBER OF EMPLOYEES, DAYS OF LABOR PERFORMED, FATALITIES AND INJURIES IN COKE OVENS IN THE UNITED STATES, 1916 TO 1921.

Year.	Average days active.	Men employed.		Days of labor performed.	Number killed.		Number injured.	
		Actual number.	Equivalent in 300-day workers.		Total.	Per 1,000 300-day workers.	Total.	Per 1,000 300-day workers.
1916	324	31,603	34,119	10,235,674	45	1.32	5,237	153.49
1917	329	32,417	35,595	10,678,429	76	2.14	6,713	188.59
1918	329	32,389	35,476	10,642,688	73	2.06	7,792	219.64
1919	289	28,741	27,674	8,302,059	53	1.92	4,031	145.66
1920	319	28,139	29,921	8,976,214	49	1.64	3,415	114.13
Average for five years	319	30,658	32,557	9,767,013	59	1.81	5,438	167.03
1921	257	16,204	13,868	4,160,298	17	1.23	1,853	133.62

The principal causes of nonfatal accidents at all coke ovens were falling objects, burns, falls of persons, hand tools, haulage, and nails and splinters, in the order named, while the highest fatality rates were due to coke-drawing machines, falls of persons, and haulage equipment. In the following table the number of fatalities and injuries occurring during the year ending December 31, 1921, and the rate per 1,000 300-day workers are shown by causes.

NUMBER OF FATALITIES AND INJURIES AND RATE PER 1,000 300-DAY WORKERS FOR THE YEAR ENDING DECEMBER 31, 1921, BY CAUSES.

Cause.	Killed.		Injured.	
	Number.	Rate per 1,000 300-day workers.	Number.	Rate per 1,000 300-day workers.
Cars, lorries, and motors	3	0.22	123	8.87
Railway cars and locomotives	1	.07	28	2.02
Coke-drawing machines	4	.29	33	2.38
Electricity	1	.07	21	1.51
Falls of persons	4	.29	204	14.71
Hand tools			182	13.12
Suffocation from gases			8	.58
Burns			226	16.30
Gas explosions			9	.65
Falling objects	1	.07	229	16.51
Nails, splinters, etc			56	4.04
Run of coal or coke	1	.07	20	1.44
Other causes	2	.15	714	51.49
Total	17	1.23	1,853	133.62

Coal-dust Explosion Tests.[1]

THE results of a series of tests of coal-dust explosions, conducted by engineers of the Bureau of Mines in their experimental mine near Pittsburgh, which were carried on during the years 1913 to 1918, have been published recently. In the United States, during the years 1901 to 1910, the report states, there were 106 gas and dust explosions, each of which killed five or more men, in bituminous and subbituminous mines. A total of 3,296 were killed in these explo-

[1] U. S. Bureau of Mines Bul. No. 167: Coal-dust explosion tests in the experimental mine, 1913 to 1918, inclusive. Washington, 1922.

sions. During the 10 years 1911 to 1920 there were 75 such explosions with 2,057 deaths—a reduction of 1,239 deaths when compared with the earlier period, although the average number of miners and the average production had increased nearly one-half.

Prior to a series of preliminary tests made in 1911 and 1912 there had been much skepticism among practical mining men as to the explosibility of coal dust, it having been considered that fire damp or gases of unknown composition were the causes of these explosions which had resulted in so much damage and loss of life. The violent explosions produced in these first tests, however, established the fact beyond dispute that dry coal dust in a mine is decidedly dangerous even without the presence of inflammable gas in the air. From 1913 to May, 1918, 494 explosion tests were made in the experimental mine, and while much information was obtained in regard to the starting, propagation, limitation, and prevention of coal-dust explosions, there are still many problems which are not entirely solved.

The experimental mine was opened by the bureau in order to make large-scale explosion tests under actual mine conditions, as the engineers of the bureau considered that while the tests made in steel-surface galleries in Great Britain, France, and Germany were of value, preventive measures developed by the gallery experiments should be confirmed or modified by actual mine tests.

Coal dust is formed in a mine in a variety of ways. In drilling, the production of dust, although small, is unavoidable. Machine cutting also produces considerable unavoidable dust, as does blasting and picking the coal by hand. Avoidable causes which produce a great deal of dust are overloaded cars and cars having spaces through which the coal can fall, and the practice of using coal for ballasting. Such coal is soon pulverized by the feet of men, horses, and mules and produces large quantities of dust. Coal dust at the working face, therefore, can not be prevented, but it is possible almost entirely to prevent its production and distribution in the entries.

Coal dust will not explode unless ignited in the air, so that mines which are free from fire damp and in which explosives are seldom used are practically free from explosions. The sources of ignition of coal-dust explosions in the United States, in the order of their importance, are as follows:

1. Long-flame explosives.
2. Ignition of bodies of fire damp.
   (*a*) Ignition of fire damp by open lights.
   (*b*) Ignition of fire damp by grounding of electric wires.
   (*c*) Ignition of fire damp by explosives.
   (*d*) Ignition of fire damp by defective safety lamps or an opened safety lamp.
   (*e*) Ignition of gases methane and distilled hydrocarbon gases—by mine fires.
3. Direct ignition of coal dust in air by electric arcing, as by the "short" from a trolley wire.
4. Direct ignition of coal dust in air by an open lamp or torch.

In tests to determine whether or not explosions travel with the air, as had been believed to be the case, it was found that while the movement is slightly faster with the air current than against it the coal-dust explosions propagate in any direction in which there is coal dust of sufficient purity. The amount of coal dust which may propagate an explosion is only 0.05 ounce for each cubic foot

of air space. Pure anthracite dust in air will not ignite, while dry subbituminous dust is highly explosive. In testing the size of particles of coal dust from different mines it was found that most mine road dust passing through a 20-mesh screen contained not more than 20 per cent that would pass through a 200-mesh screen, while 75 per cent of pulverized dust would pass through a screen of that size. The limit of explosibility when mixed with incombustible matter like shale dust varies according to the percentage of fine dust, 10 per cent of road dust which would pass through a 200-mesh screen requiring the addition of 50 per cent of shale dust to render it inert, while 20-mesh rib or timber dust of which 40 per cent would pass through a 200-mesh screen requires the addition of twice its weight in shale dust in order to prevent explosion.

Tests of the efficacy of wetting the dust in mines in the prevention of explosions showed that it is necessary that no dry dust should be present anywhere and the watering must be done frequently enough to keep the old dust wet and to wet the new dust before any large amount has accumulated. As pure coal dust is exceedingly difficult to wet, it is necessary to mix it with rock dust or deliquescent salts. The watering method, however, requires much attention and is likely to cause a sense of security when there is a dangerous amount of dust in some parts of the mine.

The control of propagation of an explosion through the establishment of so-called dustless zones or of watered or wet zones, if there is any dust on the ribs or timbers, was found to be impossible. On the other hand, the flame of explosions can be limited by the use of rock-dust barriers of different types or by rock dusting. While the bureau does not advocate changing from watering to rock dusting in a mine where it is shown that the dust is kept wet, still a number of the most disastrous explosions in this country, it is said, have occurred in mines which have been considered well equipped with sprinklers, force tank cars, and humidifying methods. The use of rock dust in this country has been so limited that it can not yet be said to have proved an absolute protection. Its greatest advantage is that it can be used in every entry and that under ordinary conditions a treated entry will remain safe for a considerable period without further treatment, while in a mine using the watering method a single day in cold weather in which the dust is not watered may render it dangerous.

Tests have shown that a given percentage of incombustible material in a dust mixture will prevent the propagation of an explosion. The quantity of rock dust needed in any given place depends therefore upon the amount of coal dust that is present or may be deposited in the immediate future. Objection has been made to the use of rock dust because of the alleged danger to miners' lungs, but pulverized shale dust has been shown by British commissions investigating this point not to be injurious.

The use of shale dust in an amount equal to or ranging to twice the amount of coal dust does not require the mechanical mixing of the shale with the coal dust, as the air waves advancing before an explosion raise both the coal dust and shale dust into suspension and they are thus automatically mixed in the air. It is, however, considered safer to have the shale dust in the top layer.

Other tests have been made on a variety of barriers the purpose of which is to launch into the air the rock dust or shale dust on the barriers by the violent air waves which always immediately precede an explosive flame. The inert dust absorbs heat and separates individual particles of coal dust by a screen of incombustible dust. If sufficient inert dust is thus automatically put into the air it has been found that it will extinguish the most violent as well as the weaker explosions. The use of barriers instead of rendering coal dust inert by water or rock dusting is not advocated by the bureau but it does consider them valuable as additional precautions.

Further tests on most of these questions are contemplated as well as on problems which have as yet received little attention, with the possible result, it is stated, that modifications in the systems used and in those proposed for safeguarding against explosions may be shown to be desirable.

Gas Masks and Respirators for Use in Railroad Tunnels.[1]

A SERIES of tests by engineers of the United States Bureau of Mines have been made for the purpose of devising a mask for the protection of train crews in passing through railroad tunnels. Analyses were also made of tunnel atmospheres in order to determine the amount of dangerous gases present. Recent investigation has shown that the Army gas mask while affording protection from all the gases met in warfare does not protect against all gases met in industry, particularly against carbon monoxide and against such common industrial gases as illuminating gas, natural gas, and ammonia. Work has been done by the bureau on a "universal" mask which would protect the wearer against all the gases commonly met and a light-weight form of this mask has been developed for the use of city firemen.

The air in a railroad tunnel is affected by the flue gases and smoke particles from the steam locomotive and the amount of such gases present varies with the coal used, the method of firing, and the excess of air admitted to the fire box. The dangerous products resulting from combustion of the fuel are carbon dioxide, carbon monoxide, and sulphur dioxide. Immediately after firing these gases are present in greater quantities, and for this reason firing of locomotives is seldom done just before entering or while passing through a tunnel. Carbon dioxide, it is stated, is one of the least troublesome of tunnel gases since about 3 per cent in the atmosphere can be breathed without noticeable effect and it is not asphyxiating until it reaches more than 6 per cent, a point which is unlikely to be reached in railroad tunnels. The percentage of sulphur dioxide also is never large enough to be dangerous but it causes much discomfort because of its irritating effect on the eyes and throat. Other sources of irritation in locomotive smoke are solid particles of ash, cinders, soot, tar, and vapors. While none of these substances are poisonous they are extremely disagreeable when mixed with exhaust steam and breathed at an uncomfortably high temperature. The temperatures in the locomo

[1] United States Bureau of Mines Technical Paper 202: Tests of gas masks and respirators for protection from locomotive smoke in railroad tunnels with analyses of tunnel atmospheres. Washington, 1922.

tive cab were found to range from 50° to 100° F. higher than the normal tunnel atmosphere due to the heat radiated from the boiler and firebox together with the hot smoke and exhaust steam. In actual temperature tests a maximum of 131° F. was registered, although it was considered that sometimes the temperatures must have been much higher owing to the lag in registration of the thermometer.

Numerous cases, both in this country and abroad, are cited of train crews or workmen being overcome by heat and flue gases, generally when heavy trains with more than one locomotive became stalled.

Experiments were made with three types of gas masks, two of which, the Army mask and a pocket canister, gave protection from sulphur dioxide, smoke, cinders, and all flue gases except carbon monoxide, and the third of which included carbon monoxide protection. The pocket canister, which was found perfectly satisfactory, contained a granular mixture of charcoal and soda lime, the soda lime granules containing a mixture of caustic soda, slaked lime, and Portland cement. The bottom of the canister is perforated with small holes with a screen to retain the charcoal and soda-lime absorbent. A piece of Turkish toweling is placed on top of the absorbent to act as a filter and a stiff wire screen is held rigidly upon the absorbent by springs. The canister is held in the mouth by thin rubber leaves and each canister has clips for closing the nostrils attached to it by cords. Rubber-edged goggles were found to prevent eye irritation from the sulphur dioxide.

The engineers and firemen have been accustomed in going through tunnels to breathe through handerchiefs stuffed into their mouths. Although this gives some relief from the heat and smoke particles it does not serve for the choking gases and vapors.

The tests which were made under the ordinary conditions prevailing in both ventilated and unventilated tunnels did not show dangerous percentages of carbon dioxide or carbon monoxide present, although there was always enough sulphur dioxide to be extremely irritating. It is considered that while it is possible that in the event of a train being stalled men using the charcoal and soda-lime canister might be asphyxiated by carbon monoxide, this hazard is so unusual that ordinarily it is not necessary to carry protection against this gas.

The pocket canisters are much more convenient to carry than the Army gas masks but as they contain only from one-fourth to one-third the quantity of absorbent their capacity for holding gas is correspondingly reduced. They are, however, a satisfactory protection against mild concentrations of poisonous gases and vapors and against coarse dust and the large carbonized particles present in locomotive smoke.

Metalliferous Mine Accidents in Colorado, 1920 and 1921.

AMONG the tabular statements published in the annual report of the Colorado Bureau of Mines for the year 1921 is the following in which the fatal and serious accidents in the metal mines, quarries, mills, and smelters of the State are shown for 1920 and 1921:

DAYS OF EMPLOYMENT IN AND ABOUT METAL MINES, MILLS, SMELTERS, AND QUARRIES, AND NUMBER OF MEN KILLED AND SERIOUSLY INJURED PER 10,000 DAYS OF EMPLOYMENT IN 1920 AND 1921.

Kind of mine.	Days of employment.		Fatalities.				Serious injuries (time lost over 14 days).			
			1920		1921		1920		1921	
	1920	1921	Number of accidents.	Rate per 10,000 days.	Number of accidents.	Rate per 10,000 days.	Number of accidents.	Rate per 10,000 days.	Number of accidents.	Rate per 10,000 days.
Underground	1,100,688	859,185	22	0.1998	17	0.1978	190	1.726	138	1.501
Surface	382,719	285,030	5	.1306	1	.0350	62	1.620	55	1.929
Mills	776,046	207,723	2	.0257	.....	.....	39	.502	17	.8183
Smelters	1,354,585	395,109	3	.0221	1	.0253	63	.465	26	.658
Quarries	185,461	151,554	4	.2157	1	.0659	29	1.563	21	1.385
Placer mines (dredges)	20,896	12,515	1	.4785	.....	.....	9	4.307	2	1.598
Oil shale[1]	.....	11,259	.....	.....	7	6.2170	.....	.....	8	7.105

[1] Not segregated in 1920.

Effects of Fatigue and Temperature on Causation of Industrial Accidents, Great Britain.

A RECENTLY published British report [1] gives the results of studies of the influence of temperature and other conditions on the frequency of industrial accidents and of the relation of fatigue and accuracy to speed and duration of work. In a study by the Health of Munition Workers' Committee in 1918 it was shown that the temperature of workshops exercised a very marked influence upon the accident incidence. In the present investigation a continuous temperature record was kept for a nine-month period in a factory making 9.2-inch howitzer shells, and for a twelve-month period in a factory making 6-inch shells. As cuts formed over 70 per cent of all the accidents treated and as they afford a reliable indication of accident frequency since nearly all persons thus injured report for treatment, the accident records were confined to this form of injury. In the first factory it was found that both men and women experienced a minimum number of cuts at 70° to 74° F. with a sharp rise in the number at higher temperatures. At temperatures below 70° to 74° there was a gradual increase in accident frequency which reached its maximum for both men and women at 50° to 54°, no temperature lower than 50° being recorded. While the processes of manufacture in the two factories are very similar, they take about twice as long for the larger sized shell, so that there is usually more waiting and standing about in this factory. This was considered to account in part for the fact that in the 6-inch shell factory the minmum accident frequency was at temperatures ranging from 65° to 69°, the differences in the methods of heating also being considered a factor in this result. The highest accident rate was found to be at the same temperatures as at the first factory, 50° to 54°, with a slight reduction in the accident rates at lower temperatures. This reduction in the rates at the lowest tempera-

[1] Great Britain. Industrial Fatigue Research Board. Report No. 19: Two contributions to the study of accident causation. London, 1922. General series No. 7.

tures was considered to be due probably to insufficiency in the number of records or to the fact that in very cold weather the production rate and with it the liability to accidents was likely to be reduced. It is pointed out in this connection that the best temperature for accident prevention is not necessarily the best one for working efficiency, although there is no exact information as to what constitutes the best temperature for work requiring different degrees of exertion. Accidents increased with the fall of temperature at about the same rate among both men and women, averaging about 35 per cent more accidents at the maximum than at the minimum temperature.

The hourly incidence of accidents in the day shift at the projectile factory followed closely the variations in output. They were low at first, reached their maximum in the middle of the shift, and were then gradually reduced. The night-shift accidents, however, showed no relation to output, being greatest during the first hour of work, after which there was a sharp decrease. Psychical factors were considered to contribute to this result. The influence of fatigue in causing accidents was evident in the 6-inch shell factory as a reduction in the hours from 61 to 39½ per week for women was followed by a large reduction in the number of accidents.

