UNITED STATES DEPARTMENT OF LABOR
BULLETIN OF THE WOMEN'S BUREAU, No. 73

VARIATIONS IN EMPLOYMENT TRENDS OF WOMEN AND MEN

[PUBLIC—No. 259—66TH CONGRESS]

[H. R. 13229]

An Act To establish in the Department of Labor a bureau to be known as the Women's Bureau

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be established in the Department of Labor a bureau to be known as the Women's Bureau.

SEC. 2. That the said bureau shall be in charge of a director, a woman, to be appointed by the President, by and with the advice and consent of the Senate, who shall receive an annual compensation of $5,000. It shall be the duty of said bureau to formulate standards and policies which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency, and advance their opportunities for profitable employment. The said bureau shall have authority to investigate and report to the said department upon all matters pertaining to the welfare of women in industry. The director of said bureau may from time to time publish the results of these investigations in such a manner and to such extent as the Secretary of Labor may prescribe.

SEC. 3. That there shall be in said bureau an assistant director, to be appointed by the Secretary of Labor, who shall receive an annual compensation of $3,500 and shall perform such duties as shall be prescribed by the director and approved by the Secretary of Labor.

SEC. 4. That there is hereby authorized to be employed by said bureau a chief clerk and such special agents, assistants, clerks, and other employees at such rates of compensation and in such numbers as Congress may from time to time provide by appropriations.

SEC. 5. That the Secretary of Labor is hereby directed to furnish sufficient quarters, office furniture, and equipment for the work of this bureau.

SEC. 6. That this act shall take effect and be in force from and after its passage.

Approved, June 5, 1920.

UNITED STATES DEPARTMENT OF LABOR
JAMES J. DAVIS, SECRETARY
WOMEN'S BUREAU
MARY ANDERSON, Director

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UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, July 1, 1929.

SIR: I am submitting herewith a report on the variations in employment trends of women and of men in the State of Ohio over an 11-year period. The study was made at the request of the committee on governmental labor statistics appointed by the American Statistical Association. The figures on which the study is based were made available to the bureau by the division of labor statistics of the Department of Industrial Relations of Ohio. Acknowledgment is made of the courtesy of the Ohio officials in assisting in the solution of the problems that arose and in answering the many inquiries.

Miss Mary van Kleeck and Mr. Ralph G. Hurlin, respectively chairman and secretary of the committee on governmental labor statistics, have been consulted freely as to procedure and method and have given generously of their time and judgment. Other members of the committee, independent economists, Ohio employers, and the commissioner and certain members of the staff of the United States Bureau of Labor Statistics also have lent cooperation. To all these persons my grateful thanks are extended.

The analysis of the charts has been made by Mary N. Winslow, in charge of special studies in this bureau, and the reports on the iron and steel and textile industries, appearing as an appendix, were prepared by Frances V. Speek and Peter A. Speek.

Respectfully submitted.

MARY ANDERSON, *Director.*

Hon. JAMES J. DAVIS,
Secretary of Labor.

VARIATIONS IN EMPLOYMENT TRENDS OF WOMEN AND MEN

PART I. RECORDS STUDIED AND METHODS OF PRESENTATION

INTRODUCTION

The present study was suggested at a meeting in New York City, on April 13 and 14, 1923, of the committee on governmental labor statistics appointed by the American Statistical Association. This committee is concerned with improvements in methods of collecting and presenting employment statistics, and its membership consists of representatives of State and Federal bureaus and other organizations actually collecting employment data. One of the problems that have presented themselves to this committee has been whether or not employment statistics should be collected and presented separately for men and women.

For many years it has been the custom of the United States Bureau of the Census in its reports on employment in manufacturing industries to present figures showing the number of male and of female wage earners. This practice was discontinued in the report for 1921 and has not been resumed. In some of the States where regular employment statistics are gathered it is customary to give the results only for the total of both sexes. In a few States the figures are given separately for males and females.

Naturally, in collecting and presenting employment statistics any simplification of the basic facts required is very much to be desired, provided that such simplification does not reduce the usefulness and significance of the facts. It is, therefore, highly desirable that before finally adopting any simplified method of presenting statistics on employment there should be careful examination of the possibility of the loss, through such simplification, of fundamentally important facts and the obscuring of others.

Women form a comparatively small minority of the persons employed in wage-earning pursuits. It is inevitable, therefore, that in any general statistical presentation of employment figures the trends indicated would be chiefly influenced by the trends of men's employment.

But although women are in the minority among wage earners, the present developments of the economic and industrial life of the country are bringing about significant changes in their status. If public policies are to be guided wisely toward the stimulation of employment and the reduction of unemployment for all wage earners it will be necessary to know just how the developments of women's employment differ from those of men's. If there is no great difference in trends for the two sexes, figures giving employment statistics for the two groups combined will be adequate and will be simpler of collection

and presentation. But, on the other hand, it may be that women's employment is subject to different influences and reacts differently from men's. If this is so, it will be essential that employment trends for each sex be known.

In view of the importance of this problem in relation to the employment of women and the lack of any adequate data to illuminate it, the committee on governmental labor statistics asked the Women's Bureau to consider the possibility of a statistical study of State records of employment in Illinois and Ohio. The committee unanimously agreed that such a study would throw a good deal of light on fluctuations in employment and would show whether it should be urged that employment figures be collected separately for men and women.

SOURCE AND TYPE OF BASIC DATA

In planning the study it was thought originally that Massachusetts or Illinois would be found to have the most complete employment statistics by sex over a period of years. Investigation showed, however, that Illinois, though it secures data by sex, tabulates and publishes only the total figures, and that the continuity of the Massachusetts series was broken in 1921 when the State followed the lead of the Federal census and asked for the total number of employees only, an unfortunate occurrence that lessened the value of the data, as 1921 figures show what happened to the two sexes in severe industrial depression. Furthermore, for neither of these States are figures available on the numbers of clerks and sales people.

A much more satisfactory and significant field for study was indicated in the figures available in the State of Ohio. Since 1914 this State has collected monthly figures on employment, by sex, for wage earners, clerical workers, and sales people not traveling. For the years 1916 to 1922 these figures have not been published; for 1922 they had not, at the time of inquiry, even been tabulated. But it was apparent that here was the most promising field, since material was available on the sex distribution of clerks and of sales people, as well as wage earners, for the years 1914 to 1924. Accordingly, Ohio was selected as the field for study.

Throughout the course of this study the Women's Bureau has been fortunate in receiving the fullest cooperation from the Ohio Division of Labor Statistics. That division has not only furnished the basic data necessary for the study but has been of great help in the analysis and interpretation of the figures after they were compiled.

The Ohio law creating the bureau of labor statistics was passed May 5, 1877, and the first commission was appointed two days later. A report for the year ended June 30, 1877, was issued, though of the 1,021 blanks sent to employers only 405 were returned. Most of these reported total number of employees only, and gave but one figure for the year, as did the reports for 1878 to 1885. For 1886 to 1891, practically without a break, sex and industry were reported and tabulated; in 1892 and 1893, special reports on women were made; and since 1894 the numbers of men and women in the various occupations have been presented separately. At the time of the present study, then, the employers of the State had for 30 years been reporting their employees by sex, an experience that augurs well for the authenticity of the figures.

Separation by sex, but only the year's average, was the form of reports until 1914, when the present system was installed, under which a statement made in the month of January gives the number of men and of women employed on the 15th (or nearest representative day) of each month of the calendar year just ended, wage earners, clerical workers, and sales persons not traveling being reported separately. It is this valuable series of monthly data, culminating in reports for 30,439 establishments and 1,055,720 employees in 1924, that constitutes the basis of the present report.

The schedule sent to employers (Form 1124) has remained practically unchanged throughout the 11-year period. The form and instructions are reproduced in an appendix to this report.

This form, with a letter, is sent to employers on January 1 of each year. Replies must be filed on or before the last day of January. It is explained in the letter that the report asked for is distinct from the semiannual pay-roll report furnished the auditing department of the industrial commission in connection with workmen's compensation insurance. It is stated further that if the employer's business was disposed of during the year a report covering the period before such transaction must be made, and the present status of the business, with name and address of present owner, must be reported. It is not stated that replies must be certified before a notary.

A number of form letters are used for the subsequent correspondence in regard to the reports submitted—questions unanswered or misunderstood, inconsistencies, only part of the year covered, and so on.

Since 1920, blanks have been sent to every employer coming under the compensation law, which law was compulsory, in the years 1921 to 1923, for all employers having five or more employees, compulsory in 1924 for all employers having three or more employees, and in both periods optional with employers having fewer employees. For the years 1914 to 1920 the blanks were sent to every employer whose name could be secured, so that the change in 1921 to the list of those having five or more employees resulted in a reduction in the list of firms covered.

QUALIFICATIONS OF DATA

Accuracy.

Every effort is made by the Ohio Division of Labor Statistics to insure that the figures sent in are accurate. The schedules are edited, checked with those received in earlier years, and compared with the reports on total pay roll submitted to the workmen's compensation authorities. Incomplete or inaccurate schedules are returned to the employers for correction.

Form A–21 sent out by the workmen's compensation authorities calls for the total wages paid for a year, and Form 1124 sent out by the division of labor statistics calls for the weekly rate. "In this way" to quote the division of labor statistics, "we can check the two reports, and if there is a discrepancy or any cause whatsoever for questioning the accuracy, we immediately return the report and ask that same be corrected, and in some cases to be verified under oath. For the year 1923, we returned 3,031 reports for correction. * * * We endeavor to impress upon employers that we do not wish any figures other than actual figures, taken from their time book or pay-roll reports, but * * * we can not help the creeping in of some errors

because we receive reports from thousands of employers in the State of Ohio.

"We feel assured that these reports are as near correct as they can be, under existing conditions. I might add that it is the general opinion of employers in the State of Ohio, that our report and Form A–21 of the auditing department are compared, and they therefore attempt to give us accurate figures because the auditing department has traveling auditors to make a check on every pay roll in the State."

Completeness.

In the 11 years the data collected have been of three grades of completeness: (1) All persons known to be employers—1914 to 1920; (2) all persons known to have five or more employees and some electing to be insured though having fewer than five employees—1921 to 1923; and (3) all persons known to have three or more employees and again some electing to be insured—1924.

The State reports are considered to cover everything but interstate railroads and mines and quarries. Actually, however, considerable numbers of employers are not included. For example, only a few farms, relatively speaking, are reported, because commonly they have not as many as three or five employees, as the case may be. The same qualification applies to the number of establishments reported in other classifications where small units are customary. The omissions, however, though probably affecting to a considerable degree the accuracy of the number of establishments reported in such classifications, are not equally serious when the numbers of employees are considered; for the total number of employees in these small establishments, employing less than three or five persons, would form a very small proportion of the employees enumerated in the reported establishments. Their omission, therefore, probably has had very little effect on the validity of the figures as representing total employment in the State.

This is illustrated by comparing the figures reported by the State with those reported by the Federal census for the same periods. In a comparison with the United States census of manufactures of the numbers of wage earners in manufacturing in the Ohio figures, the differences are found to be small. For such comparison there were excluded from the census totals the figures for cars and general construction and repairs of electric and steam railroad shops, since these were not tabulated by the State, and there were excluded from the State totals the figures for custom tailoring and tobacco rehandling, not taken by the census. Thus made comparable, the Federal figures exceed the State figures for 1919 by only 2.7 per cent, for 1921 by only 2.1 per cent, and for 1923 by only 1.6 per cent. In other words, if the Federal census may be considered as 100 per cent, the State reports covered, in 1919, 97.3 per cent; in 1921, 97.9 per cent; and in 1923, 98.4 per cent. Federal and State governments alike call for the number of wage earners on the 15th of the month or the nearest representative day. Moreover, when the State system of reporting was put on a new basis in 1914, and reports by the month were called for, the manufacturing establishments were classified as closely as local conditions would permit like the 1909 United States census of manufactures.

Greater differences exist between Federal and State reports of numbers of establishments. Though the invariable rule of the State

is to report as two or more establishments any firm whose operations fall into two or more classes,[1] a practice resorted to by the Federal census only occasionally or in some cases, the inclusion by the latter in 1919 of all firms whose annual product was worth as much as $500 operated to make the Federal number of establishments very much greater than that of the State, the Federal figures exceeding the State figures by 81.9 per cent. In 1921 and in 1923 the Federal census excluded all firms whose value of product was less than $5,000, but the numbers of establishments exceeded by 33.5 per cent and 28.9 per cent, respectively, the numbers reported by the Ohio authorities.

That these discrepancies in numbers of establishments make so slight a difference in numbers of employees is due to the fact that such small numbers of wage earners are in the factories with an output of less than $5,000 value.

In spite of the indications of harmony between State and Federal figures there are a few gross examples of dissimilarity. Perhaps the most striking is that appearing at the close of 1919 in the rubber-goods industry, where the Federal figure, which from January to October had practically equaled the State figure, unaccountably falls below it in November and December by 17.4 and 20.1 per cent, respectively. Since tires and tubes formed 95 or more per cent of the rubber industry, through the courtesy of the largest Akron employers the State figures were verified, and from inquiry of the Bureau of the Census it was learned that the peculiarity of the November and December figures had been noted but could not be explained.

Assignment of the electric-lamp industry to different groups by State and Federal statisticians probably accounts for the discrepancies between the two authorities apparent in the groups "electrical machinery, apparatus, and supplies" and "gas and electric fixtures and lamps and reflectors." The Federal figure very much exceeds the State figure in the first group mentioned and falls far short of it in the case of the second group. The discrepancy is much diminished, however, when the two groups are thrown into one.

The most exaggerated case of Federal and State figures disagreeing in an unimportant industry, where the Bureau of the Census reports more employees in the manufacture of screws, by several hundred per cent, than does the State, appears to be due to the census having included, with plants producing machine screws, plants producing special parts, most of which are threaded, made on screw machines. In fact, by 1923 the group is so described.

The table next presented shows in detail a comparison of the State and Federal figures for 1923.

[1] For example, a tobacco manufacturer making his own boxes is required to submit two reports, one covering the tobacco manufacture and one the manufacture of boxes, and each is considered as the report of an establishment. This is the rule whether the various operations are in separate buildings or under one roof.

Census and State figures compared—1923

Industry (terminology is that of State)	Establishments		Total employees (average for year)			
	United States census	State	United States census	State	Number and per cent by which census figure exceeds (+) or is less than (−) State figure	
					Number	Per cent
All manufactures [1]	11,013	8,543	661,293	650,737	+10,556	+1.6
Chemicals and allied products [2]	524	382	23,581	18,903	+4,678	+24.7
Food and kindred products	2,374	1,278	31,637	29,335	+2,302	+7.8
Bakery products [3]	1,115	377	10,995	7,823	+3,172	+40.5
Canning and preserving [4]	100	82	2,700	1,700	+1,000	+58.8
Confectionery	121	117	3,560	4,068	−508	−12.5
Iron and steel and their products [5]	1,812	1,647	249,372	238,036	+11,336	+4.8
Bolts, nuts, washers, and rivets [6]	23	27	4,849	5,518	−669	−12.1
Screws, machine and wood [7]	28	6	3,485	790	+2,695	+341.1
Leather and leather products	173	145	17,472	16,266	+1,206	+7.4
Boots, shoes, cut stock and findings [8]	69	56	14,314	13,362	+952	+7.1
Liquors and beverages [9]	206	124	1,925	2,195	−270	−12.3
Lumber and its products [10]	828	1,007	25,270	26,843	−1,573	−5.9
Metals and metal products other than iron and steel [11]	497	456	20,987	34,148	−13,161	−38.5
Gas and electric fixtures, lamps and reflectors [12]	41	51	2,448	4,944	−2,496	−50.5
Paper and printing	1,481	913	38,003	34,766	+3,237	+9.3
Boxes, fancy and paper; drinking cups [13]	66	70	3,821	4,111	−290	−7.1
Printing and publishing [14]	1,186	668	17,474	17,842	−368	−2.1
Rubber products	103	119	46,758	46,864	−106	−.2
Tires and tubes [15]	53	75	42,476	42,885	−409	−1.0
Stone, clay, and glass products [16]	756	674	48,302	43,052	+5,250	+12.2
Glass	34	43	9,539	9,536	+3	(17)
Pottery, terra-cotta and fire-clay products; brick and tile, clay [18]	377	348	30,902	27,890	+3,012	+10.8
Textiles [19]	646	592	40,859	42,581	−1,722	−4.0
Men's clothing, including shirts and coat pads [20]	212	189	15,434	13,269	+2,165	+16.3
Women's clothing, including corsets [21]	116	112	5,063	5,883	−820	−13.9
Gloves, cloth [22]	30	30	2,811	2,474	+337	+13.6
Hosiery and knit goods [23]	39	35	4,617	4,937	−320	−6.5
Tobacco—Cigars and cigarettes; chewing and smoking tobacco and snuff [24]	238	142	11,838	11,325	+513	+4.5
Vehicles [25]	348	331	58,747	64,520	−5,773	−8.9
Automobiles and parts [26]	254	198	46,750	51,123	−4,373	−8.6
Miscellaneous—Electrical machinery, apparatus, and supplies [27]	195	152	26,300	16,206	+10,094	+62.3

[1] Census, total manufactures minus operations of railroad companies, not covered by State reports. State omits custom tailoring (under textiles) and tobacco rehandling, not covered by Census reports.
[2] Census, chemicals and allied products minus liquors, a State group, and ammunition, coke, fireworks, and mucilage and paste, included by the State in miscellaneous.
[3] Census, bread and other bakery products.
[4] Census excludes one fish cannery, number of employees not reported.
[5] Census, from machinery, iron and steel and their products not including machinery, metals and metal products other than iron and steel, and transportation equipment, air, land, and water.
[6] Census, under iron and steel, which see.
[7] Census, screws, machine, and screws, wood.
[8] Census, boots and shoes other than rubber, boot and shoe cut stock and boot and shoe findings, not made in boot and shoe factories.
[9] Census, from chemicals and allied products and food and kindred products.
[10] Census, lumber and allied products minus certain things (metal furniture, for example) thrown elsewhere by State.
[11] Census, from metals and metal products other than iron and steel, iron and steel and their products not including machinery, and lumber and allied products (metal furniture).
[12] Census, gas and electric fixtures not including lamps and reflectors and lamps and reflectors not including electric lamps.
[13] Census, boxes, paper and other not elsewhere classified. Drinking cups not obtainable.
[14] Census, printing and publishing (three classes) and bookbinding and blank-book making.
[15] Census, rubber tires and inner tubes.
[16] Census, same and sand and emery cloth from miscellaneous.
[17] Less than 0.05 per cent.
[18] Census, pottery including porcelain ware and clay products (other than pottery) and nonclay refractories. Brick and tile, clay, combined with the pottery group for the State because not separable from this group in the census.
[19] Census, textiles and their products and mattresses and artificial flowers and feathers, from miscellaneous. State omits custom tailoring, not covered by census report.
[20] Census, clothing, men's (regular factories and contract shops) and shirts.
[21] Census, clothing, women's (regular factories and contract shops) and corsets.
[22] Census, gloves and mittens, cloth, not made in textile mills.
[23] Census, knit goods.
[24] Census does not collect data for tobacco rehandling.
[25] Census, transportation equipment, air, land, and water, minus locomotives not made in railroad repair shops (included by the State in iron and steel). See also footnote 1.
[26] Census, motor vehicles and motor-vehicle bodies and parts.
[27] Census, same minus locomotives.

A considerable discrepancy between State and Federal figures appears in the case of certain industries, some of which can be accounted for and others of which can not. The somewhat compensating differences in the two groups "electrical machinery, apparatus, and supplies" and "gas and electric fixtures, lamps and reflectors"—respectively plus 62.3 per cent and minus 50.5 per cent—may be due in part to a different classification of electric lamps, as suggested. When the two groups are thrown together the per cent by which the Federal census exceeds the State is reduced to 36.

In some industries employing large numbers the disagreement among the various authorities is slight or unimportant. For example, the State reports 37 establishments, with almost 24,000 employees, as making munitions in 1918, and for the same year the Directory of Ohio Manufacturers [2] reported 19 establishments, with about 19,000 employees, so engaged. In 1919, according to the State figures, the munitions plants had dwindled to 8, with about 2,400 employees, and the Federal census found 3 establishments making ordnance and accessories and 3 making ammunition, throwing these in the group "not elsewhere specified," with number of employees not reported.

To test the general accuracy of the Ohio figures and the validity of the trends of employment represented by them, the Women's Bureau has compiled the figures on employment given by the Federal census of manufactures for 1914, 1919, 1921, and 1923, subject to the necessary reclassification, has computed index numbers of employment based on the average for 1914, and has plotted the resulting curve on the charts showing curves for the employment figures given by the State authorities. The similarity of the trends indicated by the two sets of figures is very marked. Occasionally there are divergences, but these are probably due more to a difference in classification than to inaccuracy or inadequacy in the State figures.

In making this comparison every effort was made to insure similarity of classification, but in some cases certain differences were unavoidable.

The State classification of wage earners in 1923 is presented in Appendix B. This 1923 classification was used as the base to which the State classifications of earlier years and the Federal census figures for 1914, 1919, 1921, and 1923 were made to conform. For example, in 1923 the Federal census tabulated in the machinery group such things as calculating machines, scales and balances, sewing machines, etc., formerly classed in iron and steel. Through the courtesy of the Bureau of the Census, which supplied detailed and unpublished figures, it was possible to lift these from the machinery group and restore them to iron and steel, and this was done in every instance.

Important differences between State and Federal classifications, existing in 1923, are shown in the list following.

[2] Ohio Industrial Commission. Department of investigation and statistics. Directory of Ohio Manufacturers, 1918. Report No. 35.

Industry	Census group	State group
Agricultural implements	Machinery	Miscellaneous.
Ammunition	Chemicals	Do.
Bells	Metals other than iron and steel.	Iron and steel.
Belting and hose, woven and rubber.	Textiles; rubber	Miscellaneous.
Beverages	Food	Liquors.
Calculating machines, etc	Machinery	Iron and steel.
Coke	Chemicals	Miscellaneous.
Electrical machinery, etc	Machinery	Do.
Emery wheels and other abrasives, including sand and emery cloth.	Stone, clay, and glass; miscellaneous.	Stone, clay, and glass.
Firearms	Iron and steel	Miscellaneous.
Fire extinguishers, chemical	Metals other than iron and steel.	Do.
Fireworks	Chemicals	Do.
Foundry and machine-shop products.	Machinery; metals; iron and steel.	Iron and steel.
Galvanizing	Iron and steel	Metals.
House-furnishing goods, miscellaneous.	Textiles	Miscellaneous.
Ice, manufactured	Food	Do.
Liquors	Chemicals	Liquors.
Locomotives not made by railroad companies.	Transportation equipment; machinery.	Iron and steel.
Malt	Food	Liquors.
Mattresses, pillows, and cotton felts.	Miscellaneous; textiles	Textiles.
Metal furniture	Lumber	Metals.
Millinery and lace goods, including artificial flowers and feathers.	Textiles; miscellaneous	Textiles.
Mucilage and paste	Chemicals	Miscellaneous.
Munitions	Iron and steel; chemicals	Do.
Musical instruments	Musical instruments	Do.
Pens, gold	Metals	Do.
Pumps and windmills	Machinery	Iron and steel.
Scales and balances	do	Do.
Sewing machines, cases, and attachments.	do	Do.
Typewriters and parts	do	Do.
Vehicles (*see also* Locomotives)	Transportation equipment	Vehicles.
Washing machines and clothes wringers.	Machinery	Miscellaneous.

With such differences in classification the difficulties of compiling comparable figures for the two groups were enormous.

To make the Federal figures comparable with the State figures on the basis of the 1923 classification it was necessary to reclassify many census industries. Examples of this are next presented.

For all manufactures: Cars and general shop construction and repairs, electric and steam railroad shops, were omitted from the census figures.
For iron and steel:
Calculating machines, scales and balances, typewriters, sewing machines, gas or electric locomotives, pumps, and foundry and machine-shop products were taken from machinery.
Bells were taken from metals.
Steam locomotives not made in railroad shops were taken from transportation equipment.
For liquors and beverages:
Malt and beverages were taken from food.
Liquors were taken from chemicals.
For metals:
Galvanizing was taken from iron and steel.
Metal furniture was taken from lumber.
For stone, clay, and glass: Sand and emery cloth was taken from miscellaneous.
Vehicles were taken from transportation equipment.
Cars and general shop construction and repairs, electric and steam railroad shops, were omitted from census total.
For textiles: Mattresses and artificial flowers and feathers were taken from miscellaneous.
For miscellaneous:
Agricultural implements, electrical machinery, etc., and washing machines were taken from machinery.
Coke, fireworks, and mucilage and paste were taken from chemicals.
Ammunition, munitions, and firearms were taken from chemicals and iron and steel.
Belting and hose, woven and rubber, were taken from textiles and rubber.
House-furnishing goods, miscellaneous, were taken from textiles.
Ice, manufactured, was taken from food.
Fire extinguishers, chemical, were taken from metals.
Pianos, organs, etc., and other musical instruments were taken from musical instruments.

With the classifications made as nearly identical as is possible the indications of trend of employment in Ohio resulting from the two sets of figures are nearly enough alike to substantiate the fluctuations shown by the more detailed and continuous State figures.

Continuity.

In discussing trends of employment over a period of years the most important factor in the statistical foundation must be the continuity of the samples taken for the period under discussion. It is in this connection that appear the most serious qualifications of the material studied. For the establishments reported by the Ohio Division of Labor Statistics are not the same throughout the 11 years, nor is the classification of the establishments always alike, nor is the scope of the figures identical. It would seem at first glance that these qualifications would so limit the validity of the trends represented as to make them of little significance. Consideration of the extent to which these various qualifications can affect the figures reported, however, shows that they are not so serious as they at first appear.

Taking first the changes in the number of establishments reporting, it is plain from the comparison just given between the State and the Federal census figures that on the whole the State figures represent with great accuracy the volume of employment, although the actual number of establishments in the State is not so accurately reported. In a study of employment trends it is the volume of employment that is the important aspect, and therefore a fluctuating number of establishments reporting may give a more accurate picture of the situation than where reports from only identical establishments are considered.

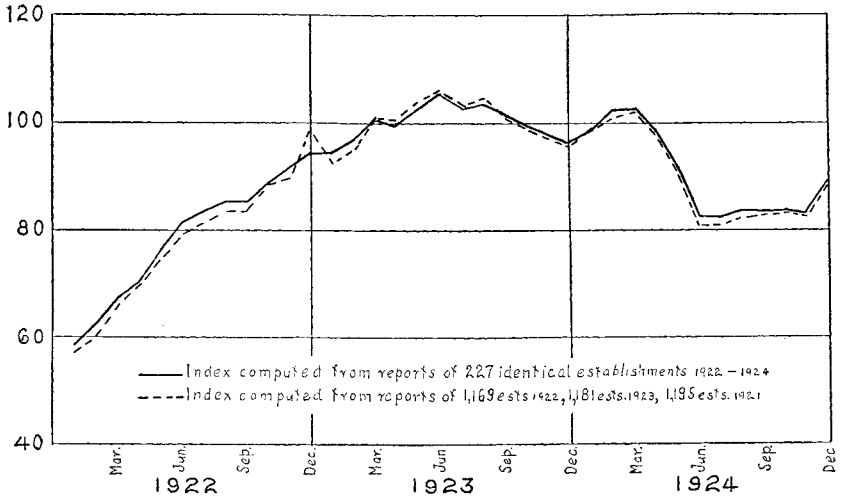
64130°—30——2

The figures have been carefully studied for the effect of changes in the establishments reported and in only occasional instances have these changes appeared to affect the validity of the trends indicated. The 1915 figures in the telegraph and telephone industry afford an interesting example of the importance of the continuity of the sample as a basis for employment curves. It will be noted that the numbers of male employees reported for January, June, and December exceeded greatly the numbers reported for other months. This appears to be due to the fact that at least one large company did not begin until 1916 to report employment for each month and in 1915 reported only for January, June, and December.

There was a decided drop between 1914 and 1916 in the Ohio figures for screws, machine and wood, in the numbers of establishments and employees. A sufficient number of firms did not report for 1915, therefore there are no figures for that year. But in 1914

INDEX OF EMPLOYMENT OF WAGE EARNERS, IRON AND STEEL INDUSTRY IN OHIO

[Average month, 1923, equals 100]



there were 8 establishments, employing 1,740 persons, and by 1916 there were only 3 firms, employing 611 persons. This may have been due to a change in classification between the years reported.

The apparent decrease in glass probably was due to the inclusion of extra establishments in 1918. Since no figures for 1916 and 1917 were available and the establishments increased from 23 in 1915 to 64 in 1918, the curve is not representative, the increase probably being due to a change in classification.

Such examples give emphasis to the need for careful examination of all the figures before reaching conclusions as to trends of employment, but they are not sufficiently numerous nor obscure to seriously qualify the figures presented. This is illustrated clearly in the foregoing chart, which shows the great similarity between the trends of employment for the years 1922, 1923, and 1924 in the iron and steel industry, as shown by weighted index numbers for three main branches of this industry as compiled and plotted by R. J. Watkins

in his study of employment trends [3] in 227 identical establishments and similar index numbers compiled from the varying number of establishments reporting the figures presented in the present study. It is plain that the employment trends were very much the same in the 227 identical establishments and in the 1,150 to 1,200 establishments during the same years.

A more serious qualification of the figures presented is the changes that have been made in their classification at different times during the 11-year period under discussion.

In 1923 the State's rule in tabulating wage earners was that every industry should appear for which three or more establishments reported and 100 or more wage earners were represented, smaller groups going into the residual class of n. o. c. (not otherwise classified) at the end of the table. In tabulating clerical workers, three or more establishments must report and 50 or more bookkeepers, stenographers, and office clerks be represented for an industry to be listed under its own title, and a similar requirement was the rule in tabulating sales people.

In the earlier printed reports—those of 1914 and 1915—the requirement had been more strict. At least 200 employees were to be represented in the case of wage earners and at least 100 in the case of clerical workers and of sales people for the industry to be reported under its own name.

The not-otherwise-classified group also contains the establishments not falling into any special division of the code.

In the 11-year period for which figures are presented, 30 industries for which provision is made in the State classification of wage earners in 1923 are never reported separately but are included, unless they had gone out of business, in the n. o. c. group. The list follows:

Wage earners in the manufacture of—
- Chemicals: Bluing; bone, carbon and lamp black.
- Food: Glucose and starch.
- Iron and steel: Horseshoes, not made in steel works or rolling mills; locomotives, not made by railroad companies;[4] typewriters and parts.
- Liquors: Malt.
- Lumber: Billiard tables and materials.
- Metals: Babbitt metal and solder; gold and silver, leaf and foil; needles, pins, hooks and eyes.
- Paper: Type founding and printing materials; wall paper.
- Rubber: Garments.
- Stone, clay, etc.: Burial vaults, concrete; statuary and art goods.
- Textiles: Upholstery materials; waste; wool pulling, including scouring.
- Vehicles: Wheelbarrows.
- Miscellaneous: Artists' materials; engravers' materials; firearms and ammunition; fuel, manufactured; house-furnishings goods, miscellaneous; jewelry and instrument cases; lapidary work; mucilage and paste; and paving materials.

Wage earners in service—Shoe repair.

Perhaps the most serious aspect of the omission of figures for the years 1916 and 1917 for certain of the subclassifications is the fact that when an industry was classed in one group in 1915 and in another group in 1918 there is no telling how it was classed in 1916 and 1917, and the Ohio authorities are not able to supply this information.

[3] Watkins, Ralph J. Ohio Employment Studies. Ohio State University Studies, Bureau of Business Research Monographs, No. 7. 1927. pp. 23-34.

[4] The Directory of Ohio Manufacturers, 1918, reports a firm with 2,000 employees as making locomotives.

Thus it is not possible to make the statement that mattresses, for example, were transferred from miscellaneous to textiles in such and such a year. It can only be said that in 1914 and 1915 mattresses and spring beds were in the miscellaneous group and in 1918 to 1924 mattresses, pillows, and cotton felts were in the textile group.

After editing, classifying, and tabulating, the original schedules are kept by the State office for not more than a year. A card file of employers is maintained, but when a firm has reported for six years and the card is full the card is destroyed. Furthermore, even the work sheets of the reports prior to 1921 were accidentally destroyed by fire, in October, 1922, precluding any further reference to settle questions of classification.

Although these changes in classification that have occurred during the period under discussion have probably altered somewhat the general trends of employment as indicated by the charts and curves for some of the smaller classifications, they do not, of course, influence greatly the trends represented in the larger classifications. These are so inclusive as to have been practically unchanged during the 11 years, or, if they have been changed, the alterations have affected such proportionately small numbers that they would be reflected to only a very small degree.

From the viewpoint of the present study the changes in classification can not be considered to affect materially the significance of the figures. For the purpose of this study is to compare the trends of men and of women and the extent to which they are affected in the same way by certain economic situations. The minor changes in classification that have been made from 1914 to 1924 probably have had very little effect in bringing about a difference or greater similarity of trend for the two sexes. It is unlikely that except in the very small and unimportant classifications such changes can have altered the relative importance of either sex in the classification.

Of course, the smaller the classification the greater the possibility of distortion of the curves showing trends of employment accompanying any change in the classification or inclusiveness of the figures. For this reason, therefore, it is in the larger classifications only that the fluctuations and comparisons of trends can be considered uninfluenced by the changes in statistical method that have been made during the 11 years.

STATISTICAL METHOD EMPLOYED

Source and preparation of the basic figures.

The figures furnished by the State comprise the number of employees—total, male, and female—for each month of the year, the period covered being 1914 to 1924 for the main industrial groups and most of the subgroups, and 1918 to 1924 for the remaining subgroups.

The first plan was to confine the study to the years 1918 to 1923 and only those figures were supplied for the subgroups. Later, when it was decided that figures over a longer period would be more significant, data for 1914 and 1915 were copied from the published reports. No such record was available for 1916 and 1917; accordingly, these years are missing for a considerable number of the subgroups.

Though the figures for 1922 had never been tabulated by the State, they seemed essential for the continuity of the figures; so at the request

of the Women's Bureau, and at the bureau's expense, the 24,124 reports received by the State for that year were tabulated in the Ohio office in the usual way and the tables were sent to Washington. At the time this was done it was believed by the Women's Bureau that reports on clerical workers were important only for those in offices and reports on sales people only for those in stores. Accordingly, these subgroups were tabulated and the totals for sales and clerical workers were not secured. The grand total of all employees, therefore, is not available for 1922.

From the 12 monthly figures the Women's Bureau has computed the average number of employees for the year. It also has computed, by dividing the month of highest employment into the month of lowest employment, the per cent that the minimum employment is of the maximum—an important figure showing the variability of employment within the year.

Figures and charts are presented in this report for all the main classifications except construction and fisheries. These two groups employ so few women (well under one-half of 1 per cent in 1923) as to be unimportant in this study. They are, of course, included in the grand totals for all wage earners and all employees.

Not all the subclassifications of the figures have been presented separately in table and chart form. Many of these smaller classifications contained either numerically or proportionately unimportant groups of women and it was felt that analysis of the difference of trends between the sexes in such subclassifications would add little of real value to the present study. Selections for presentation and analysis necessarily were limited by the time and funds available for the study and attempt was made to limit the selections to those subclassifications that might represent important tendencies in relation to fluctuations especially of women's employment. The list following shows the classifications for which figures and curves are presented in this study.

CLASSIFICATION FOR WHICH FIGURES AND CURVES ARE PRESENTED

All employees in all industries.
- Wage earners in—
  - All industries.
    - Agriculture.
    - All manufactures.
      - Chemicals and allied products.
      - Food and kindred products.
        - Bakery products.
        - Canning and preserving.
        - Confectionery.
      - Iron and steel and their products.
        - Bolts, nuts, washers, and rivets.
        - Screws, machine and wood.
      - Leather and leather products.
        - Boots, shoes, cut stock and findings.
      - Liquors and beverages.
      - Lumber and its products.
      - Metals and metal products other than iron and steel.
        - Gas and electric fixtures and lamps and reflectors.
      - Paper and printing.
        - Boxes (fancy and paper) and drinking cups.
        - Printing and publishing.
      - Rubber products.
        - Tires and tubes.