The study of the relation of fatigue and accuracy to speed and duration of work presents data bearing on the extent to which inaccuracy of movement depends upon the rate of movement or upon fatigue. In all the experiments two tests of muscular precision involving eye-hand coordination were used, and while the results obtained were not considered conclusive since modification of the experiments might show more or less different results, the data given in the report show that—

* * * (1) An increase in rate of movement (for certain rates used) causes an increase in the inaccuracy of movement, and that the faster the rate in operation at any time, the greater in general is the increase in inaccuracy produced by any unit increase in rate; (2) continuous work for several hours (in one case for 3½ hours) with tests of motor precision fails to show a gradual increase in inaccuracy but the very reverse, the resulting inaccuracy curve being almost the exact opposite of the typical industrial accident curve for the morning hours; (3) a curve for inaccuracy of movement, broadly similar to the typical industrial accident curve for the morning hours, can be experimentally obtained by gradually increasing the rate of movement in a morning period of continuous work with motor precision tests.

In view of what is known concerning hourly variations in speed of production, the conclusion suggested by these results is that the principal factor in the hourly variations in the number of industrial accidents is not "fatigue," but rate of work. There may be hours of the workday for which this conclusion is not true, and the question whether this is so or not is highly important; but the conclusion seems true for the morning hours at least.

WORKMEN'S COMPENSATION AND SOCIAL INSURANCE.

Recent Compensation Reports.

Hawaii.

THE Workmen's Compensation Law of Hawaii, 1915, establishes separate industrial accident boards for each of the four counties of the Territory. By far the greater part of the industry and population comes under the jurisdiction of the Honolulu board, covering the Island of Oahu. This board reports for the year ending June 30, 1922, a total of 2,584 accidents, of which 1,714 were minor, i. e., the disability did not exceed 7 days, so that no compensation was required. However, in a number of these, wages were paid during the whole of the disability period. In 826 cases there was total disability varying from 10 days to 3 months, and in 23 the disability had not yet terminated. There was 1 case of permanent total disability, while 20 accidents were fatal. Disability cases, 1,009 in number, called for awards amounting to $29,358; while for permanent partial disability (65 claims) $28,182.72 was paid in addition to $2,808.77 for total disability preceding the permanent partial status. In addition to the above, $2,259.10 was paid out for medical and hospital expenses, making a total of $33,250.59.

Awards in death cases amounted to $36,503.91, medical, hospital, and burial expenses bringing the total up to $37,528.36. The total awards for all classes amounted to $94,004.63, besides $33,197.91 for medical and hospital expenses. Medical and hospital expenses provided by sugar plantations and by the city and county of Honolulu are not included in the above.

The Hawaii board reported 928 accidents, the majority of which were minor cases. Six were fatal and 84 necessitated loss of time ranging from 1 to 3 months. The Maui board reported 767 accidents, 212 of which caused disability of more than 7 days' duration, besides 134 pending, and 7 fatalities. The total compensation paid for disabilities was $5,191.78, nearly all of which is by self-insuring concerns. The board in Kauai reported 187 accidents, 5 of which were fatal. Compensation was reported in 66 cases.

Kentucky.

THE Kentucky Workmen's Compensation Board has recently issued its fifth annual report, covering the year ending June 30, 1921. The compensation statute, according to the report, seems to be satisfactory in its workings, judging from the few complaints that have reached the board, and during the year there has been a large increase in the number of employers who have elected to operate under the act. Of the 8,566 employers who have accepted the act since its

inception, only 52 have withdrawn and of these many have either gone out of business or have reaccepted the act under a new name.

Risks are divided into two groups for insurance rating purposes—coal mining and industrial. Mine rates are dealt with as a single class, while industrial risks are divided into 953 separate classes with varying basic rates. A request to the board for an increase in rates allowed insurance carriers was followed by an investigation which resulted, first, in a refusal to allow the increase, and second, on further investigation in a downward revision of the existing rates. The basic coal mine rate was reduced from $3.65 to $3.40, and the minimum rate from $2.75 to $2.50. In the revision of industrial rates the basic rates on 495 classifications were decreased, and 362 were increased, while on 96 the old rate was retained. The net result as regards industrial risks was an average about equal to the old rate, but taking into consideration the increased benefits under the 1920 amendment to the act, there is an average decrease; while on the same basis the decrease in the coal-mining rate is greater than appears from the reduction of premiums.

The report shows the number of employers electing each year, the number in 1921 being greater than for any previous year except the first, being 1,765 as against 1,126 last year and 807 in the year preceding that. The number of accidents reported in 1921 (fiscal year) was 16,909 as compared to 16,155 in the previous year. Several financial statements and a number of tables of accidents are given. The accident data are not classified, being merely detailed statements as to the number of accidents reported from each of the various industries with classifications according to cause, 86 causes being named. A statement is made of the number of cases in which agreements were approved for specific periods of compensation, of the nature of injury indicated by the agreements approved, etc. The lack of classification makes any comparisons with other reports impossible, nor can any summary be made of the figures for the State itself. The total compensation agreed upon was $446,734.81, while the amounts arrived at under written awards total $184,821.93. The number of persons injured at different ages and the weekly wages of those injured are also given in another section, the largest number (1,532) receiving $30 per week.

Recommendations to the legislature include one for the transfer of the control of rates to the insurance department of the State, leaving the compensation board free to devote its entire time to the administration of the other provisions of the act. Recommendations made in the last report are repeated in regard to the clarification of the situation as to the maximum weekly benefit. The original allowance of $12 was in some sections of the act changed to $15 in 1920, but others were left unchanged, resulting in a confused and complicated system which the board recommends should be corrected so as to provide a uniform maximum of not less than $15 per week.

Nebraska.

THE Department of Labor of Nebraska has issued a typewritten report showing the activities of the compensation division for the six months ending December 30, 1922, and a résumé of activities for the four-year period 1919 to 1922. A report for the calendar

year 1922 is also given. This later report shows 13,932 first reports and 11,629 final reports during the year; 2,303 cases are therefore pending. Lump-sum settlements, 40 in number, involved the amount of $64,551.79. The total compensation paid during the year was $526,715.46, besides medical and hospital expenses amounting to $181,231.56, or a total of $707,947.02.

The number of accidents for the year is the greatest reported during the history of the law, but only by a rather small margin as there were 13,676 in 1920 and 13,293 in 1917. However, the compensation paid is greater by more than $120,000 than the amount paid in 1920, while in 1917 it was but $101,204.51, besides medical, etc., expenses.

During the last four years compensation has been paid when due, as well as medical and hospital expenses, in approximately 47,000 cases "without a dispute"; investigations by adjusters of insurance companies or by self-insured employers have followed rather than preceded the grant of medical attention. "If compensation was coming to the injured worker it was paid at the end of the second week following the accident, as provided by law."

The number of cases coming before the commissioner on contest has greatly increased, but 74 being heard during the years 1917–18, while during the four years 1919 to 1922 the commissioner passed on 774 contested cases.

Pennsylvania.

Report of Bureau of Workmen's Compensation, 1922.

THE Bureau of Workmen's Compensation of the Department of Labor and Industry of Pennsylvania has furnished in typewritten form a summary report of the accidents, etc., during the calendar year 1922, together with data covering the period of the operation of the law, from January 1, 1916, to December 31, 1922. The number of accidents reported in 1922 was 146,255, an increase of 6,058 as compared with the previous year, but nearly 40,000 less than in 1918, and more than 100,000 less than in 1916, when 255,616 were reported. However, the number of compensable accidents was greater in 1922 (86,367) than in any other year with the exception of 1920, when 93,598 were found compensable. The total number of accidents reported since the compensation law became effective is 1,282,315.

Fatal cases in 1922 aggregated 1890, of which 732 were in the industrial group, 809 in the mining industry, and 349 in the public service group. The number of fatal accidents last year was the smallest for any year since the inception of the act, despite the fact that there was a serious catastrophe in the Cambria County coal mines in which 77 persons were killed. Expenses of this accident are said by "a conservative estimate" to be $225,000. So far as records to date disclose there were 31 widows, 10 mothers, 9 fathers, and 53 boys and 45 girls under 16 who were beneficiaries under the agreements approved by the board.

The number of agreements for the payment of compensation approved during the year was 62,793, including 1,565 fatal and 1,173 permanent disability cases. Of this latter group total disability was due in 14 cases to the loss of both eyes; 5 to the loss of both hands;

1 to the loss of both arms; 6 to the loss of both feet; 3 to the loss of both legs; and 34 to miscellaneous causes.

The total compensation incurred by all agreements was $10,853,344, distributed as follows: Fatal cases, $5,062,490; permanent disability, $2,226,364; temporary disability, $3,564,490. The total compensation incurred during the history of the act is $69,892,995.

The average compensation per case of death in 1922 was $3,497.50 in 1,444 cases. In 3,180 cases there were no dependents, the average payment in such cases being $97.96.

A series of tables shows for each principal member the total number of agreements and awards and the total compensation incurred for dismemberment during the history of the act. The average in 3,905 cases of loss of eye was $1,334; these include 99 cases in which both eyes were lost. For the loss of a hand (including 12 cases in which both hands were lost) the average in 1,649 cases was $1,727; for the loss of an arm (including one loss of both arms) an average of $2,070 in 517 cases; for the loss of a foot (including 15 cases in which both feet were lost), $1,551 in 859 cases; for the loss of a leg (including 15 cases in which both legs were lost), $2,041 in 650 cases.

Temporary disabilities were compensated to the number of 60,055; the average compensation for the 7 years has been $47 each in 427,266 cases.

During 1922 contested cases were assigned to referees in 2,388 instances; in 886, awards were approved; in 539, they were disallowed; while 809 cases were dismissed and 157 withdrawn. Petitions for modification, review, termination, and reinstatement of agreements amounted to 2,077; of these 1,154 were granted and 894 refused, leaving 29 pending.

The compensation bureau maintains an adjustment division consisting of a force of eight men with headquarters in four principal industrial centers and the chief adjuster at the capital. "The services of these adjusters have been the means of settling many disputed cases, which otherwise would have resulted in litigation and legal expense to employers and employees." A plea is made for an increase in the number of these men by whose activities the number of disputed claims "could be materially reduced." The total number of cases investigated and adjusted in 1922 was 3,803; compensation agreements were secured and approved in 1,626 instances; in 218 cases noncompensable accidents were adjusted; in 154, interstate commerce cases were settled under the Federal Liability Act, not coming under the compensation statute; in 259, fatal cases were investigated and closed in which no dependents were found, etc. There were 159 cases on hand at the close of the year.

A division of exemption and insurance considers the application of persons desiring self-insurance. There were 514 applications during the year, chiefly among the larger employers. "In normal times the self-insured companies have two-thirds of the accidents of the State. No employee in Pennsylvania has ever suffered the loss of any or all of his compensation due to the failure of a self-insurer to comply with the provisions set forth in his application for exemption."

The law of Pennsylvania requires each employer either to insure his liability or obtain exemption, and an amendment of 1921 prescribes a penalty of $1 per day for each employee during the con-

tinuance of the failure of the employer to take the required steps. The effort to reduce the number of rejections of the compensation act to a minimum has resulted in a reduction of these rejections to 75 companies, the majority of which employ but one person or "are in extremely nonhazardous industries." The penalizing amendment above referred to is said to have aided particularly in the success of this effort.

Report of State Workmen's Insurance Fund, 1921.

The manager of the State Workmen's Insurance Fund of Pennsylvania has issued a condensed financial statement of the fund as of December 31, 1921. This shows assets aggregating $5,657,952.67. The various classes of reserves aggregate $2,748,045; other liabilities are incurred in the 1922 premium paid in advance, amounting to $205,641.55, showing a surplus of $2,704,266.12.

The statement bears the announcement that initial rates of the fund are 10 per cent below those of other carriers, so that comparisons as to expense ratio must be made with that in mind. A table is presented showing earned premium, incurred expenses, expense ratio, and interest ratio, for all carriers in the State writing over $300,000 of industrial compensation insurance, and over $200,000 of coal mine compensation insurance. The State fund is one of the four leading insurance carriers in industrial insurance, and one of two in coal mining. The largest amount of earned premium was received by the Pennsylvania Manufacturers' Association Casualty Insurance Co., the amount being $2,284,890 with an expense ratio of 17 per cent and interest ratio of 5.8 per cent. The next largest premium was $2,171,804, written by the Travelers' Insurance Co.; this had an expense ratio of 44.8 and an insurance ratio of 5. The third company in rank was the Aetna Life Insurance Co. with an earned premium amounting to $1,155,204, an expense ratio of 44.9, and an interest ratio of 4.6. The State fund had earned premiums amounting to $1,153,724, with an expense ratio of 18.2 and an interest ratio of 12.5. The next highest company had earned premiums amounting to $899,495. Expense ratios ranged from 89.2 to 17 per cent, noted for the Pennsylvania Manufacturers' Association Casualty Insurance Co.

In coal mining the Associated Companies was the largest carrier, with $1,523,090 earned premiums, an expense ratio of 37, and an interest ratio of 5. The State fund comes next with $1,183,215 earned premiums, an expense ratio of 22, and an interest ratio of 12.5. The next highest company had an earned premium of $580,321. Expense ratios ranged from 42 to 22.

The statement was made that if insurance had been written at stock company rates, the expense ratio of the State fund would have been 16.5 per cent (the lowest) of industrial premiums and 20 per cent of coal mining premiums. The high ratio of interest earnings to premium income reduces the actual expense ratio of the State fund to 5.7 per cent of industrial premiums and 9.5 per cent of coal mine premiums, placing the expense ratio for the State fund in a class entirely by itself.

Tennessee.

THE Bureau of Factory and Workshop Inspection of Tennessee is charged with the administration of the compensation act of this State, and it includes in its ninth annual report a brief statistical statement of the accidents reported from July 1, 1920, to December 31, 1921, a period of 18 months, classified according to source and nature of the injuries and the amount of compensation paid. The number of accidents was 25,370, involving compensation amounting to $311,851.06. The accidents for the year July 1, 1920, to July 1, 1921, numbered 17,189, of which 3,139 were compensated, calling for $249,999 in benefits. For the last 6 months of 1921 the number of accidents was 8,181, of which 1,347 were found compensable, calling for $61,852.06. Of the total number of accidents for the 18 months, 17,858 are reported as occurring in manufacturing. Coal mines are not covered by the act except by election, and the statistics indicate only a slight election to come under the act, all mines (iron, copper, zinc, phosphate, and coal) furnishing but 1,884 accidents, only slightly above the number in lumber (1,684) and foundries (1,662). These three groups are included under the classification "Manufactures."

United States.

THE United States Employees Compensation Commission's latest report covers the year ending June 30, 1922, being the sixth annual report. The accident data chiefly relate to the experience of the calendar year 1921, covering cases upon which final action was taken during that year.

The custom of preceding years in making specific recommendations for amendatory legislation is not followed, but emphasis is laid upon the need of thorough investigations, demands for which "have been throughout the year past greatly in excess of the powers of the commission's limited force." It is also pointed out that amounts "likely to be paid as compensation because of lack of sufficient investigation are many times in excess of the possible cost of the making of proper investigations."

The rapid readjustment of working forces in the various departments following the war led to a considerable scattering of claimants, with corresponding difficulties of investigations and reports; the making of claims has also been affected. In this connection the hardship resulting from the requirement of notice of claim within one year is referred to, but "in view of the expressed time limitation of the compensation act it is not possible to grant relief in these cases." In connection with the above, note may be made, though not referred to in the report, of an amendment to the twentieth section of the act, approved June 13, 1922. This extends the period for making original claims of civilian employees of the expeditionary forces of the United States serving outside the territory of the United States, and sustaining injury during the period of the Great War, for a term of one year after the passage of this act.

A third point that is dwelt upon at some length is injuries as distinguished from accidents. The policy of the commission to construe the term "personal injuries" as covering not only accidents, but also "any bodily injury or disease due to the performance of duties and

causing incapacity for work" is set forth. There is also a detailed table showing injuries caused by poisonous and corrosive substances and occupational diseases. The showing in this connection is purely factual in form, but is in effect a cogent argument in behalf of the inclusion of such injuries under the act.

Table 1 of the statistical presentation shows the number of injuries reported and claims received from the enactment of the law, September 7, 1916, to September 30, 1922. The number for the calendar year 1921 was 18,390, as against 20,080 for the preceding year, a decrease of 8.4 per cent. The number of claims received was 8,167, of which 310 were for death. There were 10,932 claims in 1920, of which 427 were for death. The monthly data for the nine months of 1922 show uniformly a decrease from the previous year in so far as claims are concerned, and in five months for the number of injuries reported.

The second table shows the number of injuries, by extent of disability, for each department or important bureau or establishment during the calendar year 1921. The injury hazard naturally varies greatly in the different departments according to the nature of the work; there is also a great difference in the number of employees. For these reasons a mere enumeration of the number of persons injured in each department lacks the significance that it would have if numbers and occupations were more fully set forth. However, it is obvious that in the navy yards and arsenals, and in the railway mail service there is a greater hazard than in the offices in which clerical employees predominate. The Department of Agriculture reports 423 injuries, of which 8 were fatal; of these, 217 with 4 fatalities were in the Forest Service. In the Department of Commerce there were 163 injuries, 6 being fatal; of these, 91 were in lighthouse operations, all fatalities occurring in that connection. The Government Printing Office reports 75 injuries, 1 fatal. In the Interior Department there were 553 injuries and 12 fatalities; of these, 313 with 5 deaths were in the Reclamation Service. In the Department of Labor there were 66 injuries reported, 1 of them being fatal. The Navy Department reported 2,802 injuries, of which 36 were fatal; of these, 2,272 injuries and 27 fatalities were in the navy yards. The Post Office Department ranks next to highest with 3,592 injuries and 51 deaths. The city mail service (outdoor) is responsible for 1,892 injuries and 15 deaths, while the aerial service is charged with 57 injuries, 15 of which were fatal. The Treasury Department reported 759 injuries, 25 being fatal; the largest number of injuries occurring in the Bureau of Engraving and Printing (261), though a slight majority of the fatalities (13) was in the Internal Revenue Service. The War Department shows the highest number of injuries, 4,098, and also of deaths, 114. The Engineering Department is charged with 1,483 injuries and 62 deaths, and the Quartermaster Department with 1,232 injuries and 31 deaths; the Ordnance ranks next with 1,029 injuries, though but 13 deaths were reported. The Shipping Board shows a high rate of fatalities compared with the total number of injuries, there being 50 fatal cases out of 177 injuries reported. This is doubtless due to the nature of the employment, which includes a number of sailors on vessels, who are subject to the seamen's rights of care, cure, and continuance of wages for the term of the voyage.

This would dispose of a large number of temporary disability cases, so that there would be neither claim nor report of the injury. The grand total is 12,906 injuries, of which 310 resulted in death, 89 in permanent total disability, 571 in permanent partial disability, and 11,936 in temporary total disability.

Of this latter group, 2,231 recovered within 3 days, while 2,435 returned to work within 4 to 7 days, inclusive. The number whose disability continued from 8 to 14 days was 2,552; from 15 to 21 days, 1,335; from 22 to 28 days, 826; and over 28 days, 2,557.

A similar distribution to that used in the foregoing table is followed in Table 3, which shows the number of injuries and duration of disability for tabulatable accidents and awards for compensated cases. The data here given are affected by the fact that in the Government service the grant of annual leave is availed of in a number of cases, thus securing the continuance of full wages for such period as the employee may elect up to the statutory allowance. This renders the figures for awards incomparable with the results under State laws where employees involved have only the award under the compensation statute. Thus, when only the compensated cases are considered, 5.6 per cent of the time lost in 1920 was covered by leave with pay, while for 1921, 7.2 per cent was thus cared for. In a very considerable number of cases no claim is filed, the commission being able to render "no entirely satisfactory explanation" for such failure. Of the total number of temporary total disabilities disposed of during the calendar year 1921, 11,936 in number, 6,502 were followed by compensation, 2,730 were cared for by absence with pay, while in 518 cases, with a total duration of 5,684 days, no claim was filed. In 2,186 cases disability continued for not more than 3 days, the total being 4,502 days' disability. The average days' duration of all cases was 24, and of compensated cases 37; while the average award, which does not include the amount of leave with pay, was $66.70.

Other tables show the number of permanent partial disabilities with duration and awards for compensated cases; medical payments for each department and office; total medical payments in all cases included in annual reports from September 7, 1916, to December 31, 1921; permanent partial disabilities by location for the same period; nature of injury with resulting disability for the calendar year 1921; nonfatal cases showing results in cases with infection; distribution of accidents according to the duration of disability and extent of permanent disability; duration of disability in cases of temporary total disability; comparison of wage loss and compensation paid; deaths with and without dependents and value of awards; widows to whom compensation was awarded for the period of the law; cessation of dependency of widows for the same period; duration of widowhood in cases of remarriage; remarriage rates by ages of widows for a six-year period; summary of awards and valuations for the calendar year 1921; and injuries caused by poisonous and corrosive substances and occupational diseases.

Permanent partial disabilities, reported in Table 4, are treated under the Federal statute in a different method from that used by most of the States. Payment is made for the term of permanent disability, but on return to work without loss of wage the case is considered closed. However, subsequent loss of earnings due to the same

injury may lead to a reopening of the case despite its apparent termination. In 1921, 277 dismemberment cases were closed in the above sense, showing an average duration of time lost, 106 days. Of these, 230 were compensated for an average of 124 days and an average award of $713.36. In 29 cases the time loss was covered by leave, in 7 others no claim was filed, in 4 disability caused less than 3 days loss of time, and in 7 no time was lost. Besides these there were 293 cases of loss of function only, with an average time loss of 300 days; of these, 267 were compensated for an average of 327 days each, the average award being $1,462.08. There were 26 cases not compensated for the same reasons as above, 17 by reason of being covered by leave.

The Federal statute bases compensation on the salary, giving two-thirds pay up to $100, so that the maximum benefit is $66.67 per month. A table is given showing a comparison between wage loss and compensation paid, from which it appears that for the 6,502 compensated cases in 1921 there was a wage loss of $1,000,640.52, while compensation amounted to $433,698.55, or but 43.34 per cent of the wage loss. This slightly exceeds the percentage in 1920, when it was but 41.18. "For the higher paid employees the percentage of the wage loss received as compensation was considerably below 40 per cent; in other words, the employee's money loss of wages because of injuries greatly exceeds the compensation cost to the Government."

Of 310 fatal cases passed upon by the commission in 1921, 60 were without dependents, while 250 left dependents of various classes, totaling 537. Of these, 162 were widows, 131 were sons under 18 years of age, and 132 were daughters under the same age, while dependents over 18 years of age and incapable of self-support were 10 in number. There were 33 fathers and 60 mothers, besides other relatives. Of 135 widows whose dependency ceased between September 7, 1916, and September 6, 1922, 79 had children and 56 were without children; dependency ceased in 102 cases by reason of remarriage and in 33 by reason of death. There were 4 remarriages between 3 and 6 months after the death of the husband and 11 more before the first year's expiration. The largest number (21) married after 12 but under 18 months of widowhood, 20 more marrying before the expiration of the second year. The next two 6-months' periods show 13 and 16 additional marriages, respectively. Seven remarried after more than 4 years. The remarriage rate for the 6-year period is somewhat higher than for the 5-year period shown in the fifth annual report, being 3.72, as against the showing last year of 3.68, but is still considerably below the 3-year experience shown by a Pennsylvania report covering 3 years, which gave the remarriage rate of 4.16 per hundred widows. The rate for those under 21 was 17.95, and from 21 to 26, 8.93, the reduction continuing until at the ages 46 and under 51 the rate was but 0.72 per cent, no marriage being reported above that age. The average age of those remarried was 29, which was identical with that of Pennsylvania.

Combining the cessations by reason of remarriage and those by reason of death, a combined cessation rate is given of 4.92 per hundred widows.

The table on occupational diseases, etc., shows 81 cases of injury due to the handling of or contact with poisonous substances, 2 of them resulting fatally; 78 cases of injury from inhaling poisonous fumes, 1 resulting fatally; 3 from swallowing poisonous substances, 1 resulting fatally; 109 from handling or contact with corrosive substances, 1 resulting fatally; 2 from inhaling fumes from corrosive substances; while 47 others, 9 of them fatal, are charged to occupational diseases, though the term is not used in its ordinary sense, the diseases being bronchitis, diphtheria, malaria, tuberculosis, etc., found to have been incurred by reason of the condition of the employment.

Unemployment Insurance, by Industries, Great Britain.

THE Ministry of Labor Gazette of Great Britain of December, 1922, carries a memorandum of the Minister of Labor addressed to the National Confederation of Employers' Organizations and the Trades Union Congress General Council. In February, 1922, the then Minister of Labor addressed a letter to representative associations of employers and employed with regard to the possibility and desirability of placing unemployment insurance on the basis of insurance by industries. A large number of such letters were sent out, but "the number of replies received has been frankly disappointing—about 10 per cent." However, so pressing is the situation with regard to unemployment insurance that it was regarded as desirable "to consider the whole problem on the broadest lines," and with specific regard to a recommendation of a special committee that the possibility of extending unemployment insurance by industries be further explored. "The problem of unemployment is among the most urgent and serious of present times, and, while the existing crisis must be dealt with by emergency measures, I regard it as scarcely less important to take early measures in order to secure the continuance in future of a comprehensive scheme of unemployment insurance."

The appointment of a committee of experts to consider the matter of insurance by industries had been recommended, but the circumstances did not seem favorable to such action. The letter above referred to was, however, thought desirable as a preparatory step.

The existing law carries a limited provision enabling an industry to undertake its own insurance. The memorandum states that this provision (sec. 18 of the act of 1920) has thus far been made use of by but one industry, and that this scheme is now in suspense owing to the financial condition of the Unemployment Insurance Fund. Formidable difficulties of demarcation are recognized, "and the necessary measure of common agreement among the diversified interests which exist in almost any industry is difficult to secure."

The memorandum continues:

* * * In any development the main objects to be kept in view are:

(1) To link up together as closely as possible the financial responsibility for paying benefit with the responsibility of finding employment so as to give the greatest possible incentive for the reduction of unemployment.

(2) To give a full opportunity to industries (or smaller units) of providing for their own unemployment in the hope that, at any rate in the case of industries with average

or less than average risks, it will be possible to secure (without any diminution of reasonable contributions from the State) additional advantages for the worker.

Possible methods of securing these objects are indicated in the paragraphs below.

Method A.

It is for consideration whether the responsibility for unemployment and unemployment insurance should not be deflected entirely away from the State and placed upon industry. The steps that necessarily have been taken in the past four years have fostered the view that the responsibility is a State matter. It may be contended that this is not a right view, and that the duty of making provision for unemployment should be placed more directly on those engaged in industry. On this basis unemployment insurance would take some such form as follows:

As from an appointed date a statutory liability would be placed upon every employer to devise, in association with his workpeople, an approved scheme of unemployment insurance; by such scheme any workmen in the employment of the employer on or after the appointed date would, if and when the workmen became unemployed, receive from the employer (or from such joint agency as the employer and his workpeople might have set up) unemployment benefit at the prescribed rate for a prescribed period.

It is not necessary at this stage to elaborate the details of this proposal, but provisions would probably be required enabling employers to deduct agreed contributions from the workers' wages, and arrangements would be necessary for workers not in employment at the appointed date to remain under the State insurance scheme, at any rate for a time.

Method B.

Bearing in mind (1) the extent to which there is movement of labor, particularly unskilled labor, from one industry or establishment to another; (2) the fact that in almost every trade there is a "margin" or fringe of labor exposed to more than the normal risk of unemployment; and (3) the fact that there are very large numbers of small employers whose circumstances are such that they could not readily set up a self-contained private scheme, it may be found that there is much to be said for continuing the State unemployment insurance scheme in its entirety, but at the same time making arrangements whereby industries having private schemes of insurance would contribute to the State insurance fund only an appropriate part of the contribution in order to cover the cost of what might be termed a "basic rate" of benefit, the balance of the contribution being retained by the industry for the purpose of providing other benefits suited to its own conditions. Under such an arrangement all insured workers in whatever industry, and however they moved from one industry to another, would be secured at least the advantages of the State scheme; but it is clear that only industries with relatively low risks would initiate private schemes.

Method C.

Another suggestion, intermediate in character, between Method A and Method B, would be along the following lines:

(1) There should be every encouragement to employers and workpeople to devise arrangements which, with proper safeguards, would amount in each case to a self-contained scheme for the industry or part of the industry (including, of course, all classes of labor employed), those who are out of employment receiving their unemployment benefit from what may be termed a "private scheme."

(2) Private schemes for industries with high risks, as well as for industries with low risks, should, if possible, be facilitated by means of an adjustment—under adequate safeguards—of the contribution from the State insurance fund, such contribution being higher in the case of industries with high risks than in the case of industries with low risks.

(3) So far as employers and workpeople are not covered by private schemes they must be dealt with by the State scheme.

(4) In accordance with the general principle of insurance, industries or parts of industries where unemployment is low must contribute to some extent towards the provision to be made under the State scheme for industries where unemployment is high.

(5) In order to limit the liability of employers and workpeople and at the same time to secure to the workpeople the payment of unemployment benefit for a reasonable period, those insured under a private scheme might be a charge upon that scheme for

some specified period, falling back upon the State scheme when that period has been exhausted.

(6) Industries or parts of industries which undertook to devise and maintain private schemes might contribute to the State fund only such amounts as might be ascertained to be the appropriate charge upon that industry or part of the industry in respect of: (*a*) Its proportion of the general burden of unemployment in the country; and (*b*) the estimated cost of the fall-back benefit payable from the State insurance fund to the workpeople in whose cases the payments under the private scheme had come to an end.

(7) Industries or parts of industries that did not devise and maintain private schemes would have to pay the full contribution to the State insurance fund.

The administrative problem is to determine in relation to each of these alternatives the way in which private schemes may be encouraged, whilst at the same time securing:

(*a*) That there is a definite incentive to industries to devise means whereby the volume of unemployment is kept as low as possible.

(*b*) That workers moving from one industry to another remain effectively covered by insurance.

(*c*) That the cost of unemployment insurance to the exchequer is not increased beyond that normally involved by the present unemployment insurance acts.

(*d*) That the arrangements are sufficiently simple not to lead to excessive expenditure upon administration, whether by the Government departments concerned or by those responsible for the private schemes.

LABOR LAWS AND COURT DECISIONS.

Decisions of Courts and Opinions Affecting Labor, 1921.

APPROXIMATELY 250 cases, illustrating many phases of the questions involved in the relations of employers and employees, are presented in Bulletin 309, Decisions of courts and opinions affecting labor, 1921, recently published by the United States Bureau of Labor Statistics. One-half of these cases relate to questions arising in the administration of the workmen's compensation laws, while 37 are selected cases relating to labor organizations, their status, activities, etc. Other subjects receiving attention are minimum wage laws, under which four cases are considered and the Federal statute relating to railroad service, under which there are twelve. Although a great majority of the States have workmen's compensation laws, there is still frequent recourse to the common law or statutes relative to employers' liability, a score of such cases appearing in the report, besides a group in which the rights of seamen are considered.

The bulletin, while limited to the activities of the courts for a single year, is in effect a presentation of cases on labor law in which nearly every active phase of the subject is touched upon. It contains the important decision of the Supreme Court in the case of American Steel Foundries *v.* Tri-City Central Trades Council, in which the Clayton Act was construed; also the decision of the same court (Truax *v.* Corrigan) holding the Arizona statute restricting the issue of injunctions in labor disputes unconstitutional, more on account of its construction than on account of its actual terminology.

The constitutionality of the workmen's compensation law of Indiana in its compulsory application to coal mines and important decisions relating to classification, injuries, etc., are among the important decisions under this head. Diversity of opinion marks the construction adopted by the courts of different States, as one in Indiana allowing compensation for death due to the inhalation of impure air in a mine, while the Supreme Court of Colorado took the opposite view, though by a divided court.

The exuberant spirit of healthy young workmen frequently finds expression in acts not connected with the employment, as by throwing missiles, pushing, scuffling, etc., or the perennial criminal folly of applying compressed air hose to the body, usually with fatal results. The Supreme Court of Nebraska regarded this last act as compensable, since under the conditions of employment and the class of workers employed the event might arise, as it held it did, out of the employment. The California court, on the other hand, said there was nothing in the nature of the employment to require the men to throw missiles, and the contention that some frolicking is inevitable was not regarded as sufficient justification for an award. In Ohio a

playful scuffle for the possession of a tool resulted in the loss of an eye, for which compensation was awarded and affirmed.

When a combination is such a restraint of commerce as to be a monopoly offensive to the antitrust law, whether membership in the I. W. W. is itself a violation of a State "criminal syndicalism" statute, the rights of members of a local as against the officers of the federation to which the union belongs, the extent to which picketing can be engaged in, the legality of boycotts and secondary boycotts, and the right of an expelled member to reinstatement are discussed in one or more cases in the section devoted to labor organizations.