Classification—Continued.
Wage earners in—Continued.
All manufactures—Continued.
Stone, clay, and glass products.
Glass.
Pottery, terra-cotta and fire-clay products.
Textiles.
Cloth gloves.
Hosiery and knit goods.
Men's clothing (including shirts and coat pads).
Women's clothing (including corsets).
Tobacco manufactures.
Cigars and cigarettes, chewing and smoking tobacco, and snuff.
Rehandling.
Vehicles.
Automobiles and parts.
Miscellaneous products.
Electrical machinery, apparatus, and supplies.
Service.
Hotels.
Laundries and dry cleaners.
Restaurants.
Trade, retail and wholesale.
Transportation and public utilities.
Telegraph and telephone (including messenger service).
Bookkeepers, stenographers, and office clerks in—
All industries.
All manufactures.
Trade, retail and wholesale.
Offices.
Stores, retail and wholesale.
Sales people (not traveling) in—
All industries.
All manufactures.
Trade, retail and wholesale.
Stores, retail and wholesale.

In addition to the numbers of employees, figures were supplied by the State to show the number of establishments reporting annually. In this connection it is important to note that the number of establishments is the same for clerical workers and for sales people as for wage earners, since the number reporting is, as the term implies, the number returning schedules. Thus agriculture, in the basic and unpublished figures, shows the same number of establishments in the clerical-workers' table as is shown for wage earners, the 548 establishments in 1923 having about 230 bookkeepers, stenographers, and office clerks; and thus construction shows its 5,883 establishments to have about 650 sales people not traveling.

Classification.

Information concerning the classification of employees as wage earners, clerical workers, or sales people appears on the back of Form 1124. (See Appendix A.) Supplementing this, the bureau has learned by correspondence with State authorities that the following also are classed as wage earners:

Bundle wrappers, messengers and errand positions, canvassers and collectors, cashiers in stores and restaurants, cash-register operators, insurance agents (wage earners in offices), nurses in training in hospitals; that wage earners in service, theaters, include actors, ushers, stage hands, cleaners, etc.; that wage earners in service, professional, probably are mostly cleaners and do not include nurses in training

in hospitals; and that waitresses and cooks of hotel restaurants are included in service, hotels, if the restaurant is considered part of the hotel and are included in service, restaurants, if it is not.

Accountants, bank cashiers, and office clerks handling sales are included in bookkeepers, stenographers, and office clerks, and real-estate agents and bond salesmen are tabulated as sales people not traveling.

Supervisory positions come under the heading "superintendents and managers," appearing only in question 8 on Form 1124, relating to total wage and salary payments. No figures whatsoever pertain to owners.

Compilation of charts.

To facilitate the interpretation and analysis of the mass of figures presented here, the Women's Bureau has prepared charts for each of the classifications for which figures are presented.

These charts show the trend of employment in two ways. One series is confined to the changes within a year and is plotted separately for each year from index numbers based on the number of employees in January. In this series the figures are illustrated separately for men and women, but the total is not given.

The other series shows a continuous curve for the 11-year period, the base being the average number of employees in 1914. In this series the figures are illustrated separately for men and women and a third curve shows the trend of employment for the total. In most of the manufacturing classifications for 1914, 1919, 1921, and 1923, curves are plotted also to illustrate the trends indicated by the United States census of manufactures.

For the series based on the average for 1914 it was proposed at first to compute the seasonal variation and then to correct the exaggerated curves to eliminate the element of growth, but this idea had to be given up because of the differences from year to year in number of establishments reporting. Accordingly, in each case December and January are linked only by a dotted line.

A study of the charts is facilitated by grouping them in various combinations. For convenience in so doing the graphs are presented separately, accompanying the bulletin in an envelope instead of being bound with the text. The scale is the same throughout[5] except that canning and preserving, whose seasonal fluctuation is very great, is not comparable with the other industries.

For the agricultural classification, in order to eliminate the effect of the extreme seasonal employment, a supplementary curve has been plotted, based on a 12-month moving average. It is possible from this chart to analyze the trends for men and women with less confusion than when the extremes of employment also are indicated.

The curves follow the exact relatives, even where obviously there is something wrong, as, for example, in confectionery. Here the men's and women's curves based on 1914 would appear to be transposed in the years 1916 to 1918 and again in 1921 were it not that the curves based on January are so evidently not transposed. Through inquiry of the State authorities the tabulations themselves were corroborated, but the original records had been destroyed by fire. Candy manufacturers interviewed could throw no light on the ques-

[5] Owing to lack of space, the charts do not carry the zero line.

tion; especially could they not believe that several hundred men were taken on in 1921, which was "a rotten year" in the candy trade. The rapidly increasing use of machines was referred to, as was the possibility of ice-cream manufacture and bakeries being reported with confectionery.

Ice-cream manufacture was decided upon as largely responsible for the peculiarity of the curve for men's employment in the earlier years. Curves comparing the confectionery and the dairy products industries make it clear that ice cream was tabulated with confectionery prior to 1918, and that, beginning with that year, it was supposed to be tabulated with dairy products; but the new plan was not wholly in effect until 1919.

There is no explanation of the fact that in 1921 women constituted only 46.4 per cent of all confectionery employees instead of around 60 per cent. In this year the average of total employment—4,692, exactly as it was in 1918—has the sexes in positions opposite to those in 1918, women comprising 53.6 per cent of the employees in the earlier year and men comprising 53.6 per cent of those in 1921.

PART II. VARIATIONS IN EMPLOYMENT TRENDS

INTRODUCTION

The figures on employment for men and women in Ohio presented in this discussion show the trends of employment for men and for women in 54 classifications. For each of these classifications curves have been computed, according to the methods described in the preceding pages, that show graphically when and to what extent trends for the two sexes have differed or coincided. Taking them in all, perhaps the most striking fact about the curves is the extent to which they indicate similarity in the trends of employment of men and of women. Often the indexes of men's and women's employment in the different classifications run in more or less parallel lines, up or down as the general trend of the classification may be. Even seasonal trends are very likely to be similar for the two sexes and, therefore, represented faithfully in the curve for the total.

But this similarity of trend is not always found in men's and women's employment. There are certain classifications where trends are similar and others where the trends differ widely. There are certain periods of economic disturbance or stimulation where the course of employment for men and that for women have taken very divergent paths. There are certain occupational concentrations for each sex which may result in extreme similarities or extreme differences in the course of employment. It is the significance and extent of these differences and similarities that are of foremost importance in estimating the validity for each sex of the trends indicated by the figures showing totals and not differentiating by sex.

There are four main types of differences between the trends of the two sexes that appear in the curves presented as illustrations. The first, and probably the most significant to women, is the difference in the long-term trends. In many of the classifications the figures when separated by sex show a distinct tendency toward an increasing importance of women throughout the 11-year period under consideration. In a few classifications there has been apparently a decrease in women's importance, but this is not nearly so often the case.

Another kind of difference in the trends for men and women is found in certain of the classifications that are affected by seasonal variation. In some of these classifications there is a distinct seasonal trend for women and not for men; in others the seasonal trend is more extreme for men than for women.

A third type of difference is that caused by some economic situation such as the war or the depression of 1920–21, and a fourth is seen as the result of strikes that may affect women or men or both.

The figures and curves showing the trends of men's and women's employment through 11 years in Ohio will illustrate the importance of these differences in relation to the validity of the trends indicated by the figures for the totals. They will show also what are the

governing influences that react toward the establishment of similarities or differences in trends for men and women. Although employment figures from only one State, and for only 11 years, can not be considered to be comprehensive enough to form a basis for generally applicable findings, they will be serviceable as indications of probabilities that can be tested through more comprehensive data.

In the following discussion of the variations in trends for the two sexes and the factors that influence these variations it is important to bear in mind that the material is presented as only illustrative of the different situations. Many of the classifications have been selected for presentation in this study because they illustrate significant situations as far as women's employment is concerned. Because of this selective basis the enumeration of groups of these classifications as illustrating one or another type of variation can not be considered to offer any conclusive foundation for the assertion of the frequency of occurrence of the variation in question.

The purpose of this study is to provide some basis for guiding policies as to whether employment figures should be collected and presented separately for each sex. Although all the 54 charts have been considered in preparing the different sections of the study, no attempt has been made to present a complete analysis of the figures and curves for each classification in its relation to the various situations discussed. Instead the method has been to describe only such classifications as are significantly illustrative.

In some cases the figures and curves have proved so erratic in their variations, because of seasonal factors, smallness of the numbers included, changes in classification, or differences in the number of establishments reporting, that they provide significant illustration of only a few of the many factors that influence variations in men's and women's employment. In such cases, these classifications are cited only in those connections for which they seem important. The qualifications of the basic material have been discussed in earlier pages of this study. The interpretations of the material have been made in the light of these qualifications, but it has not been considered necessary to confuse the discussion by constant reiteration of the fundamental make-up of the data.

Although as an indication of general industrial trends throughout a period of years employment statistics that are not based on reports from identical establishments may leave something to be desired, nevertheless, as an indication of the variability of trends for the two sexes and the validity of the total figures as an indication of trends for each sex, such statistics should be fairly reliable. As such, they are presented here in the hope that they will provide enlightenment regarding the extent to which women's and men's employment trends present separate problems that must be studied separately if they are to be dealt with intelligently.

SUMMARY

To indicate general long-term trends of employment, in most classifications the curve for the total of both sexes seems to be adequately representative. The curve for the total, however, fails to indicate changes in the relative importance of the two sexes and does not show the different influences of seasonal employment on the two sexes.

Although the changes in relative importance of the two sexes appear in the more inclusive curves not to have been very great, such changes as are indicated become of far greater significance when they are considered in the smaller classifications that together make up the more inclusive figures.

There is greater similarity between trends for the two sexes when the classifications are compiled along occupational lines.

The effects of changes in economic conditions—war, depression, strikes—are not consistently the same for both sexes nor, through different classifications, are they consistently the same even for one sex.

Separate figures by sex must be available for periods of economic disturbance if the significant variations for the sexes are to be understood.

LONG-TERM TRENDS OF EMPLOYMENT

There is one aspect of the long-term trends of employment that from the standpoint of the industries studied, of the general interest of the employees, and of the well-being of the State itself is of primary importance. This is the general trend of employment—whether it is increasing or decreasing. From the standpoint of women, developments in their relative importance in wage-earning pursuits are of extreme significance, as they indicate the extent to which women are getting increasing opportunity and are becoming more essential units in the economic system. If men are being let out from a plant in greater numbers than women, that may seem something on which the women are to be congratulated. But the fact that employment is decreasing at the same time for both sexes is by no means a matter of congratulation even for the sex whose decreases are the smaller. And so the trend up or down in employment is really the most far-reaching and important tendency to be discovered through a study of employment figures.

The figures for the 11 years in Ohio show a remarkable similarity in the general trend of employment for the two sexes. Ignoring the temporary peak of employment caused by the war and the drop caused by the depression of 1920–21, the curves show with few exceptions that employment has been on an upward trend for both sexes during the 11 years. It is only in some of the subsidiary classifications of the wage earners in manufacturing that declining employment is shown. However, both when employment is declining and when it is increasing the general trend is almost universally the same for the two sexes. The only exceptions to this situation are of very minor significance. For example, in the manufacture of tobacco the total curve shows for 1924 a very slight decrease in employment since 1914, for the women there was an actual increase of about 12 points, and for the men there was a decrease of about 30 points. Somewhat the same situation is reflected in the figures showing employment in the manufacture of cigars and cigarettes, etc., but here the curves for the total and for the men show a decided decrease, while that of the women remains about the same.

Also, in the manufacture of glass products apparently there has been, during the 11 years, a decrease in total employment and a decrease in men's employment but an increase in women's employ-

ment. This probably is not accurate, as no figures are available for 1916 and 1917 and the figures for 1918 show an increase over 1915 of 23 (56.1 per cent) establishments reporting. The 64 establishments in 1918 employed 16.1 per cent women, while the 41 in 1915 employed only 9.3 per cent women. It is probable therefore that the inclusion of the extra establishments in 1918 altered the character of the classification so that the relative position of the women's index based on the 1914 average is not representative.

With such minor exceptions it may be stated that, on the whole, the general course of employment in Ohio as illustrated in the figures is upward for both men and women, and this tendency is represented with a fair degree of accuracy by the figures and curves for the total. In the few cases where the tendency is downward this tendency usually is the same for both sexes and is illustrated by the curves for the total.

Even when the trends in employment from one year to the next are considered, the similarity between the two sexes is almost as marked as in the case of the trends over the 11-year period. In a few years, however, notably 1915, 1918, 1919, and 1924, there are a number of classifications in which there is a difference in trend for the two sexes, shown by comparing for each sex the figure giving average employment for the year with the corresponding figure for the year before. In other words, from 1917 to 1918, of the 42 comparisons possible, there are 24 in which the average employment of both sexes shows the same trend, but there are 17 in which average employment increased for women but decreased for men and there is 1 in which average employment increased for men but decreased for women. The year 1918 was exceptional in this regard and the curves show how rapidly after the war was over men's and women's employment resumed its normal similarity of course. Next to 1918 the most conspicuous extent of difference in trend is evident in comparing average employment for the two sexes in 1923 and 1924. In these two years it is possible to make 54 comparisons. In 37 classifications the trend from one year to the next is the same for both sexes. In 10 classifications the average employment for women is higher in 1924 than in 1923 while for men it is lower, and in 7 classifications the men's figure has increased while women's has decreased.

Such comparisons in average employment from year to year probably are not so significant as the curves that show the actual trend from month to month. The average figures may be too strongly influenced by the effect of seasonal or other temporary stimulation within the year to give, in certain classifications, a fully reliable indication of the trend for the year. Nevertheless, the lack of any extensive difference in the general trends for the sexes as indicated by these averages is a significant supplement to the similarities indicated by the more detailed curves. Taking them in all, of a total of 482 possible comparisons of average employment between two consecutive years, the changes indicated are alike for the two sexes in 390 instances and different in only 92. Of these 92 differences there are 54 cases where the women's average goes up and the men's goes down, and 38 where the men's goes up and the women's goes down.

An especially important aspect of long-term trends for women is shown by the figures that indicate, over a period of years, whether women have tended to decrease or to increase in the wage-earning group.

It is possible for total figures to give a fairly accurate indication of whether or not the trend of employment over a certain period has been up or down, and if this situation applies alike, even though not equally, to both sexes the long-term trend in this respect as shown by the total may be generally indicative of the situation for men and women considered separately.

It is obvious, however, that no figures showing only the developments of total employment can be indicative of changes in the proportionate importance of any of the components of the total figures. If such changes have occurred they will be entirely lost sight of when figures are given only for total employment. The extent and significance of the information that would thus be obscured are well illustrated in the curves computed for the Ohio employment figures, where it is apparent that in the majority of cases the figures for the total fail to indicate the development in women's employment that took place during the 11-year period.

The trend toward increased proportionate importance of women is particularly striking and consistent in the clerical classifications, all of which show not only considerable and steady increase for both sexes but a marked increase in the proportion of women.

Similar increases, though not nearly so conspicuous nor so consistent, are evident in the more inclusive classification showing the figures for all employees. In transportation and public utilities also the proportion of women increased during the 11 years, although the last 3 years of the period show a tendency toward a slightly decreased importance.

In the manufacturing industries as a whole there seems to have been very little permanent change in the proportionate importance of women among the wage earners, but this is not true when the figures are examined for the separate manufacturing classifications. Among these groups there are many examples of increased importance of women, as in the manufacture of iron and steel and their products; electrical machinery, apparatus, and supplies; miscellaneous manufacturing; pottery, terra-cotta and fire-clay products; stone, clay, and glass products; and rubber products. In none of these is the proportionate increase for women indicated by the total curve, although in every case the total curve does show the general trend of employment during the period under consideration.

In a few cases the increased proportionate importance of women is due more to a decrease in the number of men than to any development in actual employment for women. This is apparent in the figures for tobacco manufacturing and for its subsidiary group, the manufacture of cigars and cigarettes, etc. It also appears in the curves for the manufacture of leather and leather products and the subsidiary group, the manufacture of boots, shoes, etc. In these classifications the total figures, although they indicate decreases in employment, give no idea of the extent to which men have lost their relative importance among the wage earners.

In a smaller number of classifications it is apparent that women became of less importance during the 11-year period. This is true of sales people, to a less degree of wage earners in trade, retail and wholesale, and to a slight degree of wage earners in service. It is apparently true also in the curve for all wage earners, but the situation illustrated there may be only a temporary fluctuation, as it does not show the long-term tendency that is characteristic of the trends in the other groups. In the manufacturing classifications some examples of decreasing importance of women are found in the curves for boxes (fancy and paper) and drinking cups, metals and metal products, and printing and publishing. For those groups where there has been a significant decrease in the proportionate employment of women this fact would be totally lost sight of if the figures on employment were shown only for the total.

Of course there is a remaining group of classifications in which the relative importance of the sexes did not change conspicuously during the 11-year period. This is not the case in any of the larger classifications, with the possible exception of the wage earners in all manufactures, where the change in proportionate importance of the sexes was not consistent nor regular nor very great during the period. In a few of the subsidiary groups of manufacturing, however, it is evident that there has been little permanent change in the relative importance of the sexes during the period.

Probably the most conspicuous example of similarity in the long-term trends for the two sexes is in the classification of wage earners in the manufacture of textiles. Here the proportionate increases for men and women during the 11-year period are almost identical. However, in the subsidiary groups for which figures on textile manufacturing are shown this similarity is not so exact. The most conspicuous divergence is in the manufacture of hosiery and knit goods, where the proportionate importance of women was considerably less in 1924 than in 1914. In the manufacture of men's clothing there was apparently a slight increase in the relative importance of women among the wage earners during the 11-year period, but this appeared to be diminishing at the close of the period. In the manufacture of women's clothing the curves of employment seem to indicate a decided increase in the proportionate importance of women in spite of a general decrease in employment for both sexes. This increase, however, may be due more to a change in the establishments reporting between 1914 and 1915 than to any significant development in the industry. In the manufacture of cloth gloves, another division of the textile classification, there is a very great similarity in the long-term trends for the two sexes.

Additional illustrations of similarity of long-term trends for the two sexes may be found in canning and preserving and in the manufacture of lumber and its products.

In cases such as these the figures and curves showing trends for total employment are quite accurately indicative of the long-term trends for each sex, but they are very much in the minority. It is more usual to find in the various classifications that there has been a change in the relative importance of the sexes and that this is not indicated in the figures showing only total employment.

FACTORS THAT INFLUENCE VARIATIONS IN MEN'S AND WOMEN'S EMPLOYMENT TRENDS

In studying the illustrations presented of the differences in extent of variability between the trends of employment for men and women it is immediately apparent that this variability differs to marked degrees in the different classifications. In some cases the ups and downs of the curve showing the trend of employment for the total number are duplicated with great accuracy by the curves showing trends for men and women separately. In other cases there is a wide divergence of one sex or the other from the curve for the total. Occasionally the trends indicated by the total curve are representative of neither men's nor women's employment.

If the significance of the curve for the total as an indication of trend for either sex is to be evaluated adequately, it will be necessary to discover whether there are any influences that make consistently for any one type of deviation for either sex or that bring about a greater similarity. In other words, how is the resemblance between the curve for each sex and the curve for the total affected by the size of the group; by the scope of the industries and occupations included; by the relative importance of the two sexes; by the seasonal requirements of the industries included; by the developments within industry leading to changes in product and methods of production; by the concentration of one or the other sex in certain definite occupational lines; by the influences of general economic conditions, such as the war or the depression of 1920–21; or by local situations, such as strikes, affecting more limited groups included in the classification? If certain of these factors can be shown to have a consistent and predictable effect upon the resemblance between the trends for the two sexes and that for the total it may be possible to accept as accurate the indications of the total, making such qualifications for either sex as the type of the classification and the period under discussion may require. If this can not be done, if the effect of these various factors is so erratic as to permit no generalization, the only alternative will be to require employment figures separately for each sex if the significant trends of women's employment are to be made clear.

Size of classification.

It is almost a truism of statistics that the larger the numbers from which a curve is drawn the smoother will be the curve. This does not apply, however, when considering the extent of resemblance between the curves for men and women indicated in these charts based on Ohio employment statistics.

Considering first the curves that indicate the trends for all the employees covered by the Ohio figures, apparently there were three periods when there were distinct differences in trend for men and women. The chief differences in the curves are the more rapid increase of men from 1914 to the middle of 1917, the more rapid increase of women during the latter part of 1918, both due probably to the war, and a smaller decrease of women than of men during the last months of 1920.

The differences that appear in the smaller classifications are neither consistently greater nor consistently less than those in the largest of all classifications. The classifications that make up the total group,

of all employed persons, are most of them very distinct in type, and some show great similarities and some great differences in the trends for the sexes.

Comparing the figures for all employees with those for the three groups wage earners, sales people not traveling, and bookkeepers, stenographers, and office clerks, which together make up the all-inclusive group, it is obvious immediately that it is the figures for the wage earners that influence the general curve most strongly. Although the employment of wage earners reached in 1921 and 1924 a level that was slightly lower than that of all persons, the general shape of the curve of employment for the two groups during the 11-year period is very similar.

There is, however, one important exception to this similarity: In 1924 the total curve for all wage earners indicates a decided decrease in employment that is not shown to any great extent for all employees. Furthermore, in the years 1923 and 1924 the women in the all-employees curve maintained a higher level than did the men and during the last months of 1924 women's employment was increasing rapidly while men's was decreasing. This is not true where the smaller group, wage earners, is considered. Here the employment of men and women was on practically the same level in 1923, while in 1924 the employment of women dropped to a level well below that of men and showed no tendency to a greater increase during the late months of the year. Obviously, then, although there is remarkable similarity in the trends for the two sexes in these two groups there are differences that are extremely significant.

Clerical workers.

Examination of the figures for the sales and clerical groups shows that the difference in the trends for the sexes between the curve for all wage earners and that for all employees is due chiefly to the influence upon the latter of the figures for clerical workers. In this group, although the trends for the two sexes are very similar throughout the 11-year period, with the exception of 1918, the women increased greatly in relative importance late in 1917 and all through 1918 and maintained their position after that time. It is plainly the influence of the figures for this group that is chiefly responsible for the differences in trend for the two sexes between the wage-earners group and the larger classification of all employees.

Sales people.

This fact becomes even more plain when the figures for sales people not traveling are considered. The figures for this group illustrate the effect of seasonal demands on women's employment in sales occupations, showing greatly increased numbers of women during the latter part of each year. The seasonal aspect of sales work is not nearly so evident in the figures for men's employment. Ignoring this difference in seasonal demands, however, the general trend of men's and women's employment in sales work did not differ greatly until 1921, when the index of women's employment became considerably less than that of men's and continued so, with the exception of the seasonal stimulation at the end of each year, through 1923 and 1924. The situation with the sales people in respect to the different trends for men and women during 1923 and 1924 is, therefore, more like the situation with the wage earners and is not represented by the curves for all employees, of whom the sales people are a part.

Examination of the most important classes of sales work discloses very great similarity among them. In each case one subclassification includes the vast majority of the employees in the larger group. For example, of sales people in all industries the sales people in trade formed 83.7 per cent in 1914, while the sales people in trade consisted chiefly of the sales people in stores—98.7 per cent in 1914. The sales people in all manufactures being in a minority among all sales people showed a greater deviation from the trends for the larger group and for its more important subclassifications.

The significant difference in trend between sales people in manufacturing and those in trade is that in manufacturing the 11-year period saw women's index of employment rise above that of men from the middle of 1915 to the end of 1920. After that it dropped below men's at first only slightly but by 1924 to a considerable degree. In trade the index of men's employment was noticeably below women's (except for the seasonal increase of women at the end of each year) only during a few months in 1918 and the first half of 1919. After that it was consistently and increasingly higher than women's.

Another difference in employment trend between the sales people in trade and those in manufacturing is that in manufacturing there is not nearly so great a seasonal factor in women's employment as there is in trade. Women's employment fluctuated to only a very slight degree in manufacturing, while in trade there was a decided peak in their employment in December of each year.

The course of employment for men and women in sales work in manufacturing is very different from that of the men and women wage earners in manufacturing. This difference shows the effect of occupational classification upon the comparative trends for the two sexes. When for wage earners men's employment increased more rapidly than women's between 1915 and the middle of 1917, for sales people women's employment increased more rapidly than men's from the end of 1915 to the end of 1918. While the index for the women in sales remained consistently above the index for men from 1915 to the end of 1920, the index for the women wage earners during the same period was above the men's only for five months in 1918 and two months in 1919, and these two periods were not consecutive. In 1921, when the men's index dropped lower than the women's for the wage earners, the women's dropped lower than the men's for the sales people. In 1924, when the women in sales work were well below the men, the women wage earners were at first equal to men and then above them.

The long-term trends indicate for both sexes a greater rate of increase in sales work than in the wage-earning group. At the close of 1924 the index of employment for wage earners had reached only 135 for men and 145 for women, while the men in sales work had an index of 187 and the women an index of 168.

Wage earners.

The group of wage earners forms by far the largest part of the total of all employees, the number of all wage earners in 1914 being 86.2 per cent of the number of all employees in that year, and the number in 1924 being 81.5 per cent.

The five chief groups in which the wage earners are classified are agriculture, manufactures, service, trade, and transportation

and public utilities. Construction and fisheries also are groups of wage earners, but because of the fact that these classifications are not important so far as women are concerned they have not been included in this study.

It is apparent in examining the curves for these groups that manufacturing is the only one that is represented typically in the curve of all wage earners.

Agriculture.—In agriculture the number of wage earners employed is subject to such violent seasonal fluctuation that the figures and curves showing employment in this classification are difficult of analysis from the standpoint of long-term variations in trends for the two sexes.

Also, unfortunately, the figures upon which these curves are based can not be considered so representative as those that form the basis for the other charts. It goes without saying that the limitation of the establishments reporting to those with three or more employees, explained in an earlier section of this report, has affected materially the representative character of the returns for wage earners in agriculture. As a matter of fact, the United States census of occupations for 1920 reports for Ohio more than 70,000 persons as farm laborers working out. Undoubtedly there is a very large amount of agricultural work done on farms having fewer than three employees, and as none of the employers on such farms would be expected to report to the State authorities the agricultural figures are very far from complete. Nevertheless, the figures given show clearly the outstanding characteristics of this group and the differences between men's and women's employment.

To eliminate as far as possible the distracting fluctuations in the curves for agriculture resulting from the seasonal employment in this classification, another set of curves, based on a moving average of the original figures, has been drawn. By this method the curves are smoothed sufficiently to give a more readily appreciated picture of general trends in the classification. After examining the extreme variations between and fluctuations in men's and women's employment indicated by the curves showing monthly employment, it is striking to find in the smoothed curves how much more closely the general trends for men and women resemble the trends indicated by the curve for the total. The differences in the trends for men and women illustrated by this smoothed curve do not resemble in general the differences that appear in the classification of wage earners in all industries.

During the years 1918, 1919, and 1920 the index of women's employment in agriculture was consistently higher than the index of men's and in 1922 the women's curve fell well below the men's, but in 1924 women were below men in the all-wage-earners group but above them in agriculture.

It is evident that, even eliminating the intense seasonal fluctuations for women that occur in agriculture, the employment curve for women is much more sensitive than is men's. The general long-term trends, however, are not very different.

Service.—Another of the subsidiary groups of wage earners in all industries is that which includes the wage earners in service. In 1914 the average number of employees in this group numbered 21,578, which is only 3.9 per cent of the number of all wage earners at that

date. By 1924 the average had increased to 62,834, or 7.3 per cent of the number of all wage earners.

The differences in the trend of employment for men and women in the all-wage-earners curve are not reflected in the curves for those engaged in service. With the exception of the close of 1918, the employment indexes for men and women in service run in parallel lines, with little deviation for either sex from the curve of total employees. The last half of 1918 saw a drop in the curve of men's employment that was not paralleled for the women, but by the middle of 1919 the men had more than regained their position and in spite of considerable fluctuations in the succeeding years the relative importance of the two sexes has not changed greatly.

Although increasing and decreasing at approximately the same rate, the employment of women wage earners in service has remained consistently subordinate in importance to that of men.

Neither the similarity between the curves for men and women in this group nor the fairly consistent increases for both sexes throughout the 11-year period are indicated in the curves for all wage earners.

The curve for total wage earners in service is adequately representative of both long-time and seasonal trends for both sexes.

To discover whether this similarity of trend for the two sexes is really characteristic of this branch of work, the analysis of trends in service occupations must be carried one step further to show to what extent this similarity applies to smaller classifications within this industrial group. It is quite possible that the trends for the two sexes in one of the smaller groups may, when combined with those of other groups, so offset each other that the similarities evident in the curves for all wage earners in service may not be typical of the components of this classification.

Three important industries the wage earners in which form part of this service classification are hotels, restaurants, and laundries and dry cleaners. The curves for these three groups show some important differences in men's and women's employment that are not reflected in the total curves for both sexes in the same groups and that are not duplicated in the variation indicated by the curves for all service classifications combined.

Taking first the hotels, which employed in 1914 an average of 5,410 wage earners, of whom 37.5 per cent were women, and 11,725 wage earners in 1924, of whom 43.2 per cent were women. In 1915 the curve for the total shows a sharp increase in employment in July and a sharp decrease in October. This fluctuation is entirely the result of a similar movement in men's employment, for women's employment decreased very slightly in July and rose very slightly in October. Clearly in this instance the curve for the total would give a very erroneous impression of the progress of women's employment in hotels in that year. The next discrepancy between the trend indicated by the total curve and that for each of the two sexes occurs in 1918. Here the employment as shown by the total curve did not fluctuate very greatly. The index at the beginning of the year was 181; at the end of the year it was 179 and the increase in the summer months amounted to less than 10 points. This course of employment is typical for neither the men nor the women, and it is the result of the neutralizing effect of combining the figures for men and women when

the trends of their employment were in opposite directions. After 1918 the total curve indicates with considerable fidelity the seasonal and long-term trends for both sexes, although it fails to reflect the decrease in the proportionate importance of women during the summer of 1922 and the total proportionate gain that women have made in this industry since the beginning of 1918. Women have held to an astonishing degree the gains they made in this type of work during the war. This is a fundamentally important fact as far as women are concerned that would be lost sight of if the figures for employment were not separated for the two sexes.

In restaurants the curve for the total wage earners follows very closely the trends for both men and women—but here again are two instances where a deviation from the normal similarity of trends for each sex limits the representative character of the total curve. In 1918 the men and women wage earners in restaurants, like those in hotels, followed different courses of employment. The women increased rapidly through September and decreased, though not so rapidly, from September to December. The men decreased as the women increased, and having reached their lowest point in October increased to December. The result of those opposite trends was, of course, that they offset each other and the curve for the combined figures is representative of neither. Later on, in 1922, the men experienced an unprecedented increase, reaching a very high point by September and decreasing at practically the same rate afterwards. The women's curve shows no such peak, but instead, with only one or two breaks, had a fairly consistent increase throughout the year. The increase of the men was so great as to influence the total curve to such a degree that the total resembles the men's trend much more than it does that of the women.

With these exceptions, however, the total gives usually a trustworthy picture of the trends for both sexes in restaurants.

In laundries and dry cleaners the total curve is representative of both seasonal fluctuations and long-term trends for men and for women. The only thing—but a very important thing—that it fails to show is the degree to which men are becoming more important among the wage earners in this industry. Starting with the beginning of 1919 the men's proportionate importance increased, until by the middle of 1920 they were well above the index for women. Since that time they have maintained their relative numerical superiority.

Trade.—Turning to the classification of wage earners employed in trade (retail and wholesale) it is apparent that the total curve is representative of the trends for the two sexes to very much the same extent as in the service classification.

Although the curve for total wage earners in trade does not bring out the seasonal aspect of women's employment nor the temporarily increased importance of women from 1918 to 1921, it does give a very close approximation to the long-term trend of employment for each sex, the index in December, 1924, being 223.5 for all wage earners, while that for men was practically the same, and the women's index, due chiefly to the characteristic seasonal increase in December, was 228.7.

Aside from the differences in seasonal trend for the two sexes the most significant difference in the curves for employment of men and of women in trade that is not shown by the curve for all wage earners

and that does not appear in the curves for the other groups of wage earners is the increased proportionate importance of women wage earners in trade during the years 1918, 1919, 1920, and the first half of 1921. Before and after this period the index of women's employment, with exceptions for occasional seasonal fluctuation, was less than the index for men, but in March, 1918, the index for women became 16.3 points higher than that of men and stayed higher to a greater or less degree until after June, 1921. Apparently women then resumed their normal place and the curve of their employment fluctuated about that of the men very much as it did during the first four years of the 11-year period.

Transportation.—For the wage earners in transportation and public utilities the curve for the total shows a greater deviation from the curve for women than appears in trade, service, manufactures, or all industries. Both the curves for each year and the long-term curves for the 11-year period show marked differences in trend for the two sexes, and, probably because of the small proportion that women formed of the total employees (17.9 per cent in 1914 and 20.4 per cent in 1924), the curve for the total parallels that of the men and does not reflect the situation with regard to the women. It is apparent from the curves for the two sexes that women increased rapidly in proportionate importance from the beginning of 1917. During 1919 they lost some of their importance while the men increased slightly, but after this the women remained at a fairly consistently higher level than the men until the early part of 1922, when there was an increase in men's employment that was not paralleled by the women. From then on, ignoring considerable seasonal fluctuations among the men, the relative importance of women has decreased somewhat. As the very great majority of the women who are classified as wage earners in transportation and public utilities are telephone operators, it seems likely that this decrease in proportionate importance is due to the introduction of automatic telephones. If so, it is an important trend and affects large groups of women. It would be entirely obscured in a curve that included the figures of employment for both sexes.

On the other hand, as an indication of general long-term trends for this group the curve for the total would be fairly indicative of the situation for each sex, with an index in December, 1924, of 167 for the total and of 161.2 and 193.4 for the men and women, respectively. The greater rate of increase for women than for men would, however, be lost sight of, as would the extent to which women have lost some of the gains they made during the war and postwar years.

Manufacturing.—For wage earners in manufacturing the similarity of the curves to those for all wage earners is very great, but even here a striking discrepancy in the trends for the two sexes is apparent. The chart for wage earners in all industries shows that in 1924 women's employment dropped from a relatively high index to one that was considerably below that of men. In manufacturing this did not occur. On the contrary, at the beginning of 1924 men's and women's employment was on very nearly the same level and subsequently women decreased at a less rate and then advanced at a greater rate than did men. It was not until the latter part of the year that the trend of women's employment started downward, while men's went up.

With this exception the general trend of employment as well as the differences for the two sexes was strikingly similar for all wage earners and for wage earners in manufacturing. The total curve in the manufacturing as in the all-wage-earners classification, however, fails to indicate certain differences in the curves for the two sexes that are of great importance in view of the fact that these differences resulted from well known economic conditions. From the early part of 1915 the effect of the World War on men's and women's employment was not the same. Both groups increased in numbers but men increased more rapidly, until by January, 1917, they had reached an index about 25 points above the index for women. After that the women began to increase more rapidly, until by July, 1918, they had almost reached the men's level, and afterwards they exceeded it. These fluctuations for the two sexes can be traced definitely to the war. At first, before the entry of the United States, men's employment increased more rapidly as the industries stimulated by the demands from foreign countries were those that manufactured munitions or metal goods in which large numbers of men were employed. With the entry of the United States into the war increases in employment stopped at first and then women began to be employed in increased numbers. At the close of 1918, with the cessation of war, the curve of women's employment naturally came tumbling down more rapidly than men's, as the women, to meet the necessities of war production, had been taken on beyond the saturation point while the minimum of men had been employed. These fluctuations in employment for the two sexes are not reflected in the curve for total wage earners in all manufactures. It is impossible that they should be, as in one or two cases they are in opposite directions. The curve for total employees therefore reflects the trend of the larger group—the men—and does not represent the trend for the women except when their trend is similar to that of the men. This occurs in a number of years. Speaking roughly, the curve for the total is representative of both sexes in 1914, 1915, 1919, 1920, most of 1922, 1923, and the first part of 1924.

It is in the crucial years, from a standpoint of economic significance, that the differences come for the two sexes, and in those years curves separate for men and women are necessary if the facts are to emerge.

Carrying the analysis through all the minor classifications of wage earners in manufacturing would only emphasize what the foregoing accounts have shown. Each classification has its characteristic similarities or variations for the two sexes, and these do not combine in the more inclusive classification so as consistently to offset or to emphasize each other. Combining the figures for several groups has not resulted in a flattening out of dissimilarities. Evidence of dissimilarity in the largest classifications is of course not so extreme as in some of the smaller groups, but on the other hand there are not a few of the smaller groups where the resemblance in trend for the two sexes is far more marked than in the larger groups.