None of the cases is reproduced fully, but a summary statement introduces in most cases quotations from the language of the courts, setting forth concisely the principal points involved, in such a way as to facilitate an understanding of the subject matter.

Membership in I. W. W. a Criminal Offense Under California Statute.

AN ACT of the California Legislature of 1919 (ch. 188) provides penalties for what is designated as "criminal syndicalism." The term is defined as "any doctrine or precept advocating, teaching, or aiding or abetting the commission of crime, sabotage (which word is hereby defined as meaning willful and malicious physical damage or injury to physical property), or unlawful acts of force and violence or unlawful methods of terrorization as a means of accomplishing a change in industrial ownership or control, or affecting any political change." The second section specifies various offenses or acts, the commission of which is declared to be felony and punishable by imprisonment. In the main the list designates acts of teaching, aiding or abetting by spoken or written words, and the encouragement and commission of the things condemned by the law. The fourth subdivision of the section, however, declares that anyone who "organizes or assists in organizing, or is or knowingly becomes a member of any organization," etc., whose purpose is to advocate, abet, or aid criminal syndicalism is guilty of a felony.

In a case recently before the District Court of Appeals of California a conviction of the lower court was affirmed over the contention that the indictment was defective, the testimony uncertain, and the evidence insufficient to support the verdict. (People *v.* Roe, 209 Pac. 381.) The court points out that each of the various subdivisions of section 2 "describes or specifically enumerates different and distinct acts," the commission of which would necessarily be pleaded with particularity sufficient to inform the accused of the precise acts with the commission of which he was charged. Subdivision 4 on the other hand declares that membership is in itself an offense, and this is sufficiently charged by repeating the language of the subdivision.

"The acts therein denounced as acts of criminal syndicalism are sufficiently described by the language itself to make it perfectly clear what was thereby intended," citing language to that effect in an earlier case decided by the supreme court of the State (People *v.* Steelik, 203 Pac. 78). The indictment charged membership in an organization "known and designated as 'the Industrial Workers of

the World,' * * * which said organization * * * was then and there organized and assembled to advocate, teach, and aid and abet criminal syndicalism."

In view of this charge and construction of the statute and further of the admitted membership in the organization, the only point remaining was to determine whether the organization was one actually advocating, etc., criminal syndicalism. It was in this connection that the second contention was offered as to the admission of testimony. One witness, Arada, a laborer, testified that in August, 1917, he and 48 or more other laborers were digging potatoes on a ranch near Stockton, and that while so engaged some 14 other men appeared and applied for employment. They were accepted and worked the remainder of the day, retiring at night to the bunkhouse on the ranch with the other men. On the following morning the 14 new men abandoned their work and left the farm, the others continuing their employment. However, they had not proceeded far until a burning sensation was felt on their feet, which presently became unbearable so that they could not continue at work. On removing their shoes they discovered that acid in the form of a powder had been deposited therein by some one, the resulting injuries being so serious as to require medical treatment. Arada testified that he was compelled, as a result of the burns produced, to remain in the county hospital under treatment for over a year, amputation being considered at one time as probably necessary to save his life. None of the 48 workers was a member of the I. W. W. but after the 14 left the ranch some I. W. W. papers were found in the bunkhouse where the latter slept the one night that they were at the ranch.

It was objected to this testimony that it was hearsay and further that no definite connection of the acts with the I. W. W. organization was established and therefore no connection with the present defendant. However, other witnesses who had been members of the I. W. W. testified that a chemical combination of the nature of the one used in the instance cited "was one of the instrumentalities employed by said organization to terrorize laboring men and thus so intimidate them as to cause them to refuse to take employment in the fields or fruit orchards of the country." This testimony, together with the circumstances of finding the I. W. W. papers, was said to constitute sufficient foundation for the allowance of Arada's testimony, not for the purpose of connecting the defendant Roe with the acts supposed to have been committed by the 14 men, but solely to show the character of the organization to which he and they are alleged to and presumably did belong.

There was other evidence of ex-members of the organization who had been called upon to testify in detail as to its principles and activities both prior and subsequent to the date of the enactment of the statute. The court ruled that this testimony was admissible "as tending to disclose the character of said organization"—a proposition that had been fully examined and conclusively considered in the Steelik case referred to above.

The defendant was arrested in June, 1921, while selling and distributing I. W. W. literature, many copies of which in various forms he had in his possession. Quotations from these documents set

forth the well-known attacks on existing governmental and industrial conditions, declaring that "the working class and the employing class have nothing in common," and that "between these two classes a struggle must go on until the workers of the world organize as a class, take possession of the earth and the machinery of production, and abolish the wage system." The court stated that on the face of such statements they appeared to be nothing more "than an innocent or a legitimate economic proposition. No one of sense and fairness will deny the right of the laboring classes to maintain an organization for proper self-protection." Nor is it a crime to advocate the equal distribution of the fruits of all material or industrial activity; but "when in attempting to crystallize such a condition any organization resorts to criminal acts of any character, or proposes to do it by the destruction of property and vested rights, then it has clearly transcended the line of demarcation between right and wrong. * * * The record before us overflows with proof of the most dastardly crimes known to the criminal law which were resorted to for the avowed purpose of terrorizing the people, in the vain hope of intimidating them into accepting the propaganda of the I. W. W. as the true faith in the matter of government." Arson, the willful destruction of machinery, and other acts of terrorization were named in the testimony of witnesses who were former members of the organization; and teachings and acts of a criminal nature were abundantly testified to, as appeared from the record brought up from the court below.

No error being found in the form of the indictment or in the admission of evidence, the judgment was affirmed.

Employers' Liability in Interstate or Intrastate Commerce.

THE Supreme Court of the United States has apparently written the concluding chapter in an unusual, though in many respects typical, suit for damages. John W. Kinney was an engineer on a freight train, employed at the time of his injury in yard service for the Michigan Central Railway Co. His injury resulted from a collision of his train with a passenger train of the New York Central & Hudson River Railroad. The original complaint set forth facts that would have given a cause of action at common law or under the statutes of New York or the Federal Employers' Liability Act, according as one or the other of these laws might be found to govern the case. The complaint alleged a notice such as is required by the New York statute, and to that extent implied an intention to rely upon that law. The first trial was concluded February 11, 1910, at which time a verdict of $20,000 was rendered. This was afterwards set aside and a new trial granted. On January 23, 1911, there was a retrial and a verdict for $23,000, from which an appeal was taken to the appellate division which reversed the judgment of the trial court. The third trial was had in October, 1912, when a verdict for $12,000 was rendered, which was affirmed on appeal to the appellate division; however, on June 17, 1913, the court of appeals reversed this judgment and granted a new trial. Kinney's attorneys then requested

an order of the court allowing an amendment of the complaint so as to permit an allegation that the injury was received in interstate commerce. This order was granted, and was affirmed on appeal to the appellate division. The fourth trial followed in March, 1917, which resulted in a disagreement of the jury, while on the fifth trial, in May, a verdict was rendered of no cause of action. This time the plaintiff appealed and secured a reversal of the decision of the trial court and directions for a new trial. This (the sixth) was had on January 27, 1919, and resulted in a verdict for the plaintiff in the amount of $32,000.

Alleging special difficulties and extraordinary conditions the plaintiff moved for an extra allowance of costs under section 6233 of the Code of Civil Procedure of the State of New York. The decision on this motion was rendered April 3, 1919, the court finding that there were "many difficult and troublesome questions of law involved," as well as practical railroad problems, complex and calling for a large amount of evidence. An allowance of 5 per cent on the verdict of $32,000 was therefore ordered. Both the judgment on the verdict and the order granting an additional allowance of costs were carried to the appellate division, where on January 1, 1920, the judgment for damages was affirmed and the order granting the allowance of costs was reversed. Following this there was an appeal to the court of appeals of the State, in which a number of facts noted above were set forth and the contention made that the pleading under the Federal statute was not made until more than two years after the cause of action accrued, and was therefore barred by the statute of limitations. However, the judgment of the courts below was affirmed with costs. From this a writ of certiorari was sued out in the Supreme Court of the United States, bringing the case before that body. Here on November 21, 1922, the case was argued, the decision being announced December 4, affirming the judgment of the courts below in the award of damages. It was said that the amended complaint seeking recovery under whatever law the jury should find applicable was not forbidden by the statutes of the United States, and the allowance of an amendment more than two years after the injury was not in contravention of the statute of limitations, because "the declaration was consistent with a wrong under the law of the State or of the United States as the facts might turn out. The amendment merely expanded or amplified what was alleged in support of the cause of action already asserted and was not affected by the intervening lapse of time; the facts constituting the tort were the same, whichever law gave them that effect." (Cases cited.)

This proceeding would seem to be an illustration of weight in connection with the consideration of the desirability of a compensation statute that, coordinated with the State laws on the subject, would secure to railroad employees a prompt and certain redress for injuries received in the course of employment. More than 12 years elapsed from the rendition of the first verdict in February, 1910, to the affirmance by the Supreme Court of the United States in December, 1922. Costs have accumulated and expenses of various kinds have had the inevitable effect of absorbing a large proportion of the $32,000 verdict finally affirmed.

The citations in the case are under the heading, Kinney *v.* N. Y.

Cent. & H. R. R. Co., or in the appeal cases, N. Y. Cent. & H. R. R. Co. *v.* Kinney, and are reported in 148 App. Div. 900, 132 N. Y. Supp. 1134; 157 App. Div. 942, 142 N. Y. Supp. 1126; 217 N. Y. 325, 111 N. E. 1048; 98 Misc. Rep. 11; 162 N. Y. Supp. 42; 164 N. Y. Supp. 1098; 166 N. Y. Supp. 868; 171 N. Y. Supp. 1090; 175 N. Y. Supp. 241; 190 App. Div. 967, 179 N. Y. Supp. 929; 231 N. Y. 578, 132 N. E. 895; 43 Sup. Ct. 122.

Industrial Legislation in Turkey.

ACCORDING to a note in the New York Medical Journal and Medical Record, December 20, 1922 (p. 731) the first legislation designed to better the condition of working people has recently been enacted in Turkey. The legislation in question relates to conditions affecting workers in the mining districts. It is provided by these laws that mine owners must construct houses of concrete, stone, or brick for their workers, and that these houses must have wooden floors and an adequate number of windows. Each mining district must have a public bath, a mosque, and evening schools, and a pension fund for injured and aged employees must be created.

Law Establishing a General Emigration Bureau in Yugoslavia.

SLUZBENE Novine, the official gazette of Yugoslavia, published in its issue of November 4, 1922, a law enacted on October 11, 1922, which established in Yugoslavia a General Emigration Bureau. This bureau, which is subordinated to the Ministry of Social Welfare, began its activities on October 25, 1922. Its temporary offices are now at Zagreb, and the law provides that it shall be transferred to one of the Adriatic ports as soon as transport of emigrants through such ports begins.

The activities of the new bureau are to include: (1) Supervision of the activities of steamship companies and their agencies in so far as they relate to the transport of emigrants; (2) inspection of the moving of emigrants; (3) the final decision of appeals against decisions of port police authorities; (4) the management of the State depot for emigrants at Zagreb; (5) the rendering of decisions on requests for emigration passports; (6) inspection of all emigration authorities in the country; (7) the keeping of registers of Yugoslav subjects abroad and of aliens in Yugoslavia; (8) the safeguarding abroad of Yugoslav emigrants; (9) the maintaining of an information service on employment and living conditions in countries of immigration, transport, etc.; (10) the publishing of statistics on emigration from, and immigration into, Yugoslavia and other countries.

The chief of the bureau is appointed by royal decree. He is to be assisted by other officials, the number and salaries of whom will be fixed in the budget. Only persons knowing the English language may be appointed as officials of the General Emigration Bureau.

Persons knowing another largely used foreign language may also be appointed as officials, provided they obligate themselves to learn English within one year. The bureau is to be composed of several divisions in accordance with the various activities assigned to the bureau by the law. Until the abolishment of the existing district bureaus has been decreed these shall assist the general bureau at Zagreb in its activities and in the solution of all problems. Appeals against decisions of the General Bureau of Emigration are to be made within a period of 14 days to the Ministry of Social Welfare, whose decision shall be final. The present law came into force on the date of its publication in the official gazette.

LABOR BUREAUS.

Organization and Activities of the United States Bureau of Labor Statistics.[1]

THE economic importance to the country at large of the United States Bureau of Labor Statistics is shown in an account of its history, activities, and organization which has recently been compiled by a member of the staff of the Institute of Government Research. The value to the public, whether interested from the employers' or workers' viewpoints, of a fact-finding agency uninfluenced by partisan considerations can hardly be questioned.

Created by act of Congress in 1884, the bureau has passed through several changes of organization, being finally incorporated in the newly created Department of Labor in 1913. Its functions have remained practically unchanged, however, throughout its existence and it has been the authoritative medium for many years for the collection and dissemination of statistical information regarding wholesale and retail prices, wages and hours of labor, and cost of living. Special studies are carried out on many subjects of importance in the industrial life of the country such as workmen's compensation, industrial accidents and hygiene, labor legislation, employment and unemployment, and collective bargaining, and trade agreements. The work of the statistical and editorial and research divisions, the major part of which is the result of original investigations, is made available to the public through a series of bulletins, some of which are published annually and others at irregular intervals, and through the MONTHLY LABOR REVIEW. Practically the entire field of labor questions is thus covered by the bureau in a more or less comprehensive manner.

Appendixes to the bulletin give a survey of the personnel and annual salary rates, a classification of the bureau's activities, a description of its publications, an index to laws and a bibliography relating to the bureau, a financial statement, and a chronological list of publications of the bureau.

[1] U. S. Bureau of Labor Statistics Bul. No. 319: The Bureau of Labor Statistics, United States Department of Labor: Its history, activities, and organization.

LABOR ORGANIZATIONS.

Trade-Union Movement in Finland.[1]

THE Finnish Federation of Trade-Unions, the affiliated membership of which before the civil war amounted to 160,695, was completely destroyed by the time hostilities had ceased. All trade-unions were dissolved and the property of the organizations was either destroyed or confiscated by the victors.

After a great effort the trade-union movement of Finland had been reconstituted at the beginning of 1919 under the leadership of Matti Paasivuori, an old experienced trade-union leader, who was elected president. Immediately afterwards the communists, at the instigation of the Russians, began their covert and open attempts to place the trade-union movement under the dictatorship of their party with the ultimate result that they gained control of the federation and the old experienced trade-unionists were excluded. Only trusted communists were allowed to be the spokesmen of the trade-unions, and within the organizations an open campaign of calumny was started against the noncommunist elements. The trade-union members were forced to swell the membership of the Communist Party by means of compulsory payment of contributions to that party. Similarly, a ruthless agitation was conducted against the International Federation of Trade Unions of Amsterdam, and no stone was left unturned to discredit that organization. At the beginning of 1921 a referendum was taken at the instigation of the communist leaders on the question as to whether the Finnish Federation of Trade-Unions should be independent or affiliated with Moscow. When the final vote on the question was taken in February, 1922, only 18,006 votes were cast altogether; of these, 12,000 were cast in favor of affiliation with the Moscow International, and 5,843 against. The number of votes cast represented only 37 per cent of the total affiliated membership of the federation.

The situation is at present very difficult. The workers are leaving the organizations in large numbers, thus weakening the whole movement. The officers of the Finnish Federation of Trade-Unions have so far not given effect to the decision of affiliating with Moscow, but are keeping the matter in abeyance. As it is to be feared that the great mass of workers will leave the trade-unions, the executive committee of the Social-Democratic Party has appointed a committee with the object of considering the possibility of reorganizing the trade-union movement on its former basis.

According to the annual report of the directorate of the Finnish Federation of Trade-Unions, the unions affiliated with it had a membership of 59,470 at the beginning of 1921. At the end of the third

[1] The International Trade-Union Movement. Amsterdam, September–October, 1922, p. 295, Korrespondenzblatt des Allgemeinen Deutschen Gewerkschaftsbundes, Berlin, December 2, 1922, p. 648.

quarter of 1921 this number had fallen to 47,917; later on it rose again, and at the end of 1921 the membership was 48,589, of which 7,593 were female members and 1,276 were apprentices. During 1921 the federation expended 147,128 Finnish marks ($28,395.70, par) for strike benefits and 174,111.45 marks ($33,603.51, par) for educational purposes. The total income of the federation was 504,405.45 marks ($97,350.24, par). Wage statistics given in the report, which cover 35,000 members show that the average hourly wage of men was 5.63 marks ($1.09, par), of women, 3.15 marks (61 cents, par), of male apprentices, 3 marks (58 cents, par), and of female apprentices, 1.87 marks (36 cents, par). The daily hours of labor were as a rule eight.

International Congress of Building Workers.[1]

THE International Federation of Building Workers held its fifth congress at Vienna, October 2 to 5, 1922. Delegates from 15 national building workers' organizations were present, also the secretaries of the international federations of carpenters, painters, and stone workers and a representative of the International Labor Office. The international organization of building workers now has affiliated with it 22 federations in 17 countries, its total membership aggregating over 1,200,000. The federations of Poland and Spain "have intimated their desire for admission."

One of the principal subjects for discussion was the organization of an international industrial federation to include the international federations of building workers, stone workers, carpenters, and painters. A committee was appointed to work out a plan by which these several crafts could preserve their autonomy within the proposed single federation.

The congress decided not to admit the Russian Federation of Building Workers, but to maintain friendly relations with it.

Arrangements were made for a special conference in November, 1922, for the consideration of the matter of rebuilding devastated regions and the International Federation of Building Workers will establish an office for the recruiting of foreign laborers for reconstruction work.

As a result of a joint congress of building guilds and building workers the International Federation of Building Guilds was organized.

International Congress of Transport Workers.

A BRIEF report on the congress of the International Federation of Transport Workers, which met in Vienna in the early part of last October, was published in the International Labor Review for December, 1922. The more than 100 delegates in attendance at the congress came from 19 different countries and represented a membership of 2,300,000.

[1] International Labor Review, Geneva, December, 1922, pp. 927, 928.

The railwaymen's committee requested the secretariat of the federation to formulate a plan for the international regulation of the labor conditions of transport workers. Each national organization would be expected to take action in its own country "in accordance with the scheme laid down" and report results to the secretariat. The latter would, in cooperation with the International Federation of Trade Unions and the International Labor Office, endeavor to bring about the establishment of international standards.

The congress adopted a resolution of the dock workers' committee setting forth the following demands: "Raising of wages in ports where the standard is low up to that of ports where the standard is highest; fullest measure of workers' control; control of labor supply by unions; provision of maintenance allowances to compensate for casual nature of dock employment; full wages in case of accidents; regulations for safety, including prohibition of employment of women and children. Affiliated organizations are instructed to employ all means at their disposal to carry through these demands."

The devising of a uniform scheme for socializing the transport industry was regarded as impossible in view of "the economic, geographical, and cultural differences between countries."

CONCILIATION AND ARBITRATION.

Conciliation Work of the Department of Labor in December, 1922.

By HUGH L. KERWIN, DIRECTOR OF CONCILIATION.

THE Secretary of Labor, through the Division of Conciliation, exercised his good offices in connection with 30 labor disputes during December, 1922. These disputes affected a total of 23,961 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 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 workmen directly and indirectly affected.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, DECEMBER, 1922.

Company or industry and location.	Nature of controversy.	Craft concerned.	Cause of dispute.	Present status.
Glen Alden Coal Co., Nanticoke, Pa.	Strike	Miners	Working conditions	Adjusted.
S. J. Cohen & Bro., Philadelphia, Pa.	do	Clothing workers.	Violation of agreement.	Do.
Children's clothing manufacturers, New York City.	do	do	Piecework	Pending.
Nagle Packing Co., Jersey City, N. J.	do	Truck drivers	Union activities	Unclassified.
Midland Tailors Co., Chicago, Ill	do	Tailors	Renewal of agreement.	Do.
Candy drivers (jobbers), Chicago, Ill.	do	Candy workers	To unionize drivers	Do.
Tyler Tube & Pipe Co., Washington, Pa.	do	Employees	Company refused to sign agreement.	Adjusted.
Cincinnati Traction Co., Cincinnati, Ohio.	do	Electrical workers.	Conditions	Adjusted.
Saco-Lowell Co., Saco, Me	do	Molders	do	Pending.
Julius Kayser Knitting Mills, Brooklyn, N. Y.	Controversy.	Knitters	Working conditions	Unable to adjust.
Boston Colliery, Scranton, Pa	Strike	Employees	do	Adjusted.
Polliser, Janet & Ravet, New York City.	do	Dye workers		Pending.
Chasin & Rubin, manufacturers, New York City.	do	Shirt makers	Asked raise and union recognition.	Adjusted.
Pottery workers, Evansville, Ind.	do	Pottery workers	Asked increase	Do.
5 firms electrical contractors, Los Angeles, Calif.	do	Inside wiremen	Asked new scale; closed shop.	Pending.
Coal miners, Indiana fields	Threatened strike.	Miners	Check-off system	Adjusted
Hudson Coal Co., Scranton, Pa	Strike	Coal miners	Working conditions	Do.
Webb Mine, Shadyside, Ohio	do	do	do	Do.
H. P. Wylie China Co., Huntington, W. Va.	do	Potters	Asked 7 per cent increase.	Do.
McNichol Pottery Co., Clarksburg, W. Va.	do	do	do	Do.
Printing pressmen, Cincinnati, Ohio.	do	Pressmen	Wage cut; conditions	Unclassified.
Granite manufacturing firms, Quincy, Mass.	do	Cutters	20 per cent cut; conditions.	Adjusted.
Granite quarries, Quincy, Mass	do	Quarrymen	Wages; closed shop	Do.
Jones Brothers, Barre, Vt	do	Granite cutters	20 per cent cut; conditions.	Do.
McDonald & Sons (monuments), Barre, Vt.	do	do	do	Do.
Wells & Lamson Quarrying Co., Barre, Vt.	do	do	do	Do.
Gindici Bros. (monuments), Barre, Vt.	do	do	do	Do.
Victory Granite Co., A. Sangavetti Co., and Chioldi Co., Barre, Vt.	do	do	do	Do.
Novelli & Calcagin Co. (monuments), Barre, Vt.	do	Granite workers	do	Do.

LABOR DISPUTES HANDLED BY THE UNITED STATES DEPARTMENT OF LABOR THROUGH ITS DIVISION OF CONCILIATION, DECEMBER, 1922—Concluded.

Company or industry and location.	Terms of settlement.	Date of—		Workmen affected.	
		Beginning.	Ending.	Directly.	Indirectly.
		1922.	1922.		
Glen Alden Coal Co., Nanticoke, Pa.	Return on company's terms.	Nov. 24	Nov. 26	850	.....
S. J. Cohen & Bro., Philadelphia, Pa.	Discharged men reinstated.	Dec. 2	Dec. 13	200	.....
Children's clothing manufacturers, New York City.	.....	.....	.....	2,000	.....
Nagle Packing Co., Jersey City, N. J.	No possibility of adjustment.	Nov. 1	Dec. 13	18	.....
Midland Tailors Co., Chicago, Ill.	Neither agree to conciliation.	.....	.....	60	.....
Candy drivers (jobbers), Chicago, Ill.	Adjusted prior to commissioner's arrival.	Oct. 20	Nov. 1	280	7,000
Tyler Tube & Pipe Co., Washington, Pa.	Signed scale	July 1	Dec. 11	200	150
Cincinnati Traction Co., Cincinnati, Ohio.	On company's terms	.....	.....	.....	.....
Saco-Lowell Co., Saco, Me	.....	.....	.....	200	.....
Chasin & Rubin, manufacturers, New York City.	Demands granted	Dec. 1	Dec. 15	120	.....
Pottery workers, Evansville, Ind	No cut; return as before	.....	.....	250	.....
5 firms electrical contractors, Los Angeles, Calif.	Partially adjusted; small firms agree.	Dec. 16	.....	400	200
Coal miners, Indiana fields	Company agreed to check-off assessment.	Dec. 8	Dec. 23	.....	.....
			1923.		
Hudson Coal Co., Scranton, Pa	.....	.....	Jan. 3	3,600	400
Webb mine, Shadyside, Ohio	.....	.....	.....	700	.....
			1922.		
H. P. Wylie China Co., Huntington, W. Va.	Increase not allowed	Oct. 1	Dec. 11	170	.....
McNichol Pottery Co., Clarksburg, W. Va.	....do	...do	...do	225	.....
		1921.			
Printing pressmen, Cincinnati, Ohio.	Companies declined mediation.	Sept. 1	.....	262	.....
		1923.			
Granite manufacturing firms, Quincy, Mass.	Wages unchanged	Jan. 1	Dec. 13	1,100	2,500
Granite quarries, Quincy, Mass	Strike lost	...do	Dec. 19	2,500	.....
		1922.			
Jones Brothers, Barre, Vt	No cut; satisfactory adjustment.	Apr. 1	...do	300	.....
McDonald & Sons (monuments), Barre, Vt.	....do	...do	...do	50	25
Wells & Lamson Quarrying Co., Barre, Vt.	....do	...do	...do	75	.....
Gindici Bros. (monuments), Barre, Vt.	....do	...do	...do	22	27
Victory Granite Co., A. Sangavetti Co., and Chioldi Co., Barre, Vt.	Satisfactory adjustment	...do	...do	50	.....
Novelli & Calcagin Co. (monuments), Barre, Vt.	....do	...do	...do	27	.....
Total	.....	.....	.....	13,659	10,302

On January 1, 1923, there were 47 strikes before the department for settlement and in addition 8 controversies which had not yet reached the strike stage. Total number of cases pending was 55.

Conciliation Machinery for Mining Industry in South Africa.

AT THE close of the strike in the mining industry on the Rand (South Africa), a brief account of which appeared in the May, 1922, issue (pp. 196–197) of the MONTHLY LABOR REVIEW, an effort was made to formulate a method of conciliation designed

to bring about a better understanding between employers and employees in the industry and thus avert, as far as possible, the recurrence of strikes in the industry in the future.

With this end in view the chamber of mines and the unions acting separately prepared individual solutions of the difficulties. Then after a five-day conference, at which both employers and workers were represented, the following conciliation scheme as given by A. Cooper Key, editor of the South African Mining Review, Johannesburg, in the International Labor Review for December, 1922 (pp. 914, 915), was agreed upon on August 22, 1922, and became operative October 1 of this year. The scheme follows:

The scheme is based on the assumption that neither employers nor employees will avail themselves of the corresponding province of the Transvaal Industrial Disputes' Prevention Act. The conciliation machinery is subject to modification at any time by the conciliation board, and is terminable on six months' notice by either side. The provisions do not apply to officials, which term includes foremen who have a 30-day notice clause in their contract of employment, shift bosses, dust inspectors, employees on secretarial, clerical, and store-keeping work, assaying, hospital, and compound work.

No strike or lockout shall take place until the procedure laid down has been completely carried out in regard to the point in dispute. The penalty clause of six months' imprisonment for either employers or employees embodied in the chamber of mines' draft proposals was evidently dropped. A month's notice is to be given of any alteration in working conditions, by posting in the mine or, if of general application, to the whole Rand, by publication in the newspapers and to the trade unions concerned. It is laid down that, for the time being, trade-union methods of handling disputes are recognized by the gold producers' committee. It is made clear that shop and shaft stewards and work shop committees are not recognized by the gold-mining industry. Any employee is at liberty to become a member of a trade union or not, as he thinks fit. When a trade-union official is present at a discussion, an official of the employers' organization may also attend, if the mining company desires it. Nonunion members shall have exactly the same rights in lodging complaints as trade unionists.

Any complaint must in the first instance be laid before the official concerned within three days; it must directly concern the employee. If satisfaction be not obtained, he may lay his case before the manager. If no agreement is arrived at, he may again interview the manager, bringing with him a whole-time official of his trade union. Should an agreement still not be reached, the trade-union official may again interview the manager, the employee concerned not being present. Unless otherwise arranged, interviews shall take place outside working hours. Where a number of employees are concerned they may appoint a deputation not exceeding five, with the same precedure. The manager shall not be required to discuss with third parties individual contracts, engagement, suspension, discharge, promotion, or derating of employees; on those matters his decision shall be final. For a period of six months the decision of the manager on a complaint made by an employee and supported by a whole-time trade-union official shall be final. The arrangement for union officials to interview the management may continue after the six months by mutual arrangement between the gold producers' committee and the unions which desire continuance.

When a dispute between the management and a body of employees comprising all those of a particular class, or numbering more than ten, is not settled under the previously explained procedure, the employees may request that the matter be brought before the board of directors, the meeting to take place within a week. The men, accompanied, if they wish, by their trade-union representatives, shall discuss the matter with the directors and such individuals as they may invite, not more than seven persons on either side. In the event of no agreement being arrived at within a fortnight, either party or the minister of mines, acting through the Department of White Labor, may apply, within 21 days of the meeting, for the calling together of a conciliation board.

Points of collective bargaining in regard to wages, hours, and other conditions shall be discussed between the trade union concerned and the gold producers' committee. The procedure in the event of disagreement is to be as just described. The maximum number of persons present is to be nine on either side.

The standing conciliation board will deal with matters referred to it under the foregoing procedure, and any dispute which it is mutually agreed shall be so dealt with. The board is to consist of 12 members, 6 appointed by the gold producers' committee and 6 elected by the employees of the mines, 2 to be elected by underground workers, one each by skilled mechanics, engine drivers and firemen, reduction workers, and other surface workers. The mining industry board shall appoint the first conciliation board, which shall hold office for a year. Thereafter members shall be appointed for two years. Of the first elected board three members shall retire at the end of the year. Retiring members are eligible for reelection and provision is made for substitutes, who shall be the candidates securing the next highest number of votes. Elections are to be by secret ballot, conducted by the inspector of white labor. Only men who are actually employed by the mines, or who, if out of work, were last employed within eight weeks, are entitled to vote. Only actual employees or whole-time trade-union officials are eligible for election. Provision is made for casual vacancies. For the first six months one of the representatives of the gold producers' committee shall be chairman, one of the employees' representatives vice-chairman, the positions then being reversed.

For each dispute the board shall agree upon an independent referee; failing agreement selection shall be made by the chief justice of the Union of South Africa. In the event of the board being unable to arrive at an agreement within a fortnight, the referee shall be called in. The matter in dispute shall again be discussed with the referee in the chair. His report shall be published in three newspapers within a week of presentation. "It will be in no way binding on either side, but no action in the way of strike or lockout may take place on the point at issue until fourteen days after publication * * *." The board shall draw up its own standing orders, which shall be consistent with this memorandum. Expenses of the board shall be borne by the Government, the necessary secretarial and clerical assistance being provided by the Department of the Inspector of White Labor.

IMMIGRATION.

Statistics of Immigration for November, 1922.

By W. W. HUSBAND, COMMISSIONER GENERAL OF IMMIGRATION.

THE following tables show the total number of immigrant aliens admitted into the United States and emigrant aliens departed from the United States from July to November, 1922. The tabulations are presented according to the countries of last permanent or future permanent residences, races or peoples, occupations, and States of future permanent or last permanent residence. The last table (Table 6) shows the number of aliens admitted under the per centum limit act of May 19, 1921, from July 1 to December 31, 1922.

TABLE 1.—INWARD AND OUTWARD PASSENGER MOVEMENT, JULY TO NOVEMBER, 1922.

Period.	Arrivals.					Departures.			
	Immigrant aliens admitted.	Non-immigrant aliens admitted.	United States citizens arrived.	Aliens debarred.	Total arrivals.	Emigrant aliens.	Non-emigrant aliens.	United States citizens.	Total departures.
July, 1922	41,241	12,001	22,279	1,191	76,712	14,738	16,096	53,069	83,903
August, 1922	42,735	12,298	31,407	1,537	87,977	10,448	9,051	21,364	40,863
September, 1922	49,881	17,135	54,766	1,528	123,310	7,527	9,734	18,668	35,929
October, 1922	54,129	17,063	34,678	1,558	107,428	7,192	10,645	19,546	37,383
November, 1922	49,814	12,316	21,251	1,612	84,993	7,077	10,202	15,354	32,633
Total	237,800	70,813	164,381	7,426	480,420	46,982	55,728	128,001	230,711

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, DURING JULY TO NOVEMBER, 1922, BY COUNTRIES.

Country.	Immigrant.		Emigrant.	
	November, 1922.	July to November, 1922.	November, 1922.	July to November, 1922.
Austria	996	4,384	15	136
Hungary	980	4,932	43	641
Belgium	240	1,307	39	309
Bulgaria	78	316	9	80
Czechoslovakia	2,417	12,147	119	1,414
Denmark	367	1,674	43	204
Finland	478	2,384	20	184
France, including Corsica	408	2,580	80	841
Germany	3,672	15,053	112	993
Greece	618	3,024	267	1,740
Italy, including Sicily and Sardinia	7,886	39,739	2,337	13,897
Netherlands	212	1,050	22	215
Norway	397	3,418	84	403
Poland	4,228	16,714	253	4,137
Portugal, including Cape Verde and Azores Islands	419	2,125	420	1,620
Rumania	1,538	7,744	68	754

TABLE 2.—LAST PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND FUTURE PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, DURING JULY TO NOVEMBER, 1922, BY COUNTRIES—Concluded.