Classification.

Apparently it is the type more than the size of the classifications included that influences the variability of trend for men and women. It takes very little study of the curves to show that when the classifi-

cation is a fairly homogeneous one, built along functional lines, there is a far greater similarity in the trends for the sexes than when the classification is such as to include many widely different types of industry and occupation. For example, the similarity of trend for the two sexes in the clerical (bookkeepers, stenographers, and office clerks) and in the sales group is very marked, and the trends for men and women clerical workers in manufacturing establishments are much more like those for other groups of clerical workers than they are like those for the wage earners employed in the same manufacturing establishments.

The same is true for the clerical workers employed in trade. The trends for the two sexes in this case are more like those of the clerical workers in manufacturing and of all clerical workers than they are like those of the wage earners in trade.

Naturally in any inclusive classification the extent of variation between the sexes will be weighted by the extent of the variations that appear in the components of the classification most important numerically. If, as in the classification of textiles, the subclassifications are on fairly homogeneous lines, the trends for the sexes in the larger classification will show less variation than when the classification covers a very broad and heterogeneous group of subclassifications having little occupational similarity. This situation is represented in the iron and steel curves, where the trends for the two sexes are far more divergent than in the more selective classification of textile manufacturing.

Other instances of very general classifications where the variations between the sexes are noticeably erratic are miscellaneous manufacturing and the manufacture of metals and metal products. On the other hand is the classification of paper and printing, which is an example of an inclusive classification whose component groups represent more similar occupational concentration for the two sexes. In this classification the trends for the two sexes are much more alike.

With as complicated a subject as trends of employment it is not possible to isolate the effect of any one factor when so many influences are bringing about increases and decreases for each sex. But it seems safe to state that if employment figures were consistently classified in homogeneous groups in regard both to the occupational concentrations of the sexes and to the product, the trends for the two sexes would be very similar and very faithfully reproduced in the figures for the total.

Seasonality.

In some industries a distinctly seasonal tendency for one sex or the other disturbs what would otherwise be a very great similarity between the sexes, and brings about, in consequence, a divergence of one of the sexes from the trend indicated by the total figures. It is more usual, however, for both sexes to be affected by the seasonal stimulation, although not usually to the same extent.

On the whole, the curves for the Ohio figures show that where there is a distinct seasonal trend for one sex and not for the other this trend is reflected, if it is sufficiently marked, in the total curve. For example, the total curve for sales people in all industries indicates a considerable increase of employment at the end of each year.

Actually this increase is found principally among the women, although the men have it to a certain extent. On the other hand, the seasonal fluctuation indicated by the total curve for wage earners in service applies to both men and women.

Intense seasonal fluctuation occurring for either sex that is much in the minority is not reflected in the total curve. This is illustrated by the curves for wage earners in trade, where the seasonal fluctuation indicated for women is reflected in the total curve to only a very limited extent, the women in this classification forming only about 19 per cent of the total employees.

The curves showing the trend of employment for wage earners in agriculture present an almost dramatic picture of seasonal fluctuation in this line of work. Wage earners in this classification are faced with extremely seasonal work that fluctuates more greatly for women than for men. The curve for total employees follows almost exactly the curve for men, due to the very large proportion men formed of all employees (about 93 per cent). The extreme peaks of women's employment during June are not indicated in the curve for total employees, but that June is the season of highest employment for both sexes is plain from the total curve.

Another example of exceedingly great seasonal fluctuation where the total does not show the extent of the fluctuation for women, but indicates with considerable accuracy the seasonal trends for both sexes, is canning and preserving. Here, although the proportion of women among all wage earners (about 40 per cent in 1924) is far larger than in agriculture, the high peak of their employment in the summer is not fully indicated by the total. However, the same months are also the busy months for men, so the general seasonal character of the group is indicated very accurately by the total.

The manufacture of confectionery is a third example of highly seasonal employment, but in this case, probably because there are more women than men in the classification, the total curve follows the women's seasonal fluctuations more closely than the men's.

The manufacture of bakery products is another example in the manufacture of food and kindred products of a seasonal industry for which the total shows the type of seasonal stimulation for each sex but not the more extreme fluctuations for the women.

The manufacture of automobiles and parts is somewhat seasonal and the seasonal variations are indicated in the total. The fluctuations in women's employment, although very great, probably are not due chiefly to seasonal factors, and therefore, although the total for this industry is by no means representative of women's trend, it is not because of a difference in seasonal demands.

The curves showing employment in the manufacture of men's and women's clothing indicate a certain degree of seasonality for both sexes, which is very accurately represented by the total. As an indication of the seasonal problems of the clothing industry, however, the trend shown by these curves is probably not representative of a field wider than the State for which the figures are presented. For both the men's and women's clothing industries in Ohio are influenced by factors that make for greater steadiness of employment than may be expected in other localities.

Relative importance of men and women.

The proportionate importance of either sex in the total for any one classification does not seem to be a strong influence toward either similarity or dissimilarity in trend for the two sexes. Of course where there is a difference in trend the total curve will most closely resemble the numerically superior sex, but it is not apparent that there is more actual difference in trend where one sex is very much in the minority than where they are on a more equal basis. For example, in the manufacture of iron and steel and their products, where women in 1924 formed less than 3 per cent of all employees, the trends for the two sexes were not greatly unlike except for the war years 1917 and 1918 and to a less degree in 1915 and 1916, and such differences are found in the great majority of industrial classifications irrespective of the proportionate importance of the sexes. In the other classifications in which women formed a very small proportion of the wage earners there were different degrees of variation between the trends for the two sexes, but these differences apparently were dependent upon other factors than the proportionate importance of women. In the manufacture of lumber and its products, where the proportion of women was around 6 per cent, there were marked differences in trend for the two sexes not only in 1917 and 1918 but in 1919 and 1921. These differences are plainly due not to the great disparity in the proportionate importance of the two sexes but to economic conditions accompanying and following the war. In the manufacture of liquors and beverages, where women formed only about 2 per cent of the wage earners, certain extreme variations occur for the women that are not duplicated by the curves for the men. In this case, however, the extreme fluctuations for the women are due chiefly to the very small actual number of women—varying from 27 to 249 over the 11-year period—and a consequently small base number for the 1914 index, which would inevitably result in a curve showing very great fluctuations.

In the manufacture of automobiles and parts, where women formed about 5 per cent of the wage earners, the very extreme fluctuations for the women that do not occur for the men probably are due chiefly to the fact that the employment of women in this industry is comparatively new. They are being experimented with—added in great numbers when there is a rush of work, laid off just as rapidly when times are dull; taken on for the manufacture of some new product and laid off when certain styles are discontinued. They are still the "extras" in this type of work, and this is a more fundamental reason for the erratic course of their employment than is the fact that they are in a minority in the industry.

Although the proportionate importance of the sexes does not seem to have an important bearing on the extent of variation between the trends of employment for the two sexes, it does, of course, play a very leading part in determining the resemblance of the total curve to one or the other sex.

When trends of employment for men and women are similar the curve for the total of both sexes represents the situation with considerable fidelity. Where the trends are different—and these are the crucially important spots as far as women's opportunity is

concerned—the curves for the total illustrate most closely the trend for the sex that is most important proportionately and this usually is the men.

General economic conditions.

Probably it is the effect of general economic conditions that causes the most violent deviation for the two sexes from the trend indicated by the curve for the total. The outstanding example of this will be found in comparing the course of men's and women's employment during the period of the World War and during the depression of 1920–21.

THE WAR

From a comparison of the curves for bookkeepers, stenographers, and office clerks, for sales people, and for wage earners it is apparent that the readjustments and stimulations resulting from the war did not affect the trends of men's and women's employment in the same way. For example, the curves for all wage earners show that with the early part of 1915 both men's and women's employment began to increase but the increase was much more rapid for men than for women. It was not until the middle of 1917 that women's increases began to catch up with the men's. In 1918, although men's employment increased at a fairly rapid rate, women's employment increased even more rapidly, until by August, 1918, the women's index equaled the men's. After August, 1918, the women continued to increase for a few months while the men decreased, but during the last month of the year, after the war was over, women decreased as well as the men. This decrease continued for both sexes until March, 1919, and for women it was prolonged until June, by which time men's employment had picked up again and their index once again equaled and then exceeded that of the women. No such variation in trend of employment for the two sexes as a result of the war is found in the curves for clerical workers and sales people.

Clerical workers.

Among the clerical workers the effect of the war apparently was to increase the employment of women at a greater rate than the employment of men. The women's curve started to ascend at a greater rate than men's at the beginning of 1917 and continued so until the end of 1918, but the curve was not a fluctuating one for either sex and their increases had very much the same trend. The war, however, left the women in clerical work in a very much better position than the men.

In the smaller classifications of clerical workers the war seems to have affected the trends for the two sexes in very much the same way except for the year 1918. In manufacturing, the men and women clerical workers increased at almost exactly the same rate until the last part of 1917. From then on until almost the end of 1918 the women increased rapidly while the men showed a slight decrease. Almost as soon as the war was over, however, men began to increase again, but they did not regain to any great extent the proportionate importance that had been theirs before the United States entered the war. In trade also, the effect of the war, except for 1918, was to stimulate employment for both men and women clerical workers,

but the men's employment, although following the same trend as women's, has steadily become less important.

Clerical workers in trade are divided into two groups, representing employment in offices and in stores. For these two groups the year 1918 showed the decrease in men's employment and the increase in women's that are characteristic of the larger classifications of clerical workers. The beginning of 1915, however, showed a condition in stores that was not paralleled in offices. In the beginning of this year there was apparently a great drop in men's employment, followed by a slight increase throughout the year. This great drop at the beginning of the year can not be attributed to a change in the number of establishments reporting, as in this respect there was an increase of 449 between 1914 and 1915. This decrease, as well as the course of men's and women's employment in clerical work in stores, although unlike the curves for offices is similar to those for all clerical workers in trade.

Sales people.

For the sales people there seems to have been practically no change in the trends for the two sexes resulting from the war. The curves for the two sexes maintain the same relative positions almost without exception, until the beginning of 1918. For the first few months of 1918 men's employment remained much as usual but women's employment increased, and when men's employment showed an unusual decrease at the last part of 1918 the women maintained their usual great seasonal increase and started 1919 in a better position than did the men, who, however, quickly regained their usual position in the industry and by August the curves for the two sexes started to resume a shape similar to that preceding 1918. Evidently for the sales group what small effect the war had on accentuating differences in trend for men and women came later than it did for all wage earners, the group so largely influenced by the manufacturing industries.

Examination of the smaller classifications of sales persons shows that although the war seems to have brought about a slight increase in the importance of women in sales work in manufacturing, on the whole it does not seem to have had a very important effect on differences in trend for men and women in sales work. The year 1915 saw an increased proportion of men employed in sales work in trade but this increase in proportion held true only for that year, and after that there was little significant change in the trends for the two sexes until March, 1918, when women began to assume the slightly increased importance that they retained until the middle of 1919. In manufacturing, the curves for the sales people show a drop in employment for both sexes in 1915. This may be due to a cessation of selling activities in manufacturing at the beginning of the war, or it may be due to some change in the establishments reporting. Whatever its cause, however, it did not result in any important change in the relative position of men and women in this type of work. After 1915 the women's curve showed a slight superiority over the men's, but increases in employment were not severe. Nineteen hundred and eighteen saw the characteristic, but very slight, increase for women and decrease for men. The recovery in 1919 was quick and along similar lines for both sexes.

Wage earners.

When the important classification of wage earners is considered it is immediately apparent that the effect of the war in causing variations in men's and women's employment was far more marked and more diverse here than in the classifications of clerical workers and sales people.

For the men and women wage earners in agriculture, service, trade, and transportation and public utilities, the variations in trend resulting from the war are not at all similar to the variations indicated by curves for wage earners in all industries.

Agriculture.—In agriculture the curves based on the moving average show that the women started to increase more rapidly than did men in 1914. In the latter part of 1917 their rate of increase became considerably greater than that of men and continued so throughout 1918. In fact women held most of the proportionate importance gained during the war until 1921. The extent to which women in agriculture profited by the war is not indicated by the total curve.

Service.—In service occupations as a whole the relative importance of men and women wage earners seems not to have been affected at all by the war until the middle of 1918, when men's employment decreased rapidly although women's continued along a normal course. By the middle of 1919 the men's curve had risen again until they had more than regained their former position of superiority in this classification.

Study of some of the smaller classifications of wage earners in service shows that the variations in trend for the two sexes that appear in the total classification were representative of the situation for the men and women wage earners in hotels and restaurants but not those in laundries and dry cleaners.

Ignoring a temporary and apparently seasonal fluctuation for the men in hotels during the summer months of 1915 and a marked increase for the men in restaurants during the last quarter of 1916, there was a general and quite steady upward trend for men and women during the first years of the war, from the beginning of 1915 through 1917. In 1918 came the characteristic decrease of men and increase of women that appears in so many of the charts for this year. In restaurants 1919 saw a quick return to a similarity of trend for the two sexes, but in hotels men did not regain the position that they lost in 1918, although the trend of their employment was very similar to that of the women.

In laundries and dry cleaners the war does not seem to have changed the relative position of the men and women wage earners. There was a great increase in the number of men employed for a few months in the first half of 1915 but otherwise the indexes of men's and women's employment were very similar through 1918.

Trade.—In trade (retail and wholesale) the curve of women wage earners was, except for occasional seasonal fluctuations, consistently subordinate to men's through the early years of the war. It was not until the beginning of 1918 that the women's curve mounted above the men's. During the latter part of 1918 the characteristic slight decrease for men and considerable increase for women occurred and women maintained their gains after this, with certain seasonal fluctuation, until the middle of 1921.

Apparently the effect of the war emergency in increasing the proportionate employment of women came at about the same time in trade as in manufacturing, but lasted after the close of the war in trade as it did not in manufacturing.

Transportation.—In transportation and public utilities the effect of the war on the relative position of men and women became evident early in 1917, when the women's curve started above the men's. By the end of 1918 the index of women's employment was more than 50 points above the index for men, and although there was a slight decrease in the relative importance of women during 1919 their curve remained well above that of men, and continued so through 1924.

About one-fourth of all the wage earners in transportation and public utilities and practically all the women are included in the classification of wage earners in telephone and telegraph (including messenger service). It is in this group, therefore, that analysis will most clearly isolate the varying effects of the war on men's and women's employment.

It is difficult to say from the curves what part the war played in changing the trends of men's and of women's employment in this classification. From 1914 to 1918 the rate of increase for both sexes was greater than in subsequent years. On the whole, the trends for the two sexes were very similar, but the violent, though temporary, deviations for the men may be due to war necessities. In June, 1917, soon after the entry of the United States into the war, there was apparently a rapid decrease in men's employment. There was no corresponding decrease for women. In fact, with minor fluctuations women's index of employment rose slightly, while men's continued to decline until the end of 1918. After that women's employment fell while men's rose during 1919.

Manufacturing.—In manufacturing, the curves showing trends for men and women wage earners indicate that during the early years of the war, from the beginning of 1915 to the middle of 1917, men's employment increased more rapidly than did women's, though employment for both sexes was on the upgrade during this period. After the middle of 1917 increases in men's employment ceased and there was even a slight decrease for them. At the same time women's employment was experiencing a much more rapid increase than in the earlier years of the war. This rapid increase for women continued until the last month of 1918. The decreases in men's employment, however, that had started in the middle of 1917 shortly after the entrance of the United States into the war, did not continue for very long. In fact, the first half of 1918 saw men's employment increasing again, although not at so great a rate as women's. After the middle of 1918 the men started to decrease again while women's employment was still going up. The armistice in November, 1918, was followed by a rapid drop in women's employment, but it does not seem to have had a very striking effect on men, whose employment continued to decline after the armistice at about the same rate as before. In the depression immediately following the war, in 1919, women's employment decreased more than men's, but recovery came at about the same time for both.

The variations in trend for men and women indicated in these curves for all manufactures are by no means typical of the many

different industries that, combined, make up the classification of all wage earners in manufacturing. In the first place the general trend of employment indicated for all manufactures is not typical of the trends in all the subclassifications. In some manufacturing industries the early years of the war brought about a decrease of employment rather than the stimulation indicated in the all-manufacturing figures. In other industries the influence of the war years was neither stimulation nor decrease of employment; instead, conditions seem not to have changed greatly.

Examples of such dissimilarity between the general trends indicated by the all-manufacturing curves and those for the smaller classifications may be found in the following: The manufacture of leather and leather products, where the war years showed no stimulation of employment and a sharp drop for a few months during the latter part of 1917; in the manufacture of pottery, terra-cotta and fire-clay products, where the stimulation of employment caused by the war was slight and took place chiefly during the first half of 1915; in the manufacture of tobacco, where the early years of the war saw decreasing employment and from 1917 on through 1918 the decreases for men were accelerated, although women increased during 1917; and in the manufacture of textiles, where the war years produced very little stimulation of employment. Of course an increase of employment during the early years of the war was a more usual trend in the general run of industrial classification, but the exceptions just noted are an indication of the possible diversity of effect that may result in various industries from any changed economic situation.

Differences caused by the war in the trend of men's and of women's employment are no more consistently alike in the various industrial classifications than are the general trends of employment.

In all manufacturing the year 1915 showed a greater rate of increase for men than for women, and in 1916 rates of increase for the two sexes were very much alike, with a very slightly greater rate for men. This was by no means, however, a universal difference. In fact, among the industries that show increased employment for these two years there is a very great variety in the way in which men's and women's employment increased during 1915 and 1916. Examples of similarity of the differences in trend for the sexes may be found in the manufacture of textiles and of pottery, terra-cotta and fire-clay products, where in 1915 the increase for men was more rapid than for women and in 1916 there was very little difference in the rates of increase for the two sexes. But the curves showing trend of employment in the manufacture of iron and steel and their products, in its subsidiary group the manufacture of bolts, nuts, washers, and rivets, and in the manufacture of hosiery and knit goods show that the increases of men were more rapid than those of women in 1915 while the women increased more rapidly than did the men in 1916. The increases were greater for men in both 1915 and 1916 in the manufacture of rubber products and of chemicals and allied products, and greater for women in both years in the manufacture of metals and metal products, of paper boxes, and of miscellaneous products.

The two sexes increased at about the same rate in 1915 and the men increased at a greater rate in 1916 in the manufacture of stone, clay, and glass products; while there was very little difference in either year in the rates of increase for the two sexes in canning and preserving.

These variations in trend of employment seem not to be based on any consistent differentiation of product, and it does not seem possible to establish any classification of industry or occupation that can be expected to produce similarities in variation of employment for the two sexes. Comparison of the trends for the two sexes during the years 1917 and 1918 yields equally important illustrations of the different effects of the war on the employment of men and women in different classifications.

In 1917 the curves for all manufacturing indicate that men's and women's employment did not fluctuate greatly. There was a very slight upward tendency for the women from the middle of the year, and a slight downward tendency for the men at the end of the year, but these variations were not very marked. Study of the different manufacturing classifications shows, however, that this evenness and similarity of trend was by no means entirely representative of conditions in all manufacturing, although it is probably more generally characteristic than were the trends indicated for 1915 and 1916. For example, fluctuations were similar for men and women, and only very slightly up or down, in the manufacture of paper and printing; pottery, terra-cotta and fire-clay products; metals and metal products; and liquors and beverages. The trend of employment was also alike for men and women, but distinctly down in the manufacture of boots and shoes and distinctly up in the manufacture of chemicals and allied products. There were differences in trend, but very slight differences, for the men and women in the manufacture of bolts, nuts, etc.; textiles; and stone, clay, and glass products, where the men's employment went very slightly down and the women's very slightly up. A downward trend for both sexes but more emphasized for men occurred in the manufacture of paper boxes, and an upward trend, which was more emphasized for women, occurred in miscellaneous manufacturing.

A stimulation in employment during the first half of the year occurred for both sexes in the manufacture of hosiery and knit goods, but the increases were greater for women than for men and the subsequent decreases were greater for men than for women, with the result that the end of the year 1917 saw men's employment practically where it had been at the beginning of the year, while there had been an increase in the number of women.

Very distinct differences of trend for the two sexes occurred in the manufacture of lumber and its products, where men's employment decreased decidedly; in the manufacture of iron and steel and their products, where men increased slightly but women decreased considerably; and in the manufacture of rubber products, where men decreased slightly but women increased decidedly.

On the whole, except in a few industries the year 1917 seems to have witnessed a slowing up of the increases that took place in 1915 and 1916, and the stimulation of men's and women's employment was not so striking as it had been. If the analysis of the figures were carried further and the trends were examined month by month throughout the year, greater variations between the trends for the two sexes might appear, for April, 1917, saw the entry of the United States into the war and after a month or so during which war orders were being placed and plans put under way for the recruiting of the war forces, employment tendencies were distinctly altered. The reflec-

tion of this change of trend, that probably started in the latter part of 1917, is found clearly in the employment figures for 1918. During the course of this year economic conditions altered so radically that it is necessary to study separately the course of employment in the two parts of the year if the significant differences in men's and women's trends are to be made apparent.

The curves for all manufacturing show that during 1918 women's employment increased very rapidly throughout the year until November, after which there was an abrupt falling off in their numbers. The curve of men's employment was quite different. In the first place, although their employment increased during the first half of the year, the increases were not nearly so great as those of the women, and the men's employment started to decline several months earlier than did the women's, although again at a very much slower rate than the later decreases of the women. The decreases for the men began after August, 1918, when the second draft had gone into effect, while the decreases for the women did not start until after November, following the armistice.

The variations indicated for the two sexes in the all-manufacturing curve are indicative of the trends of employment in some, but by no means all, of the smaller classifications in manufacturing. In fact, the curves showing the trend of employment for the year 1918, based on the average for January of that year as 100, show that there were far more classifications in which the trends for the two sexes were alike than might be supposed from a knowledge of the industrial and military necessities of that year.

The classifications in which the differences in trend for men and women were very much like those indicated for all manufacturing include iron and steel and their products, chemicals and allied products, bakeries, lumber and its products, rubber products, tires and tubes, automobiles and parts, miscellaneous manufacturing, and electrical machinery, apparatus, and supplies. However, even in some of these classifications there were certain ways in which the variations for the two sexes did not agree with those shown for all manufacturing. For example, in iron and steel the rise for the women was much more exaggerated than in all manufacturing, while there was very little fluctuation in the men's employment; in bakery products there was no decrease in women's employment after the armistice; in the manufacture of rubber products considerably greater decrease was indicated for the men than in all manufacturing; and in the manufacture of electrical machinery, apparatus, and supplies there was no increase, and toward the latter part of the year there was even a decrease in men's employment.

In some classifications, although the variations for the two sexes were not those indicated by the figures and curves for all manufacturing there nevertheless were decided differences in trend. In the manufacture of confectionery, for example, apparently there was a great drop for women and a corresponding increase for men in the middle of the year, quickly followed by a decrease for men and an increase for women; in the manufacture of boots and shoes there was a sharp decrease for the men after June, but the women's employment did not show the sharp and consistent increases through the year that appeared in some other classifications; also, there was no decrease after the armistice for either men or women. In metals and metal

products fluctuations were very much alike for the two sexes until September, after which there was a continued decrease for men but a short increase for women until after the armistice, when women decreased slightly. In stone, clay, and glass products the increases for women started later in the year than in all manufacturing, and the increases continued, with a drop for one month, until September, after which, employment for women remained on practically the same level; for the men, employment experienced a sharp decrease after June, which was continued, but less sharply, after July. Employment in glass manufacturing saw a sharp drop for men in the middle of the year, followed by a slight drop for women, then a slight increase for men and a considerable increase for women; after the armistice women's employment decreased slightly, but men's increased.

In most of the other classifications studied there was a marked similarity of trend for the two sexes throughout the year. Conspicuous examples of this similarity are all textiles and its subsidiary groups, the manufacture of men's and of women's clothing; tobacco and its subsidiary groups, the manufacture of cigars and cigarettes and rehandling; paper boxes; and gas and electric fixtures.

The immediate effect of the armistice upon men's and women's employment in the different classifications provides a very graphic illustration of the variations in trend for the two sexes that may be expected to occur in different industrial classifications.

As in all manufacturing, in the manufacture of iron and steel and their products, lumber and its products, automobiles and parts, and in miscellaneous manufacturing, the rise in women's employment was checked following the armistice, and a sharp decline ensued, while men's employment after the armistice followed generally the fluctuating decrease that had started early in the year. In the other classifications there was great variety in the trends for the two sexes at this time. Women suffered a similar reversal of employment trends, from an increase to a decline, in the manufacture of chemicals and allied products, metals and metal products, rubber products, tires and tubes, glass, and electrical machinery, apparatus, and supplies; but men's employment, except in metals and metal products, rubber products, and tires and tubes, showed a reversal also, and instead of continuing on a downward trend as in all manufacturing started up after the armistice. In the manufacture of metals and metal products men continued their downward trend, while in rubber products and tires and tubes an upward trend for men had started one month before the armistice. Another group of industries in which the trend for women was down after the armistice was textiles and its subclassifications, men's clothing and hosiery and knit goods, but here the downward trend was for both sexes alike and had been in effect before the armistice.

In not a few cases the armistice seems to have been followed by an increase of employment for women. In fact, a downward trend for women that had been in effect before the war was reversed after the armistice, and increased employment for women was indicated, in bakery products, paper and printing, the tobacco industry and its two subclassifications, and the manufacture of pottery, terra-cotta and fire-clay products. In tobacco men's employment reversed its course after the armistice, from a downward to an upward trend, and in paper and printing men's employment continued its upward trend; but in

the case of bakery products and the pottery group, although an increase of women came after the armistice the men's employment continued to decline. In the manufacture of liquors and beverages the reversal from a downward to an upward trend for women came a month before the armistice, the men continuing downward for the rest of the year. A continued upward trend for women both before and after the armistice was apparent in the manufacture of bolts, nuts, etc., cloth gloves, leather and leather products, paper boxes, boots and shoes, and gas and electric fixtures. In only three of these classifications, however—boxes, boots and shoes, and gas and electric fixtures—did men's employment also follow an upward course. In the manufacture of bolts, nuts, etc., and in leather and leather products men's employment remained about the same, with neither increase nor decrease after the armistice. In the manufacture of cloth gloves, although the armistice was followed by a continued slight increase for women, men's employment continued to decrease slightly. The armistice brought about neither a stimulation nor a retardation of women's employment in the manufacture of women's clothing and of stone, clay, and glass products, but for men in these classifications employment continued to decline as it had done before the armistice.

In practically all the classifications in which there was a difference of trend for the two sexes during 1917 and 1918, the trends indicated by the total figures and curves followed the trends for men rather than those for women. Very occasionally, as in the manufacture of electrical machinery, apparatus, and supplies, the variations for the two sexes were so extreme that the total was representative of neither sex, but on the whole the total curve was very much more likely to show the ups and downs of men's employment with a fair degree of accuracy but to be representative of the women's trend only so far as the women's resembled the men's.

The period of depression following the war, during the early part of 1919, had generally a more serious effect on women than on men. Women's employment during this depression dropped further than men's or dropped when men's did not in all manufacturing, leather and leather products and its subclassification boots and shoes, paper boxes, automobiles and parts, miscellaneous manufacturing, electrical machinery, apparatus, and supplies, iron and steel, cloth gloves, bolts, nuts, etc., hosiery and knit goods, lumber and its products, rubber products, and rubber tires and tubes. Men's employment dropped more than women's in some classifications, including gas and electric fixtures and chemicals and allied products. Occasionally the decreases were about the same for both sexes, as in the manufacture of metals and metal products, textiles, men's clothing, and tobacco. In these last groups, however, textiles and tobacco, there was almost no drop for either sex.

In some of the classifications employment did not seem to suffer as a result of the depression immediately following the war. For example, increases in employment that were similar for both sexes occurred in 1919 in the manufacture of pottery, terra-cotta and fire-clay products, women's clothing, bakery products, and printing and publishing. In the more inclusive classification of paper and printing, however, although increases were very much alike for both sexes, they came later in the year. The early months of 1919 showed in paper and printing a very slight decrease for women and a correspondingly slight increase

for men. In stone, clay, and glass products and its subclassification glass manufacturing, there were increases for both sexes but greater for men, and these increases were followed later in the year by decreases, a decrease only for women in the larger group but in the subclassification for both sexes.

In the classifications in which there were decreases for both sexes recovery was not always at the same time for each. Women's employment did not pick up until later than the men's in the manufacture of gas and electric fixtures, iron and steel, cloth gloves, and metals and metal products. On the other hand, women's employment started to increase before the men's did in the manufacture of bolts, nuts, etc., hosiery and knit goods, and chemicals and allied products.

Summary.

During the entire war period and including the months immediately following the war the employment figures for Ohio manufacturing industries show that there was considerable diversity in the trends of men's and women's employment. The curves showing the long-term trends illustrate that during this period women gained a position of increased importance among the wage earners in a number of classifications and retained it, to a greater or less extent, throughout the rest of the period studied. In other classifications the increased importance of women resulting from the war was only a temporary situation and did not last beyond the period of economic necessity that brought it about. To what extent the first or second of these conditions applies is of vital importance in studying the developments of women's employment. Only detailed employment figures by sex will afford a basis of adequate information about such tendencies. The great diversity of trends throughout the war period in the various industrial classifications gives added emphasis to the need for separate employment figures by sex if proper understanding of and provision for the development of women's employment opportunities is to be undertaken.

THE DEPRESSION OF 1920–21

Second in importance only to the war in its effect on trends of employment is the depression of 1920–21 that hit industry to a greater or less degree all over the United States. Many other periods of depression, equally or more severe, have affected the industries of the country, but within the 11-year period under discussion it is the years 1920–21 that stand out as a time of greatly decreased employment. Study of the tendencies of men's and women's employment during the war has shown great variations according to the industrial or occupational classification of the employees. But the years of the war saw a great dislocation in the normal demand and supply of male labor. There was inevitably a certain degree of substitution of women for men and an acceleration of women's employment as men were drawn off for military necessities. These conditions would be almost certain to result in a considerable variation in trend of employment for the two sexes.

But in a time of general economic depression such as occurred in 1920–21 the complicating factor of a dislocated labor supply does

not enter in, and it is possible to view the variations in trend for men and women as affected by more normal economic fluctuations, instead of, as in the war years, by peculiar and individual circumstances and necessities.

On the whole, the depression of 1920–21 showed several variations in the trend of men's and women's employment. Examining first the most inclusive curve, that which shows the figures for all employees, it appears that the depression, as reflected in a decrease of employment, started for both sexes about the same time, around the middle of the year 1920; that the ensuing decrease of employment was more severe for the men than for the women; and that recovery started for both sexes in about the middle of 1921 but was at first slightly more rapid for women than for men. In the classifications that make up the group of all employees the effect of the depression does not seem to resemble consistently the trends indicated in the larger classification. Here again, as has appeared in connection with the effect of other factors on the employment of men and women, the course of employment at a time of economic depression seems to vary for men and women most directly in relation to the type of occupation in which they are classified.

Clerical workers.

With the clerical workers, for example, the decrease in employment that started in August, 1920, affected both sexes to about the same degree. The proportionate decrease for men and women was practically the same, and their recovery subsequent to 1921 was apparently at the same rate.

Examining the subclassifications of clerical workers it is apparent that the depression hit the men and women clerical workers in manufacturing and trade in the same way, the outstanding difference being that in trade the decrease started about six months later than it did in manufacturing.

The clerical workers employed in offices were affected by the depression a few months earlier than were those employed in stores, the decrease of employment for the former starting in August of 1920 while in stores it did not start till the first months of 1921. In both cases, however, the effect was the same for both sexes.

Sales people.

For the sales people a different story appears from the curves. In the first place the depression did not affect either sex until 1921 and then it affected the women more than the men. In fact, from the beginning of 1921 the men in this classification assumed a more important proportion than they had had before and this importance continued and increased through 1924.

On the whole, the depression of 1920–21 apparently had only a very slight effect on the general course of employment in sales work. It brought a slightly greater reduction for women than for men in sales work in trade. In manufacturing, the number of salesmen did not decrease at all but the women's curve fell below the men's. Since the drop caused by the depression women have never regained their relative position in sales work, either in trade or in manufacturing. However, the effect of the 1920–21 depression was not very great, especially among the men and women sales people in manufacturing.

The course of employment for them, in fact, shows less depression at this time than do the curves for any of the other large classifications except wage earners in service.

Wage earners.

While trends for the two sexes in the clerical and sales classifications were comparatively similar during the depression, this was not so generally the case in the classification of all wage earners. The depression struck the men and women wage earners at about the same time, around July, 1920. The ensuing decreases for both sexes continued through 1920, but in the beginning of 1921 women, whose employment had not then decreased so much as men's, started slightly on the upward grade, while men decreased a little more. After March the trends for the two sexes were fairly similar, with the women maintaining their superior position throughout the year and not losing it in 1922 until a more rapid increase among the men after January brought them on a level with the women by August. Women wage earners, therefore, although they felt the results of the depression almost simultaneously with the men, did not suffer so greatly from it.

This does not apply, however, to the smaller classifications of wage earners, some of which were strongly affected and others very little influenced by the depression, while the comparative extent to which decreases in employment affected the men and women differs greatly. Apparently the depression did not play an important part in influencing the relative position of men and women wage earners in service, trade, or transportation.

Agriculture.—In agriculture, however, it is apparent from the chart based on moving averages that the depression of 1920–21 brought with it a very much more rapid and extensive decrease for women than for men. Although the slight decrease experienced by the men lasted only until December, 1921, women's continued until August, 1922.

Service.—In service the second half of 1920 witnessed a decline in numbers of both men and women, but this decline was not very much greater than the usual seasonal decrease during the latter part of each year and the trend was the same for each sex. The year 1921 saw a slight decrease for both men and women, although the usual seasonal increase for each sex occurred. Trends for the two sexes were similar. After the slowing up of 1921 the course of employment was resumed, with seasonal fluctuations and a steady upward trend for each sex.

For the three subclassifications of service the depression of 1920–21 is not reflected very strongly in the employment curves. Naturally the restaurants show the greatest change in employment at that time. The increased employment in restaurants following the war was sharply accentuated for both men and women during the first half of 1920. The decrease for the men started in August, while for the women it started about two months later. However, by March, 1921, the women's curve began to pick up again, and the men's followed suit a month later, so that the early part of 1921 saw employment for both men and women in restaurants again increasing. Throughout the two years 1920–21 there was very little deviation from the total by either men's or women's curve.

In hotels the depression had practically no effect on the relative position of men and women. Allowing for the usual seasonal increase for each sex in the summer months, the general trend was slightly

downward for both men and women from the beginning of 1920 to the end of 1921. The seasonal trends were similar for men and women, but the men's curve maintained a consistently subordinate position. In 1922 men's employment increased for the busy summer season very much more than did women's, so that for a short time the men achieved a relative position similar to that of 1917. This was only a temporary recovery, however, and the last two years of the period saw the women's curve again well above the men's.

In laundries the depression seems not to have had a great effect on the employment of either sex. There was a decline in employment for both men and women, starting late in 1920 and continuing through 1921, after which employment started on the upgrade. Throughout this period the relative position of men and women and the trends of their employment were very similar.

Trade.—In trade the course of the depression is rather difficult to trace, owing to the irregularity in the curves that probably is due to a great decrease in the number of establishments reported. It is evident, however, that during the period of depression women lost the relative importance of the position they had held since the early part of 1918 and in the middle of 1921 their curve resumes, roughly, a position in relation to the men's curve similar to its position before 1917.

Transportation.—For wage earners in transportation the depression of 1920–21 did not change greatly the relative position of the two sexes. There was a certain decrease of employment for both men and women during 1921 and women became, proportionately, slightly less important than they had been in 1920, but the difference was not very great.

In the subclassification of transportation that comprises telephone and telegraph occupations, the depression of 1920–21 apparently had no very serious effect upon the men and women. Decreases in employment for both sexes started in the last part of 1920. There was a slight seasonal stimulation for the men during the middle months of 1921, but a low point was reached for both sexes in the spring of 1922. After that, employment increased, on the whole, for both sexes. Evidently, therefore, the depression hit the telephone and telegraph workers later than it hit manufacturing and clerical workers and their recovery did not start until a few months after the others.