Country.	Immigrant.		Emigrant.	
	November, 1922.	July to November, 1922.	November, 1922.	July to November, 1922.
Russia	2,324	9,091	87	1,768
Spain, including Canary and Balearic Islands	76	605	341	1,453
Sweden	1,330	5,946	70	442
Switzerland	388	1,945	33	279
Turkey in Europe	681	2,130	10	101
United Kingdom:				
England	2,121	10,322	259	3,040
Ireland	2,157	8,449	56	912
Scotland	1,507	7,221	17	446
Wales	106	547	.....	21
Yugoslavia	942	4,963	58	1,271
Other Europe	38	375	7	99
Total Europe	36,604	170,185	4,869	37,400
China	383	2,323	569	1,911
Japan	589	2,337	473	1,456
India	25	122	21	78
Turkey in Asia	210	1,571	62	545
Other Asia	47	212	9	43
Total Asia	1,254	6,565	1,134	4,033
Africa	38	365	6	69
Australia, Tasmania, and New Zealand	80	402	54	231
Pacific Islands (not specified)	5	35	4	10
British North America	7,766	30,704	241	1,321
Central America	88	561	56	276
Mexico	2,733	21,650	283	1,130
South America	359	1,729	114	748
West Indies	885	5,595	316	1,760
Other countries	2	9	.....	4
Grand total	49,814	237,800	7,077	46,982
Male	26,513	128,933	5,204	30,810
Female	23,301	108,867	1,873	16,172

TABLE 3.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED, JULY TO NOVEMBER, 1922, BY RACES OR PEOPLES.

Race or people.	Immigrant.		Emigrant.	
	Nov., 1922.	July to Nov., 1922.	Nov., 1922.	July to Nov., 1922.
African (black)	390	3,149	83	564
Armenian	401	1,822	6	57
Bohemian and Moravian (Czech)	1,080	4,681	122	1,154
Bulgarian, Serbian, and Montenegrin	361	1,441	48	1,145
Chinese	333	2,027	551	1,867
Croatian and Slovenian	638	3,360	10	143
Cuban	85	727	57	369
Dalmatian, Bosnian, and Herzegovinian	82	404	6	106
Dutch and Flemish	529	2,418	79	548
East Indian	22	73	19	54
English	4,595	20,301	537	4,384
Finnish	377	1,877	24	225
French	2,164	9,156	97	1,045
German	5,707	24,305	169	1,307
Greek	748	3,742	272	1,778
Hebrew	6,837	27,082	20	284
Irish	3,243	12,581	68	947
Italian (north)	1,565	7,705	161	1,462
Italian (south)	6,414	32,456	2,195	12,538
Japanese	567	2,266	458	1,437
Korean	13	45	8	23
Lithuanian	354	1,236	25	1,010
Magyar	1,085	5,499	47	732
Mexican	2,668	21,202	275	1,063
Pacific Islander	3	13	.....	2
Polish	1,624	8,622	248	4,003
Portuguese	450	2,234	433	1,687
Rumanian	176	885	66	698
Russian	408	1,623	81	880
Ruthenian (Russniak)	116	407	.....	15
Scandinavian (Norwegians, Danes, and Swedes)	2,434	12,433	227	1,201
Scotch	2,569	11,380	42	643
Slovak	913	5,480	8	287
Spanish	239	1,710	389	1,712
Spanish American	149	846	95	593
Syrian	137	852	67	477
Turkish	77	201	10	81
Welsh	155	618	11	41
West Indian (other than Cuban)	84	595	49	260
Other peoples	22	346	14	160
Total	49,814	237,800	7,077	46,982

TABLE 4.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED, JULY TO NOVEMBER, 1922, BY OCCUPATIONS.

Occupation.	Immigrant.		Emigrant.	
	Nov., 1922.	July to Nov., 1922.	Nov., 1922.	July to Nov., 1922.
Professional:				
Actors	49	371	12	69
Architects	17	83	1	16
Clergy	206	882	52	280
Editors	11	43	1	9
Electricians	130	610	4	39
Engineers (professional)	193	864	22	120
Lawyers	15	76	3	23
Literary and scientific persons	69	289	3	57
Musicians	97	507	8	70
Officials (Government)	54	263	20	105
Physicians	71	320	12	74
Sculptors	26	154	5	44
Teachers	233	1,320	27	235
Other professional	232	1,297	30	267
Total	1,403	7,079	200	1,408
Skilled:				
Bakers	301	1,297	15	122
Barbers and hairdressers	212	1,068	19	159
Blacksmiths	201	930	5	67
Bookbinders	21	78	.....	4
Brewers	1	6	.....	.....
Butchers	202	883	13	111
Cabinetmakers	34	145	2	43
Carpenters and joiners	770	3,848	40	276
Cigarette makers	1	16	.....	1
Cigar makers	17	141	12	57
Cigar packers	1	5	.....	3
Clerks and accountants	1,312	6,483	123	845
Dressmakers	561	2,574	15	164
Engineers (locomotive, marine, and stationary)	206	1,276	17	70
Furriers and fur workers	17	121	.....	6
Gardeners	77	349	13	73
Hat and cap makers	30	124	.....	4
Iron and steel workers	222	858	1	37
Jewelers	28	124	2	24
Locksmiths	145	661	2	8
Machinists	289	1,249	17	218
Mariners	459	2,241	50	192
Masons	309	1,631	20	105
Mechanics (not specified)	337	1,587	16	159
Metal workers (other than iron, steel and tin)	47	183	2	2
Millers	23	112	.....	8
Milliners	43	356	2	24
Miners	620	2,156	46	413
Painters and glaziers	161	779	15	96
Pattern makers	13	57	.....	2
Photographers	29	145	1	16
Plasterers	32	142	1	11
Plumbers	32	231	.....	22
Printers	54	264	4	39
Saddlers and harnessmakers	17	88	.....	.....
Seamstresses	232	1,126	7	46
Shoemakers	437	2,106	29	243
Stokers	44	259	5	36
Stonecutters	35	112	.....	10
Tailors	694	3,221	27	312
Tanners and curriers	16	71	.....	5
Textile workers (not specified)	35	84	.....	6
Tinners	52	176	3	13
Tobacco workers	3	14	2	2
Upholsterers	8	70	.....	8
Watch and clock makers	38	171	4	13
Weavers and spinners	168	825	38	224
Wheelwrights	4	16	.....	.....
Woodworkers (not specified)	18	81	4	11
Other skilled	376	1,825	42	302
Total	8,984	42,305	614	4,612
Miscellaneous:				
Agents	97	434	8	58
Bankers	8	54	3	38
Draymen, hackmen, and teamsters	58	240	3	20
Farm laborers	2,927	12,332	70	479

TABLE 4.—IMMIGRANT ALIENS ADMITTED AND EMIGRANT ALIENS DEPARTED, JULY TO NOVEMBER, 1922, BY OCCUPATIONS—Concluded.

Occupation.	Immigrant.		Emigrant.	
	Nov., 1922.	July to Nov., 1922.	Nov., 1922.	July to Nov., 1922.
Miscellaneous—Concluded.				
Farmers	1,063	5,512	195	964
Fishermen	161	467	7	31
Hotel keepers	22	78	4	17
Laborers	6,322	35,538	3,382	18,890
Manufacturers	35	164	4	39
Merchants and dealers	964	4,433	248	1,371
Servants	6,426	30,943	191	1,944
Other miscellaneous	1,815	8,232	311	1,674
Total	19,898	98,487	4,426	25,525
No occupation (including women and children)	19,529	89,929	1,837	15,437
Grand total	49,814	237,800	7,077	46,982

TABLE 5.—FUTURE PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND LAST PERMAMENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JULY TO NOVEMBER, 1922, BY STATES AND TERRITORIES.

States.	Immigrant.		Emigrant.	
	Nov., 1922.	July to Nov., 1922.	Nov., 1922.	July to Nov., 1922.
Alabama	51	236	.....	22
Alaska	7	89	7	37
Arizona	700	4,397	25	121
Arkansas	24	101	.....	52
California	4,281	17,151	983	3,942
Colorado	170	805	27	125
Connecticut	1,023	4,952	100	990
Delaware	56	252	3	36
District of Columbia	167	768	30	208
Florida	279	1,337	76	536
Georgia	49	250	3	38
Hawaii	296	1,124	17	256
Idaho	53	260	11	49
Illinois	3,819	18,060	354	2,862
Indiana	469	2,237	30	294
Iowa	295	1,414	37	178
Kansas	143	613	12	74
Kentucky	50	279	4	39
Louisiana	121	588	34	181
Maine	600	2,484	4	68
Maryland	295	1,218	14	216
Massachusetts	4,058	16,795	647	4,288
Michigan	2,686	11,801	192	1,403
Minnesota	574	3,069	51	335
Mississippi	40	155	4	16
Missouri	415	1,915	27	311
Montana	139	646	38	128
Nebraska	182	893	28	151
Nevada	20	174	8	30
New Hampshire	321	1,337	10	66
New Jersey	2,735	13,289	221	2,077
New Mexico	116	421	7	41
New York	14,655	67,859	2,844	18,869
North Carolina	14	162	7	16
North Dakota	126	527	15	57
Ohio	1,977	9,619	157	1,657
Oklahoma	48	287	5	42
Oregon	381	1,517	46	262
Pennsylvania	4,924	21,189	389	3,871
Philippine Islands	.....	4	.....	5
Porto Rico	26	115	18	118
Rhode Island	559	2,514	124	609
South Carolina	11	70	5	10
South Dakota	62	336	8	35
Tennessee	37	212	2	16
Texas	581	13,891	134	532
Utah	104	504	36	116

TABLE 5.—FUTURE PERMANENT RESIDENCE OF IMMIGRANT ALIENS ADMITTED AND LAST PERMANENT RESIDENCE OF EMIGRANT ALIENS DEPARTED, JULY TO NOVEMBER, 1922, BY STATES AND TERRITORIES—Concluded.

States.	Immigrant.		Emigrant.	
	Nov., 1922.	July to Nov., 1922.	Nov., 1922.	July to Nov., 1922.
Vermont	207	875	----	35
Virginia	108	561	6	89
Virgin Islands	----	11	----	----
Washington	814	3,767	181	736
West Virginia	201	1,035	27	241
Wisconsin	692	3,387	61	452
Wyoming	54	248	8	44
Total	49,814	237,800	7,077	46,982

TABLE 6.—STATUS OF THE IMMIGRATION OF ALIENS INTO THE UNITED STATES UNDER THE PER CENTUM LIMIT ACT OF MAY 19, 1921, AS EXTENDED BY PUBLIC RESOLUTION NO. 55, SIXTY-SEVENTH CONGRESS, APPROVED MAY 11, 1922, JULY 1 TO DECEMBER 31, 1922.

Country or region of birth.	Maximum monthly quota.	Admitted Dec. 1–31.	Annual quota.	Admitted July 1 to Dec. 31.	Balance for year.[1]
Albania	58	17	288	272	11
Armenia (Russian)	46	18	230	229	[2]
Austria	1,490	909	7,451	4,735	2,652
Belgium	313	148	1,563	1,549	[2]
Bulgaria	61	14	302	276	22
Czechoslovakia	2,871	1,238	14,357	13,990	160
Danzig	60	15	301	107	193
Denmark	1,124	166	5,619	2,218	3,389
Finland	784	211	3,921	2,832	1,059
Fiume	14	14	71	45	26
France	1,146	251	5,729	3,186	2,530
Germany	13,521	2,545	67,607	18,730	48,639
Greece	659	116	3,294	3,294	[2]
Hungary	1,128	646	5,638	5,485	30
Iceland	15	6	75	51	24
Italy	8,411	1,698	42,057	41,928	[2]
Luxemburg	19	----	92	92	[2]
Memel region	30	9	150	34	113
Netherlands	721	192	3,607	1,590	2,014
Norway	2,440	382	12,202	4,176	7,996
Poland	4,215	2,842	21,076	18,218	2,654
Eastern Galicia	1,157	611	5,786	2,316	3,301
Pinsk region	857	511	4,284	2,088	2,039
Portugal	493	22	2,465	2,464	[2]
Rumania	1,484	1,385	7,419	6,971	286
Bessarabian region	558	102	2,792	421	2,342
Russia	4,323	2,785	21,613	13,774	7,533
Esthonian region	270	23	1,348	123	1,184
Latvian region	308	178	1,540	887	552
Lithuanian region	462	231	2,310	2,273	[2]
Spain	182	2	912	912	[2]
Sweden	4,008	357	20,042	7,726	12,307
Switzerland	750	326	3,752	2,750	988
United Kingdom	15,468	4,697	77,342	39,884	37,259
Yugoslavia	1,285	807	6,426	5,973	407
Other Europe	17	1	86	85	[2]
Palestine	12	----	57	57	[2]
Syria	186	147	928	916	[2]
Turkey	478	274	2,388	2,387	[2]
Other Asia	16	1	81	81	[2]
Africa	25	----	122	122	[2]
Atlantic Islands	24	----	121	63	57
Australia	56	36	279	279	[2]
New Zealand and Pacific Islands	16	14	80	69	3
Total	71,561	23,947	357,803	215,658	139,770

[1] After all admissions and pending cases have been deducted from the annual quota.
[2] Exhausted for year. Pending cases for which quotas have been granted cover differences between annual quota and number already admitted.

WHAT STATE LABOR BUREAUS ARE DOING.

California.

THE data here given are from a typewritten summary of the forthcoming 20th biennial report of the Bureau of Labor Statistics of California for the years 1920–21 and 1921–22.

Collection of wage claims.—During the period covered by the report out of 22,718 wage claims filed with the bureau, 10,538, or 46.4 per cent, were collected, the amount thus secured reaching $450,164, over six times that collected in 1913. It is estimated that in addition to these collections the bureau saves the workers of California from $55,000 to $85,000 a year in legal fees.

Wages of cannery hands in Alaska.—As the result of the bureau's supervision of wage payments to Alaska salmon cannery workers, the net average earnings of such workers, which were at a low level, have steadily increased.

Eight-hour law.—In the above-mentioned biennial period 870 complaints relative to violations of the 8-hour law were investigated by the bureau. Restaurants led in the number of violations. Hotels, apartment houses, and boarding houses ranked next in the frequency of infringements of this law.

Child labor.—In the scholastic year 1921–22, 2,395 working permits were issued to children—1,423 to children between 14 and 15 years of age and 972 to children between 15 and 16 years of age. In 1920–21 only 1,203 permits were issued—a little more than one-half the number in 1921–22.

In 1910 there were 11,251 gainfully employed children in California; in 1920 only 9,057—a decrease of 19.5 per cent.

Inspection.—The bureau's factory inspection work has been handicapped by the inadequacy of appropriations. There are approximately 12,000 industrial establishments in the State and the bureau has but one factory inspector. Only 2,267 inspections of factories and mercantile establishments were made by the bureau in the two years ending June 30, 1922. During this period the bureau started 80 prosecutions for violations of the labor law. In 51, or 63.7 per cent, of these cases convictions were secured.

Colorado.[1]

THE enforcement of the factory inspection law of Colorado has been of great assistance in the reduction of the number of industrial accidents in the State. While the law is in very many respects a good one, it has various defects, it is said, among them being the lack of standardization of the bureau's inspection work with that of

[1] Colorado. Bureau of Labor Statistics. Biennial report, 1921-1922. Denver, 1922.

private accident insurance companies whose safety orders so often differ very considerably from the State law. Moreover, the wording of the law fails to bring out clearly the absolute authority of the bureau's inspectors "to enforce necessary safety orders. * * * A State law should supersede in authority all self-made rules."

During 1921, 2,084 safety and sanitary orders were issued; in 1922, 2,270. The total number of inspections for 1921–22 was 5,185, which greatly exceeded the number for any other similar period.

The sanitary conditions of restaurants in all parts of the State have been very much improved. The issuance of a special compliance letter to establishments which have been found "strictly sanitary," has resulted in considerable clearing up. The possession of these certificates is highly appreciated and the restaurants have shown themselves willing to meet the obligations imposed before such endorsements are conferred.

Child labor.—During the biennial period covered by the report compliance with the child-labor law was secured without recourse to court proceedings. Taking all things into consideration, there have been remarkably few objections to the operation of the act.

During 1921 and the first nine months of 1922, 1,400 working certificates were issued to school children in Denver, 14.2 per cent more than in 1919–1920.

Collection of wage claims.—The bureau has no legal power to enforce the payment of wage claims. "Only moral suasion is used." From December, 1920, to November, 1922, inclusive, 2,735 claims were filed involving $261,174.35. Of these claims 1,936 were paid, the amount collected aggregating $127,790.61. This work was done without charge to claimants.