Manufacturing.—It is for the wage earners in manufacturing that the greatest variations appear in the effect of the depression on the trend of employment for the two sexes.

The decrease in employment in the all-manufacturing classification due to the depression started for the men after June, 1920, the earlier decline apparent in the figures for April and May being due chiefly to strikes in the iron and steel industry. Women's employment was affected by the depression about the same time as the men's. The drop in employment was sharp and rapid for both sexes, but was somewhat greater for men than for women. The beginning of 1921 saw the start of recovery for women, but the men continued to decline slightly until after the middle of the year. After that the trend for both sexes was upward, except for minor fluctuations, until the middle of 1923. On the whole, therefore, it can be said that in the all-manufacturing group the depression did not affect women so severely

as men. Decreases in employment were not so severe, and recovery came sooner.

Here again, however, the more detailed classifications do not show that this was consistently the case in all industrial groups. Though in the very great majority of the subclassifications the figures show that the depression was more severe for women than it was for men—in other words, that the decreases in women's employment were proportionately greater than those in men's employment—some classifications show very marked differences between the sexes in the extent of the decreases, as in the manufacture of glass, automobiles and parts, and paper boxes; in others the differences were slighter, and in still others the extent of the depression was very similar for the two sexes. In a very few cases, notably the manufacture of rubber products and metals and metal products, the men seem to have suffered more than did the women.

But the actual proportionate decreases in employment accompanying the depression are not the sole measure of its effects. There must also be considered the duration of decreases, and here too the conditions were not alike for men and women. In all manufacturing it appears that decreases in employment due to the depression started for the men and women in July, 1920, while the women's recovery started early in 1921, and the men's not until after the middle of the year.

These variations are far from typical of the conditions in the smaller classifications. For example, in the manufacture of electrical machinery, apparatus, and supplies the decrease started in men's employment in July, 1920, and in women's employment a month later, while recovery started for the women in March, 1921, but for the men not until December. In the manufacture of metals and metal products the decrease started five months earlier for the men than for the women (July, 1920, for the men and December for the women) and recovery started in September, 1921, for both sexes, though it was sharper for the men. In the lumber industry, the decrease started a month earlier for the men than for the women (July and August of 1920, respectively) but recovery for the men began in February, 1921, and was six months ahead of the women's recovery.

In some important classifications the depression appears to have affected the women earlier than it did the men. This occurred in the manufacture of chemicals and allied products, where decreases started in women's employment in August, 1920, two months earlier than for men. In this classification, however, women's employment recovered in February of the year following, while men's did not start up again until August. In the manufacture of rubber products the decreases for women came in April, 1920, a month earlier than for the men, but recovery came at the same time (February, 1921) for both, though it was more rapid for the men. In the manufacture of leather and leather products also the depression affected women earlier than men, the decreases for the women starting in February and for the men in April of 1920. In this case, however, although recovery came in December, 1920, for both sexes, it was more rapid for women than for men. In miscellaneous manufacturing the depression started at the same time (August, 1920) for both sexes, but recovery for the women started in August, 1921, four months before the recovery for the men.

Summary.

It would be possible to multiply many times the instances of variation in the effects of the depression on men's and women's employment, but it is not necessary to detail further examples to show that such effects are not constant for any group of industries and that no figures giving employment trends only for total wage earners can illustrate the many important deviations from the total that may occur for either sex.

Surely it is of very great importance that, at a time of approaching depression, any community should be able to predict whether the problem of unemployment is going to strike first at the women or at the men wage earners, and during a period of depression it is equally necessary that there should be some basis for judging whether it is for men or for women that relief will come first. Such a basis will be afforded by adequate and comparable employment statistics by sex, but if the figures available are for the two sexes combined the essential units in any constructive program for the prevention and relief of unemployment will not be available.

STRIKES

Another factor that brings about considerable variation in the trends of men's and women's employment in manufacturing industries is the occurrence of strikes. Sometimes a strike will have only a limited local effect; sometimes its influence will extend far beyond the confines of the industry to which apparently it is limited. In almost every case the effect of a strike will show to a different degree in the employment figures for men and for women, depending upon the extent of organization and the proportionate importance of either sex in the industry affected by the dispute.

The 11-year period under discussion in Ohio saw many instances of trade disputes and strikes in the various industries for which figures have been presented. Some of these disputes were so limited as to locality and involved so few workers that their effect is not discernible in the figures and curves showing trends of employment. Others, notably the great steel strike of 1919, caused marked fluctuations in employment not only in the industry itself but in many allied industrial groups.

The effect of the strike in the iron and steel industry is discussed in considerable detail in a later section of this study, dealing specifically with the iron and steel industry. (See Appendix B.) It is necessary to discuss here, therefore, only the variations in the effect of this situation on the employment trends for the two sexes. The figures and curves for the iron and steel classification show a sharp drop in employment in October, 1919 (the strike began late in September), for both the men and the total. This drop was not paralleled in the figures for women's employment, which indicate that women were affected to only a very minor extent by this strike.

That this is not always the case, however, is illustrated by fluctuations in employment in the same industry during April and May of 1920. At this time the decrease in women's employment, although not so severe as the decrease among men, nevertheless shows the effect of strike conditions, the labor disturbances being a strike of railroad switchmen and yard crews, that began in Chicago on April 9 and soon spread to other cities, and a strike of machinists in Cincinnati in May.

An illustration of strikes that affected women's employment very much more seriously than men's may be found in the curves and figures for employment in the manufacture of pottery, terra-cotta and fire-clay products. In this classification the curves show a very great drop in women's employment in October and November of 1922. This drop was reflected in a similar but not nearly so extensive decrease in men's employment. The fluctuations indicated here were the result of extensive strikes in the potteries, where almost all the women in this classification were employed. As a result of these strikes, caused by wage disagreements and occurring in October and November, several thousand workers in the general ware and sanitary ware branches of the industry quit work. About 50 per cent of the women were out of employment. The men's numbers were reduced less than 25 per cent.

The influence of these strikes on employment fluctuation is shown also in the figures for the more inclusive classification of stone, clay, and glass products. In neither classification, however, would the figures or curves for the total show to how great a degree these strikes affected women.

Summary.

A detailed study of many of the other industries for which employment figures are given would yield examples of numbers of strikes that involved considerable groups of men or women workers or both. The examples just described, however, give adequate illustration of the fact that strikes influence employment of men and women to varying degrees. Employment figures classified by sex are essential if these variations are to be shown.

INDUSTRIAL DEVELOPMENTS

In studying the different aspects of women's employment it is a well-known fact that more far-reaching and significant than any local labor disputes or even than any temporary change in economic conditions is the influence of changing industrial practices and products and developments in the use of machinery. It is here that lies the key to the development or retardation of women's opportunity. It is the part played by these changes and developments that must be fully understood if the wisest use of women is to be achieved. Employment figures inevitably are an important element in illustrating the effects of such industrial changes as are being made and the figures and curves presented here afford some interesting illustrations of the value of differentiating these figures by sex to indicate the effects of developments in the industry. For example, the figures for the tobacco industry show a considerable decrease for the men wage earners over the 11-year period and a very much increased proportionate importance of women. This is the result of more than one factor, but it probably illustrates chiefly the effect of recent developments in cigar making. Beginning about 1919 the cigar-manufacturing industry in Ohio, as elsewhere, has been revolutionized by the introduction of machines. Forced into their use by the acute shortage of labor in 1919, manufacturers adopted them more and more widely. It was estimated in 1924 that by that time only about 5 per cent of

the total cigar production was exclusively handmade; about 30 per cent was solely machine made, the remainder consisting of cigars in which both machine and hand operations were employed.[1] The decline in handwork was outlined by the president of the Cigar Makers' International Union in September, 1925. He said that in 1923 the union had 13,305 people making cigars by the out-and-out hand method, but in 1925 they had only 7,817, a decrease of 5,488 within two years. In the same time the number of workers employed on the automatic machine had increased from 1,928 to 3,528.[2]

In Ohio many small plants, with their old-style handwork, were forced out of business, unable to compete with the large plants equipped with automatic machines. In the smaller plants men had been employed. They had worked for short periods of a few months, and were more like stragglers or tramps in the industry. In the large, modern, machine-equipped plants in Ohio, mostly in the hands of a few big corporations, few men were employed, and the greater number of these were maintenance men. The manufacturers preferred girls, because they were faster, neater, and more economical wrappers. At one time of labor shortage in 1919 it was said that the real anxiety was about women, who were wanted everywhere for the lighter employments, and several companies were installing certain comforts and conveniences in their factories to attract them. In the large plants employment was quite steady and the women worked the year around.

This development in the importance of women in the cigar industry is of great significance. It is clearly illustrated by the curves and figures on employment differentiated by sex.

Another type of development, in which women are becoming of less importance, is taking place in telephone employment. Here, where women have for many years been a most important factor, the introduction of automatic telephones is apparently decreasing their employment. This is illustrated clearly in the figures and curves for the telegraph and telephone industry, where since 1920 the curve of men's employment has risen disproportionately.

In the manufacture of boots and shoes the development of fancier styles has been accompanied by the increased proportionate employment of women, as they are used for the stitching on shoes, and this work has increased greatly with the modern styles. The employment curves for this classification show, since the middle of 1922, a steadily increasing proportion of women among the wage earners that undoubtedly is a reflection of the changes taking place in the industry itself.

The curves for the paper-box industry illustrate the effects of changes in product. From 1914 to 1920 women constituted from 50 to 60 per cent of all employees; by 1924 their proportion had dwindled to 38 per cent. This decline seems to have been due to the greater development of the folding-box and shipping-case branches of the industry. The expense of shipping set-up paper boxes has contributed to the success of the folding box, and the heavy paper carton is replacing the wooden packing box. In these lines the employment of men is much greater than that of women.

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[1] The Tobacco Industry. Chas. D. Barney & Co., New York, 1924, pp. 26, 27.
[2] Perkins, George W. Women in the Cigar Industry. American Federationist, September, 1925, p. 809.

Other classifications show other industrial influences at work to vary the trends of men and women workers. The comparative newness of the automobile and electrical-manufacturing industries has resulted in more experimentation with women and resultingly great fluctuations in their employment when compared with men's; while the long-established methods and more standardized products of the clothing industries apparently have produced a greater degree of similarity in the ups and downs of employment for the two sexes.

Whatever the influence of industrial change may have been, its full effect will not be disclosed unless it is possible to consult and compare figures showing the trend of employment for each sex separately, and herein lies the chief value of presenting employment figures with this amount of detail.

PART III. GENERAL TABLES

TABLE 1.—ALL EMPLOYEES: ALL INDUSTRIES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	14,149	641,737	89.8	635,205	638,594	650,761	665,806	659,404	662,025	648,352	645,207	649,753	639,893	608,038	597,802
1915	17,981	737,106	79.3	641,274	655,143	681,989	708,833	726,387	745,954	749,952	760,394	785,170	788,190	793,256	808,729
1916	20,017	928,356	83.6	822,946	852,236	874,354	902,118	916,226	941,971	944,534	965,426	975,094	977,845	984,921	982,577
1917	21,624	1,019,546	93.8	977,022	982,662	1,009,663	1,010,482	1,033,973	1,041,991	1,035,462	1,037,783	1,037,168	1,034,987	1,031,836	1,001,524
1918	22,709	1,041,992	90.6	981,479	993,326	1,024,647	1,029,512	1,047,370	1,075,783	1,081,878	1,083,004	1,057,368	1,057,610	1,045,660	1,026,273
1919	23,652	1,039,150	85.8	984,912	969,317	970,875	981,282	985,813	1,019,542	1,059,646	1,092,856	1,102,395	1,069,109	1,104,026	1,130,025
1920	27,241	1,123,955	80.1	1,141,427	1,131,891	1,167,525	1,170,761	1,157,384	1,186,454	1,182,950	1,147,260	1,135,287	1,093,248	1,022,510	950,765
1921	23,562	812,605	96.9	822,124	809,183	808,031	818,214	813,112	821,800	796,826	803,371	810,285	817,522	819,907	810,882
1922 [2]															
1923	25,904	1,070,998	89.0	993,797	1,014,709	1,056,337	1,071,261	1,093,231	1,116,212	1,092,820	1,103,270	1,089,471	1,083,372	1,076,264	1,061,231
1924	30,439	1,055,720	93.6	1,052,544	1,069,752	1,085,609	1,096,980	1,068,307	1,034,165	1,027,173	1,035,618	1,054,552	1,057,996	1,039,749	1,046,197
Males:															
1914	14,149	515,256	88.0	506,820	509,406	520,693	537,042	532,556	536,594	525,571	521,796	523,109	512,852	483,810	472,819
1915	17,981	596,772	77.3	508,372	519,910	543,302	570,340	588,380	606,817	613,428	622,475	642,142	641,977	646,621	657,498
1916	20,017	764,347	82.8	671,766	697,310	715,905	740,171	755,139	779,269	781,288	801,984	806,826	805,823	811,232	805,455
1917	21,624	836,644	92.9	799,420	805,512	828,829	830,427	855,228	860,923	855,231	856,768	851,222	845,569	842,046	808,551
1918	22,709	828,838	91.8	792,194	800,955	824,916	827,599	842,914	859,488	862,679	861,766	831,235	828,812	815,202	799,195
1919	23,652	819,069	85.1	770,525	757,348	759,428	770,251	775,993	806,016	841,867	870,959	876,475	839,627	869,991	890,349
1920	27,241	888,994	77.7	908,308	898,545	928,933	930,494	917,749	943,849	940,281	908,872	898,243	861,263	797,858	733,530
1921	23,562	617,425	96.6	628,484	614,231	611,192	622,247	618,207	626,819	606,873	612,291	616,650	620,880	622,290	608,941
1922 [2]															
1923	25,904	836,748	88.1	773,792	790,265	824,762	838,205	859,568	878,084	858,143	869,208	852,517	844,379	835,822	816,232
1924	30,439	817,494	93.3	816,829	830,675	843,818	854,487	831,125	799,994	797,226	805,364	817,007	817,388	798,333	797,684
Females:															
1914	14,149	126,481	94.4	128,385	129,188	130,068	128,764	126,848	125,431	122,781	123,411	126,644	127,041	124,228	124,983
1915	17,981	140,334	87.9	132,902	135,233	138,687	138,493	138,007	139,137	136,524	137,919	143,028	146,213	146,635	151,231
1916	20,017	164,009	85.4	151,180	154,926	158,479	161,947	161,087	162,702	163,246	163,442	168,268	172,022	173,689	177,122
1917	21,624	182,902	91.8	177,602	177,150	180,834	180,055	178,745	181,068	180,231	181,015	185,946	189,418	189,790	192,973
1918	22,709	213,155	82.1	189,285	193,271	199,731	201,913	204,456	216,295	219,199	221,238	226,133	228,798	230,458	227,078
1919	23,652	220,081	87.5	214,387	211,969	211,447	211,031	209,820	213,526	217,779	221,897	225,920	229,482	234,035	239,676
1920	27,241	234,961	89.5	233,119	233,346	238,592	240,267	239,635	242,605	242,669	238,388	237,044	231,985	224,652	217,235
1921	23,562	195,179	94.1	193,640	194,952	196,839	195,967	194,905	194,981	189,953	191,080	193,635	196,642	197,617	201,941
1922 [2]															
1923	25,904	234,250	89.8	220,005	224,444	231,575	233,056	233,663	238,128	234,677	234,062	236,954	238,993	240,442	244,999
1924	30,439	238,226	92.5	235,715	239,077	241,791	242,493	237,182	234,171	229,947	230,254	237,545	240,608	241,416	248,513

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 2.—WAGE EARNERS: **ALL INDUSTRIES**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	14,149	553,138	87.7	547,213	551,276	562,619	576,394	570,558	573,248	560,395	558,056	561,822	551,266	519,259	505,549
1915	17,981	638,344	77.9	546,163	560,725	585,972	611,992	628,613	647,787	652,116	662,590	685,425	686,976	690,686	701,081
1916	20,017	812,088	82.8	713,759	742,829	762,388	787,875	801,902	826,843	828,574	849,473	856,723	857,373	862,542	854,771
1917	21,624	887,877	93.4	850,750	856,886	881,069	880,515	903,457	910,624	903,607	905,960	903,480	900,379	895,941	861,856
1918	22,709	895,726	89.9	841,025	852,360	881,072	885,824	902,619	928,599	934,382	935,737	908,919	909,230	895,965	872,982
1919	23,652	876,103	85.7	832,424	815,933	815,660	823,726	827,247	858,781	895,898	926,607	934,638	899,846	930,765	951,694
1920	27,241	942,925	76.9	965,496	954,090	936,870	988,016	973,970	1,002,058	997,747	964,163	954,033	914,088	844,326	770,271
1921	23,562	655,340	96.5	658,602	648,783	647,620	659,576	654,971	665,055	642,354	650,230	657,356	663,838	665,316	650,374
1922	24,124	750,403	74.1	617,183	639,948	667,033	696,600	734,903	779,196	789,017	806,956	808,714	812,688	819,629	852,969
1923	25,904	889,627	87.9	821,527	841,515	879,715	893,122	913,660	934,290	910,266	921,373	905,279	898,921	889,399	866,458
1924	30,439	860,379	92.5	861,334	877,747	891,393	900,438	873,634	839,935	832,913	842,205	859,685	862,863	842,351	840,053
Males:															
1914	14,149	465,569	86.8	457,505	460,308	471,407	487,152	482,796	486,579	475,549	471,819	473,264	463,156	434,437	422,860
1915	17,981	541,118	76.0	454,834	466,528	489,457	516,030	533,553	551,195	557,476	566,279	585,486	584,909	588,993	598,681
1916	20,017	699,574	82.1	610,845	635,846	653,187	676,925	691,353	714,673	715,841	735,884	740,511	739,033	743,814	736,973
1917	21,624	764,737	92.6	729,783	735,300	757,880	758,970	783,461	783,455	782,259	783,786	778,601	773,258	769,482	735,611
1918	22,709	754,727	91.1	717,667	725,489	749,478	752,583	767,596	783,713	787,324	787,249	758,237	757,187	743,452	726,644
1919	23,652	737,757	85.1	696,174	682,056	683,005	692,623	697,203	725,757	759,401	786,335	791,759	754,185	782,965	801,616
1920	27,241	797,601	75.9	818,694	807,803	836,997	837,755	824,679	850,312	846,306	815,845	806,817	771,473	709,178	645,355
1921	23,562	537,345	96.5	545,237	532,001	529,464	541,237	537,559	546,840	527,721	533,485	538,231	542,698	543,865	529,799
1922	24,124	625,644	72.1	503,116	522,293	547,364	576,346	614,297	654,684	663,529	679,416	678,345	682,816	687,303	698,219
1923	25,904	743,881	87.4	685,363	701,032	734,035	746,846	767,369	784,635	763,895	774,928	757,847	749,865	740,688	720,069
1924	30,439	715,902	92.3	717,112	730,343	742,990	752,621	729,525	698,357	695,134	703,382	715,035	715,665	696,333	694,330
Females:															
1914	14,149	87,569	90.1	89,708	90,968	91,212	89,242	87,762	86,669	84,846	86,237	88,558	88,110	84,822	82,689
1915	17,981	97,225	89.2	91,329	94,197	96,515	95,962	95,060	96,592	94,640	96,311	99,939	102,067	101,693	102,400
1916	20,017	112,514	86.7	102,914	106,983	109,201	110,950	110,549	112,170	112,733	113,589	116,212	118,340	118,728	117,798
1917	21,624	123,140	94.4	120,967	121,586	123,189	121,545	119,996	122,169	121,348	122,174	124,879	127,121	126,459	126,245
1918	22,709	141,000	80.9	123,358	126,871	131,594	133,241	135,023	144,886	147,058	148,388	150,682	152,043	152,513	146,338
1919	23,652	138,347	86.7	136,250	133,877	132,655	131,103	130,044	133,024	136,497	140,272	142,899	145,661	147,809	150,078
1920	27,241	145,324	82.3	146,772	146,287	149,873	150,261	149,291	151,746	151,441	148,318	147,216	142,615	135,148	124,916
1921	23,562	117,995	93.3	113,365	116,782	118,156	118,339	117,412	118,215	114,633	116,745	119,125	121,140	121,451	120,575
1922	24,124	124,759	84.7	114,067	117,655	119,669	120,254	120,606	124,512	125,488	127,540	130,369	129,872	132,326	134,750
1923	25,904	145,746	91.0	136,164	140,483	145,680	146,276	146,291	149,655	146,371	146,445	147,432	149,056	148,711	146,389
1924	30,439	144,477	92.8	144,222	147,404	148,403	147,817	144,109	141,578	137,779	138,823	144,650	147,198	146,018	145,723

[1] Arithmetic average of the 12 months.

TABLE 3.—WAGE EARNERS: AGRICULTURE

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	153	2,120	63.1	1,590	1,624	1,776	2,317	2,375	2,486	2,521	2,451	2,237	2,303	2,065	1,691
1915	270	2,811	53.2	2,019	2,042	2,396	2,985	3,159	3,222	3,797	3,261	3,003	2,940	2,598	2,313
1916	363	3,685	55.9	2,688	2,797	2,980	3,717	3,962	4,481	4,805	4,375	4,143	3,863	3,373	3,031
1917	450	4,459	58.7	3,323	3,314	3,764	4,695	4,861	5,306	5,648	5,313	5,041	4,514	4,178	3,551
1918	520	4,511	62.3	3,518	3,603	4,226	4,725	4,985	5,644	5,226	5,080	4,894	4,598	4,035	3,596
1919	552	4,403	58.0	3,376	3,500	3,830	4,583	4,619	5,505	5,823	5,129	4,671	4,402	3,877	3,520
1920	586	4,592	60.3	3,522	3,552	3,821	4,540	4,923	5,428	5,841	5,124	5,099	4,903	4,383	3,964
1921	504	4,185	63.8	3,243	3,272	3,772	4,546	4,504	4,956	5,086	4,781	4,447	4,296	3,837	3,480
1922	519	4,138	58.6	3,108	3,057	3,472	4,297	4,594	5,188	5,215	4,907	4,451	4,125	3,832	3,411
1923	548	4,358	58.4	3,195	3,230	3,573	4,108	4,454	5,256	5,475	5,072	4,870	4,911	4,313	3,834
1924	732	5,433	57.7	3,986	4,013	4,339	5,606	5,739	6,320	6,909	6,455	6,201	5,932	5,178	4,520
Males:															
1914	153	1,992	63.2	1,491	1,513	1,652	2,171	2,218	2,337	2,358	2,325	2,105	2,173	1,965	1,591
1915	270	2,612	54.8	1,860	1,889	2,235	2,798	2,948	2,964	3,393	3,062	2,819	2,762	2,449	2,168
1916	363	3,448	59.1	2,543	2,641	2,818	3,517	3,739	4,162	4,306	4,099	3,861	3,621	3,201	2,866
1917	450	4,164	59.8	3,148	3,127	3,528	4,406	4,569	4,855	5,228	4,943	4,669	4,206	3,936	3,349
1918	520	4,174	64.8	3,318	3,380	3,943	4,359	4,618	5,123	4,874	4,701	4,507	4,199	3,725	3,343
1919	552	4,082	59.1	3,118	3,246	3,544	4,276	4,316	5,050	5,280	4,797	4,353	4,078	3,641	3,289
1920	586	4,274	62.8	3,319	3,314	3,552	4,204	4,574	5,068	5,273	4,809	4,766	4,593	4,120	3,698
1921	504	3,924	62.7	3,003	3,047	3,541	4,222	4,219	4,589	4,790	4,515	4,186	4,063	3,640	3,270
1922	519	3,922	58.0	2,922	2,869	3,278	4,069	4,317	4,889	4,946	4,664	4,242	3,944	3,658	3,262
1923	548	4,044	59.2	3,000	3,014	3,303	3,778	4,085	4,804	5,069	4,742	4,503	4,589	4,048	3,592
1924	732	5,090	58.5	3,756	3,771	4,032	5,227	5,359	5,881	6,416	6,068	5,805	5,601	4,898	4,268
Females:															
1914	153	128	60.7	99	111	124	146	157	149	163	126	132	130	100	100
1915	270	199	35.9	159	153	161	187	211	258	404	199	184	178	149	145
1916	363	237	29.1	145	156	162	200	223	319	499	276	282	242	172	165
1917	450	295	38.8	175	187	236	289	292	451	420	370	372	308	242	202
1918	520	337	38.4	200	223	283	366	367	521	352	379	387	399	310	253
1919	552	321	42.5	258	254	286	307	303	455	543	332	318	324	236	231
1920	586	318	35.7	203	238	269	336	349	360	568	315	333	310	263	266
1921	504	261	53.7	240	225	231	324	285	367	296	266	261	233	197	210
1922	519	216	49.8	186	188	194	228	277	299	269	243	209	181	174	149
1923	548	314	43.1	195	216	270	330	369	452	406	330	367	322	265	242
1924	732	343	46.7	230	242	307	379	380	439	493	387	396	331	280	252

[1] Arithmetic average of the 12 months.

TABLE 4.—WAGE EARNERS: ALL MANUFACTURES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees;															
1914	6,749	437,089	87.0	445,302	451,748	460,258	462,988	449,761	446,060	432,074	429,391	433,541	427,407	403,684	402,858
1915	7,890	486,527	77.0	420,903	439,125	455,815	467,025	473,452	486,857	487,670	497,623	516,161	519,886	527,183	546,627
1916	8,299	628,208	84.4	562,646	592,371	609,412	616,469	618,969	633,802	629,192	644,312	650,785	652,238	661,477	666,825
1917	8,600	682,379	96.8	672,039	679,985	694,158	681,553	687,859	690,745	680,480	680,904	681,068	682,657	684,235	672,867
1918	8,858	699,656	91.7	664,397	675,277	693,514	687,682	701,208	716,286	722,232	724,830	706,940	710,055	705,173	688,278
1919	9,011	678,525	85.5	662,393	647,251	642,943	638,470	635,636	656,151	687,685	712,388	718,463	682,207	715,291	743,424
1920	9,652	715,858	71.5	763,282	754,615	776,484	764,545	742,673	762,219	753,182	720,940	707,237	674,469	615,308	555,339
1921	8,632	460,671	92.2	473,861	469,515	463,942	465,469	465,024	461,296	437,025	446,223	451,457	460,352	469,865	464,023
1922	8,403	546,435	72.3	447,293	470,432	495,367	513,615	536,076	565,817	567,530	579,516	580,800	585,868	596,109	618,793
1923	8,701	654,142	90.6	619,518	641,812	670,124	669,847	677,290	683,434	656,706	663,112	649,914	646,264	641,739	629,942
1924	9,125	606,558	84.6	637,166	653,143	660,479	649,612	614,109	572,216	558,864	569,890	588,643	593,747	584,337	596,491
Males:															
1914	6,749	370,239	86.0	376,091	381,060	389,744	394,892	383,053	380,435	367,937	363,449	365,889	360,188	339,608	340,527
1915	7,890	414,787	75.3	354,429	369,050	384,220	396,713	404,046	416,335	418,463	426,353	441,814	444,009	451,537	470,470
1916	8,299	543,940	84.1	485,998	511,744	527,437	533,485	536,607	550,332	545,252	559,105	563,468	563,240	572,412	578,205
1917	8,600	593,224	96.1	582,961	590,437	604,179	593,970	602,064	603,487	594,116	593,505	590,818	590,177	592,082	580,898
1918	8,858	594,884	93.8	575,035	582,732	597,379	590,097	601,858	608,681	612,156	613,075	593,185	595,038	589,773	579,603
1919	9,011	577,722	86.0	563,108	550,423	547,549	545,033	543,187	561,902	588,950	609,370	613,020	574,350	605,290	631,383
1920	9,652	611,740	70.9	655,552	647,251	666,544	654,822	634,072	652,244	644,135	614,462	602,350	574,468	522,615	472,369
1921	8,632	381,568	90.3	399,751	391,653	385,173	386,733	386,785	382,600	361,151	367,407	370,467	377,789	386,897	382,410
1922	8,403	461,015	70.5	370,965	390,127	413,706	431,650	454,092	481,136	481,629	491,168	490,256	496,414	504,901	526,139
1923	8,701	553,190	90.6	525,302	543,230	567,521	567,341	575,633	579,635	555,847	561,900	548,491	543,307	539,568	530,500
1924	9,125	509,953	83.9	539,341	552,445	559,347	550,235	518,507	479,465	469,143	478,311	491,602	494,735	486,530	499,769
Females:															
1914	6,749	66,850	88.2	69,211	70,688	70,514	68,096	66,708	65,625	64,137	65,942	67,652	67,219	64,076	62,331
1915	7,890	71,741	87.3	66,474	70,075	71,595	70,312	69,406	70,522	69,207	71,270	74,347	75,877	75,646	76,157
1916	8,299	84,268	86.1	76,648	80,627	81,975	82,984	82,362	83,470	83,940	85,207	87,317	88,998	89,065	88,620
1917	8,600	89,155	92.8	89,078	89,548	89,979	87,583	85,795	87,258	86,364	87,399	90,250	92,480	92,153	91,969
1918	8,858	104,772	77.4	89,362	92,545	96,135	97,585	99,350	107,605	110,076	111,755	113,755	115,017	115,400	108,675
1919	9,011	100,803	82.5	99,285	96,828	95,394	93,437	92,449	95,149	98,735	103,018	105,443	107,857	110,001	112,041
1920	9,652	104,117	75.4	107,730	107,364	109,940	109,723	108,601	109,975	109,047	106,478	104,887	100,001	92,693	82,970
1921	8,632	79,103	89.3	74,110	77,862	78,769	78,736	78,239	78,696	75,874	78,816	80,990	82,563	82,968	81,613
1922	8,403	85,419	82.4	76,328	80,305	81,661	81,965	81,984	84,681	85,901	88,348	90,544	89,454	91,208	92,654
1923	8,701	100,952	90.8	94,216	98,582	102,603	102,506	101,657	103,799	100,859	101,212	101,423	102,957	102,171	99,442
1924	9,125	96,606	88.7	97,825	100,698	101,132	99,377	95,602	92,751	89,721	91,579	97,041	99,012	97,807	96,722

[1] Arithmetic average of the 12 months.

TABLE 5.—WAGE EARNERS: CHEMICALS AND ALLIED PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	247	10,779	89.9	10,915	10,915	11,253	11,355	10,997	10,737	10,558	10,574	11,240	10,210	10,270	10,324
1915	301	12,218	84.8	11,410	11,599	11,832	12,069	11,924	11,864	11,889	12,089	13,089	12,552	12,844	13,452
1916	317	14,713	90.0	13,825	14,144	14,581	14,766	14,509	14,807	14,607	14,876	15,364	14,886	14,913	15,273
1917	340	16,826	91.1	15,777	16,186	16,864	16,719	16,703	16,911	16,888	17,145	17,311	17,080	17,142	17,178
1918	351	18,974	91.9	18,009	18,284	19,251	19,028	18,550	18,609	19,187	19,377	19,459	19,194	19,140	19,601
1919	369	19,422	80.9	19,353	18,773	18,125	17,637	18,140	18,985	19,715	20,871	21,809	20,520	20,003	19,126
1920	411	20,340	76.6	20,347	20,443	21,505	20,820	20,074	20,922	21,366	21,418	21,298	20,404	19,010	16,472
1921	360	14,968	90.4	15,543	15,248	15,156	14,812	14,435	14,197	14,068	14,498	15,496	15,435	15,559	15,174
1922	373	16,989	87.8	16,015	16,300	16,374	16,512	16,565	16,435	16,883	17,269	17,710	17,606	17,964	18,236
1923	382	18,903	91.2	18,672	18,828	19,304	19,106	19,178	19,119	19,177	19,386	19,539	18,504	18,201	17,823
1924	392	18,005	88.9	17,978	18,356	18,864	18,978	18,451	17,829	16,874	17,166	18,117	17,789	17,737	17,922
Males:															
1914	247	9,540	90.1	9,607	9,575	9,901	10,031	9,714	9,489	9,376	9,406	10,012	9,033	9,158	9,180
1915	301	10,916	84.6	10,183	10,322	10,525	10,759	10,652	10,594	10,611	10,876	11,760	11,200	11,474	12,038
1916	317	13,237	88.3	12,331	12,647	13,103	13,323	13,067	13,343	13,179	13,467	13,963	13,392	13,339	13,687
1917	340	15,192	90.3	14,174	14,563	15,209	15,059	15,108	15,332	15,229	15,614	15,700	15,437	15,439	15,434
1918	351	16,753	94.7	16,361	16,335	17,249	16,973	16,405	16,336	16,891	17,063	17,020	16,721	16,550	17,079
1919	369	17,000	79.5	16,928	16,498	15,810	15,380	15,849	16,505	17,164	18,281	19,345	17,991	17,478	16,769
1920	411	18,065	77.7	17,956	18,064	19,090	18,477	17,754	18,540	18,868	18,994	19,016	18,127	17,067	14,831
1921	360	13,312	89.2	14,003	13,602	13,491	13,142	12,830	12,565	12,492	12,867	13,812	13,600	13,787	13,557
1922	373	15,268	89.0	14,478	14,722	14,800	14,885	14,929	14,797	15,156	15,520	15,942	15,725	16,003	16,264
1923	382	16,954	90.8	16,791	16,802	17,270	17,107	17,126	17,158	17,277	17,443	17,629	16,579	16,262	16,004
1924	392	16,303	89.8	16,239	16,580	17,021	17,164	16,671	16,115	15,409	15,495	16,474	16,110	16,047	16,307
Females:															
1914	247	1,239	82.2	1,308	1,340	1,352	1,324	1,283	1,248	1,182	1,168	1,228	1,177	1,112	1,144
1915	301	1,302	85.8	1,227	1,277	1,307	1,310	1,272	1,270	1,278	1,213	1,329	1,352	1,370	1,414
1916	317	1,476	88.3	1,494	1,497	1,478	1,443	1,442	1,464	1,428	1,409	1,401	1,494	1,574	1,586
1917	340	1,634	87.8	1,603	1,623	1,655	1,660	1,595	1,579	1,659	1,531	1,611	1,643	1,703	1,744
1918	351	2,221	63.6	1,648	1,949	2,002	2,055	2,145	2,223	2,296	2,314	2,439	2,473	2,590	2,522
1919	369	2,422	87.1	2,425	2,275	2,315	2,257	2,291	2,480	2,551	2,590	2,464	2,529	2,525	2,357
1920	411	2,275	65.7	2,391	2,379	2,415	2,343	2,320	2,382	2,498	2,424	2,282	2,277	1,943	1,641
1921	360	1,656	83.9	1,540	1,646	1,665	1,670	1,605	1,632	1,576	1,631	1,684	1,835	1,772	1,617
1922	373	1,721	77.9	1,537	1,578	1,574	1,627	1,636	1,638	1,727	1,749	1,768	1,881	1,961	1,972
1923	382	1,949	88.6	1,881	2,026	2,034	1,999	2,052	1,961	1,900	1,943	1,910	1,925	1,939	1,819
1924	392	1,702	79.5	1,739	1,776	1,843	1,814	1,780	1,714	1,465	1,671	1,643	1,679	1,690	1,615

[1] Arithmetic average of the 12 months.

TABLE 6.—WAGE EARNERS: IRON AND STEEL AND THEIR PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	1,245	151,137	78.3	158,945	158,793	161,957	164,746	155,634	157,424	152,719	148,204	147,782	143,906	128,924	134,609
1915	1,394	171,583	70.0	141,309	149,012	155,543	161,342	163,792	171,416	173,935	178,299	184,823	186,112	191,441	201,972
1916	1,490	237,345	81.8	210,268	222,857	230,041	229,770	232,392	240,106	235,434	243,849	246,122	246,564	253,718	257,017
1917	1,583	263,504	94.6	256,851	257,355	264,432	257,134	262,900	263,787	261,709	264,653	265,398	270,901	271,583	265,351
1918	1,635	267,688	95.1	260,471	261,511	267,384	262,262	268,388	267,329	273,151	273,891	267,632	273,485	270,790	265,965
1919	1,687	242,505	79.8	262,719	247,464	239,715	232,595	232,842	234,843	246,578	253,443	254,069	209,605	236,211	259,982
1920	1,797	268,187	78.2	278,796	273,372	284,009	274,824	260,073	275,016	277,535	273,682	279,608	269,161	250,121	222,049
1921	1,667	151,257	69.4	184,993	172,593	162,411	154,695	152,142	145,447	128,310	135,411	137,489	142,958	150,845	147,795
1922	1,613	188,847	60.9	140,990	150,299	164,159	171,698	182,914	195,278	197,511	201,783	201,412	211,385	217,385	231,346
1923	1,647	238,036	89.0	221,850	227,806	240,903	239,038	245,405	249,272	243,668	246,646	240,146	238,252	234,425	229,022
1924	1,673	215,136	79.0	238,390	243,497	244,067	236,303	219,356	193,284	192,901	196,660	199,627	203,280	200,524	213,744
Males:															
1914	1,245	148,175	78.1	155,944	155,665	158,719	161,511	152,560	154,379	149,793	145,346	144,953	141,067	126,190	131,979
1915	1,394	168,420	69.8	138,456	146,109	152,497	158,280	160,652	168,203	170,753	175,141	181,664	182,829	188,027	198,428
1916	1,490	232,736	81.9	206,507	218,825	225,912	225,443	227,788	235,438	230,681	239,010	241,171	241,526	248,535	251,993
1917	1,583	257,597	93.9	249,624	250,819	257,771	250,798	258,029	258,652	256,656	259,295	259,425	264,390	265,813	259,889
1918	1,635	259,732	96.3	255,005	255,893	261,519	255,893	261,336	259,416	264,385	264,821	258,194	263,494	260,514	256,312
1919	1,687	234,741	79.5	253,878	239,703	232,080	225,243	225,542	227,639	239,062	245,632	246,234	201,848	228,180	251,846
1920	1,797	260,274	78.4	270,608	265,219	275,416	266,425	251,759	266,492	268,989	265,656	271,811	261,682	243,260	215,974
1921	1,667	146,808	69.2	179,743	167,735	157,526	149,961	147,597	141,120	124,462	131,450	133,430	138,758	146,372	143,542
1922	1,613	183,573	60.9	137,155	146,075	159,700	166,975	177,774	189,690	192,001	196,060	195,689	205,529	211,191	225,032
1923	1,647	230,953	89.1	215,249	220,815	233,633	231,571	237,812	241,620	236,272	239,340	233,319	231,464	227,783	222,556
1924	1,673	208,929	79.1	231,800	236,503	237,106	229,688	213,159	187,463	187,472	191,278	193,875	197,113	194,317	207,375
Females:															
1914	1,245	2,961	81.2	3,001	3,128	3,238	3,235	3,074	3,045	2,926	2,858	2,829	2,839	2,734	2,630
1915	1,394	3,163	80.5	2,853	2,903	3,046	3,062	3,140	3,213	3,182	3,158	3,159	3,283	3,414	3,544
1916	1,490	4,609	72.6	3,761	4,032	4,129	4,327	4,604	4,668	4,753	4,839	4,951	5,038	5,183	5,024
1917	1,583	5,908	67.4	7,227	6,536	6,661	6,336	4,871	5,135	5,053	5,358	5,973	6,511	5,770	5,462
1918	1,635	7,956	53.2	5,466	5,618	5,865	6,369	7,052	7,913	8,766	9,070	9,438	9,991	10,276	9,653
1919	1,687	7,765	81.5	8,841	7,761	7,635	7,352	7,300	7,204	7,516	7,811	7,835	7,757	8,031	8,136
1920	1,797	7,913	70.7	8,188	8,153	8,593	8,399	8,314	8,524	8,546	8,026	7,797	7,479	6,861	6,075
1921	1,667	4,449	73.3	5,250	4,858	4,885	4,734	4,545	4,327	3,848	3,961	4,059	4,200	4,473	4,253
1922	1,613	5,274	60.7	3,835	4,224	4,459	4,723	5,140	5,588	5,510	5,723	5,723	5,856	6,194	6,314
1923	1,647	7,083	84.5	6,601	6,991	7,270	7,467	7,593	7,652	7,396	7,306	6,827	6,788	6,642	6,466
1924	1,673	6,208	77.0	6,590	6,994	6,961	6,615	6,197	5,821	5,429	5,382	5,752	6,167	6,207	6,369

[1] Arithmetic average of the 12 months.

TABLE 7.—WAGE EARNERS: IRON AND STEEL—BOLTS, NUTS, WASHERS, AND RIVETS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	15	2,636	77.9	2,705	2,759	2,921	2,859	2,722	2,689	2,661	2,659	2,574	2,500	2,307	2,276
1915	18	4,006	70.4	3,369	3,487	3,574	3,995	4,786	4,082	3,873	3,905	4,055	4,170	4,266	4,504
1916	23	5,167	80.3	4,604	4,879	4,931	4,842	4,993	5,156	5,141	5,224	5,367	5,472	5,661	5,732
1917	23	5,490	94.3	5,449	5,574	5,644	5,539	5,534	5,590	5,476	5,512	5,358	5,323	5,504	5,366
1918	26	5,948	96.2	5,900	5,959	5,956	5,847	5,992	6,009	6,042	5,881	5,812	5,988	5,967	6,027
1919	30	5,389	77.0	5,833	5,413	5,265	5,497	5,194	5,146	5,377	5,735	5,747	4,491	5,299	5,669
1920	30	5,533	91.2	5,615	5,436	5,629	5,568	5,328	5,461	5,618	5,663	5,678	5,771	5,364	5,264
1921	30	3,324	60.2	4,407	3,799	3,822	3,672	3,482	3,139	2,653	2,884	2,872	2,992	3,194	2,972
1922	26	4,503	50.3	2,747	3,239	3,428	3,816	4,276	4,768	4,984	5,286	5,232	5,359	5,462	5,437
1923	27	5,518	87.9	5,278	5,420	5,644	5,619	5,799	5,735	5,817	5,649	5,353	5,396	5,397	5,111
1924	28	4,602	69.1	5,287	5,559	5,426	5,358	4,577	4,081	3,855	3,839	4,121	4,165	4,357	4,594
Males:															
1914	15	2,179	78.0	2,225	2,239	2,412	2,348	2,231	2,232	2,238	2,205	2,141	2,085	1,906	1,881
1915	18	3,418	66.8	2,824	2,937	2,984	3,435	4,230	3,497	3,266	3,304	3,456	3,571	3,656	3,851
1916	23	4,396	81.1	3,992	4,116	4,159	4,100	4,190	4,355	4,327	4,439	4,601	4,700	4,846	4,922
1917	23	4,743	93.4	4,686	4,842	4,962	4,819	4,800	4,835	4,747	4,773	4,597	4,596	4,733	4,580
1918	26	5,034	95.2	5,042	5,115	5,089	4,985	5,129	5,099	5,114	4,963	4,881	5,018	4,967	5,009
1919	30	4,522	76.7	4,843	4,545	4,430	4,659	4,398	4,312	4,535	4,825	4,854	3,721	4,427	4,715
1920	30	4,658	90.6	4,731	4,561	4,715	4,678	4,496	4,591	4,731	4,755	4,795	4,900	4,505	4,439
1921	30	2,763	60.4	3,646	3,143	3,142	3,077	2,896	2,657	2,202	2,440	2,390	2,490	2,622	2,453
1922	26	3,750	49.7	2,263	2,694	2,851	3,157	3,524	3,961	4,161	4,425	4,367	4,499	4,557	4,537
1923	27	4,603	89.3	4,392	4,479	4,695	4,657	4,790	4,731	4,837	4,767	4,493	4,527	4,552	4,320
1924	28	3,797	71.7	4,347	4,499	4,419	4,435	3,814	3,369	3,227	3,225	3,412	3,418	3,609	3,792
Females:															
1914	15	457	76.0	480	520	509	511	491	457	423	454	433	415	401	395
1915	18	588	83.5	545	550	590	560	556	585	607	601	599	599	610	653
1916	23	771	75.1	612	763	772	742	803	801	814	785	766	772	815	810
1917	23	747	91.6	763	732	742	720	734	755	729	739	761	727	771	786
1918	26	914	82.9	858	844	867	862	863	910	928	918	931	970	1,000	1,018
1919	30	867	77.8	990	868	835	838	796	834	842	910	893	770	872	954
1920	30	875	90.3	884	875	914	890	832	870	887	908	883	871	859	825
1921	30	561	58.3	761	656	680	595	586	482	451	444	482	502	572	519
1922	26	753	53.5	484	545	577	659	752	807	823	861	865	860	905	900
1923	27	915	78.4	886	941	949	962	1,009	1,004	980	882	860	869	845	791
1924	28	804	57.9	940	1,060	1,007	923	763	712	628	614	709	747	748	802

[1] Arithmetic average of the 12 months.

TABLE 8.—WAGE EARNERS: **IRON AND STEEL—SCREWS, MACHINE AND WOOD**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	8	1,740	78.5	1,835	1,822	1,889	1,925	1,815	1,739	1,723	1,661	1,527	1,511	1,608	1,818
1915 [2]															
1916	3	611	80.6	543	560	579	611	588	558	616	663	674	651	653	627
1917	7	758	79.8	661	738	799	804	828	791	812	739	738	741	742	706
1918	3	535	84.9	498	484	537	545	556	546	570	549	553	523	544	524
1919	5	762	76.8	636	706	717	771	757	748	760	805	797	821	798	828
1920	5	741	60.7	810	878	905	802	821	760	746	745	659	620	586	549
1921	4	338	56.5	394	415	438	469	331	332	285	287	280	283	265	275
1922	5	468	47.3	268	316	417	475	458	499	526	532	567	506	501	543
1923	6	790	72.9	785	852	866	838	765	797	907	822	785	720	680	661
1924	6	517	56.4	546	653	643	597	511	468	368	460	481	481	479	520
Males:															
1914	8	1,534	77.4	1,623	1,603	1,666	1,707	1,611	1,529	1,504	1,453	1,340	1,321	1,419	1,630
1915 [2]															
1916	3	451	80.0	422	404	432	458	438	417	455	488	505	475	450	463
1917	7	513	81.7	487	543	575	545	547	505	519	470	472	501	513	484
1918	3	316	84.5	295	284	305	314	315	332	325	317	325	321	336	328
1919	5	483	74.8	404	439	433	484	491	479	482	534	540	492	499	523
1920	5	471	62.0	525	544	568	518	518	466	475	475	430	398	378	352
1921	4	239	67.2	264	267	285	299	259	247	211	214	208	213	202	201
1922	5	320	52.1	200	242	280	314	319	343	348	368	384	351	330	355
1923	6	527	76.9	553	543	581	569	542	514	578	553	510	474	456	447
1924	6	331	67.5	338	400	388	367	326	309	270	293	310	313	312	343
Females:															
1914	8	206	83.9	212	219	223	218	204	210	219	208	187	190	189	188
1915 [2]															
1916	3	160	59.6	121	156	147	153	150	141	161	175	169	176	203	164
1917	7	245	59.4	174	195	224	259	281	286	293	269	266	240	229	222
1918	3	219	80.0	203	200	232	231	241	214	245	232	228	202	208	196
1919	5	279	70.5	232	267	284	287	266	269	278	271	257	329	299	305
1920	5	270	58.5	285	334	337	284	303	294	271	270	229	222	208	197
1921	4	99	37.1	130	148	153	170	72	85	74	73	72	70	63	74
1922	5	148	36.2	68	74	137	161	139	156	178	164	183	155	171	188
1923	6	263	65.0	232	309	285	269	223	283	329	269	275	246	224	214
1924	6	187	38.4	208	253	255	230	185	159	98	167	171	168	167	177

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 9.—WAGE EARNERS: **FOOD AND KINDRED PRODUCTS**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	865	17,855	72.4	15,981	15,926	16,220	15,997	16,069	17,320	17,262	18,958	22,008	21,492	19,062	17,968
1915	1,198	21,016	73.4	19,403	19,224	19,015	18,552	18,898	20,379	20,176	21,776	25,262	23,638	23,237	22,631
1916	1,289	24,074	77.2	21,769	21,786	21,890	22,024	22,174	23,005	23,199	25,068	28,184	27,418	27,155	25,220
1917	1,364	26,374	77.9	24,124	24,010	24,233	23,964	24,250	25,652	25,760	26,393	30,755	29,921	29,234	28,193
1918	1,439	27,933	79.5	25,030	25,343	25,804	25,865	26,111	28,329	27,352	30,565	31,503	29,811	29,582	29,904
1919	1,475	30,067	74.9	28,136	26,843	26,396	26,459	27,036	30,183	29,947	32,348	35,224	33,133	33,256	31,843
1920	1,601	30,335	75.4	29,582	27,947	27,581	27,423	27,973	30,529	31,125	32,123	36,378	33,600	31,321	28,438
1921	1,426	27,706	80.0	26,648	25,699	25,674	25,375	25,689	27,675	26,350	29,005	31,725	30,510	29,833	28,289
1922	1,243	28,058	76.3	25,003	25,577	25,425	25,304	25,295	27,665	26,768	29,004	31,638	32,752	31,686	30,581
1923	1,278	29,335	73.8	26,236	26,462	26,452	26,038	26,754	29,459	28,782	31,126	35,283	33,205	31,927	30,302
1924	1,366	29,323	82.0	27,933	28,081	28,004	27,597	27,627	28,777	29,534	29,133	33,668	32,236	30,250	29,036
Males:															
1914	865	13,365	79.9	12,274	12,254	12,372	12,328	12,296	13,185	13,146	14,183	15,334	15,010	14,221	13,775
1915	1,198	16,125	77.8	15,389	15,081	14,827	14,491	14,739	15,646	15,704	16,795	18,619	17,385	17,522	17,300
1916	1,289	18,579	81.7	17,365	17,166	17,182	17,185	17,400	17,794	18,153	19,597	21,022	20,332	20,427	19,330
1917	1,364	20,243	82.2	18,897	18,724	18,736	18,807	19,157	20,120	20,021	20,494	22,774	21,806	21,953	21,433
1918	1,439	20,904	83.5	19,157	19,295	19,475	19,560	19,753	21,380	20,799	22,947	22,797	21,932	21,721	22,027
1919	1,475	22,317	80.1	21,080	20,052	19,987	20,239	20,714	23,057	22,591	23,939	24,946	23,538	24,040	23,620
1920	1,601	22,790	78.0	22,211	21,095	20,627	20,810	21,362	23,109	23,490	23,932	26,432	24,620	23,526	22,262
1921	1,426	21,670	83.3	21,327	20,209	20,087	19,991	20,377	21,836	21,364	22,922	24,005	23,133	22,862	21,924
1922	1,243	21,799	78.8	19,792	20,000	19,997	19,987	19,834	21,570	21,018	22,265	23,611	25,121	24,528	23,869
1923	1,278	22,507	75.7	20,148	20,051	20,137	20,026	20,709	22,734	22,574	24,118	26,446	24,959	24,531	23,646
1924	1,366	22,852	86.5	22,048	21,941	21,949	21,794	21,890	22,666	23,437	23,183	25,188	24,387	23,273	22,472
Females:															
1914	865	4,490	55.0	3,707	3,672	3,848	3,669	3,773	4,135	4,116	4,775	6,674	6,482	4,841	4,193
1915	1,198	4,891	60.4	4,014	4,143	4,188	4,061	4,159	4,733	4,472	4,981	6,643	6,253	5,715	5,331
1916	1,289	5,495	61.5	4,404	4,620	4,708	4,839	4,774	5,211	5,046	5,471	7,162	7,086	6,728	5,890
1917	1,364	6,131	62.8	5,227	5,286	5,497	5,157	5,093	5,532	5,739	5,899	7,981	8,115	7,281	6,760
1918	1,439	7,030	67.5	5,873	6,048	6,329	6,305	6,358	6,949	6,553	7,618	8,706	7,879	7,861	7,877
1919	1,475	7,750	60.5	7,056	6,791	6,409	6,220	6,322	7,126	7,356	8,409	10,278	9,595	9,216	8,223
1920	1,601	7,545	62.1	7,371	6,852	6,954	6,613	6,611	7,420	7,635	8,191	9,946	8,980	7,795	6,176
1921	1,426	6,036	64.6	5,321	5,490	5,587	5,384	5,312	5,839	4,986	6,083	7,720	7,377	6,971	6,365
1922	1,243	6,259	64.9	5,211	5,577	5,428	5,317	5,461	6,095	5,750	6,739	8,027	7,631	7,158	6,712
1923	1,278	6,829	68.0	6,088	6,411	6,315	6,012	6,045	6,725	6,208	7,008	8,837	8,246	7,396	6,656
1924	1,366	6,472	67.7	5,885	6,140	6,055	5,803	5,737	6,111	6,097	5,950	8,480	7,849	6,977	6,564

[1] Arithmetic average of the 12 months.

TABLE 10.—WAGE EARNERS: FOOD—BAKERY PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	269	4,516	94.8	4,391	4,521	4,558	4,445	4,462	4,549	4,505	4,484	4,630	4,589	4,557	4,502
1915	366	5,278	93.4	5,215	5,217	5,216	5,116	5,253	5,302	5,287	5,217	5,287	5,322	5,478	5,429
1916 [2]															
1917 [2]															
1918	407	6,320	88.0	5,903	5,947	5,926	5,890	6,255	6,444	6,571	6,521	6,504	6,632	6,562	6,691
1919	403	6,412	90.3	6,159	6,164	6,196	6,129	6,233	6,416	6,557	6,456	6,551	6,563	6,734	6,787
1920	451	7,078	93.5	6,927	6,926	6,955	6,975	7,090	7,369	7,331	7,118	6,976	7,175	7,206	6,889
1921	371	6,302	92.9	6,193	6,177	6,229	6,078	6,094	6,315	6,367	6,311	6,403	6,465	6,541	6,451
1922	367	7,109	69.5	6,268	6,363	6,408	6,418	6,416	6,686	6,778	6,496	6,708	8,779	8,975	9,015
1923	377	7,823	86.4	7,249	7,387	7,558	7,471	7,626	7,870	8,002	7,781	8,039	8,279	8,387	8,226
1924	421	7,772	96.9	7,671	7,806	7,872	7,779	7,713	7,866	7,755	7,629	7,874	7,747	7,844	7,713
Males:															
1914	269	3,504	95.8	3,431	3,534	3,567	3,439	3,461	3,504	3,456	3,485	3,582	3,528	3,536	3,521
1915	366	3,912	93.9	3,913	3,895	3,904	3,810	3,868	3,892	3,907	3,853	3,895	3,910	4,057	4,034
1916 [2]															
1917 [2]															
1918	407	4,449	94.1	4,391	4,422	4,398	4,288	4,353	4,467	4,516	4,527	4,508	4,558	4,496	4,469
1919	403	4,639	90.7	4,454	4,450	4,491	4,456	4,537	4,606	4,694	4,686	4,747	4,781	4,857	4,904
1920	451	5,219	94.4	5,092	5,101	5,061	5,135	5,227	5,361	5,350	5,229	5,194	5,283	5,356	5,235
1921	371	4,768	92.8	4,683	4,661	4,683	4,583	4,628	4,747	4,803	4,813	4,940	4,889	4,934	4,849
1922	367	5,504	66.4	4,823	4,860	4,853	4,893	4,874	5,060	5,110	4,994	5,070	7,060	7,190	7,262
1923	377	6,028	87.2	5,654	5,689	5,773	5,726	5,833	5,999	6,101	6,009	6,257	6,349	6,485	6,457
1924	421	5,860	96.4	5,844	5,921	5,960	5,859	5,744	5,876	5,834	5,816	5,907	5,817	5,901	5,837
Females:															
1914	269	1,012	90.5	960	987	991	1,006	1,001	1,045	1,049	999	1,048	1,061	1,021	981
1915	366	1,367	91.6	1,302	1,322	1,312	1,306	1,385	1,410	1,380	1,364	1,392	1,412	1,421	1,395
1916 [2]															
1917 [2]															
1918	407	1,871	68.0	1,512	1,525	1,528	1,602	1,902	1,977	2,055	1,994	1,996	2,074	2,066	2,222
1919	403	1,774	88.8	1,705	1,714	1,705	1,673	1,696	1,810	1,863	1,770	1,804	1,782	1,877	1,883
1920	451	1,859	82.4	1,835	1,825	1,894	1,840	1,863	2,008	1,981	1,889	1,782	1,892	1,850	1,654
1921	371	1,534	91.0	1,510	1,516	1,546	1,495	1,466	1,568	1,564	1,498	1,463	1,576	1,607	1,602
1922	367	1,605	81.0	1,445	1,503	1,555	1,525	1,542	1,626	1,668	1,502	1,638	1,719	1,785	1,753
1923	377	1,795	82.6	1,595	1,698	1,785	1,745	1,793	1,871	1,901	1,772	1,782	1,930	1,902	1,769
1924	421	1,913	91.1	1,827	1,885	1,912	1,920	1,969	1,990	1,921	1,813	1,967	1,930	1,943	1,876

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 11.—WAGE EARNERS: FOOD—CANNING AND PRESERVING

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	80	1,808	12.7	719	653	760	684	798	1,649	1,716	3,037	5,128	3,831	1,806	916
1915	90	1,709	10.5	603	590	717	744	857	1,832	1,588	2,932	5,596	2,625	1,436	983
1916	92	1,509	12.2	611	595	687	688	701	1,356	1,326	2,655	4,863	2,686	1,186	751
1917	92	1,711	10.7	607	584	712	831	907	1,571	1,989	1,972	5,442	3,338	1,615	965
1918	93	2,015	9.7	627	584	649	750	888	2,650	1,652	4,742	6,029	2,865	1,682	1,064
1919	89	1,783	14.2	755	738	735	815	1,066	2,748	1,539	3,355	5,162	2,343	1,304	836
1920	85	1,673	9.2	617	561	617	714	841	1,791	1,988	2,523	6,102	2,371	1,374	581
1921	72	1,227	8.7	326	391	429	508	759	1,923	984	2,611	3,734	1,481	906	667
1922	77	1,479	10.2	464	537	594	603	762	1,886	1,362	3,089	4,567	1,997	1,082	811
1923	82	1,700	9.9	582	656	660	675	755	2,413	1,395	3,090	5,853	2,145	1,280	898
1924	85	1,567	13.8	689	707	751	821	881	1,287	1,938	1,745	4,995	2,731	1,369	893
Males:															
1914	80	997	12.9	375	349	388	406	484	1,003	921	1,867	2,714	1,876	1,034	552
1915	90	1,108	11.1	416	391	458	527	598	1,148	1,012	2,054	3,531	1,568	917	686
1916	92	1,008	13.0	401	402	448	492	538	917	966	1,880	3,094	1,678	775	509
1917	92	1,143	11.4	406	412	492	634	696	1,076	1,403	1,394	3,575	1,984	1,025	622
1918	93	1,296	11.3	435	414	453	528	636	1,775	1,057	3,045	3,651	1,687	1,131	735
1919	89	1,153	15.5	514	480	543	644	748	1,950	1,002	2,164	3,088	1,312	829	558
1920	85	1,057	10.9	429	409	443	518	632	1,204	1,218	1,598	3,741	1,283	761	446
1921	72	820	10.5	254	289	300	365	539	1,334	640	1,795	2,418	926	586	399
1922	77	966	10.7	312	350	401	433	547	1,365	882	2,008	2,928	1,161	680	523
1923	82	1,105	9.5	367	421	438	457	526	1,622	917	2,023	3,875	1,271	818	525
1924	85	934	14.5	423	432	475	556	601	787	1,192	1,052	2,926	1,584	709	476
Females:															
1914	80	811	11.5	344	304	372	278	314	646	795	1,170	2,414	1,955	772	364
1915	90	600	9.1	187	199	259	217	259	684	576	878	2,065	1,057	519	303
1916	92	500	9.2	210	193	239	196	163	439	360	775	1,769	1,008	411	242
1917	92	568	9.2	201	172	220	197	211	495	586	578	1,867	1,354	590	343
1918	93	720	7.1	192	170	196	222	252	875	595	1,697	2,378	1,178	551	329
1919	89	630	8.2	241	258	192	171	318	798	537	1,191	2,074	1,031	475	278
1920	85	616	5.7	188	152	174	196	209	587	770	925	2,361	1,088	613	135
1921	72	406	5.5	72	102	129	143	220	589	344	816	1,316	555	320	268
1922	77	514	9.3	152	187	193	170	215	521	480	1,081	1,639	836	402	288
1923	82	595	10.9	215	235	222	218	229	791	478	1,067	1,978	874	462	373
1924	85	633	12.8	266	275	276	265	280	500	746	693	2,069	1,147	660	417

[1] Arithmetic average of the 12 months.

TABLE 12.—WAGE EARNERS: FOOD—CONFECTIONERY

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	94	2,919	60.4	2,625	2,634	2,741	2,651	2,611	2,497	2,358	2,854	3,550	3,901	3,443	3,158
1915	104	3,100	64.8	2,639	2,677	2,701	2,695	2,763	2,797	2,711	2,933	3,490	4,071	3,950	3,774
1916	126	4,317	66.3	3,641	3,771	3,856	3,888	3,875	4,022	4,186	4,137	4,805	5,378	5,489	4,754
1917	131	4,944	71.5	4,336	4,357	4,522	4,330	4,328	4,623	4,859	5,070	5,618	6,055	5,864	5,364
1918	148	4,692	80.5	4,526	4,661	4,917	4,837	4,496	4,298	4,499	4,696	4,572	4,546	4,916	5,341
1919	131	4,835	60.2	4,575	4,508	4,208	3,967	3,812	3,897	4,355	4,840	5,793	6,298	6,335	5,438
1920	138	4,647	69.4	4,795	4,568	4,564	4,282	4,151	4,282	4,134	4,879	5,351	5,779	4,968	4,008
1921	133	4,692	57.6	3,918	4,564	4,675	4,532	4,308	4,102	3,451	4,267	5,702	5,990	5,657	5,139
1922	120	3,712	63.3	3,323	3,583	3,237	3,171	3,272	3,478	3,047	3,713	4,196	4,817	4,492	4,212
1923	117	4,068	64.1	3,970	4,200	4,004	3,707	3,512	3,468	3,363	3,748	4,578	5,250	4,818	4,201
1924	111	3,199	64.0	3,090	3,238	3,124	2,811	2,620	2,764	2,704	2,829	3,793	4,093	3,749	3,570
Males:															
1914	94	1,168	78.1	1,053	1,088	1,116	1,115	1,123	1,117	1,108	1,202	1,334	1,349	1,251	1,166
1915	104	1,310	74.8	1,180	1,160	1,169	1,160	1,242	1,289	1,308	1,322	1,486	1,551	1,465	1,393
1916	126	2,341	78.7	2,015	2,011	2,094	2,202	2,294	2,395	2,552	2,504	2,555	2,544	2,538	2,391
1917	131	2,474	79.3	2,204	2,193	2,239	2,254	2,363	2,558	2,684	2,767	2,716	2,684	2,651	2,370
1918	148	2,177	78.8	1,979	2,039	2,068	2,175	2,168	2,246	2,394	2,511	2,183	2,033	2,096	2,229
1919	131	1,636	70.8	1,540	1,542	1,476	1,399	1,412	1,527	1,497	1,719	1,857	1,944	1,977	1,744
1920	138	1,653	78.3	1,700	1,650	1,634	1,583	1,560	1,586	1,583	1,700	1,835	1,864	1,677	1,460
1921	133	2,514	75.6	2,493	2,482	2,554	2,510	2,430	2,344	2,173	2,373	2,721	2,874	2,650	2,567
1922	120	1,507	68.3	1,385	1,418	1,299	1,321	1,346	1,537	1,364	1,498	1,687	1,903	1,707	1,615
1923	117	1,554	73.1	1,545	1,602	1,512	1,426	1,393	1,391	1,366	1,453	1,704	1,869	1,800	1,587
1924	111	1,312	69.5	1,299	1,333	1,317	1,166	1,106	1,189	1,186	1,230	1,504	1,592	1,451	1,374
Females:															
1914	94	1,750	49.0	1,572	1,546	1,625	1,536	1,488	1,380	1,250	1,652	2,216	2,552	2,192	1,992
1915	104	1,790	55.7	1,459	1,517	1,532	1,535	1,521	1,508	1,403	1,611	2,004	2,520	2,485	2,381
1916	126	1,976	53.6	1,626	1,760	1,762	1,686	1,581	1,627	1,634	1,633	2,250	2,834	2,951	2,363
1917	131	2,470	58.3	2,132	2,164	2,283	2,076	1,965	2,065	2,175	2,303	2,902	3,371	3,213	2,994
1918	148	2,515	65.9	2,547	2,622	2,849	2,662	2,328	2,052	2,105	2,185	2,389	2,513	2,820	3,112
1919	131	3,199	54.4	3,035	2,966	2,732	2,568	2,400	2,370	2,858	3,121	3,936	4,354	4,358	3,694
1920	138	2,994	65.1	3,095	2,918	2,930	2,699	2,591	2,696	2,551	3,179	3,516	3,915	3,291	2,548
1921	133	2,178	41.0	1,425	2,082	2,121	2,022	1,878	1,758	1,278	1,894	2,981	3,116	3,007	2,572
1922	120	2,205	57.8	1,938	2,165	1,938	1,850	1,926	1,941	1,683	2,215	2,509	2,914	2,785	2,597
1923	117	2,514	59.1	2,425	2,598	2,492	2,281	2,119	2,077	1,997	2,295	2,874	3,381	3,018	2,614
1924	111	1,887	60.5	1,791	1,905	1,807	1,645	1,514	1,575	1,518	1,599	2,289	2,501	2,298	2,196

[1] Arithmetic average of the 12 months.

TABLE 13.—WAGE EARNERS: LEATHER AND LEATHER PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	152	17,735	79.6	18,740	19,309	18,351	15,371	16,718	17,966	18,524	18,415	17,419	16,650	17,722	17,643
1915	174	17,581	88.4	18,317	18,134	17,784	16,577	16,389	17,024	17,444	17,815	17,581	17,317	18,041	18,546
1916	161	18,346	94.7	18,075	18,709	18,660	18,123	18,160	18,529	18,736	18,669	17,962	17,735	18,256	18,599
1917	160	17,465	80.1	18,754	19,173	18,494	17,436	18,051	18,008	17,999	17,041	15,360	15,691	16,495	17,074
1918	161	16,855	91.2	17,372	17,296	17,333	17,230	17,229	17,442	17,155	16,313	16,495	15,903	16,187	16,304
1919	156	17,790	83.3	16,878	17,210	16,772	16,508	16,980	17,334	17,864	18,076	17,841	18,923	19,282	19,808
1920	158	16,395	63.7	19,013	18,781	18,911	18,568	18,157	17,647	17,000	16,042	14,565	13,376	12,120	12,564
1921	144	15,947	74.0	13,251	14,069	14,534	15,073	15,579	16,380	16,707	17,211	17,016	16,500	17,898	17,148
1922	138	14,875	70.1	16,438	16,546	16,312	15,242	12,529	11,540	13,281	14,248	14,909	15,290	15,704	16,467
1923	145	16,266	91.8	16,199	16,894	17,033	16,394	15,671	16,037	16,295	16,367	16,167	16,229	16,276	15,629
1924	138	15,043	89.0	15,508	15,889	15,832	14,840	14,189	14,145	14,797	15,217	15,242	15,176	14,968	14,716
Males:															
1914	152	11,605	80.7	12,210	12,760	12,194	10,297	10,965	11,666	11,947	11,848	11,313	10,928	11,580	11,555
1915	174	11,225	89.4	11,780	11,686	11,420	10,786	10,527	10,839	11,098	11,323	11,208	10,916	11,407	11,710
1916	161	11,899	94.5	11,779	12,162	12,178	11,871	11,790	11,975	12,096	12,055	11,593	11,504	11,805	11,976
1917	160	11,316	82.7	11,924	12,350	11,930	11,400	11,506	11,691	11,674	11,199	10,211	10,227	10,688	10,993
1918	161	10,577	87.2	11,315	11,174	11,124	11,013	11,037	11,009	10,548	9,866	10,090	9,943	9,873	9,932
1919	156	11,253	85.8	10,522	10,814	10,723	10,678	10,886	11,113	11,460	11,547	11,418	11,722	11,895	12,259
1920	158	10,761	64.6	12,487	12,338	12,500	12,215	11,872	11,549	11,075	10,508	9,558	8,782	8,072	8,178
1921	144	9,957	72.4	8,437	8,848	9,110	9,419	9,652	10,113	10,205	10,486	10,431	10,361	11,650	10,773
1922	138	9,565	73.2	10,345	10,519	10,402	9,787	8,371	7,718	8,589	9,119	9,531	9,811	10,045	10,546
1923	145	10,236	89.4	10,383	10,772	10,719	10,390	10,092	10,088	10,244	10,244	10,116	10,113	10,037	9,633
1924	138	9,025	88.6	9,477	9,519	9,552	8,880	8,492	8,467	8,760	8,960	9,106	9,102	9,052	8,934
Females:															
1914	152	6,130	77.5	6,530	6,549	6,157	5,074	5,753	6,300	6,577	6,567	6,106	5,722	6,142	6,088
1915	174	6,356	84.7	6,537	6,448	6,364	5,791	5,862	6,185	6,346	6,492	6,373	6,401	6,634	6,836
1916	161	6,447	93.8	6,296	6,547	6,422	6,252	6,370	6,554	6,640	6,614	6,369	6,231	6,451	6,623
1917	160	6,149	75.4	6,830	6,823	6,564	6,036	6,545	6,317	6,325	5,842	5,149	5,464	5,807	6,081
1918	161	6,278	90.2	6,057	6,122	6,209	6,217	6,192	6,433	6,607	6,447	6,405	5,960	6,314	6,372
1919	156	6,537	77.2	6,356	6,396	6,049	5,830	6,094	6,221	6,404	6,529	6,423	7,201	7,387	7,549
1920	158	5,634	62.0	6,526	6,443	6,411	6,353	6,285	6,098	5,925	5,534	5,007	4,594	4,048	4,386
1921	144	5,990	71.6	4,814	5,221	5,424	5,654	5,927	6,267	6,502	6,725	6,585	6,139	6,248	6,375
1922	138	5,310	62.7	6,093	6,027	5,910	5,455	4,158	3,822	4,692	5,129	5,378	5,479	5,659	5,921
1923	145	6,030	88.4	5,816	6,122	6,314	6,004	5,579	5,949	6,051	6,123	6,051	6,116	6,239	5,996
1924	138	6,018	89.1	6,031	6,370	6,280	5,960	5,697	5,678	6,037	6,257	6,136	6,074	5,916	5,782

[1] Arithmetic average of the 12 months.