The following statement reveals the difficulties which confront the bureau as a wage collection agency:

> In this wage claim work we are handicapped and retarded not only by lack of legal power, but also by the absence of any statute fixing a legal workday, and one fixing a minimum wage for such a day. Many more persons than one is willing to admit are employed on terms that are thoroughly indefinite as to either time or wages. They are employed "by the month" and expected to work every day and as long in a day as strength will permit. They are promised "what they are worth," or the "going wage." Such arrangements inevitably breed misunderstandings of a kind that can never be settled in a way that the worker can get a square deal. So we would recommend that if such a thing is possible, a statute should be enacted stating definitely what is a "day" for the worker, and another one fixing a minimum pay for such a day. This for both men and women in all occupations, and whether the employer is a company, or a corporation, or a private citizen. We believe that such a statute would be of very widespread benefit to a class of people who greatly need State aid.

Woman's eight-hour law.—The woman's 8-hour law of Colorado was enacted a decade ago. The bureau considers that the unsatisfactory results of this legislation are due to the fact that this measure includes but few occupations. It is urged in the report that the law be amended "to cover all women working in any occupation of whatever kind or character."

Beet-sugar industry.—A special report is made on 16 beet-sugar factories of the State. About 200,000 acres of land were in cultivation in 1921 to provide raw material for these establishments. The cultivation and harvesting of this crop involved wage payments amounting to $6,000,000, or $30 an acre. When to this sum is added

the $5,449,416 paid to 6,833 men and 252 women employed in these 16 factories, the total pay roll aggregates $11,449,000.

Newspaper industry.—The newspaper industry is a very important one in Colorado, the capital invested in such industry by publishers being $5,336,465; the number of wage earners employed, 2,178, and the average yearly pay roll, $3,379,986.

Massachusetts.

THE following regulations [1] for safeguarding power-press tools have been adopted by the Massachusetts Department of Labor and Industries to become effective February 1, 1923:

(1) All power press tools in use shall be constructed, or effective safety appliances provided, to prevent the hand of an operator from being in the hazard zone at the time of operation; if—

(*a*) The speed of the press when running continuously is more than 30 working strokes per minute and the clutch is engaged for each stroke.

(*b*) The speed of the press is more than 45 working strokes per minute, the stroke is less than 4 inches and the press is running continuously.

(2) Power shall be off and press drive wheel shall be at rest while tools are being adjusted, except where the control allows the ram to be stopped at any point of the stroke.

(3) No person shall render inoperative or fail to use any safety appliance which has been provided in accordance with section 1.

NOTE 1.—Safety appliances may be of the following types:

(*a*) Stationary guards.

(*b*) Movable guards of the sweep type, operating positively from the ram or shaft and not from the tripping mechanism.

(*c*) Movable guards of the gate type, closing in advance of the operation of the clutch.

(*d*) Mechanical means; such as chute, slide, dial, magazine or roll feeds.

(*e*) Double hand trips.

(*f*) Pliers or other hand implements.

North Carolina.[2]

THE enactment of an 8-hour law and a workmen's compensation law "without regard to fault of workmen," and the creation of a State labor board for the adjustment of industrial controversies are among the outstanding recommendations made by the commissioner of labor and printing in his letter transmitting the report of his department for the biennial period 1921–1922 to the governor of the State. Provisions for the inspection of boilers, drastic legislation for the safeguarding of machinery, and the strengthening of existing laws relating to women in industry and child labor are also recommended.

The commissioner points out that while "North Carolina has become one of the leading manufacturing States, it is also one of the most delinquent in providing and maintaining industrial standards for the protection of workers." It is one of the six States in the Union which has no compensation law.

[1] Massachusetts. Department of Labor and Industries. Recommendations of punch press committee regarding safeguarding power press tools.

[2] News and Observer, Raleigh, Dec. 19, 1922, pp. 1, 2.

Over 19,000 men and women have found jobs and positions in the past year through the recently created employment bureau which operates under the direction of the State Department of Labor and Printing.

Pennsylvania.[1]

THE commissioner of the Department of Labor and Industry of Pennsylvania is of the opinion that the apprenticeship system of the State urgently requires consideration. The industrial board may make, at an early date, a survey to find out what progress has been made in the matter of training prospective workers in industry.

Building code.—In the beginning of 1923 Pennsylvania will have a building code which will meet a long-standing need in State administration by coordinating various departmental activities. The Departments of Health, State, Police, and Labor and Industry have jurisdictional functions in regulating building. The code, as drafted, would include these regulations. Provision would also be made "for concerted enforcement and administration." This scheme is reported as harmonizing with the governor's policies in regard to governmental supervision. Although the code will not cover first and second class cities, it will be drawn up along the lines of the Pittsburgh, Philadelphia, and Scranton codes.

Increase in building plans.—The State Bureau of Inspection has approved 20 per cent more building plans in 1922 than in 1921, taking as basis of comparison the first nine months. Building construction activities are reported as 100 per cent better than in 1918. At present there seems to be no cessation in the construction of homes, apartments, schools, factories, business houses, and amusement places. All plans for buildings of over two stories, public buildings, and factories, except in first and second class cities, are approved by the Department of Labor and Industry.

Acceptance of industrial home work rulings.—According to a report made by the committee on women and children, replies received from employers in all parts of the State show "a most favorable spirit in acceptance of the industrial home work rulings of the board." Petitions in general indicate efforts to get better acquainted with the rules in order to avoid violations.

[1] Pennsylvania. Department of Labor and Industry. Labor and Industry, Harrisburg, November, 1922.

CURRENT NOTES OF INTEREST TO LABOR.

Migration of Colored Workers from the South.

FOR several months past there have been occasional notices of a renewed migration of colored workers from Southern States to Northern cities, and various explanations have been offered for it. The following statement of the underlying reason is taken from the report of the Federal Reserve Bank of Richmond for December 30, 1922:

> Reports of serious conditions among the tenant farmers of lower and central South Carolina are reaching us. Most of these tenant farmers are negroes, and usually at this season of the year they have some money from their cotton crops; but this year the damage done to cotton by the boll weevil was so serious that few of the tenants have surplus funds after paying rent, fertilizer bills, and supply bills. In a great many instances these bills have been only partly paid. Living in a purely agricultural section, these farmers are unable to secure work to tide them over until planting time again, and in many cases their landlords are unable to "carry" them through the winter. As a result, many negroes are leaving the farms for Northern cities where they hope to secure work for the winter. Some of them will return South in the spring, but many of the younger ones will doubtless find the cities to their liking and will remain there permanently. An important effect of the migration is a possible shortage of tenant labor on the cotton plantations next year.

Meeting of National Personnel Association.[1]

THE National Personnel Association (a merger of the National Association of Corporation Training and the Industrial Relations Association of America) held its meeting in Pittsburgh November 8, 9, and 10, 1922, which was attended by 400 delegates.

Among the subjects discussed at this conference were: The social and economic effects of the United States immigration policy, training immigrant workers, shop training, progress of trade apprenticeship, employment and labor turnover, psychological tests, job analysis, developing men for executive positions, training of foremen, personnel problems of small offices, economics for employees, pension plans, and health education.

Meeting of International Association on Unemployment.[2]

THE International Association on Unemployment held a meeting at Geneva on October 20, 1922. The conference was attended by representatives from Austria, Belgium, Czechoslovakia, France, Hungary, Italy, Norway, Spain, and Switzerland, who unanimously decided that the association should resume its work, the activities of the organization at least along international lines having been sus-

[1] Iron Age, New York, Nov. 16, 1922, p. 1315.
[2] International Labor Office. Industrial and Labor Information, Geneva, Oct. 30, 1922, pp. 7, 8.

pended since August, 1914. A provisional executive committee will endeavor to bring together the national sections and individual members making up the organization in 1914. A full meeting will be called for as early a date as practicable to draft a constitution and new rules. Pending this conference the provisional committee will arrange for the association to participate in the international socio-political congress which it is proposed to convene in 1923 or 1924.

One of the principal aims of the association will be to conduct propaganda for the ratification of the draft conventions and recommendations on unemployment which have been adopted by the International Labor Office. The association will again take up its studies of unemployment and emigration problems and other factors influencing the labor market. Research will be supplemented by active work for the adoption of measures required to improve existing conditions.

International Conference on Psychology and Vocational Guidance.[1]

THE third international conference on psychology as applied to vocational guidance was in session in Milan from October 2 to 4, 1922, with delegates from the following 12 countries in attendance: Belgium, Czechoslovakia, France, Germany, Great Britain, Italy, Luxemburg, the Netherlands, Poland, Rumania, Spain, and Switzerland. The relations between psychology and various kinds of scientific research were emphasized in many of the papers presented at the meeting, and the need in vocational guidance, of the cooperation of physiologists, doctors, educationalists, and economists was pointed out.

Among other problems discussed were the international standardization of tests, vocational abilities, innate and acquired abilities, and the psychological classification of occupations.

It was proposed by the principal of the Lausanne School of Crafts to divide manual occupations into "finger-tip trades," "hand trades," and "arm trades."

A French delegate submitted a "medical counterindication card," the heading of which read:

> The doctor's certificate will be most useful if he is asked to provide suggestions of occupations which the candidate can not follow without danger to himself or others, rather than positive indications of trades for which the candidate is particularly suited.

In a report on an investigation into the causes of fatal accidents it was stated that out of 100 such accidents 49 were found to be due to "maladaptation of the worker to his work."

Several papers dealt with the research activities of vocational guidance institutions in Amsterdam, Barcelona, Berlin, Brussels, Geneva, London, Paris, Prague, and elsewhere.

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[1] International Labor Review, Geneva, Dec., 1922, pp. 1004, 1005.

Merger of Two International Social Science Associations.[1]

AT the meeting of the International Association for Labor Legislation, held at Geneva in October, 1922, a brief report of which conference appeared in the January, 1923, MONTHLY LABOR REVIEW, it was agreed to interpret the term "labor legislation" in the constitution of this organization as including social insurance. Through this agreement the work of the International Association for Social Insurance was for practical reasons merged with that of the first-mentioned body. The same agreement transferred unemployment insurance from the program of the International Association on Unemployment to the combined program of the other two organizations. The International Association on Unemployment will continue as an independent body dealing only with problems of the labor market.

Reciprocity of Unemployment Relief in Denmark and Germany.[2]

THE Danish authorities, who until now have granted unemployment donations only to those German workers who were domiciled in Denmark before the war, have decided to grant such donations to all German unemployed workers who have been residing in Denmark since July 1, 1919.

As a measure of reciprocity, the German minister of labor has directed that similar benefits shall be paid to all Danish workers residents of Germany since July 1, 1919.

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[1] American Labor Legislation Review, New York, December, 1922, pp. 234, 235.
[2] Reichs-Arbeitsblatt, Berlin, Aug. 15, 1922, p. 426.

PUBLICATIONS RELATING TO LABOR.

Official—United States.

CALIFORNIA.—*Industrial Accident Commission. Report from July 1, 1921, to June 30, 1922. Sacramento, 1922. 123 pp.*

This report is summarized on pages 170 to 172 of the January issue of the MONTHLY LABOR REVIEW.

COLORADO.—*Bureau of Labor Statistics. Biennial report, 1921–1922. Denver, 1922. 63 pp.*

Certain information from this report is published on pages 265 to 267 of this issue of the MONTHLY LABOR REVIEW.

—— *Bureau of Mines. Annual report for the year 1921. Denver, 1922. 55 pp.*

Accident statistics from this report are published on pages 229 and 230 of this issue of the MONTHLY LABOR REVIEW.

HAWAII.—*Governor. Report to the Secretary of the Interior [for the fiscal year ending June 30, 1922]. Washington, 1922. 116 pp. Map.*

The section relating to the work of the industrial accident boards during the fiscal year 1921–22 is reviewed on page 232 of this issue of the MONTHLY LABOR REVIEW.

KENTUCKY.—*Workmen's Compensation Board. Report, June 30, 1920, to June 30, 1921. [Frankfort, 1922.] 43 pp.*

A brief digest of this report is given on pages 232 and 233 of this issue of the MONTHLY LABOR REVIEW.

—— —— *Report of leading decisions, March 16, 1920, to March 1, 1922. Frankfort [1922]. 222, vi pp.*

MASSACHUSETTS.—*Department of Education. Division of university extension. The Massachusetts problem of immigrant education in 1921–22. Boston, 1922. 23 pp. Bulletin, whole No. 50.*

A report on the results accomplished during the past three years by approximately 100 Massachusetts cities and towns in the education of foreign-speaking adult immigrants.

UNITED STATES.—*Bureau of Efficiency. Report for the period from November 1, 1921, to October 31, 1922. Washington, 1922. 19 pp.*

—— *Department of Agriculture. Bureau of Agricultural Economics. The almond industry in Italy and Spain, by Edward A. Foley. Washington, 1922. 58 pp. Mimeographed. Report F. S. 22.*

A brief digest of this report appears on pages 60 and 61 of this issue of the MONTHLY LABOR REVIEW.

—— —— *Office of Farm Management and Farm Economics. Harvest labor investigations, 1921. Preliminary report. [Washington, 1922.] 9 pp. Mimeographed.*

A review of this report may be found on pages 44 to 50 of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Harvest labor problems in the wheat belt. Washington, 1922. 35 pp. Bulletin No. 1020.*

A review of this bulletin may be found on pages 44 to 50 of this issue of the MONTHLY LABOR REVIEW.

UNITED STATES.—*Department of Commerce. Bureau of Navigation. Annual report for the fiscal year ended June 30, 1922. Washington, 1922. 178 pp.*

Among the labor data in this publication are the reports on nationality, discharge, desertion, wages, and allotment of wages of seamen. Appendix B contains 32 pages, which are chiefly taken up with wage statistics for this class of workers.

—— —— *Bureau of the Census. Annual report for the fiscal year ended June 30, 1922. Washington, 1922. 52 pp.*

The report shows the character and scope of the statistics gathered by this bureau.

—— *Department of Labor. Bureau of Labor Statistics. The Bureau of Labor Statistics, United States Department of Labor: Its history, activities, and organization; by Gustavus A. Weber. Washington, 1922. 59 pp. Bulletin No. 319. Miscellaneous series.*

This report is reviewed on page 251 of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Decisions of courts and opinions affecting labor, 1921. Washington, 1922. 352 pp. Bulletin No. 309. Labor laws of the United States series.*

A brief review of this bulletin appears on pages 244 and 245 of this issue of the MONTHLY LABOR REVIEW.

—— —— *Women's Bureau. Preliminary report on hours and wages of women in industry in Missouri. Washington, 1922. 23 pp.*

A résumé of this report is given on pages 177 and 178 of this issue of the MONTHLY LABOR REVIEW.

—— *Department of the Interior. Bureau of Mines. Annual report for the fiscal year ended June 30, 1922. Washington, 1922. 33 pp.*

Contains a discussion of the coal strike, and an account of the varied activities of the bureau, including training in first-aid and rescue work, and studies of health hazards in the petroleum industry.

—— —— —— *Coal-dust explosion tests in the experimental mine, 1913 to 1918, inclusive. Washington, 1922. xxii, 639 pp. Illustrated. Bulletin No. 167.*

This bulletin is reviewed on pages 225 to 228 of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Coke-oven accidents in the United States during the calendar year 1921, by William W. Adams. Washington, 1922. 34 pp. Technical paper 318.*

Data from this report are given on pages 224 and 225 of this issue of the MONTHLY LABOR REVIEW.

—— —— —— *Tests of gas masks and respirators for protection from locomotive smoke in railroad tunnels with analyses of tunnel atmospheres. Washington, 1922. 27 pp. Technical paper 292.*

For a résumé of this bulletin see pages 228 and 229 of this issue of the MONTHLY LABOR REVIEW.

—— —— *Bureau of Pensions. Report for the fiscal year ended June 30, 1922. Washington, 1922. 29 pp.*

Includes report on the operation of the retirement law for Federal employees. At the close of the fiscal year there were 7,576 annuitants, as compared with 6,471 a year earlier, and a surplus in the retirement fund of $18,134,263.91 as compared with $9,672,842.03 at the close of the previous fiscal year. During the year a total of $6,392,327.11 was disbursed for annuities, refunds, and allowances. During the period covered by the report there were 614 deaths of annuitants; and 70,580 refunds amounting to $2,203,198.04. The average annual rate of annuity was $564.48; 1,475 persons received annuities ranging between $180 and $360, inclusive; 728, annuties ranging between $576.01 and $648, inclusive; and 3,202, annuities ranging between $648.01 and $720, inclusive.

UNITED STATES.—*Employees' Compensation Commission. Report, July 1, 1921, to June 30, 1922. Washington, 1922. 111 pp.*

A summary of this report is given on pages 237 to 241 of this issue of the MONTHLY LABOR REVIEW.

—— *Federal Board for Vocational Education. Proceedings of the first national conference on vocational rehabilitation of persons disabled in industry or otherwise, St. Louis, Mo., May 15, 16, 17, 1922. Washington, 1922. 138 pp.*

This report of the proceedings of the first national vocational rehabilitation conference covers work done for persons disabled in industry and in other ways. The phases of rehabilitation work dealt with in the speeches and discussions were reciprocity among the States; cooperation of State departments, of private agencies, and of industry in the work; rehabilitation of certain types of disabilities; proposed investigations by Federal and State boards, and problems for future legislation.

—— *Interstate Commerce Commission. Annual report [for year ending October 31, 1922, except as otherwise noted]. Washington, 1922. 239 pp.*

The report of the Bureau of Safety contains statistics of accidents on steam railroads in 1921.

Official—Foreign Countries.

ARGENTINA.—*Comisión Nacional de Casas Baratas. Memoria, 1921–1922. Buenos Aires, 1922. 99 pp. Illustrated.*

The report of the National Commission on Low-priced Houses for 1921 and the first half of 1922. Data from this report were used in this issue of the MONTHLY LABOR REVIEW (pp. 212 to 216).

AUSTRALIA.—[*Department of the Treasury.*] *Invalid and old-age pensions. Statement for the twelve months ended June 30, 1922. Melbourne, 1922. 10 pp.*

—— —— *Maternity allowances. Statement showing number of claims granted and rejected, expenditure, and cost of administration during the twelve months ended June 30,1922. Melbourne, 1922. 3 pp.*

The claims paid during the year numbered 138,140; those rejected, 520. The amount paid out in maternity allowances was £690,700 ($3,361,292, par), while the cost of administration was £15,441 ($75,144, par).

—— (NEW SOUTH WALES).—*Department of Labor and Industry. Report on the working of the factories and shop act, 1912, during the year 1921. Sydney, 1922. 40 pp.*

—— (QUEENSLAND).—*Department of Labor. Report for year ended June 30, 1922. Brisbane, 1922. 50 pp.*

According to the report there were on March 31, 1922, 32,820 persons employed in the registered factories and 23,104 persons employed in shops. Factory accidents numbered 275 during the year ending June 30, 1922. Two hundred and fifty-six wage awards were in operation. Comparative tables show the rates of wages payable under the various industrial awards, 1917 to 1922, both inclusive.

—— (TASMANIA).—*Government Statistician. Statistics for the year 1920–21.* [*Hobart*] *1922.* [*Various paging.*]

Includes among other data the number of workers in various industries, their wages, hours, and output.

—— *Industrial Department. Seventh annual report for 1921–22, on factories, wages boards, shops, etc. Hobart, 1922. 39 pp.*

—— (VICTORIA).—*Registrar of Friendly Societies. Report, 1921. Melbourne, 1922. 4 pp.*

BELGIUM.—*Ministère de l'Intérieur et de l'Hygiène. Annuaire statistique de la Belgique et du Congo Belge, 1915–1919. 1re partie: années 1914–1918. 2me partie: année 1919. Tome 46. Brussels, 1922. xv, 240 pp.*

This number of the statistical yearbook of Belgium and the Belgian Congo is divided into two sections, the first part dealing with the years 1914 to 1918, inclusive, and the

second with the year 1919. The usual statistics relating to the population, commerce, industry, agriculture, education, etc., are given and in addition there is a section dealing with special conditions during the period of the war.

CANADA.—*Department of Labor. Wages and hours of labor in Canada, 1921 and 1922. Ottawa, 1922. 39 pp. Wages and hours of labor report No. 4.*

Figures from this report are given on pages 150 to 153 of this issue of the MONTHLY LABOR REVIEW.

—— (ONTARIO).—*Department of Labor. The first annual report, 1920. Toronto, 1921. 57 pp.*

GERMANY (HAMBURG).—*Statistisches Landesamt. Der Wert der Gehälter und Löhne in Hamburg. Hamburg, 1922. 37 pp. 3 charts. Statistische Mitteilungen über den hamburgischen Staat, Nr. 13.*

A statistical study of the Statistical Office of the free State of Hamburg on the nominal and real value of salaries and wages in Hamburg in 1920, 1921, and 1922, as compared with those paid on July 1, 1914. The principal contents of the study are discussed in an article in the present issue of the MONTHLY LABOR REVIEW (pp. 153 to 159).

GREAT BRITAIN.—*Home Office. Factory and workshop orders. 1922 edition. London, 1922. 291 pp.*

—— *Industrial Fatigue Research Board. Two contributions to the study of accident causation. London, 1922. xi, 36 pp. Report No. 19. General series No. 7.*

A digest of this report is given on pages 230 and 231 of this issue of the MONTHLY LABOR REVIEW.

—— *Mines Department. Reports of secretary for mines and chief inspector of mines for year ending December 31, 1921. London, 1922. 181 pp.*

The total output of minerals from the mines and quarries of Great Britain for the year 1921 was 201,999,903 tons as compared with 284,601,174 tons in 1920. Of this total production of minerals coal comprised 163,251,181 tons as compared with 229,532,081 in the preceding year.

The total number of workers employed was 1,226,917, representing a decrease of 110,380 persons over the preceding year. Of the total number employed in 1921, 968,646 were underground or inside workers; 258,271 above ground or outside workers.

The average weekly number of days during 1921 on which the mines were in actual operation was 4.72 and the aggregate number of days on which coal was mined during the year was 184.18.

Fatal accidents in the mines in 1921 numbered 768 as compared with 1,130 in 1920. A decrease is also shown in the persons injured, the number being 86,888 in 1921 and 118,490 in 1920. Of the fatal accidents in 1921, 690 occurred underground; 78 above ground. In this connection the fact that owing to a suspension of work for about three months the miners were not exposed to the usual number of occupational risks, should be taken into consideration.

The report also contains among other subjects a general review of the coal-mining industry in 1921, including the stoppage from March 31 to July 4 of that year; the mining industry act, 1920, and the miners' welfare fund.

—— *Registrar of Friendly Societies. Reports for the year ending Dec. 31, 1920. Part A.—Appendix (A). Statistical and other information relating principally to friendly societies, orders and branches, workmen's compensation schemes, loan societies and railway savings banks. London, 1922. vii, 34 pp.*

—— —— *Reports for the years 1918–1920. Part B. Industrial and provident societies. London, 1922. iv, 179 pp.*

INTERNATIONAL LABOR OFFICE.—*Emigration and immigration: Legislation and treaties. Geneva, 1922. xv, 439 pp.*

The compilation, which is in three parts, is not complete, but is an attempt to present the essential points of lengthy and complex legislation and diplomatic texts.

Part I deals with legislation on emigration and contains 11 chapters. Among the subjects treated are the following: The definition of an emigrant; the right to emigrate

and the restrictions on that right; the passport; emigration funds; the protection of emigrants before departure; protective measures to be carried out by agents engaged in transport emigration and recruiting, which measures concern the obligation of such agents as to contracts, the repatriation of emigrants, the care of their money, the transportation of their luggage, etc.; the restriction on the activities of agents and the penalties for their violation of the law, the transportation of emigrants by sea and by land, the protection of emigrants abroad by their own Governments, emigrants in transit, and repatriation.

In Part II, on immigration legislation, the first chapter gives definitions of the term "immigrant." In the four remaining chapters of the section are presented provisions regarding conditions of admission, administrative bodies dealing with immigration and advantages granted immigrants, their admission and rejection and their treatment after arrival, including registration, facilities for securing employment, and protection.

In Part III the international agreements relative to emigration and immigration are analyzed, the general treaties being taken up in Chapter I and the special treaties, both bilateral and multilateral, in Chapter II.

Some of the matters covered by the special treaties are: Accident insurance; old-age and invalidity insurance; health insurance; unemployment insurance; savings; protection of workers, minors, and infirm; public health, charitable relief, legal assistance; prohibition of night work for women; prohibition of the use of white phosphorus in match manufacture; the suppression of traffic in women and children; and the conventions and recommendations of the international labor conferences.

INTERNATIONAL LABOR OFFICE.—*Statistics of unemployment in various countries, 1910 to 1922. Geneva, May, 1922. 28 pp. Studies and reports, 1922, No. 1. Unemployment series.*

Four sets of tables give some indication of the fluctuations in employment from 1910 up to March, 1922, in all countries for which official employment statistics have been regularly published. The first set gives for each country the per cent of unemployed trade-union members in all the trades covered by the statistics and in the principal trade groups. The second set gives for certain trade groups (metal industries, building trades, woodworking, textiles, and transportation) the per cent of unemployed trade-union members in certain countries. The third and fourth sets of tables show the state of unemployment in 1921 and 1922 in certain countries (Austria, France, Italy, Switzerland, Czechoslovakia, and the United States) which do not publish data as to unemployment among trade-union members, but publish unemployment statistics based on the number of applicants for work at public employment exchanges, the number of persons in receipt of unemployment benefits, the number of persons totally unemployed and on short time, or on the increase and decrease of persons employed by industrial establishments making reports.

NETHERLANDS.—*Centraal Bureau voor de Statistiek. Overzicht van den omvang en den vornaamsten inhoud der collectieve arbeidsovereenkomsten op 1 Januari 1922. The Hague, November, 1922. 49 pp. Statistiek van Nederland, No. 356.*

A bulletin of the Central Statistical Bureau of the Netherlands on the extent of collective agreements in that country at the beginning of 1922 and on the principal contents of ex sting agreements. The contents of the bulletin will be discussed in an article in a subsequent issue of the MONTHLY LABOR REVIEW.

—— (AMSTERDAM).—*Gemeente-Arbeidsbeurs. Verslag over het jaar 1921. Amsterdam, 1922. 67 pp. Verslagen van Bedrijven, Diensten en Commissiën der Gemeente Amsterdam, No. 2.*

The annual report for the year 1921 of the municipal labor exchange of Amsterdam.

——*Gemeentelijk Arbeidsbureau. Verslag over het jaar 1921. Amsterdam, 1922. 55 pp. Verslagen van Bedrijven, Diensten en Commissiën der Gemeente Amsterdam, No. 17.*

The annual report of the labor bureau of the city of Amsterdam, containing statistics and data as to number of manual workers employed by the municipality, their

occupations, wages, working conditions, etc., and also general unemployment statistics of the city of Amsterdam.

NORWAY.—*Departementet for Handel, Sjøfart, Industri og Fiskeri. Poststyrelsen. Norges postvesen. Christiania, 1922. 112 pp. Norges Offisielle Statistikk, VII, 50.*

Statistics on Norway's mail service. Refers briefly to the railroad strike of December, 1920, and the steamship strike of June, 1921, and to the State pension fund. The postal service also has three benefit funds, which are noted in this report: The Postal Relief Fund, which under certain circumstances aids widows, children, and parent of deceased employees; the Postal Benefit Fund for employees, etc., who do nots come under the State Pension Fund; and Gulbrandsen's legacy, the interest of which is divided equally among three needy persons in certain positions.

—— *Fiskeridirektoren. Norges fiskerier, 1919. Christiania, 1922. 42*, 151 pp. Norges Offisielle Statistikk, VII, 53.*

Report on the fishing industry of Norway for 1919. According to the statistics of the State Insurance Institute on accident insurance for fishermen there were 91,435 fishermen. According to the parish constables there were in all 109,764 fishermen, with fishing the sole occupation of 27,124, the main occupation of 44,564, and an extra source of profit for 38,076. Prices on cod, liver, roes, and fish heads are given for the 10-year period 1910 to 1919, and prices of herring, sprat, salmon, mackerel, lobsters, etc., are also given.

SWEDEN.—*Riksförsäkringsanstalten. [Berättelse] år 1921. Stockholm, 1922. 32 pp. Sveriges Officiella Statistik. Försäkringsväsen.*

Report of the State Insurance Institute of Sweden for the year 1921. The number of employers registered with the institute during 1921 was about 351,110. During that year 21,428 accidents to workers insured with the institute were reported. About 2,480 of these concerned employees of self-insured employers and 4,570 were among State employees.

The report also covers the operations of the 1908 and 1918 accident insurance laws for fishermen, accident insurance in military service, annuities for illegitimate children, and life insurance in connection with home-owning loans.

—— *Socialstyrelsen. Livsmedelsförbrukningen inom mindre bemedlade hushåll under krisåren 1914–1918. Stockholm, 1922. 141 pp. Sveriges Officiella Statistik. Socialstatistik.*

Results of an investigation by the Swedish Labor Bureau (*Socialstyrelsen*) into the quantity and cost of food consumed by certain classes during the years 1914 to 1918. The second part treats of the effect of high costs on the nutritive value of the foods bought. Prizes were given to families keeping household accounts, which the report states probably aided results. For the best books premiums of from 5 to 10 kronor ($1.34 to $2.68, par) were given and in addition during the last two investigations a special compensation of 5 kronor for 1917 and 8 kronor ($2.14, par) for 1918 was given for each completely kept household book.

UNION OF SOUTH AFRICA.—*Office of Census and Statistics. Statistics of wages and industrial matters and of retail and wholesale prices, rents, and cost of living (1895 to 1922). Pretoria, 1922. 124 pp. Social statistics, No. 4, 1922.*

Statistics on wages from this report are given on pages 164 and 165 of this issue of the MONTHLY LABOR REVIEW.

Unofficial.

CALIFORNIA UNIVERSITY. *Division of vocational education. Research and service center. Third annual report of the department of part-time education, Stockton, Calif., 1921–22. Berkeley, 1922. 32 pp. Part-time education series, No. 12. Division bulletin No. 10.*

FISHER, BOYD. *Mental causes of accidents. Boston, Houghton Mifflin Co., 1922. xii, 315 pp.*

This study of accident causation analyzes the different conditions or attitudes of the mind which are responsible for many accidents with a view to suggesting methods by which this particular phase of the safety problem may be met.

FISHER, IRVING. *The making of index numbers. A study of their varieties, tests, and reliability. Boston, Houghton Mifflin Co., 1922. xxxi, 526 pp.*

This volume is a study of formulas for index numbers. A formula has been developed which is designed to stand the tests both of a high degree of accuracy and speed of calculation. The book has been planned to meet the needs of different classes of readers from the specialist in mathematics to the general reader who merely wants to know something about index numbers. Directions are given for the reading of the book, so that it may be used to the greatest advantage. The appendixes include a discussion of the influence of weighting, a list of formulas for index numbers, numerical data and examples, and a selected bibliography.

IOWA STATE COLLEGE. *Engineering extension department. Outlines of instruction in the needle-working trade. Ames [1922]. 82 pp.*

The material in this study is, as its name indicates, designed for use in public part-time and factory vestibule schools where girls are planning to enter or have already entered the needle-working trade.

MONTGOMERY, BO-GABRIEL DE. *British and continental labor policy. London, Kegan Paul, Trench, Trubner & Co. (Ltd.), 1922. xxvii, 575 pp.*

A discussion of the political labor movement and labor legislation in Great Britain, France, and the Scandinavian countries, 1900 to 1922. Chapters 1 to 19 deal with the general development of the political labor movement in each of the countries included in the survey. Chapter 19 summarizes the important features and characteristics of the political labor movements in the five countries concerned, while in chapters 20 to 26 special issues of labor policy are considered. Among these are: The legal position of trade-unions; conciliation and arbitration; minimum wage; legal regulation of the hours of labor; unemployment; joint industrial organization; and nationalization of industries. In addition, five appendixes outline the work and organization of the ministry of labor of each country included in the study.

NATIONAL SAFETY COUNCIL. *Proceedings, eleventh annual safety congress, Detroit, August 28–September 1, 1922. [Chicago] 1922. 1074 pp.*

This report of the proceedings of the annual safety congress is abridged to about one-half the complete stenographic report. The prepared papers are reproduced in full or slightly condensed but the discussions are much condensed. An account of the congress was given in the MONTHLY LABOR REVIEW for October, 1922, pp. 159–161.

WATKINS, GORDON S. *An introduction to the study of labor problems. New York, Thomas Y. Crowell Co., 1922. xv, 664 pp.*

This study of the facts and conditions which influence industrial relations is presented from the standpoint both of past experience and present conditions. It consists of a historical summary of the nature and development of the problems in England and the United States, an analysis of the problems in regard to living standards, wages and the wage system, hours, child and woman labor, unemployment, labor turnover, immigration, and industrial unrest, and the last section deals with the agencies and methods of adjustment including labor and employer organizations and associations, shop committees, personnel administration, profit-sharing systems, cooperation, and industrial education and training.