TABLE 14.—WAGE EARNERS: **LEATHER—BOOTS, SHOES, CUT STOCK AND FINDINGS**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	65	14,431	75.8	15,285	15,764	14,850	11,949	13,400	14,754	15,369	15,274	14,282	13,510	14,471	14,270
1915	80	13,995	85.2	14,638	14,396	14,000	12,929	12,858	13,605	13,824	14,153	13,905	13,941	14,609	15,083
1916	67	15,108	93.9	15,101	15,441	15,243	14,857	14,965	15,325	15,430	15,372	14,709	14,503	14,912	15,442
1917	68	13,983	75.3	15,430	15,737	15,119	14,134	14,608	14,471	14,420	13,471	11,852	12,216	12,937	13,405
1918	64	13,069	88.3	13,570	15,498	13,484	13,444	13,429	13,615	13,224	12,439	12,737	12,025	12,462	12,898
1919	64	14,707	84.1	14,078	14,371	14,008	13,730	14,094	14,381	14,781	14,886	14,688	15,379	15,772	16,322
1920	66	13,279	63.0	15,464	15,229	15,280	14,976	14,678	14,272	13,743	12,991	11,726	10,716	9,735	10,534
1921	63	13,727	73.2	11,340	12,161	12,553	12,929	13,417	14,074	14,445	14,867	14,614	14,108	15,497	14,720
1922	57	11,923	61.8	13,971	13,941	13,623	12,578	9,761	8,635	10,231	11,160	11,747	12,020	12,322	13,092
1923	56	13,362	90.1	13,338	13,927	14,051	13,414	12,665	13,062	13,399	13,525	13,374	13,403	13,409	12,774
1924	58	12,507	88.8	12,780	13,166	13,088	12,154	11,692	11,759	12,497	12,881	12,808	12,648	12,452	12,165
Males:															
1914	65	8,770	75.9	9,233	9,712	9,193	7,367	8,106	8,898	9,242	9,164	8,631	8,246	8,785	8,667
1915	80	8,314	85.6	8,773	8,623	8,308	7,812	7,660	8,073	8,135	8,324	8,207	8,224	8,677	8,953
1916	67	8,974	93.7	9,072	9,177	9,112	8,917	8,902	9,082	9,101	9,084	8,662	8,600	8,807	9,169
1917	68	8,251	76.9	8,982	9,285	8,902	8,452	8,445	8,541	8,521	8,051	7,144	7,226	7,608	7,853
1918	64	7,386	82.0	8,002	7,929	7,859	7,815	7,849	7,830	7,252	6,565	6,921	6,720	6,827	7,058
1919	64	8,547	87.0	8,066	8,287	8,247	8,167	8,289	8,474	8,730	8,763	8,701	8,685	8,884	9,269
1920	66	8,095	64.0	9,427	9,272	9,384	9,174	8,918	8,693	8,327	7,874	7,138	6,533	6,036	6,365
1921	63	7,945	70.7	6,710	7,124	7,309	7,469	7,707	8,003	8,140	8,381	8,260	8,196	9,485	8,562
1922	57	6,946	62.2	8,135	8,193	8,030	7,412	5,870	5,092	5,880	6,378	6,727	6,948	7,101	7,589
1923	56	7,721	89.0	7,787	8,121	8,101	7,796	7,501	7,534	7,748	7,798	7,699	7,719	7,624	7,226
1924	58	6,888	88.4	7,158	7,220	7,223	6,618	6,385	6,468	6,798	6,986	7,045	6,985	6,946	6,811
Females:															
1914	65	5,661	74.8	6,052	6,052	5,657	4,582	5,294	5,856	6,127	6,110	5,651	5,264	5,686	5,603
1915	80	5,681	83.5	5,865	5,773	5,692	5,117	5,198	5,532	5,689	5,829	5,698	5,717	5,932	6,130
1916	67	6,135	93.3	6,029	6,264	6,131	5,940	6,063	6,243	6,329	6,288	6,047	5,903	6,105	6,273
1917	68	5,732	73.0	6,448	6,452	6,217	5,682	6,163	5,930	5,899	5,420	4,708	4,990	5,329	5,552
1918	64	5,683	88.8	5,568	5,569	5,625	5,629	5,580	5,785	5,972	5,874	5,816	5,305	5,635	5,840
1919	64	6,161	78.9	6,012	6,084	5,761	5,563	5,805	5,907	6,051	6,123	5,987	6,694	6,888	7,053
1920	66	5,184	61.3	6,037	5,957	5,896	5,802	5,760	5,579	5,416	5,117	4,588	4,183	3,699	4,169
1921	63	5,782	71.4	4,630	5,037	5,244	5,460	5,710	6,071	6,305	6,486	6,354	5,912	6,012	6,158
1922	57	4,977	60.7	5,836	5,748	5,593	5,166	3,891	3,543	4,351	4,782	5,020	5,072	5,221	5,503
1923	56	5,641	86.8	5,551	5,806	5,950	5,618	5,164	5,528	5,651	5,727	5,675	5,684	5,785	5,548
1924	58	5,621	89.0	5,622	5,946	5,865	5,536	5,307	5,291	5,699	5,895	5,763	5,663	5,506	5,354

[1] Arithmetic average of the 12 months.

TABLE 15.—WAGE EARNERS: LIQUORS AND BEVERAGES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	178	6,020	81.9	5,572	5,524	5,524	5,801	6,066	6,643	6,744	6,580	6,302	6,039	5,797	5,650
1915	198	5,936	89.3	5,641	5,694	5,690	5,878	6,089	6,112	6,320	6,291	6,117	5,876	5,825	5,697
1916	192	6,460	78.6	5,788	5,828	5,978	6,160	6,346	6,736	7,083	7,368	6,993	6,475	6,448	6,325
1917	179	6,343	82.2	6,119	6,044	6,176	6,209	6,297	6,706	6,973	7,097	6,625	6,132	5,891	5,837
1918	182	5,820	69.6	5,722	5,731	5,979	6,069	6,087	6,426	6,601	6,545	6,009	5,134	4,938	4,597
1919	167	4,533	67.3	4,528	4,405	4,414	4,452	4,679	5,282	5,284	5,051	4,584	4,331	3,824	3,558
1920	150	3,652	64.9	3,378	3,412	3,426	3,603	3,798	4,257	4,369	4,196	3,850	3,499	3,193	2,835
1921	121	2,671	65.3	2,402	2,368	2,443	2,675	2,687	3,060	3,374	3,089	2,924	2,535	2,284	2,203
1922	120	2,234	71.8	2,023	2,001	2,078	2,172	2,304	2,534	2,605	2,543	2,449	2,214	2,014	1,870
1923	124	2,195	65.8	1,865	1,876	1,937	2,027	2,212	2,613	2,832	2,687	2,405	2,078	1,938	1,863
1924	140	2,015	70.4	1,733	1,754	1,839	1,978	2,090	2,204	2,453	2,431	2,184	1,973	1,818	1,726
Males:															
1914	178	5,960	81.6	5,509	5,462	5,468	5,741	6,007	6,590	6,690	6,529	6,236	5,962	5,730	5,597
1915	198	5,853	89.0	5,564	5,621	5,618	5,801	6,019	6,038	6,254	6,195	6,027	5,783	5,721	5,590
1916	192	6,347	78.7	5,696	5,736	5,878	6,058	6,247	6,634	6,977	7,242	6,876	6,347	6,289	6,188
1917	179	6,238	82.2	6,015	5,948	6,081	6,107	6,184	6,588	6,873	6,975	6,520	6,031	5,797	5,733
1918	182	5,718	68.9	5,622	5,636	5,883	5,960	5,980	6,320	6,501	6,442	5,915	5,046	4,833	4,477
1919	167	4,432	67.4	4,398	4,269	4,279	4,332	4,552	5,146	5,192	4,967	4,506	4,271	3,767	3,501
1920	150	3,454	65.6	3,227	3,229	3,220	3,404	3,578	4,024	4,120	3,964	3,641	3,311	3,024	2,703
1921	121	2,626	65.3	2,359	2,324	2,383	2,621	2,642	3,011	3,329	3,037	2,881	2,500	2,249	2,173
1922	120	2,191	71.8	1,991	1,963	2,036	2,128	2,259	2,484	2,553	2,499	2,411	2,167	1,969	1,832
1923	124	2,152	65.1	1,836	1,849	1,887	1,975	2,158	2,559	2,788	2,636	2,369	2,047	1,885	1,832
1924	140	1,962	70.2	1,680	1,723	1,787	1,927	2,050	2,146	2,375	2,367	2,126	1,917	1,778	1,668
Females:															
1914	178	60	66.2	63	62	56	60	59	53	54	51	66	77	67	53
1915	198	83	61.7	77	73	72	77	70	74	66	96	90	93	104	107
1916	192	113	57.9	92	92	100	102	99	102	106	126	117	128	159	137
1917	179	105	77.0	104	96	95	102	113	118	100	122	105	101	94	104
1918	182	102	73.3	100	95	96	109	107	106	100	103	94	88	105	120
1919	167	101	41.9	130	136	135	120	127	136	92	84	78	60	57	57
1920	150	198	53.0	151	183	206	199	220	233	249	232	209	188	169	132
1921	121	45	50.0	43	44	60	54	45	49	45	52	43	35	35	30
1922	120	43	61.5	32	38	42	44	45	50	52	44	38	47	45	38
1923	124	43	50.0	29	27	50	52	54	54	44	51	36	31	53	31
1924	140	53	39.7	53	31	52	51	40	58	78	64	58	56	40	58

[1] Arithmetic average of the 12 months.

TABLE 16.—WAGE EARNERS: LUMBER AND ITS PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	783	26,861	86.5	27,583	28,013	28,268	28,175	28,007	27,508	26,364	26,546	26,131	25,909	25,369	24,465
1915	802	25,010	89.4	23,289	24,263	25,031	25,456	25,163	25,394	24,677	25,025	25,187	25,874	24,704	26,061
1916	860	28,452	88.1	26,343	27,190	27,942	28,173	27,743	28,784	28,661	28,690	29,094	29,095	29,911	29,793
1917	899	28,817	91.4	28,793	29,119	29,617	28,859	29,555	29,659	29,793	28,995	28,383	27,837	27,962	27,234
1918	913	25,268	91.5	24,608	25,161	25,875	25,449	25,287	25,989	26,550	26,062	24,863	24,720	24,370	24,283
1919	923	25,276	80.7	22,533	23,023	22,944	22,678	24,800	25,689	26,192	26,414	26,293	27,212	27,630	27,911
1920	1,003	26,828	81.9	27,761	27,148	27,735	27,396	27,245	27,915	27,878	27,627	27,133	26,122	25,105	22,876
1921	914	20,841	88.2	19,295	20,611	20,716	20,853	20,842	21,677	20,354	20,362	20,779	20,843	21,882	21,888
1922	932	22,974	76.7	19,666	20,415	21,145	21,762	22,550	23,184	23,615	23,626	23,982	24,764	25,349	25,627
1923	1,007	26,843	90.2	25,134	25,726	26,133	26,432	26,782	27,872	27,791	27,533	27,357	27,554	27,336	26,471
1924	1,130	25,307	92.5	24,482	25,388	25,851	26,268	25,681	25,238	24,308	24,592	25,019	25,570	25,734	25,549
Males:															
1914	783	25,133	86.4	25,781	26,178	26,487	26,373	26,217	25,778	24,673	24,864	24,416	24,196	23,749	22,886
1915	802	23,591	89.1	21,919	22,886	23,635	24,008	23,740	23,969	23,301	23,596	23,768	24,446	23,227	24,602
1916	860	27,019	87.8	24,959	25,755	26,441	26,688	26,351	27,362	27,238	27,293	27,668	27,673	28,417	28,378
1917	899	27,265	90.8	27,384	27,679	28,105	27,392	28,013	28,053	28,164	27,376	26,781	26,229	26,431	25,574
1918	913	23,332	90.2	22,907	23,535	24,180	23,785	23,579	24,165	24,470	23,941	22,703	22,453	22,110	22,065
1919	923	23,643	79.9	20,818	21,316	21,403	21,268	23,327	24,205	24,607	24,814	24,621	25,448	25,822	26,071
1920	1,003	24,829	81.5	25,893	25,316	25,785	25,327	25,174	25,773	25,731	25,508	25,085	24,094	23,157	21,107
1921	914	19,439	87.0	17,812	19,124	19,294	19,458	19,460	20,298	19,089	19,034	19,413	19,386	20,423	20,482
1922	932	21,378	77.2	18,376	19,015	19,720	20,344	21,013	21,651	22,035	21,945	22,257	22,922	23,470	23,789
1923	1,007	24,992	90.3	23,425	23,992	24,366	24,660	24,969	25,954	25,916	25,697	25,478	25,588	25,310	24,554
1924	1,130	23,783	92.5	22,992	23,777	24,279	24,682	24,176	23,732	22,823	23,119	23,534	24,065	24,185	24,034
Females:															
1914	783	1,728	86.0	1,802	1,835	1,781	1,802	1,790	1,730	1,691	1,682	1,715	1,713	1,620	1,579
1915	802	1,419	92.8	1,370	1,377	1,396	1,448	1,423	1,425	1,376	1,429	1,419	1,428	1,477	1,459
1916	860	1,433	92.2	1,384	1,435	1,501	1,485	1,392	1,422	1,423	1,397	1,426	1,422	1,494	1,415
1917	899	1,552	84.9	1,409	1,440	1,512	1,467	1,542	1,606	1,629	1,619	1,602	1,608	1,531	1,660
1918	913	1,936	71.1	1,611	1,626	1,695	1,664	1,708	1,824	2,080	2,121	2,160	2,267	2,260	2,218
1919	923	1,633	76.6	1,715	1,707	1,541	1,410	1,473	1,484	1,585	1,600	1,672	1,764	1,808	1,840
1920	1,003	1,999	82.4	1,868	1,832	1,950	2,069	2,071	2,142	2,147	2,119	2,048	2,028	1,948	1,769
1921	914	1,402	85.1	1,483	1,487	1,422	1,395	1,382	1,379	1,265	1,328	1,366	1,457	1,459	1,406
1922	932	1,596	68.7	1,290	1,400	1,425	1,418	1,537	1,533	1,580	1,681	1,725	1,842	1,879	1,838
1923	1,007	1,851	84.4	1,709	1,734	1,767	1,772	1,813	1,918	1,875	1,836	1,879	1,966	2,026	1,917
1924	1,130	1,524	91.4	1,490	1,611	1,572	1,586	1,505	1,506	1,485	1,473	1,485	1,505	1,549	1,515

[1] Arithmetic average of the 12 months.

TABLE 17.—WAGE EARNERS: **METALS AND METAL PRODUCTS OTHER THAN IRON AND STEEL**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	294	17,024	85.8	18,082	18,144	18,135	17,733	17,116	17,333	15,574	16,739	16,947	16,885	15,928	15,672
1915	296	19,198	72.0	16,015	16,809	18,040	18,767	18,675	19,065	18,705	19,413	20,213	20,861	21,566	22,249
1916	331	24,993	88.3	23,046	24,177	24,733	24,389	24,780	25,491	25,074	25,509	25,092	25,573	25,970	26,088
1917	339	25,433	93.6	25,597	25,487	25,378	24,571	24,745	25,566	24,867	25,613	25,476	25,615	26,254	26,022
1918	395	31,800	86.0	29,033	30,149	31,325	31,013	31,800	32,791	33,537	33,752	32,801	32,478	32,169	30,749
1919	409	29,643	80.2	28,635	27,546	27,395	27,293	27,453	28,420	29,485	31,290	30,078	30,835	33,244	34,046
1920	457	34,404	77.9	35,931	35,653	36,090	35,645	35,024	36,391	35,751	34,994	34,205	33,336	31,468	28,364
1921	432	22,745	84.6	23,152	24,497	23,966	23,715	23,392	22,464	20,803	20,733	21,525	22,594	23,233	22,812
1922	406	27,522	68.1	21,155	23,375	24,758	25,755	27,142	28,861	28,788	29,460	29,395	30,017	30,522	31,042
1923	456	34,148	87.8	33,950	35,023	36,233	35,966	36,029	35,853	34,437	33,717	32,282	32,166	32,319	31,799
1924	471	30,496	81.6	31,853	32,934	34,100	32,858	30,949	29,411	27,834	28,062	28,851	29,421	29,657	30,018
Males:															
1914	294	12,994	86.4	13,303	13,612	13,851	13,666	13,228	13,522	12,283	12,800	12,879	12,783	12,031	11,973
1915	296	15,491	73.0	13,009	13,494	14,528	15,187	15,094	15,435	15,319	15,702	16,294	16,705	17,309	17,813
1916	331	20,056	89.4	18,493	19,444	19,971	19,556	19,981	20,687	20,411	20,606	20,063	20,377	20,488	20,597
1917	339	19,588	93.3	19,850	19,607	19,503	18,833	18,948	19,762	19,483	19,665	19,474	19,663	20,191	20,075
1918	395	24,994	85.9	22,895	23,792	24,570	24,563	25,218	25,969	26,380	26,657	25,891	25,388	24,989	23,612
1919	409	23,259	76.7	22,134	21,163	21,090	21,138	21,360	22,186	23,133	24,915	23,684	24,340	26,478	27,490
1920	457	27,452	74.5	29,156	29,042	29,223	28,736	28,190	29,238	28,555	27,861	27,072	26,214	24,363	21,772
1921	432	18,110	88.8	17,569	18,886	18,429	18,675	18,585	18,196	16,929	16,829	17,407	18,355	18,951	18,509
1922	406	22,755	66.2	17,143	18,898	20,090	21,052	22,351	24,037	23,977	24,527	24,546	25,109	25,448	25,879
1923	456	28,558	85.5	28,402	29,508	30,640	30,384	30,287	30,019	28,818	28,328	26,919	26,587	26,594	26,210
1924	471	24,779	80.1	26,127	26,970	28,058	26,762	25,056	23,856	22,470	22,758	23,368	23,760	23,915	24,244
Females:															
1914	294	4,030	68.9	4,779	4,532	4,284	4,067	3,888	3,811	3,291	3,939	4,068	4,102	3,897	3,699
1915	296	3,707	67.8	3,006	3,315	3,512	3,580	3,581	3,630	3,386	3,711	3,919	4,156	4,257	4,436
1916	331	4,937	82.9	4,553	4,733	4,762	4,833	4,799	4,804	4,663	4,903	5,029	5,196	5,482	5,491
1917	339	5,845	88.8	5,747	5,880	5,875	5,738	5,797	5,804	5,384	5,948	6,002	5,952	6,063	5,947
1918	395	6,806	85.5	6,138	6,357	6,755	6,450	6,582	6,822	7,157	7,095	6,910	7,090	7,180	7,137
1919	409	6,384	90.1	6,501	6,383	6,305	6,155	6,093	6,234	6,352	6,375	6,394	6,495	6,766	6,556
1920	457	6,952	91.6	6,775	6,611	6,867	6,909	6,834	7,153	7,196	7,133	7,133	7,122	7,105	6,592
1921	432	4,635	69.6	5,583	5,611	5,537	5,040	4,807	4,268	3,934	3,904	4,118	4,239	4,282	4,303
1922	406	4,768	77.7	4,012	4,477	4,668	4,703	4,791	4,824	4,811	4,933	4,849	4,908	5,074	5,163
1923	456	5,590	91.9	5,548	5,515	5,593	5,582	5,742	5,834	5,619	5,389	5,363	5,579	5,725	5,589
1924	471	5,717	87.0	5,726	5,964	6,042	6,096	5,893	5,555	5,364	5,304	5,483	5,661	5,742	5,774

[1] Arithmetic average of the 12 months.

TABLE 18.—WAGE EARNERS: METALS—GAS AND ELECTRIC FIXTURES AND LAMPS AND REFLECTORS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	38	5,226	78.5	6,064	5,745	5,736	5,224	5,007	5,124	4,758	5,019	5,075	5,149	5,014	4,793
1915	40	4,300	65.2	3,512	3,603	3,853	4,198	4,085	4,196	4,130	4,289	4,472	4,803	5,077	5,386
1916 [2]															
1917 [2]															
1918	43	6,460	90.5	6,674	6,631	6,881	6,504	6,359	6,324	6,413	6,339	6,226	6,370	6,356	6,442
1919	46	5,710	79.5	6,061	6,211	6,272	6,062	5,785	5,741	5,097	4,989	5,299	5,352	5,810	5,837
1920	48	6,682	87.9	6,330	6,316	6,290	6,367	6,486	6,619	6,553	6,870	6,979	7,159	7,124	7,084
1921	43	4,539	57.9	6,333	6,039	5,747	5,347	4,646	4,035	3,761	3,694	3,689	3,667	3,668	3,842
1922	40	4,288	82.4	3,835	4,147	4,226	4,296	4,375	4,248	4,151	4,219	4,275	4,399	4,633	4,653
1923	51	4,944	90.2	4,839	4,904	4,945	4,964	4,957	5,010	4,929	4,705	4,853	4,944	5,053	5,219
1924	50	5,151	93.1	5,084	5,256	5,305	5,306	5,192	4,977	4,940	4,983	5,089	5,136	5,255	5,292
Males:															
1914	38	2,936	81.6	3,100	3,075	3,265	3,035	2,927	3,102	2,801	2,848	2,845	2,848	2,728	2,663
1915	40	2,268	64.2	1,783	1,917	2,124	2,369	2,263	2,301	2,168	2,256	2,276	2,395	2,587	2,776
1916 [2]															
1917 [2]															
1918	43	2,873	93.7	2,990	2,904	2,932	2,878	2,807	2,807	2,853	2,802	2,803	2,888	2,869	2,947
1919	46	2,685	72.0	2,885	2,968	3,041	2,976	2,847	2,836	2,191	2,195	2,356	2,371	2,740	2,810
1920	48	3,358	88.2	3,273	3,339	3,185	3,264	3,329	3,288	3,151	3,434	3,440	3,496	3,523	3,572
1921	43	2,269	57.1	3,176	2,982	2,788	2,741	2,261	2,056	1,908	1,892	1,814	1,820	1,842	1,948
1922	40	2,230	78.1	1,926	2,123	2,177	2,238	2,265	2,199	2,153	2,171	2,232	2,378	2,465	2,435
1923	51	2,526	92.4	2,427	2,517	2,553	2,582	2,585	2,597	2,596	2,424	2,439	2,463	2,504	2,624
1924	50	2,550	92.4	2,503	2,580	2,653	2,615	2,564	2,451	2,451	2,492	2,552	2,537	2,599	2,607
Females:															
1914	38	2,289	66.0	2,964	2,670	2,471	2,189	2,080	2,022	1,957	2,171	2,230	2,301	2,286	2,130
1915	40	2,032	64.6	1,729	1,686	1,729	1,829	1,822	1,895	1,962	2,033	2,196	2,408	2,490	2,610
1916 [2]															
1917 [2]															
1918	43	3,587	86.7	3,684	3,727	3,949	3,626	3,552	3,517	3,560	3,537	3,423	3,482	3,487	3,495
1919	46	3,025	86.2	3,176	3,243	3,231	3,086	2,938	2,905	2,906	2,794	2,943	2,981	3,070	3,027
1920	48	3,324	81.3	3,057	2,977	3,105	3,103	3,157	3,331	3,402	3,436	3,539	3,663	3,601	3,512
1921	43	2,270	57.1	3,157	3,057	2,959	2,606	2,385	1,979	1,853	1,802	1,875	1,847	1,826	1,894
1922	40	2,058	86.1	1,909	2,024	2,049	2,058	2,110	2,049	1,998	2,048	2,043	2,021	2,168	2,218
1923	51	2,418	87.9	2,412	2,387	2,392	2,382	2,372	2,413	2,333	2,281	2,414	2,481	2,549	2,595
1924	50	2,601	92.5	2,581	2,676	2,652	2,691	2,628	2,526	2,489	2,491	2,537	2,599	2,656	2,685

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 19.—WAGE EARNERS: **PAPER AND PRINTING**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	806	26,678	94.4	27,231	27,247	27,400	27,240	26,935	26,691	26,201	26,391	26,258	26,484	26,209	25,852
1915	915	26,287	93.1	25,907	26,054	26,128	25,903	25,858	25,829	25,606	25,701	26,542	27,053	27,371	27,493
1916	928	29,339	90.9	27,881	27,968	28,359	28,746	28,964	29,174	29,328	29,696	30,102	30,539	30,658	30,654
1917	930	29,627	96.0	29,952	29,916	30,069	29,917	29,878	30,154	29,424	29,296	29,368	29,246	29,352	28,952
1918	958	29,825	96.9	29,627	29,842	30,012	29,817	29,834	30,018	30,089	30,329	29,399	29,447	29,507	29,984
1919	938	31,894	85.2	29,724	29,814	29,929	29,955	30,482	31,108	32,581	33,133	32,839	33,809	34,477	34,873
1920	992	35,711	93.0	35,300	35,282	35,853	35,791	35,647	36,071	36,664	36,562	35,844	36,107	35,321	34,095
1921	869	29,946	90.4	29,496	30,288	29,875	29,850	28,329	28,956	29,452	29,866	29,978	30,808	31,352	31,096
1922	886	32,207	88.1	30,227	30,351	30,829	31,105	31,361	31,956	32,405	32,965	33,284	33,672	34,003	34,328
1923	913	34,766	94.5	33,635	33,847	34,464	34,677	34,737	34,878	34,736	34,790	34,908	35,427	35,590	35,504
1924	980	37,182	93.3	35,872	36,240	36,646	36,755	36,842	37,017	36,918	37,162	38,006	38,455	38,151	38,123
Males:															
1914	806	19,613	95.5	19,755	19,864	19,997	19,997	19,959	19,735	19,352	19,388	19,366	19,507	19,333	19,100
1915	915	20,025	94.0	19,882	19,834	19,913	19,833	19,739	19,754	19,516	19,696	20,229	20,495	20,659	20,753
1916	928	22,232	92.1	21,214	21,372	21,610	21,940	22,170	22,306	22,213	22,460	22,692	22,891	22,883	23,036
1917	930	22,513	95.7	22,851	22,770	22,953	22,792	22,644	22,858	22,356	22,338	22,363	22,098	22,171	21,960
1918	958	22,326	96.0	22,434	22,615	22,703	22,518	22,463	22,454	22,380	22,524	21,865	21,786	21,925	22,241
1919	938	23,719	84.8	21,947	22,062	22,185	22,235	22,651	23,211	24,338	24,837	24,521	25,238	25,516	25,891
1920	992	26,461	94.4	26,172	26,084	26,383	26,345	26,373	26,686	27,087	27,072	26,542	26,797	26,408	25,577
1921	869	22,813	89.3	22,420	23,112	22,637	22,625	21,409	21,994	22,552	22,913	22,912	23,441	23,984	23,757
1922	886	24,349	89.2	23,068	23,196	23,454	23,592	23,792	24,181	24,347	24,775	24,973	25,306	25,640	25,867
1923	913	26,391	95.7	25,704	25,833	26,255	26,265	26,370	26,466	26,443	26,346	26,623	26,677	26,868	26,847
1924	980	28,838	93.6	27,859	28,120	28,425	28,521	28,514	28,683	28,681	28,929	29,463	29,750	29,563	29,545
Females:															
1914	806	7,066	90.3	7,476	7,383	7,403	7,243	6,976	6,956	6,849	7,003	6,892	6,977	6,876	6,752
1915	915	6,262	89.1	6,025	6,220	6,215	6,070	6,119	6,075	6,090	6,005	6,313	6,558	6,712	6,740
1916	928	7,107	84.8	6,667	6,596	6,749	6,806	6,794	6,868	7,115	7,236	7,410	7,648	7,775	7,618
1917	930	7,114	95.4	7,101	7,146	7,116	7,125	7,234	7,296	7,068	6,958	7,005	7,148	7,181	6,992
1918	958	7,500	92.0	7,193	7,227	7,309	7,299	7,371	7,564	7,709	7,805	7,534	7,661	7,582	7,743
1919	938	8,174	85.9	7,777	7,752	7,744	7,720	7,831	7,897	8,243	8,294	8,318	8,571	8,961	8,982
1920	992	9,251	88.9	9,128	9,198	9,470	9,446	9,274	9,385	9,577	9,490	9,302	9,310	8,913	8,518
1921	869	7,133	93.6	7,076	7,176	7,238	7,225	6,920	6,962	6,900	6,953	7,066	7,367	7,368	7,339
1922	886	7,858	84.6	7,159	7,155	7,375	7,514	7,569	7,775	8,058	8,190	8,311	8,366	8,363	8,461
1923	913	8,375	90.6	7,931	8,014	8,209	8,412	8,367	8,412	8,293	8,444	8,285	8,750	8,722	8,657
1924	980	8,345	92.1	8,013	8,120	8,221	8,234	8,328	8,334	8,237	8,233	8,543	8,705	8,588	8,578

[1] Arithmetic average of the 12 months.

TABLE 20.—WAGE EARNERS: **PAPER—PRINTING AND PUBLISHING**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	636	15,257	94.9	15,683	15,551	15,627	15,600	15,341	15,225	15,088	15,135	14,884	14,995	14,972	14,979
1915	712	15,505	94.8	15,359	15,511	15,526	15,377	15,364	15,348	15,223	15,159	15,483	15,849	15,868	15,991
1916 [2]															
1917 [2]															
1918	729	15,009	94.3	15,526	15,453	15,274	15,145	15,156	14,984	14,660	15,096	14,680	14,825	14,641	14,672
1919	709	16,407	81.7	14,752	15,141	15,512	15,843	16,080	16,175	16,638	16,810	16,958	17,226	17,704	18,046
1920	752	18,233	96.6	17,833	17,993	18,290	18,313	18,300	18,329	18,461	18,438	18,062	18,447	18,315	18,012
1921	630	16,121	92.2	16,353	16,229	16,303	16,255	15,152	15,796	16,425	16,354	16,308	15,995	16,061	16,219
1922	642	16,488	90.3	15,838	15,656	15,999	16,209	16,290	16,555	16,590	16,741	16,847	16,896	16,899	17,332
1923	668	17,842	94.6	17,306	17,457	17,682	17,760	17,672	17,741	17,838	18,062	17,871	18,188	18,230	18,289
1924	723	19,672	94.4	19,127	19,259	19,270	19,344	19,475	19,757	19,744	19,784	19,969	20,031	20,033	20,269
Males:															
1914	636	11,837	96.3	11,978	11,980	12,024	12,070	12,002	11,897	11,717	11,702	11,625	11,703	11,667	11,674
1915	712	12,423	94.7	12,405	12,428	12,418	12,376	12,343	12,280	12,089	12,178	12,438	12,644	12,701	12,771
1916 [2]															
1917 [2]															
1918	729	11,622	92.6	12,144	12,121	11,999	11,763	11,729	11,542	11,293	11,642	11,317	11,320	11,244	11,353
1919	709	12,645	81.8	11,374	11,686	11,975	12,198	12,307	12,458	12,807	12,999	13,111	13,297	13,618	13,907
1920	752	14,099	97.1	13,856	13,959	14,125	14,066	14,109	14,140	14,244	14,267	13,955	14,197	14,235	14,038
1921	630	12,843	90.6	12,972	12,877	12,874	12,846	11,948	12,435	13,091	13,146	13,186	12,828	12,917	12,997
1922	642	13,056	91.4	12,606	12,552	12,764	12,852	12,912	13,074	13,007	13,119	13,257	13,358	13,447	13,726
1923	668	14,003	96.5	13,724	13,784	14,016	13,962	13,928	13,945	13,988	14,054	14,111	14,086	14,220	14,214
1924	723	15,901	94.3	15,439	15,535	15,542	15,648	15,680	15,942	15,990	16,054	16,151	16,203	16,244	16,378
Females:															
1914	636	3,420	88.0	3,705	3,571	3,603	3,530	3,339	3,328	3,371	3,433	3,259	3,292	3,305	3,305
1915	712	3,082	91.7	2,954	3,083	3,108	3,001	3,021	3,068	3,134	2,981	3,045	3,205	3,167	3,220
1916 [2]															
1917 [2]															
1918	729	3,387	93.4	3,382	3,332	3,275	3,382	3,427	3,442	3,367	3,454	3,363	3,505	3,397	3,319
1919	709	3,762	81.6	3,378	3,455	3,537	3,645	3,773	3,717	3,831	3,811	3,847	3,929	4,086	4,139
1920	752	4,134	93.5	3,977	4,034	4,165	4,247	4,191	4,189	4,217	4,171	4,107	4,250	4,080	3,974
1921	630	3,278	91.0	3,381	3,352	3,429	3,409	3,204	3,361	3,334	3,208	3,122	3,167	3,144	3,222
1922	642	3,432	85.7	3,232	3,104	3,235	3,357	3,378	3,481	3,583	3,622	3,590	3,538	3,452	3,606
1923	668	3,839	87.3	3,582	3,673	3,666	3,798	3,744	3,796	3,850	4,008	3,760	4,102	4,010	4,075
1924	723	3,771	94.8	3,688	3,724	3,728	3,696	3,795	3,815	3,754	3,730	3,818	3,828	3,789	3,891

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 21.—WAGE EARNERS: **PAPER—BOXES (FANCY AND PAPER) AND DRINKING CUPS**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	47	2,831	89.1	2,917	2,977	2,974	2,918	2,853	2,845	2,744	2,720	2,779	2,842	2,750	2,652
1915	52	2,426	85.5	2,349	2,373	2,395	2,390	2,382	2,315	2,323	2,285	2,437	2,539	2,671	2,659
1916	58	2,897	80.6	2,608	2,620	2,736	2,748	2,760	2,836	2,905	2,986	2,980	3,097	3,237	3,237
1917	61	2,928	89.7	3,050	3,101	3,017	2,964	2,955	2,951	2,964	2,816	2,808	2,847	2,883	2,781
1918	60	3,058	85.1	2,795	2,976	3,045	3,020	3,052	3,124	3,239	3,175	2,917	3,009	3,055	3,284
1919	64	3,464	79.8	3,362	3,375	3,260	3,180	3,096	3,209	3,539	3,603	3,544	3,696	3,878	3,831
1920	67	3,545	80.5	3,648	3,555	3,603	3,552	3,463	3,589	3,845	3,723	3,651	3,481	3,334	3,095
1921	67	2,694	82.2	2,745	2,862	2,821	2,720	2,512	2,422	2,433	2,485	2,650	2,820	2,948	2,906
1922	66	3,508	73.0	2,955	3,055	3,089	3,251	3,323	3,392	3,635	3,759	3,770	3,855	4,046	3,961
1923	70	4,111	89.8	3,966	4,019	4,041	4,013	3,959	4,067	4,102	3,960	4,176	4,363	4,409	4,258
1924	73	4,179	89.4	4,047	4,098	4,183	4,114	4,108	4,049	4,012	4,056	4,266	4,490	4,427	4,298
Males:															
1914	47	1,382	90.3	1,421	1,437	1,447	1,424	1,418	1,420	1,348	1,333	1,326	1,363	1,340	1,307
1915	52	1,034	90.1	1,021	1,032	1,034	1,046	1,019	987	1,026	988	1,022	1,061	1,095	1,080
1916	58	1,212	84.9	1,096	1,126	1,196	1,186	1,186	1,209	1,218	1,268	1,235	1,259	1,270	1,291
1917	61	1,197	94.3	1,235	1,218	1,175	1,175	1,167	1,238	1,233	1,184	1,179	1,175	1,205	1,185
1918	60	1,403	85.3	1,263	1,342	1,380	1,403	1,415	1,481	1,459	1,439	1,361	1,400	1,432	1,463
1919	64	1,542	79.8	1,452	1,461	1,406	1,386	1,382	1,466	1,601	1,660	1,607	1,661	1,689	1,731
1920	67	1,565	83.7	1,580	1,563	1,564	1,569	1,547	1,642	1,653	1,641	1,620	1,543	1,474	1,384
1921	67	1,419	77.3	1,455	1,476	1,490	1,410	1,279	1,242	1,276	1,352	1,387	1,462	1,589	1,606
1922	66	2,052	70.7	1,659	1,711	1,741	1,899	1,996	2,026	2,186	2,256	2,238	2,254	2,345	2,314
1923	70	2,429	90.7	2,315	2,391	2,379	2,376	2,358	2,464	2,477	2,320	2,456	2,529	2,553	2,529
1924	73	2,578	90.1	2,473	2,525	2,561	2,540	2,538	2,524	2,505	2,539	2,647	2,744	2,708	2,634
Females:															
1914	47	1,449	87.3	1,496	1,540	1,527	1,494	1,435	1,425	1,396	1,387	1,453	1,479	1,410	1,345
1915	52	1,392	82.1	1,328	1,341	1,361	1,344	1,363	1,328	1,297	1,297	1,415	1,478	1,576	1,579
1916	58	1,685	76.0	1,512	1,494	1,540	1,562	1,583	1,627	1,687	1,718	1,745	1,838	1,967	1,946
1917	61	1,731	84.8	1,815	1,883	1,842	1,789	1,788	1,713	1,731	1,632	1,629	1,672	1,678	1,596
1918	60	1,654	84.1	1,532	1,634	1,665	1,617	1,637	1,643	1,780	1,736	1,556	1,609	1,623	1,821
1919	64	1,923	78.3	1,910	1,914	1,854	1,794	1,714	1,743	1,938	1,943	1,937	2,035	2,189	2,100
1920	67	1,980	78.1	2,068	1,992	2,039	1,983	1,916	1,947	2,192	2,082	2,031	1,938	1,860	1,711
1921	67	1,275	81.7	1,290	1,386	1,331	1,310	1,233	1,180	1,157	1,133	1,263	1,358	1,359	1,300
1922	66	1,455	76.2	1,296	1,344	1,348	1,352	1,327	1,366	1,449	1,503	1,532	1,601	1,701	1,647
1923	70	1,682	86.3	1,651	1,628	1,662	1,637	1,601	1,603	1,625	1,640	1,720	1,834	1,856	1,729
1924	73	1,601	86.3	1,574	1,573	1,622	1,574	1,570	1,525	1,507	1,517	1,619	1,746	1,719	1,664

[1] Arithmetic average of the 12 months.

TABLE 22.—WAGE EARNERS: STONE, CLAY, AND GLASS PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	610	38,842	86.6	37,117	37,087	38,936	41,345	41,620	40,741	37,595	38,153	40,170	39,228	38,058	36,048
1915	721	39,041	83.5	34,351	35,382	38,445	39,890	41,142	40,398	37,815	38,546	40,164	40,504	40,996	40,861
1916	712	44,096	87.7	40,883	41,662	42,784	44,565	45,061	44,746	43,410	43,877	44,835	45,162	46,621	45,547
1917	702	43,591	84.9	42,858	42,307	44,271	46,147	47,151	46,890	42,415	43,268	43,246	42,609	41,885	40,048
1918	683	35,192	84.1	35,538	35,583	36,936	37,271	38,212	38,091	34,473	34,320	34,008	33,507	32,133	32,237
1919	693	36,916	75.9	31,173	32,337	33,816	35,535	35,828	37,137	37,792	38,854	40,251	41,055	40,689	38,525
1920	713	40,168	94.5	38,940	38,965	40,760	41,119	40,872	40,346	40,129	40,617	40,690	40,761	39,968	38,853
1921	637	32,054	86.4	32,698	31,847	31,379	31,517	31,964	32,607	29,714	30,250	31,373	34,395	33,663	33,238
1922	664	34,909	79.9	30,149	32,234	33,736	34,759	36,229	37,618	37,297	37,714	37,103	32,247	32,461	37,356
1923	674	43,052	86.0	38,825	39,857	42,317	43,171	44,001	45,154	43,731	44,830	44,085	44,034	43,775	42,852
1924	711	42,898	90.6	40,810	42,620	44,026	44,122	44,610	43,930	40,415	42,517	42,808	43,473	43,070	42,373
Males:															
1914	610	35,467	85.8	33,650	33,550	35,440	37,842	38,152	37,345	34,623	34,913	36,823	35,853	34,678	32,730
1915	721	34,653	82.5	30,345	31,221	34,144	35,681	36,775	36,082	33,827	34,154	35,581	35,762	36,215	36,051
1916	712	39,056	87.2	36,024	36,734	37,772	39,519	40,033	39,667	38,462	38,952	39,812	40,112	41,335	40,255
1917	702	38,546	82.9	37,768	37,443	39,288	41,069	42,009	41,720	37,573	38,401	38,237	37,619	36,613	34,816
1918	683	30,013	80.9	30,622	30,673	31,930	32,327	33,074	32,820	29,136	29,207	28,588	28,117	26,764	26,900
1919	693	31,561	73.9	26,142	27,205	28,566	30,279	30,530	31,828	32,767	33,566	34,813	35,389	34,864	32,786
1920	713	34,488	93.5	33,426	33,398	35,088	35,374	35,327	34,834	34,752	34,891	34,919	34,770	34,006	33,074
1921	637	27,325	87.1	27,367	26,614	26,376	26,801	27,336	28,106	25,779	26,173	27,035	29,586	28,629	28,101
1922	664	30,086	78.7	25,456	27,301	28,667	29,681	31,218	32,338	32,081	32,359	31,701	28,841	29,034	32,351
1923	674	36,625	85.3	32,909	33,720	35,889	36,648	37,553	38,567	37,387	38,353	37,537	37,435	37,156	36,351
1924	711	36,821	90.5	34,623	36,283	37,664	37,813	38,275	37,733	35,115	36,781	36,955	37,386	36,972	36,256
Females:															
1914	610	3,375	84.0	3,467	3,537	3,496	3,503	3,468	3,396	2,972	3,240	3,347	3,375	3,380	3,318
1915	721	4,388	82.9	4,006	4,161	4,301	4,209	4,367	4,316	3,988	4,392	4,583	4,742	4,781	4,810
1916	712	5,040	91.8	4,859	4,923	5,012	5,046	5,028	5,079	4,948	4,925	5,023	5,050	5,286	5,292
1917	702	5,045	91.8	5,090	4,864	4,983	5,078	5,142	5,170	4,842	4,867	5,009	4,990	5,272	5,232
1918	683	5,179	90.6	4,916	4,910	5,006	4,944	5,138	5,271	5,337	5,113	5,420	5,390	5,369	5,337
1919	693	5,355	86.3	5,031	5,132	5,250	5,256	5,298	5,309	5,025	5,288	5,438	5,666	5,825	5,739
1920	713	5,680	89.8	5,514	5,567	5,672	5,745	5,545	5,512	5,377	5,726	5,771	5,991	5,962	5,779
1921	637	4,729	73.8	5,331	5,233	5,003	4,716	4,628	4,501	3,935	4,077	4,338	4,809	5,034	5,137
1922	664	4,823	63.1	4,693	4,933	5,069	5,078	5,011	5,280	5,216	5,355	5,402	3,406	3,427	5,005
1923	674	6,427	89.4	5,916	6,137	6,428	6,523	6,448	6,587	6,344	6,477	6,548	6,599	6,619	6,501
1924	711	6,076	83.3	6,187	6,337	6,362	6,309	6,335	6,197	5,300	5,736	5,853	6,087	6,098	6,117

[1] Arithmetic average of the 12 months.

TABLE 23.—WAGE EARNERS: **STONE, CLAY, AND GLASS—GLASS**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	36	9,698	62.0	10,694	10,671	10,920	11,270	10,607	9,792	7,157	6,993	9,102	9,406	9,921	9,847
1915	41	10,078	64.9	9,897	10,245	10,524	10,348	10,375	9,946	7,775	8,432	9,549	10,318	11,542	11,989
1916 [2]															
1917 [2]															
1918	64	11,371	71.7	12,286	12,736	12,896	12,352	12,678	12,611	9,249	9,711	10,711	10,628	10,248	10,352
1919	55	10,163	71.7	8,775	9,930	10,352	10,449	9,432	9,932	8,488	9,658	10,830	11,319	11,845	10,951
1920	49	11,120	88.2	10,985	11,235	11,457	11,200	11,623	10,565	10,257	11,215	11,188	10,972	11,334	11,416
1921	44	7,202	59.3	9,253	8,202	7,004	7,159	6,921	6,957	5,525	5,491	5,862	7,551	8,060	8,443
1922	49	8,506	77.7	7,167	8,276	8,647	8,495	8,347	8,842	8,585	8,484	8,348	8,561	9,092	9,227
1923	43	9,536	90.3	9,161	9,226	9,876	9,829	10,060	10,123	8,838	9,702	9,559	9,439	9,476	9,139
1924	36	8,060	75.8	7,800	8,592	8,745	8,560	8,643	8,556	6,629	7,061	7,514	7,975	8,295	8,346
Males:															
1914	36	8,871	60.4	9,798	9,738	10,018	10,373	9,727	8,949	6,587	6,267	8,292	8,577	9,091	9,038
1915	41	9,143	65.6	9,065	9,341	9,597	9,419	9,428	9,046	7,112	7,571	8,583	9,287	10,423	10,838
1916 [2]															
1917 [2]															
1918	64	9,535	65.8	10,658	11,111	11,185	10,677	10,871	10,720	7,362	8,006	8,675	8,601	8,198	8,357
1919	55	8,477	72.2	7,189	8,270	8,595	8,705	7,740	8,228	7,154	8,127	9,196	9,527	9,915	9,078
1920	49	9,358	89.5	9,222	9,473	9,679	9,330	9,820	8,878	8,788	9,491	9,474	9,081	9,437	9,628
1921	44	6,136	62.0	7,734	6,842	5,881	6,106	5,888	5,946	4,814	4,795	5,081	6,511	6,873	7,161
1922	49	7,178	77.0	6,028	7,001	7,316	7,178	7,142	7,512	7,232	7,057	6,929	7,220	7,602	7,828
1923	43	8,000	87.0	7,647	7,718	8,240	8,237	8,470	8,531	7,419	8,183	8,035	7,807	7,961	7,669
1924	36	6,916	77.2	6,597	7,356	7,469	7,264	7,356	7,289	5,764	6,217	6,540	6,857	7,150	7,133
Females:															
1914	36	827	61.1	896	933	902	897	880	843	570	726	810	829	830	809
1915	41	936	57.6	832	904	927	929	947	900	663	861	966	1,031	1,119	1,151
1916 [2]															
1917 [2]															
1918	64	1,836	79.3	1,628	1,625	1,711	1,675	1,807	1,891	1,887	1,705	2,036	2,024	2,050	1,995
1919	55	1,686	69.1	1,586	1,660	1,757	1,744	1,692	1,704	1,334	1,531	1,634	1,792	1,930	1,873
1920	49	1,762	77.4	1,763	1,762	1,778	1,870	1,803	1,687	1,469	1,724	1,714	1,891	1,897	1,788
1921	44	1,066	45.8	1,519	1,360	1,123	1,053	1,033	1,011	711	696	781	1,040	1,187	1,282
1922	49	1,328	79.8	1,139	1,275	1,331	1,317	1,205	1,330	1,353	1,427	1,419	1,344	1,400	1,399
1923	43	1,536	86.7	1,514	1,508	1,636	1,592	1,590	1,592	1,419	1,519	1,524	1,542	1,515	1,479
1924	36	1,144	65.1	1,203	1,236	1,276	1,296	1,287	1,267	865	844	974	1,118	1,145	1,213

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 24.—WAGE EARNERS: **STONE, CLAY, AND GLASS—POTTERY, TERRA-COTTA AND FIRE-CLAY PRODUCTS**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	144	15,229	89.2	14,858	15,353	15,690	15,750	15,769	15,600	15,064	15,584	15,486	15,035	14,490	14,070
1915	187	18,652	83.9	16,319	17,079	18,502	18,915	19,214	18,803	18,553	19,153	19,343	19,347	19,150	19,443
1916	193	20,571	94.0	19,840	20,115	20,323	20,400	20,711	20,001	20,611	20,938	20,884	20,868	21,109	21,053
1917	186	19,988	91.4	19,955	19,547	20,079	20,308	20,477	20,794	20,296	20,411	19,995	19,607	19,388	18,998
1918	190	17,158	91.3	17,268	17,334	17,673	17,545	17,747	17,682	17,593	17,277	16,693	16,636	16,235	16,210
1919	190	18,210	86.6	16,774	16,740	17,279	17,727	18,264	18,408	18,684	18,561	19,047	19,338	19,087	18,607
1920	193	18,974	93.2	18,929	18,750	19,394	19,256	18,196	18,494	18,723	18,674	19,070	19,530	19,276	19,392
1921	188	17,419	85.4	17,561	17,647	17,784	16,893	17,260	17,430	16,008	16,426	17,068	18,752	18,067	18,135
1922	183	17,515	71.5	16,644	17,191	17,619	18,032	18,608	18,940	18,623	19,070	19,134	13,921	13,678	18,716
1923	183	22,405	87.7	20,445	21,161	21,929	22,261	22,197	22,828	22,796	22,947	22,792	23,077	23,305	23,124
1924	183	22,620	89.3	22,369	22,972	23,501	23,062	22,907	22,378	20,980	22,642	22,679	22,836	22,599	22,509
Males:															
1914	144	12,970	87.9	12,602	13,053	13,393	13,449	13,491	13,354	12,953	13,316	13,190	12,759	12,220	11,854
1915	187	15,287	83.3	13,231	13,906	15,205	15,728	15,885	15,481	15,315	15,707	15,812	15,722	15,577	15,876
1916	193	16,794	93.9	16,156	16,367	16,586	16,651	16,934	16,207	16,861	17,207	17,121	17,073	17,203	17,162
1917	186	16,404	90.4	16,203	16,051	16,519	16,662	16,821	17,146	16,640	16,875	16,441	16,133	15,850	15,505
1918	190	13,841	89.3	13,995	14,063	14,390	14,295	14,439	14,326	14,177	13,900	13,346	13,306	12,953	12,900
1919	190	14,620	85.7	13,377	13,328	13,845	14,284	14,736	14,885	15,060	14,887	15,341	15,553	15,291	14,849
1920	193	15,188	93.2	15,291	15,063	15,624	15,501	14,568	14,795	14,955	14,810	15,146	15,594	15,367	15,541
1921	188	13,845	85.3	13,847	13,874	14,002	13,319	13,747	14,016	12,859	13,122	13,594	15,079	14,306	14,372
1922	183	14,118	77.2	13,160	13,614	13,968	14,356	14,891	15,100	14,860	15,237	15,247	11,975	11,770	15,226
1923	183	17,647	87.8	16,110	16,641	17,267	17,469	17,476	17,979	18,022	18,138	17,914	18,158	18,345	18,245
1924	183	17,847	90.0	17,523	18,014	18,566	18,192	18,010	17,610	16,702	17,907	17,967	18,045	17,838	17,793
Females:															
1914	144	2,260	91.7	2,256	2,300	2,297	2,301	2,278	2,246	2,111	2,268	2,296	2,276	2,270	2,216
1915	187	3,365	85.2	3,088	3,173	3,297	3,187	3,329	3,327	3,238	3,446	3,531	3,625	3,573	3,567
1916	193	3,777	94.3	3,684	3,748	3,737	3,749	3,777	3,794	3,750	3,731	3,763	3,795	3,906	3,891
1917	186	3,584	92.6	3,752	3,496	3,560	3,646	3,656	3,648	3,656	3,536	3,554	3,474	3,538	3,493
1918	190	3,317	95.1	3,273	3,271	3,283	3,250	3,308	3,356	3,416	3,377	3,347	3,330	3,282	3,310
1919	190	3,590	89.5	3,397	3,412	3,434	3,443	3,528	3,523	3,624	3,674	3,706	3,785	3,796	3,758
1920	193	3,786	92.2	3,638	3,687	3,770	3,755	3,628	3,699	3,768	3,864	3,924	3,936	3,909	3,851
1921	188	3,575	83.3	3,714	3,773	3,782	3,574	3,513	3,414	3,149	3,304	3,474	3,673	3,761	3,763
1922	183	3,397	49.1	3,475	3,577	3,651	3,676	3,717	3,840	3,763	3,833	3,887	1,946	1,908	3,490
1923	183	4,758	87.4	4,335	4,520	4,662	4,792	4,721	4,849	4,774	4,809	4,878	4,919	4,960	4,879
1924	183	4,772	86.3	4,846	4,958	4,935	4,870	4,897	4,768	4,278	4,735	4,712	4,791	4,761	4,716

[1] Arithmetic average of the 12 months.

TABLE 25.—WAGE EARNERS: RUBBER PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	41	21,088	74.6	19,196	21,553	23,511	25,031	24,236	21,647	20,866	19,544	19,889	19,393	19,501	18,684
1915	59	28,010	60.1	19,796	21,221	23,304	26,454	28,754	30,332	31,027	30,162	30,267	30,826	31,055	32,924
1916	78	42,401	71.5	35,332	38,866	40,376	43,126	41,775	42,576	41,981	42,661	42,670	43,733	46,272	49,445
1917	82	55,418	86.9	52,763	55,753	58,190	58,245	58,050	58,642	59,139	54,939	52,895	52,335	52,651	51,419
1918	93	49,236	86.8	48,929	50,688	49,742	48,634	50,126	52,885	52,391	51,569	47,076	45,922	46,031	46,838
1919	108	66,367	66.5	53,535	56,180	56,810	58,682	61,789	63,918	67,814	72,148	72,461	75,206	77,336	80,528
1920	114	61,671	37.5	76,877	78,053	80,767	82,063	79,884	74,666	66,094	50,410	41,376	44,056	35,073	30,735
1921	107	31,270	61.9	23,240	23,975	25,337	30,844	35,258	33,601	36,101	37,545	33,930	31,582	31,491	32,337
1922	109	43,617	72.0	34,882	36,981	37,868	38,688	42,968	47,208	48,469	48,060	46,632	46,628	47,060	47,965
1923	119	46,864	66.0	49,885	53,107	54,464	55,312	54,922	50,573	36,514	42,048	39,570	40,378	41,995	43,600
1924	120	47,207	82.8	45,370	46,719	47,441	47,142	45,375	42,531	42,966	46,578	51,345	51,032	49,672	50,310
Males:															
1914	41	18,798	73.8	16,656	18,978	20,865	22,500	21,867	19,528	18,768	17,496	17,719	17,238	17,362	16,595
1915	59	25,645	58.3	17,741	18,990	20,959	23,939	26,208	27,775	28,514	27,872	27,990	28,541	28,809	30,406
1916	78	39,328	70.2	32,444	35,741	37,232	40,043	38,681	39,540	38,925	39,645	39,682	40,742	43,063	46,197
1917	82	51,603	84.3	49,287	52,284	54,627	54,739	54,516	54,989	55,443	50,973	48,989	48,267	48,394	46,723
1918	93	41,935	81.0	44,067	45,262	43,700	42,398	43,601	44,848	44,278	43,102	38,282	36,659	37,067	39,951
1919	108	59,987	66.1	47,247	49,953	50,928	52,836	56,114	58,318	61,886	65,969	66,168	68,544	70,421	71,456
1920	114	56,182	36.3	70,329	71,486	74,071	75,470	73,455	68,279	60,180	45,275	36,889	39,954	31,414	27,380
1921	107	27,549	60.0	20,113	20,453	21,867	27,061	31,285	29,813	32,267	33,540	30,524	28,247	27,942	28,671
1922	109	38,641	71.2	30,752	32,549	33,331	34,085	38,095	42,073	43,174	43,045	41,553	41,335	41,438	42,262
1923	119	40,245	62.7	44,057	46,556	47,230	47,862	47,604	43,267	30,010	35,785	33,587	34,310	35,567	37,101
1924	120	40,213	82.6	38,568	39,883	40,412	40,101	38,733	36,337	36,926	39,890	44,010	43,347	41,898	42,451
Females:															
1914	41	2,290	77.4	2,540	2,575	2,646	2,531	2,369	2,119	2,098	2,048	2,170	2,155	2,139	2,089
1915	59	2,365	80.4	2,055	2,231	2,345	2,515	2,546	2,557	2,513	2,290	2,277	2,285	2,246	2,518
1916	78	3,073	88.9	2,888	3,125	3,144	3,083	3,094	3,036	3,056	3,016	2,988	2,991	3,209	3,248
1917	82	3,816	73.9	3,476	3,469	3,563	3,506	3,534	3,653	3,696	3,966	3,906	4,068	4,257	4,696
1918	93	7,301	52.5	4,862	5,426	6,042	6,236	6,525	8,037	8,113	8,467	8,794	9,263	8,964	6,887
1919	108	6,381	61.7	6,288	6,227	5,882	5,846	5,675	5,600	5,928	6,179	6,293	6,662	6,915	9,072
1920	114	5,489	50.1	6,548	6,567	6,696	6,593	6,429	6,387	5,914	5,135	4,487	4,102	3,659	3,355
1921	107	3,621	78.1	3,127	3,522	3,470	3,783	3,973	3,788	3,834	4,005	3,406	3,335	3,549	3,666
1922	109	4,976	72.4	4,130	4,432	4,537	4,603	4,873	5,135	5,295	5,015	5,079	5,293	5,622	5,703
1923	119	6,619	78.2	5,828	6,551	7,234	7,450	7,318	7,306	6,504	6,263	5,983	6,068	6,428	6,499
1924	120	6,994	76.9	6,802	6,836	7,029	7,041	6,642	6,194	6,040	6,688	7,335	7,685	7,774	7,859

[1] Arithmetic average of the 12 months.

TABLE 26.—WAGE EARNERS: RUBBER—TIRES AND TUBES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	93	49,236	86.8	48,929	50,688	49,742	48,634	50,126	52,885	52,391	51,569	47,076	45,922	46,031	46,838
1919	86	63,981	66.1	51,295	53,896	54,552	56,434	59,582	61,738	65,562	69,747	70,037	72,610	74,734	77,579
1920	79	60,005	36.4	75,109	76,401	79,077	80,513	78,283	72,917	64,228	48,607	39,632	42,389	33,563	29,343
1921	72	29,597	61.3	21,983	22,563	23,732	29,078	33,400	31,868	34,368	35,858	32,230	29,852	29,635	30,597
1922	72	40,155	72.2	32,241	34,062	34,643	35,224	39,285	43,331	44,650	44,409	42,983	43,084	43,509	44,442
1923	75	42,885	63.3	46,257	49,193	50,384	51,040	50,581	46,185	32,294	38,107	35,829	36,630	38,193	39,926
1924	63	42,412	81.9	40,620	41,747	42,292	41,847	40,499	38,262	38,735	42,081	46,738	46,105	44,719	45,300
Males:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	93	41,935	81.0	44,067	45,262	43,700	42,398	43,601	44,848	44,278	43,102	38,282	36,659	37,067	39,951
1919	86	58,441	65.9	45,799	48,514	49,449	51,407	54,709	56,928	60,471	64,419	64,581	66,841	68,714	69,455
1920	79	55,239	35.7	69,321	70,534	73,114	74,582	72,542	67,318	59,147	44,267	35,886	38,996	30,556	26,607
1921	72	26,626	59.5	19,316	19,606	20,910	25,996	30,177	28,816	31,194	32,484	29,456	27,187	26,776	27,595
1922	72	36,289	71.4	28,963	30,602	31,201	31,765	35,595	39,437	40,553	40,557	39,028	38,910	39,011	39,850
1923	75	37,467	60.4	41,534	43,842	44,403	44,883	44,546	40,238	27,087	33,027	31,005	31,684	32,874	34,483
1924	63	36,699	82.0	35,035	36,137	36,579	36,177	35,186	33,340	33,935	36,622	40,678	39,740	38,237	38,721
Females:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	93	7,301	52.5	4,862	5,426	6,042	6,236	6,525	8,037	8,113	8,467	8,794	9,263	8,964	6,887
1919	86	5,540	59.2	5,496	5,382	5,103	5,027	4,873	4,810	5,091	5,328	5,456	5,769	6,020	8,124
1920	79	4,766	45.9	5,788	5,867	5,963	5,931	5,741	5,599	5,081	4,340	3,746	3,393	3,007	2,736
1921	72	2,971	79.0	2,667	2,957	2,822	3,082	3,223	3,052	3,174	3,374	2,774	2,665	2,859	3,002
1922	72	3,866	71.4	3,278	3,460	3,442	3,459	3,690	3,894	4,097	3,852	3,955	4,174	4,498	4,592
1923	75	5,418	76.7	4,723	5,351	5,981	6,157	6,035	5,947	5,207	5,080	4,824	4,946	5,319	5,443
1924	63	5,713	73.0	5,585	5,610	5,713	5,670	5,313	4,922	4,800	5,459	6,060	6,365	6,482	6,579

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 27.—WAGE EARNERS: TEXTILES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	535	31,102	83.0	32,523	33,647	33,482	33,043	31,687	31,209	30,381	30,327	30,382	30,182	28,445	27,912
1915	657	35,497	90.3	33,280	35,805	36,665	35,920	34,330	34,827	34,864	35,851	36,310	36,855	35,773	35,481
1916	678	38,925	92.8	37,202	39,390	39,847	39,342	38,052	38,226	38,767	39,535	39,486	40,084	38,581	38,590
1917	708	39,905	95.5	39,363	40,335	40,972	40,581	39,141	39,781	39,730	40,107	39,892	40,340	39,507	39,110
1918	757	40,503	88.0	39,537	41,033	41,510	41,561	40,675	41,540	42,171	40,855	41,137	40,419	38,501	37,099
1919	767	39,364	84.5	37,220	37,010	36,990	36,305	36,360	37,615	39,956	41,650	41,876	42,257	42,151	42,978
1920	810	41,058	71.1	43,307	43,814	44,485	43,895	43,715	43,330	42,265	41,419	40,345	38,669	35,824	31,631
1921	680	34,170	77.6	28,421	31,498	32,844	33,791	34,077	34,695	34,545	35,306	35,709	36,640	36,351	36,158
1922	689	37,556	89.4	34,846	36,740	37,252	37,356	36,786	37,450	37,790	37,807	38,210	38,821	38,970	38,647
1923	679	44,316	91.8	41,756	43,786	45,226	45,231	45,095	45,504	45,408	44,529	44,148	44,508	43,957	42,642
1924	687	40,234	89.3	41,083	42,289	42,534	42,225	40,718	39,004	37,999	38,746	39,945	40,220	39,278	38,768
Males:															
1914	535	10,535	85.2	10,751	11,091	11,083	11,149	10,852	10,883	10,627	10,376	10,329	10,213	9,575	9,494
1915	657	12,394	90.1	11,463	12,257	12,622	12,531	12,119	12,333	12,355	12,650	12,608	12,716	12,510	12,559
1916	678	13,363	93.3	12,850	13,344	13,775	13,543	13,037	13,208	13,293	13,583	13,565	13,651	13,302	13,200
1917	708	13,498	92.9	13,523	13,468	13,984	13,832	13,429	13,664	13,520	13,533	13,356	13,445	13,238	12,987
1918	757	13,811	86.7	13,680	13,981	14,441	14,312	13,871	14,082	14,177	13,924	13,979	13,757	13,012	12,521
1919	767	13,376	84.5	12,601	12,507	12,671	12,315	12,316	12,864	13,507	14,166	14,284	14,381	14,336	14,566
1920	810	14,573	72.5	15,474	15,627	15,914	15,417	15,290	15,546	15,059	14,496	14,103	13,590	12,823	11,533
1921	680	11,359	81.6	9,934	10,551	10,966	11,188	11,214	11,334	11,504	11,544	11,757	12,091	12,056	12,169
1922	689	12,992	90.5	12,123	12,475	12,743	12,942	12,820	13,060	13,159	13,265	13,339	13,399	13,303	13,276
1923	679	15,201	93.6	14,702	15,204	15,631	15,576	15,574	15,636	15,388	15,132	14,939	15,011	14,977	14,642
1924	687	13,635	92.0	13,796	14,117	14,222	14,170	13,699	13,182	13,079	13,189	13,520	13,620	13,474	13,557
Females:															
1914	535	20,566	81.7	21,772	22,556	22,399	21,894	20,835	20,326	19,754	19,951	20,053	19,969	18,870	18,418
1915	657	23,103	90.4	21,817	23,548	24,043	23,389	22,211	22,494	22,509	23,201	23,702	24,139	23,263	22,922
1916	678	25,563	92.1	24,352	26,046	26,072	25,799	25,015	25,018	25,474	25,952	25,921	26,433	25,279	25,390
1917	708	26,407	95.3	25,840	26,867	26,988	26,749	25,712	26,117	26,210	26,574	26,536	26,895	26,269	26,123
1918	757	26,692	87.8	25,857	27,052	27,069	27,249	26,804	27,458	27,994	26,931	27,158	26,662	25,489	24,578
1919	767	25,988	84.4	24,619	24,503	24,319	23,990	24,044	24,751	26,449	27,484	27,592	27,876	27,815	28,412
1920	810	26,486	70.3	27,833	28,187	28,571	28,478	28,425	27,784	27,206	26,923	26,242	25,079	23,001	20,098
1921	680	22,811	75.3	18,487	20,947	21,878	22,603	22,863	23,361	23,041	23,762	23,952	24,549	24,295	23,989
1922	689	24,564	88.5	22,723	24,265	24,509	24,414	23,966	24,390	24,631	24,542	24,871	25,422	25,667	25,371
1923	679	29,115	90.1	27,054	28,582	29,596	29,655	29,521	29,868	30,020	29,397	29,209	29,497	28,980	28,000
1924	687	26,599	88.0	27,287	28,172	28,312	28,055	27,019	25,822	24,920	25,557	26,425	26,600	25,804	25,211

[1] Arithmetic average of the 12 months.

TABLE 28.—WAGE EARNERS: **TEXTILES—HOSIERY AND KNIT GOODS**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	39	3,874	80.1	4,221	4,173	4,263	4,185	4,211	4,000	3,597	3,642	3,605	3,713	3,461	3,416
1915	31	3,485	80.5	3,135	3,101	3,188	3,196	3,373	3,444	3,531	3,653	3,737	3,850	3,801	3,816
1916	28	4,120	85.5	3,687	3,821	3,980	4,038	4,135	4,146	4,263	4,228	4,257	4,294	4,313	4,278
1917	32	4,773	86.3	4,373	4,592	4,659	4,679	4,728	4,860	5,066	4,979	4,954	4,921	4,752	4,718
1918	32	4,819	79.2	4,542	4,591	4,686	4,828	5,020	5,339	5,401	5,183	4,849	4,622	4,495	4,276
1919	32	4,417	70.3	3,928	3,629	3,756	3,790	4,027	4,228	4,548	4,856	4,879	5,059	5,136	5,165
1920	36	4,965	54.7	4,969	5,127	5,323	5,325	5,627	5,636	5,440	5,434	5,181	4,652	3,778	3,083
1921	34	3,836	66.4	2,924	3,091	3,240	3,573	3,933	4,171	4,100	4,176	4,182	4,404	4,239	3,994
1922	38	4,416	85.8	3,947	4,152	4,457	4,534	4,421	4,475	4,509	4,414	4,484	4,486	4,598	4,516
1923	35	4,937	78.9	4,251	4,478	4,838	5,057	5,092	5,386	5,300	5,117	5,226	5,240	4,854	4,405
1924	34	4,157	84.9	4,053	4,200	4,355	4,334	4,223	4,125	4,088	4,021	4,440	4,302	3,974	3,769
Males:															
1914	39	744	79.8	762	766	812	794	800	764	747	721	722	743	653	648
1915	31	754	77.3	658	652	680	675	717	758	779	843	820	821	821	827
1916	28	911	88.1	834	859	890	925	920	927	913	919	932	936	930	947
1917	32	972	92.1	931	966	985	974	972	1,008	1,007	995	992	963	940	928
1918	32	975	77.4	923	933	932	955	1,001	1,077	1,069	1,063	1,022	993	897	834
1919	32	928	78.5	840	827	814	854	873	881	931	1,018	997	1,028	1,031	1,037
1920	36	1,019	59.0	1,062	1,081	1,097	1,084	1,131	1,138	1,104	1,116	1,053	918	775	671
1921	34	839	74.9	704	754	725	750	829	886	883	896	896	940	918	888
1922	38	989	87.6	891	956	992	1,013	994	1,017	1,016	997	1,016	986	1,004	991
1923	35	1,054	91.3	993	1,031	1,055	1,076	1,063	1,078	1,084	1,073	1,064	1,088	1,042	1,000
1924	34	971	86.0	995	1,011	1,030	1,020	988	976	953	948	977	961	902	886
Females:															
1914	39	3,130	80.0	3,459	3,407	3,451	3,391	3,411	3,236	2,850	2,921	2,883	2,970	2,808	2,768
1915	31	2,731	80.9	2,477	2,449	2,508	2,521	2,656	2,686	2,752	2,810	2,917	3,029	2,980	2,989
1916	28	3,209	84.3	2,853	2,962	3,090	3,113	3,215	3,219	3,350	3,309	3,325	3,358	3,383	3,331
1917	32	3,802	84.8	3,442	3,626	3,674	3,705	3,756	3,852	4,059	3,984	3,962	3,958	3,812	3,790
1918	32	3,844	79.5	3,619	3,658	3,754	3,873	4,019	4,262	4,332	4,120	3,827	3,629	3,598	3,442
1919	32	3,489	67.9	3,088	2,802	2,942	2,936	3,154	3,347	3,617	3,838	3,882	4,031	4,105	4,128
1920	36	3,945	53.6	3,907	4,046	4,226	4,241	4,496	4,498	4,336	4,318	4,128	3,734	3,003	2,412
1921	34	2,997	64.1	2,220	2,337	2,515	2,823	3,104	3,285	3,217	3,280	3,286	3,464	3,321	3,106
1922	38	3,427	85.0	3,056	3,196	3,465	3,521	3,427	3,458	3,493	3,417	3,468	3,500	3,594	3,525
1923	35	3,883	75.6	3,258	3,447	3,783	3,981	4,029	4,308	4,216	4,044	4,162	4,152	3,812	3,405
1924	34	3,186	83.3	3,058	3,189	3,325	3,314	3,235	3,149	3,135	3,073	3,463	3,341	3,072	2,883

[1] Arithmetic average of the 12 months.

TABLE 29.—WAGE EARNERS: **TEXTILES—MEN'S CLOTHING (INCLUDING SHIRTS AND COAT PADS)**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	226	9,634	86.3	9,737	10,033	10,161	10,277	9,971	9,459	9,210	9,385	9,504	9,604	9,393	8,870
1915	151	9,303	87.3	8,513	8,946	9,448	9,407	9,304	9,241	9,063	9,298	9,478	9,749	9,570	9,618
1916 [2]															
1917 [2]															
1918	161	9,067	85.6	9,023	9,307	9,659	9,513	9,296	9,165	9,094	8,951	9,120	8,870	8,546	8,265
1919	168	9,497	77.7	8,668	8,730	8,680	8,549	8,762	9,089	9,419	9,769	10,002	10,460	10,837	11,001
1920	191	10,974	77.0	10,946	11,298	11,653	11,626	11,738	11,187	10,831	11,066	11,040	10,872	10,387	9,041
1921	175	10,353	64.3	7,644	8,942	9,658	10,016	10,079	10,297	10,260	10,918	11,356	11,674	11,887	11,503
1922	178	11,771	87.8	10,937	11,511	11,534	11,679	11,645	11,711	11,665	11,486	11,930	12,289	12,455	12,411
1923	189	13,269	89.9	12,336	12,907	13,205	13,277	13,434	13,398	13,193	13,327	13,471	13,671	13,728	13,282
1924	184	13,139	87.7	13,372	13,710	13,928	13,743	13,460	12,882	12,213	12,638	13,070	13,167	12,826	12,656
Males:															
1914	226	3,066	86.4	3,072	3,145	3,206	3,278	3,160	3,072	2,966	3,003	3,040	3,056	2,958	2,831
1915	151	2,846	85.2	2,575	2,763	2,891	2,910	2,833	2,793	2,769	2,834	2,886	3,024	2,937	2,942
1916 [2]															
1917 [2]															
1918	161	2,703	85.1	2,721	2,703	2,887	2,869	2,843	2,744	2,699	2,725	2,676	2,606	2,509	2,458
1919	168	2,817	77.0	2,499	2,540	2,585	2,508	2,560	2,725	2,827	2,952	3,035	3,133	3,196	3,245
1920	191	3,221	78.8	3,179	3,303	3,443	3,398	3,438	3,287	3,165	3,256	3,230	3,203	3,039	2,712
1921	175	2,986	72.1	2,398	2,645	2,848	2,924	2,906	2,920	3,008	3,078	3,202	3,312	3,327	3,263
1922	178	3,444	92.9	3,326	3,365	3,390	3,436	3,392	3,406	3,368	3,446	3,524	3,581	3,549	3,542
1923	189	3,772	87.5	3,449	3,531	3,697	3,759	3,801	3,829	3,797	3,875	3,918	3,862	3,943	3,804
1924	184	3,863	92.8	3,864	3,894	3,985	3,936	3,910	3,774	3,697	3,797	3,931	3,946	3,855	3,772
Females:															
1914	226	6,568	86.3	6,665	6,888	6,955	6,999	6,811	6,387	6,244	6,382	6,464	6,548	6,435	6,039
1915	151	6,457	88.3	5,938	6,183	6,557	6,497	6,471	6,448	6,294	6,464	6,592	6,725	6,633	6,676
1916 [2]															
1917 [2]															
1918	161	6,364	85.8	6,302	6,604	6,772	6,644	6,453	6,421	6,395	6,226	6,444	6,264	6,037	5,807
1919	168	6,680	77.9	6,169	6,190	6,095	6,041	6,202	6,364	6,592	6,817	6,967	7,327	7,641	7,756
1920	191	7,753	76.3	7,767	7,995	8,210	8,228	8,300	7,900	7,666	7,810	7,810	7,669	7,348	6,329
1921	175	7,367	61.3	5,246	6,297	6,810	7,092	7,173	7,377	7,252	7,840	8,154	8,362	8,560	8,240
1922	178	8,327	85.5	7,611	8,146	8,144	8,243	8,253	8,305	8,297	8,040	8,406	8,708	8,906	8,869
1923	189	9,497	90.6	8,887	9,376	9,508	9,518	9,633	9,569	9,396	9,452	9,553	9,809	9,785	9,478
1924	184	9,275	85.6	9,508	9,816	9,943	9,807	9,550	9,108	8,516	8,841	9,139	9,221	8,971	8,884

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 30.—WAGE EARNERS: **TEXTILES—WOMEN'S CLOTHING (INCLUDING CORSETS)**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	79	6,208	67.1	6,533	7,228	6,916	6,526	5,529	6,029	6,383	6,693	6,552	6,134	5,123	4,847
1915	104	8,814	82.4	7,914	9,150	9,442	8,949	8,022	8,638	8,992	9,367	9,455	9,350	8,707	7,787
1916 [2]															
1917 [2]															
1918	117	8,028	81.7	7,944	8,599	8,626	8,437	7,792	8,085	8,675	7,572	8,324	8,070	7,123	7,086
1919	128	8,158	82.0	7,739	8,104	8,122	7,999	7,382	7,935	8,547	9,007	8,971	8,318	7,790	7,979
1920	127	7,408	60.8	8,591	8,644	8,566	8,054	7,509	7,574	7,279	7,448	7,184	6,710	6,070	5,258
1921	131	6,091	76.6	5,496	6,418	6,614	6,575	6,202	6,437	6,645	6,675	6,104	5,628	5,176	5,113
1922	121	5,671	86.2	5,312	6,041	6,056	5,674	5,330	5,646	5,884	5,944	5,856	5,742	5,349	5,219
1923	112	5,883	75.9	5,770	6,229	6,289	6,059	5,971	5,980	6,384	6,288	5,949	5,585	5,241	4,847
1924	109	4,748	73.2	5,028	5,346	5,255	5,266	4,930	4,465	4,589	4,883	4,664	4,576	4,056	3,912
Males:															
1914	79	2,373	70.6	2,481	2,664	2,531	2,440	2,135	2,374	2,481	2,569	2,506	2,396	2,017	1,880
1915	104	2,958	77.8	2,702	3,070	3,153	2,918	2,520	2,855	3,038	3,240	3,220	3,173	2,964	2,639
1916 [2]															
1917 [2]															
1918	117	2,615	73.2	2,763	2,954	2,930	2,781	2,434	2,618	2,815	2,375	2,671	2,647	2,228	2,162
1919	128	2,512	76.5	2,382	2,505	2,562	2,470	2,147	2,368	2,613	2,759	2,806	2,656	2,425	2,447
1920	127	2,506	65.1	2,849	2,860	2,817	2,599	2,319	2,524	2,430	2,560	2,530	2,456	2,264	1,861
1921	131	1,767	78.6	1,768	1,898	1,910	1,824	1,599	1,745	1,893	1,955	1,806	1,693	1,570	1,537
1922	121	1,545	85.7	1,453	1,644	1,639	1,567	1,416	1,504	1,629	1,646	1,589	1,581	1,461	1,411
1923	112	1,444	79.1	1,438	1,542	1,553	1,498	1,453	1,428	1,540	1,510	1,431	1,388	1,316	1,228
1924	109	1,264	79.5	1,310	1,397	1,353	1,347	1,256	1,163	1,275	1,340	1,251	1,235	1,110	1,131
Females:															
1914	79	3,835	65.0	4,052	4,564	4,385	4,086	3,394	3,655	3,902	4,124	4,046	3,738	3,106	2,967
1915	104	5,857	81.9	5,212	6,080	6,289	6,031	5,502	5,783	5,954	6,127	6,235	6,177	5,743	5,148
1916 [2]															
1917 [2]															
1918	117	5,413	83.5	5,181	5,645	5,696	5,656	5,358	5,467	5,860	5,197	5,653	5,423	4,895	4,924
1919	128	5,646	83.8	5,357	5,599	5,560	5,529	5,235	5,567	5,934	6,248	6,165	5,662	5,365	5,532
1920	127	4,902	58.7	5,742	5,784	5,749	5,455	5,190	5,050	4,849	4,888	4,654	4,254	3,806	3,397
1921	131	4,324	75.3	3,728	4,520	4,704	4,751	4,603	4,692	4,752	4,720	4,298	3,935	3,606	3,576
1922	121	4,126	86.2	3,859	4,397	4,417	4,107	3,914	4,142	4,255	4,298	4,267	4,161	3,888	3,808
1923	112	4,439	74.7	4,332	4,687	4,736	4,561	4,518	4,552	4,844	4,778	4,518	4,197	3,925	3,619
1924	109	3,484	70.4	3,718	3,949	3,902	3,919	3,674	3,302	3,314	3,543	3,413	3,341	2,946	2,781

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 31.—WAGE EARNERS: TEXTILES—CLOTH GLOVES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in— January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	35	2,740	85.8	2,496	2,551	2,597	2,589	2,614	2,714	2,862	2,909	2,855	2,883	2,904	2,906
1919	33	2,178	70.8	2,616	2,469	2,281	2,146	1,866	1,851	2,029	2,113	2,125	2,186	2,166	2,285
1920	35	2,434	80.1	2,192	2,264	2,361	2,437	2,426	2,456	2,485	2,601	2,561	2,681	2,594	2,148
1921	34	1,527	46.6	1,871	1,852	1,776	1,385	1,314	1,251	970	1,109	1,322	1,649	1,736	2,083
1922	30	1,740	78.6	1,628	1,618	1,617	1,576	1,564	1,639	1,841	1,903	1,750	1,877	1,990	1,875
1923	30	2,474	73.6	2,073	2,201	2,267	2,332	2,337	2,469	2,626	2,633	2,570	2,630	2,735	2,818
1924	29	2,332	73.3	2,625	2,614	2,580	2,439	2,373	2,242	1,924	2,007	2,244	2,305	2,282	2,348
Males:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	35	379	82.1	364	355	348	350	349	359	378	409	424	407	403	398
1919	33	307	75.1	328	308	284	279	260	272	322	312	316	323	330	346
1920	35	379	71.3	370	383	380	377	371	392	395	410	422	392	357	301
1921	34	205	61.3	236	221	216	205	191	185	155	163	192	211	227	253
1922	30	221	81.3	218	216	209	210	200	204	223	228	226	229	241	246
1923	30	316	72.7	269	283	293	296	308	319	325	333	332	319	343	370
1924	29	315	82.5	342	349	345	328	322	293	288	290	318	303	299	304
Females:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	35	2,361	85.0	2,132	2,196	2,249	2,239	2,265	2,355	2,484	2,500	2,431	2,476	2,501	2,508
1919	33	1,871	69.0	2,288	2,161	1,997	1,867	1,606	1,579	1,707	1,801	1,809	1,863	1,836	1,939
1920	35	2,055	79.6	1,822	1,881	1,981	2,060	2,055	2,064	2,090	2,191	2,139	2,289	2,237	1,847
1921	34	1,322	44.5	1,635	1,631	1,560	1,180	1,123	1,066	815	946	1,130	1,438	1,509	1,830
1922	30	1,519	78.0	1,410	1,402	1,408	1,366	1,364	1,435	1,618	1,675	1,524	1,648	1,749	1,629
1923	30	2,158	73.7	1,804	1,918	1,974	2,036	2,029	2,150	2,301	2,300	2,238	2,311	2,392	2,448
1924	29	2,017	71.7	2,283	2,265	2,235	2,111	2,051	1,949	1,636	1,717	1,926	2,002	1,983	2,044

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 32.—WAGE EARNERS: TOBACCO MANUFACTURES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	209	12,801	88.2	12,941	13,665	13,774	13,532	13,114	12,380	12,463	12,305	12,148	12,481	12,383	12,424
1915	240	12,640	86.0	12,531	13,311	13,813	13,299	12,689	12,446	11,881	11,944	12,271	12,415	12,506	12,576
1916	242	12,065	89.6	12,205	12,798	12,787	12,296	11,825	11,835	11,627	11,466	11,528	11,832	12,136	12,448
1917	239	13,405	91.4	13,343	13,670	13,728	13,440	13,144	13,282	13,066	12,975	12,962	13,324	13,743	14,178
1918	246	12,991	84.8	13,405	13,565	13,959	13,951	12,927	13,875	12,706	12,685	12,279	11,913	11,832	12,800
1919	249	13,211	85.4	12,840	13,216	13,131	12,865	12,657	12,728	12,815	12,933	12,797	13,543	14,177	14,828
1920	269	15,725	89.9	15,664	15,310	15,521	15,713	15,664	16,259	16,011	15,836	15,886	16,033	16,190	14,614
1921	226	13,400	87.5	13,415	14,341	14,284	13,406	12,564	12,801	12,543	12,991	13,301	13,712	13,767	13,676
1922	210	12,756	81.1	12,286	12,351	12,384	11,995	11,640	11,948	11,776	13,002	13,287	13,700	14,291	14,354
1923	213	12,995	86.5	13,090	13,073	13,825	13,167	12,271	12,861	11,955	12,707	12,661	13,404	13,458	13,466
1924	191	12,667	89.4	13,589	13,327	13,395	12,484	12,320	12,165	12,147	12,226	12,329	12,608	12,758	12,658
Males:															
1914	209	4,048	86.5	4,215	4,397	4,344	4,300	4,064	3,891	3,954	3,803	3,806	3,949	3,911	3,943
1915	240	4,131	82.7	4,285	4,474	4,646	4,331	4,089	3,952	3,844	3,850	3,960	3,982	4,043	4,114
1916	242	3,971	84.9	4,095	4,408	4,370	4,136	3,899	3,851	3,741	3,800	3,755	3,796	3,874	3,933
1917	239	3,815	84.3	3,985	4,125	4,163	4,043	3,754	3,725	3,624	3,624	3,508	3,712	3,644	3,872
1918	246	3,432	76.0	3,768	3,753	3,969	3,916	3,430	3,436	3,305	3,254	3,148	3,048	3,016	3,136
1919	249	3,381	77.6	3,132	3,180	3,205	3,112	3,110	3,285	3,328	3,415	3,375	3,628	3,800	4,008
1920	269	3,902	89.5	4,152	3,942	3,714	3,934	3,882	4,062	3,967	3,875	3,795	3,853	3,924	3,724
1921	226	3,484	84.6	3,455	3,653	3,869	3,499	3,323	3,319	3,292	3,275	3,407	3,611	3,547	3,554
1922	210	3,466	73.8	3,178	3,150	3,217	3,177	3,049	3,091	3,103	3,676	3,767	3,979	4,069	4,131
1923	213	3,242	78.2	3,406	3,499	3,726	3,494	3,127	3,223	2,914	2,976	3,017	3,152	3,185	3,186
1924	191	2,879	88.6	3,055	3,007	3,057	3,038	3,003	2,785	2,709	2,738	2,790	2,765	2,745	2,859
Females:															
1914	209	8,753	88.5	8,726	9,268	9,430	9,232	9,050	8,489	8,509	8,502	8,342	8,532	8,472	8,481
1915	240	8,509	87.7	8,246	8,837	9,167	8,968	8,600	8,494	8,037	8,094	8,311	8,433	8,463	8,462
1916	242	8,094	90.0	8,110	8,390	8,417	8,160	7,926	7,984	7,886	7,666	7,773	8,036	8,262	8,515
1917	239	9,590	90.7	9,358	9,545	9,565	9,397	9,390	9,557	9,442	9,351	9,454	9,612	10,099	10,306
1918	246	9,560	84.5	9,637	9,812	9,990	10,035	9,497	10,439	9,401	9,431	9,131	8,865	8,816	9,664
1919	249	9,829	87.1	9,708	10,036	9,926	9,753	9,547	9,443	9,487	9,518	9,422	9,915	10,377	10,820
1920	269	11,823	88.8	11,512	11,368	11,807	11,779	11,782	12,197	12,044	11,961	12,091	12,180	12,266	10,890
1921	226	9,916	86.5	9,960	10,688	10,415	9,907	9,241	9,482	9,251	9,716	9,894	10,101	10,220	10,122
1922	210	9,291	84.0	9,108	9,201	9,167	8,818	8,591	8,857	8,673	9,326	9,520	9,781	10,222	10,223
1923	213	9,753	87.9	9,684	9,574	10,099	9,673	9,144	9,638	9,041	9,731	9,644	10,252	10,273	10,280
1924	191	9,788	88.4	10,534	10,320	10,338	9,446	9,317	9,380	9,438	9,488	9,539	9,843	10,013	9,799

[1] Arithmetic average of the 12 months.

TABLE 33.—WAGE EARNERS: TOBACCO—REHANDLING

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	74	1,423	59.0	1,194	1,181	1,702	1,863	1,868	1,697	1,435	1,388	1,271	1,169	1,103	1,212
1919	77	1,777	64.3	1,655	1,654	1,602	1,550	1,561	1,632	1,750	1,771	1,697	1,895	2,143	2,410
1920	85	1,826	78.0	1,903	1,880	1,910	1,813	1,963	2,035	1,922	1,795	1,718	1,729	1,659	1,587
1921	74	1,650	56.9	1,625	1,922	2,102	2,151	1,885	1,761	1,543	1,499	1,475	1,371	1,238	1,224
1922	69	1,533	69.8	1,286	1,278	1,790	1,830	1,731	1,695	1,307	1,284	1,451	1,514	1,617	1,616
1923	71	1,670	48.8	1,336	1,502	2,094	2,131	1,867	2,022	1,039	1,562	1,454	1,647	1,653	1,735
1924	62	1,708	73.3	1,927	1,795	1,769	1,862	2,040	1,716	1,601	1,552	1,520	1,496	1,528	1,685
Males:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	74	622	59.2	599	589	806	785	799	676	597	605	539	489	477	506
1919	77	632	49.4	585	558	517	483	498	582	602	635	622	718	805	977
1920	85	769	67.3	944	955	889	770	819	825	701	692	652	665	672	643
1921	74	672	62.9	641	792	913	775	699	602	574	579	636	644	610	598
1922	69	615	58.9	597	588	752	760	691	633	448	467	532	611	643	657
1923	71	644	44.9	571	725	964	831	680	712	433	493	468	573	608	671
1924	62	677	64.9	745	717	732	826	804	674	641	621	598	573	536	661
Females:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	74	801	54.9	595	592	896	1,078	1,069	1,021	838	783	732	680	626	706
1919	77	1,145	73.3	1,070	1,096	1,085	1,067	1,063	1,050	1,148	1,136	1,075	1,177	1,338	1,433
1920	85	1,057	75.8	959	925	1,021	1,043	1,144	1,210	1,221	1,103	1,066	1,064	987	944
1921	74	978	45.5	984	1,130	1,189	1,376	1,186	1,159	969	920	839	727	628	626
1922	69	918	64.4	689	690	1,038	1,070	1,040	1,062	859	817	919	903	974	959
1923	71	1,026	46.3	765	777	1,130	1,300	1,187	1,310	606	1,069	986	1,074	1,045	1,064
1924	62	1,030	74.6	1,182	1,078	1,037	1,036	1,236	1,042	960	931	922	923	992	1,024

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 34.—WAGE EARNERS: **TOBACCO—CIGARS AND CIGARETTES, CHEWING AND SMOKING TOBACCO, AND SNUFF**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	172	11,568	86.6	12,211	12,384	12,257	12,088	11,059	12,178	11,271	11,297	11,008	10,744	10,729	11,588
1919	172	11,435	89.1	11,185	11,562	11,529	11,315	11,096	11,096	11,065	11,162	11,100	11,648	12,034	12,418
1920	184	13,899	89.6	13,761	13,430	13,611	13,900	13,701	14,224	14,089	14,041	14,168	14,304	14,531	13,027
1921	152	11,751	85.2	11,790	12,419	12,182	11,255	10,679	11,040	11,000	11,492	11,826	12,341	12,529	12,452
1922	141	11,223	77.8	11,000	11,073	10,594	10,165	9,909	10,253	10,469	11,718	11,836	12,246	12,674	12,738
1923	142	11,325	88.1	11,754	11,571	11,731	11,036	10,404	10,839	10,916	11,145	11,207	11,757	11,805	11,731
1924	129	10,960	88.1	11,662	11,532	11,626	10,622	10,280	10,449	10,546	10,674	10,809	11,112	11,230	10,973
Males:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	172	2,809	80.1	3,169	3,164	3,163	3,131	2,631	2,760	2,708	2,649	2,609	2,559	2,539	2,630
1919	172	2,750	84.0	2,547	2,622	2,688	2,629	2,612	2,703	2,726	2,780	2,753	2,910	2,995	3,031
1920	184	3,133	86.5	3,208	2,987	2,825	3,164	3,063	3,237	3,266	3,183	3,143	3,188	3,252	3,081
1921	152	2,812	88.4	2,814	2,861	2,956	2,724	2,624	2,717	2,718	2,696	2,771	2,967	2,937	2,956
1922	141	2,851	67.9	2,581	2,562	2,465	2,417	2,358	2,458	2,655	3,209	3,235	3,368	3,426	3,474
1923	142	2,598	86.3	2,835	2,774	2,762	2,663	2,447	2,511	2,481	2,483	2,549	2,579	2,577	2,515
1924	129	2,202	88.9	2,310	2,290	2,325	2,212	2,199	2,111	2,068	2,117	2,192	2,192	2,209	2,198
Females:															
1914 [2]															
1915 [2]															
1916 [2]															
1917 [2]															
1918	172	8,759	86.9	9,042	9,220	9,094	8,957	8,428	9,418	8,563	8,648	8,399	8,185	8,190	8,958
1919	172	8,685	88.8	8,638	8,940	8,841	8,686	8,484	8,393	8,339	8,382	8,347	8,738	9,039	9,387
1920	184	10,766	88.2	10,553	10,443	10,786	10,736	10,638	10,987	10,823	10,858	11,025	11,116	11,279	9,946
1921	152	8,939	84.0	8,976	9,558	9,226	8,531	8,055	8,323	8,282	8,796	9,055	9,374	9,592	9,496
1922	141	8,372	81.5	8,419	8,511	8,129	7,748	7,551	7,795	7,814	8,509	8,601	8,878	9,248	9,264
1923	142	8,727	86.2	8,919	8,797	8,969	8,373	7,957	8,328	8,435	8,662	8,658	9,178	9,228	9,216
1924	129	8,758	86.4	9,352	9,242	9,301	8,410	8,081	8,338	8,478	8,557	8,617	8,920	9,021	8,775

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 35.—WAGE EARNERS: VEHICLES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	318	35,530	85.0	35,973	37,095	38,168	38,583	37,223	34,282	32,895	32,802	33,758	36,398	34,673	34,512
1915	344	40,006	65.3	31,716	33,305	34,219	35,822	38,150	39,475	40,954	42,212	44,524	45,086	46,002	48,605
1916 [2]	358	53,656	82.8	47,263	51,231	52,932	53,176	53,405	53,684	54,762	55,938	57,086	56,525	53,478	54,397
1917 [2]	360	63,526	80.6	64,934	67,972	69,423	68,588	68,082	65,155	62,923	62,271	61,169	58,439	57,411	55,941
1918	374	71,487	82.1	62,216	64,737	69,969	70,734	72,353	73,906	74,823	75,768	72,700	74,762	74,457	71,415
1919	390	72,340	78.0	67,926	68,115	70,340	71,621	62,418	66,401	72,155	74,426	76,501	79,132	79,033	80,007
1920	416	69,283	40.7	83,524	81,926	84,016	81,867	79,390	81,800	79,788	72,171	63,923	51,040	37,775	34,174
1921	363	31,941	81.4	28,874	30,861	33,117	35,401	34,804	35,201	33,573	28,811	29,063	30,926	31,152	31,515
1922	320	46,089	62.6	33,741	35,851	40,068	46,268	49,935	53,934	49,585	51,119	49,768	46,043	47,181	49,581
1923	331	64,520	82.6	60,702	65,154	69,423	70,377	70,792	70,085	67,889	64,243	59,103	58,573	59,390	58,509
1924	328	46,952	59.5	57,929	60,084	61,473	61,504	51,486	43,449	38,647	37,874	39,013	38,642	36,593	37,327
Males:															
1914	318	34,394	85.6	34,927	35,865	36,830	37,193	35,888	33,269	31,893	31,834	32,710	35,297	33,599	33,422
1915	344	38,524	65.1	30,534	32,017	32,953	34,472	36,605	38,064	39,419	40,571	42,982	43,382	44,415	46,924
1916 [2]	358	51,541	82.9	45,495	49,261	50,873	50,997	51,276	51,467	52,660	53,752	54,867	54,284	51,461	52,100
1917 [2]	360	60,918	80.6	62,107	65,050	66,463	65,824	65,491	62,541	60,456	59,800	58,644	56,052	55,030	53,553
1918	374	67,174	85.0	59,884	62,142	66,698	67,035	68,346	69,054	69,991	70,455	67,695	69,164	68,897	66,723
1919	390	69,063	78.7	64,800	65,018	67,181	68,510	59,836	63,628	69,316	71,098	72,928	75,404	75,015	76,022
1920	416	66,131	41.5	79,623	77,988	80,039	77,703	75,417	77,803	75,913	68,934	61,175	49,214	36,583	33,178
1921	363	30,744	80.3	28,232	30,217	32,320	34,304	33,445	33,741	32,011	27,536	27,686	29,475	29,717	30,249
1922	320	44,315	62.7	32,574	34,654	38,753	44,625	48,034	51,915	47,386	48,910	47,638	44,254	45,391	47,648
1923	331	61,204	82.6	57,643	61,938	65,883	66,794	67,152	66,456	64,309	60,876	56,102	55,529	56,281	55,485
1924	328	44,608	58.6	55,320	57,297	58,614	58,656	49,164	41,499	36,175	35,970	36,845	36,391	34,344	35,625
Females:															
1914	318	1,136	69.6	1,046	1,230	1,338	1,390	1,335	1,013	1,002	968	1,048	1,101	1,074	1,090
1915	344	1,482	69.4	1,182	1,288	1,261	1,350	1,545	1,471	1,535	1,641	1,542	1,704	1,587	1,681
1916 [2]	358	2,115	77.0	1,768	1,970	2,059	2,179	2,129	2,217	2,102	2,186	2,219	2,241	2,017	2,297
1917 [2]	360	2,608	80.4	2,827	2,922	2,960	2,764	2,591	2,614	2,467	2,471	2,525	2,387	2,381	2,388
1918	374	4,313	41.7	2,332	2,595	3,271	3,699	4,007	4,852	4,832	5,313	5,005	5,598	5,560	4,692
1919	390	3,277	64.3	3,126	3,097	3,159	3,111	2,582	2,773	2,839	3,328	3,573	3,728	4,018	3,985
1920	416	3,152	23.9	3,901	3,938	3,977	4,164	3,973	3,997	3,875	3,237	2,748	1,826	1,192	996
1921	363	1,197	41.1	642	644	797	1,097	1,359	1,460	1,562	1,275	1,377	1,451	1,435	1,266
1922	320	1,774	52.8	1,167	1,197	1,315	1,643	1,901	2,019	2,199	2,209	2,130	1,789	1,790	1,933
1923	331	3,316	82.4	3,059	3,216	3,540	3,583	3,640	3,629	3,580	3,367	3,001	3,044	3,109	3,024
1924	328	2,343	65.5	2,609	2,787	2,859	2,848	2,322	1,950	1,872	1,904	2,168	2,251	2,249	2,302

[1] Arithmetic average of the 12 months.

[2] Figures probably do not include airplanes and ships and boats.

TABLE 36.—WAGE EARNERS: VEHICLES—AUTOMOBILES AND PARTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	72	21,342	77.5	19,473	20,277	21,187	21,887	20,795	19,208	19,208	20,661	21,730	24,784	23,289	23,611
1915	100	28,952	65.7	22,582	23,446	23,906	25,268	27,244	29,015	30,274	31,682	33,063	33,592	33,009	34,348
1916 [2]															
1917 [2]															
1918	165	51,171	86.3	46,093	47,302	51,917	51,924	52,852	53,427	53,097	53,310	50,418	51,485	51,669	50,554
1919	201	51,179	63.6	46,735	46,413	47,945	49,132	39,925	43,728	49,882	52,679	55,508	58,959	60,414	62,819
1920	240	55,322	35.8	66,622	65,645	67,237	65,903	65,071	67,009	65,754	58,675	51,310	38,782	27,796	24,058
1921	215	24,545	70.7	19,878	20,735	23,074	26,836	28,048	28,105	27,320	23,415	23,179	24,820	24,591	24,532
1922	188	37,491	59.7	27,268	28,313	32,393	38,705	42,330	45,696	41,526	42,296	40,282	36,032	36,518	38,536
1923	198	51,123	80.8	46,560	50,803	54,537	56,120	57,070	56,259	54,336	50,801	46,255	46,134	47,356	47,240
1924	195	39,262	55.9	49,873	51,816	53,382	52,895	43,020	35,590	30,605	30,544	31,655	31,622	29,836	30,302
Males:															
1914	72	20,515	77.3	18,729	19,393	20,229	20,865	19,829	18,514	18,518	19,962	20,954	23,948	22,477	22,765
1915	100	27,743	65.7	21,648	22,432	22,939	24,214	26,055	27,829	28,993	30,277	31,757	32,129	31,683	32,959
1916 [2]															
1917 [2]															
1918	165	47,404	89.2	44,022	44,988	48,973	48,666	49,379	49,134	48,865	48,631	46,035	46,686	46,964	46,499
1919	201	48,333	63.7	44,007	43,730	45,186	46,415	37,773	41,397	47,471	49,783	52,390	55,690	56,862	59,289
1920	240	52,531	36.4	63,140	62,132	63,717	62,179	61,534	63,451	62,287	55,794	48,871	37,221	26,832	23,211
1921	215	23,509	72.0	19,327	20,231	22,435	25,924	26,848	26,802	25,901	22,308	21,992	23,559	23,341	23,437
1922	188	35,829	59.7	26,157	27,209	31,167	37,166	40,537	43,782	39,441	40,209	38,273	34,379	34,870	36,762
1923	198	47,973	80.7	43,649	47,751	51,183	52,735	53,630	52,838	50,904	47,581	43,417	43,260	44,400	44,325
1924	195	37,100	54.8	47,395	49,197	50,709	50,237	40,875	33,802	28,890	28,833	29,706	29,586	27,787	28,185
Females:															
1914	72	827	67.5	744	884	958	1,022	966	694	690	699	776	836	812	846
1915	100	1,210	63.8	934	1,014	967	1,054	1,189	1,186	1,281	1,405	1,306	1,463	1,326	1,389
1916 [2]															
1917 [2]															
1918	165	3,767	43.2	2,071	2,314	2,944	3,258	3,473	4,293	4,232	4,679	4,383	4,799	4,705	4,055
1919	201	2,846	60.6	2,728	2,683	2,759	2,717	2,152	2,331	2,411	2,896	3,118	3,269	3,552	3,530
1920	240	2,791	22.7	3,482	3,513	3,520	3,724	3,537	3,558	3,467	2,881	2,439	1,561	964	847
1921	215	1,036	35.5	551	504	639	912	1,200	1,303	1,419	1,107	1,187	1,261	1,250	1,095
1922	188	1,662	52.9	1,111	1,104	1,226	1,539	1,793	1,914	2,085	2,087	2,009	1,653	1,648	1,774
1923	198	3,150	82.5	2,911	3,052	3,354	3,385	3,440	3,421	3,432	3,220	2,838	2,874	2,956	2,915
1924	195	2,162	64.0	2,478	2,619	2,673	2,658	2,145	1,788	1,715	1,711	1,949	2,036	2,049	2,117

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 37.—WAGE EARNERS: MISCELLANEOUS PRODUCTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	466	23,637	83.4	24,503	24,830	25,279	25,036	24,339	24,179	23,928	23,853	23,107	22,150	21,343	21,095
1915	591	32,504	73.4	27,938	29,312	30,306	31,096	31,599	32,296	32,377	32,499	33,811	34,917	35,822	38,079
1916	663	53,341	74.5	42,766	45,765	48,562	51,813	53,783	56,103	56,523	57,110	56,267	56,617	57,360	57,429
1917	715	52,147	88.3	52,811	52,658	52,311	49,743	49,912	50,552	49,794	51,111	52,228	53,187	55,125	56,330
1918	671	66,084	72.7	54,910	56,354	58,435	58,798	63,629	69,056	72,046	72,799	71,579	73,360	75,536	66,502
1919	680	49,198	79.7	47,193	45,315	46,166	45,885	44,172	46,508	49,507	51,753	51,840	52,646	53,978	55,411
1920	761	52,099	65.8	54,864	54,509	55,825	55,818	55,157	57,070	57,207	53,843	52,136	48,305	42,819	37,639
1921	686	31,754	91.3	32,433	31,620	32,206	33,462	33,262	32,535	31,071	31,145	31,149	30,914	30,555	30,694
1922	700	37,800	71.9	29,872	31,411	32,979	34,998	37,858	40,206	40,757	40,916	41,021	40,669	41,519	41,393
1923	733	41,902	85.4	37,719	40,373	42,410	42,911	43,441	44,154	43,491	42,503	42,260	41,952	41,152	40,460
1924	798	44,093	89.2	44,636	45,965	46,407	46,558	44,415	43,232	41,671	41,526	42,489	43,872	44,127	44,221
Males:															
1914	466	20,612	82.4	21,509	21,809	22,193	21,964	21,284	21,175	20,812	20,663	19,993	19,152	18,491	18,298
1915	591	27,794	74.2	23,879	25,058	25,928	26,614	27,088	27,711	27,948	27,932	29,124	29,867	30,199	32,182
1916	663	44,576	77.1	36,746	39,149	41,140	43,183	44,887	47,060	47,223	47,643	46,739	46,613	47,194	47,335
1917	715	44,894	89.9	45,572	45,607	45,366	43,275	43,276	43,792	43,044	44,218	44,836	45,201	46,680	47,856
1918	671	54,186	80.2	47,228	48,646	49,938	49,844	53,765	57,342	58,915	58,872	57,018	57,530	58,502	52,627
1919	680	39,990	80.7	37,481	36,683	37,441	37,468	36,400	38,017	40,599	42,224	42,177	42,608	43,678	45,098
1920	761	42,379	67.0	44,840	44,423	45,474	45,185	44,639	46,309	46,349	43,496	42,312	39,460	34,988	31,076
1921	686	26,272	88.4	26,980	26,325	26,818	27,988	27,630	27,154	25,876	25,801	25,767	25,245	24,728	24,949
1922	700	30,637	73.5	24,534	25,610	26,796	28,390	30,553	32,531	33,050	33,203	33,298	32,916	33,372	33,393
1923	733	33,529	85.4	30,647	32,691	34,255	34,589	35,100	35,888	35,507	34,626	34,410	33,856	33,132	32,453
1924	798	35,324	90.5	35,757	36,725	37,201	37,059	35,625	34,801	33,712	33,654	34,348	35,022	34,967	35,042
Females:															
1914	466	3,025	87.7	2,994	3,021	3,086	3,072	3,055	3,004	3,116	3,190	3,114	2,998	2,852	2,797
1915	591	4,710	68.8	4,059	4,254	4,378	4,482	4,511	4,585	4,429	4,567	4,687	5,050	5,623	5,897
1916	663	8,765	59.2	6,020	6,616	7,422	8,630	8,896	9,043	9,300	9,467	9,528	10,004	10,166	10,094
1917	715	7,253	76.3	7,239	7,051	6,945	6,468	6,636	6,760	6,750	6,893	7,392	7,986	8,445	8,474
1918	671	11,898	45.1	7,682	7,708	8,497	8,954	9,864	11,714	13,131	13,927	14,561	15,830	17,034	13,875
1919	680	9,208	75.4	9,712	8,632	8,725	8,417	7,772	8,491	8,908	9,529	9,663	10,038	10,300	10,313
1920	761	9,720	60.4	10,024	10,086	10,351	10,633	10,518	10,761	10,858	10,347	9,824	8,845	7,831	6,563
1921	686	5,482	89.2	5,453	5,295	5,388	5,474	5,632	5,381	5,195	5,344	5,382	5,669	5,827	5,745
1922	700	7,163	65.5	5,338	5,801	6,183	6,608	7,305	7,675	7,707	7,713	7,723	7,753	8,147	8,000
1923	733	7,973	84.8	7,072	7,682	8,155	8,322	8,341	8,266	7,984	7,877	7,850	8,096	8,020	8,007
1924	798	8,769	82.7	8,879	9,240	9,206	9,519	8,790	8,431	7,959	7,872	8,141	8,850	9,160	9,179

[1] Arithmetic average of the 12 months.

TABLE 38.—WAGE EARNERS: **MISCELLANEOUS—ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	61	6,955	87.1	6,976	6,993	7,168	7,229	7,091	6,963	7,083	7,189	7,105	6,929	6,437	6,294
1915	98	10,884	70.2	9,119	9,771	10,003	10,563	10,826	10,850	10,471	10,698	11,212	11,794	12,315	12,990
1916 [2]															
1917 [2]															
1918	113	18,757	94.0	18,229	18,326	18,551	18,599	18,974	18,807	19,402	19,011	18,758	18,734	18,853	18,845
1919	121	21,644	69.1	20,467	20,023	20,264	20,054	18,202	18,942	20,886	22,385	22,858	24,064	25,222	26,360
1920	141	24,661	51.0	27,510	27,574	28,318	27,928	27,258	27,830	27,888	24,957	24,005	21,137	17,080	14,448
1921	136	11,913	93.1	12,142	11,755	11,777	12,310	12,300	11,618	11,462	11,802	11,998	11,954	11,708	12,132
1922	138	16,072	69.6	12,577	12,916	13,668	14,461	15,865	17,107	17,248	17,646	17,645	17,627	18,078	18,024
1923	152	16,206	84.5	14,560	16,286	17,232	17,097	17,138	16,797	16,268	15,346	15,967	16,191	15,787	15,801
1924	168	19,122	80.0	20,177	20,840	20,939	20,748	18,642	17,954	16,752	16,759	17,802	19,006	19,657	20,183
Males:															
1914	61	6,151	86.8	6,272	6,276	6,384	6,465	6,303	6,202	6,119	6,180	6,122	6,104	5,770	5,612
1915	98	9,551	70.6	8,046	8,602	8,780	9,231	9,511	9,507	9,176	9,339	9,827	10,367	10,832	11,399
1916 [2]															
1917 [2]															
1918	113	15,410	94.2	15,833	15,761	15,807	15,567	15,664	15,445	15,549	15,293	15,003	14,964	14,910	15,124
1919	121	17,331	70.6	16,383	16,025	16,267	16,088	14,945	15,167	16,768	17,856	18,104	19,110	20,094	21,166
1920	141	19,840	54.1	22,281	22,124	22,698	22,196	21,620	22,152	22,106	19,685	19,300	17,418	14,220	12,280
1921	136	10,036	91.2	10,463	10,095	10,028	10,525	10,349	9,726	9,600	9,855	10,025	9,926	9,749	10,094
1922	138	12,917	72.8	10,473	10,639	11,103	11,682	12,664	13,694	13,735	14,027	14,104	14,137	14,391	14,357
1923	152	13,134	86.1	11,877	13,134	13,779	13,685	13,796	13,599	13,348	12,422	13,090	13,189	12,930	12,761
1924	168	15,144	82.0	15,843	16,324	16,552	16,270	14,898	14,481	13,652	13,570	14,349	15,014	15,241	15,533
Females:															
1914	61	804	66.1	704	717	784	764	788	761	964	1,009	983	825	667	682
1915	98	1,333	67.4	1,073	1,169	1,223	1,332	1,315	1,343	1,295	1,359	1,385	1,427	1,483	1,591
1916 [2]															
1917 [2]															
1918	113	3,347	60.8	2,396	2,565	2,744	3,032	3,310	3,362	3,853	3,718	3,755	3,770	3,943	3,721
1919	121	4,313	62.7	4,084	3,998	3,997	3,966	3,257	3,775	4,118	4,529	4,754	4,954	5,128	5,194
1920	141	4,821	37.5	5,229	5,450	5,620	5,732	5,638	5,678	5,782	5,272	4,705	3,719	2,860	2,168
1921	136	1,877	81.5	1,679	1,660	1,749	1,785	1,951	1,892	1,862	1,947	1,973	2,028	1,959	2,038
1922	138	3,155	57.1	2,104	2,277	2,565	2,779	3,201	3,413	3,513	3,619	3,541	3,490	3,687	3,667
1923	152	3,072	77.7	2,683	3,152	3,453	3,412	3,342	3,198	2,920	2,924	2,877	3,002	2,857	3,040
1924	168	3,978	66.7	4,334	4,516	4,387	4,478	3,744	3,473	3,100	3,189	3,453	3,992	4,416	4,650

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 39.—WAGE EARNERS: SERVICE

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	1,069	21,578	93.8	21,502	21,376	21,530	21,856	22,058	22,159	21,811	21,656	21,652	21,359	21,185	20,789
1915	1,469	28,191	88.5	26,491	26,458	26,954	27,859	28,299	28,930	29,878	29,906	29,606	28,163	27,964	27,779
1916	1,788	32,209	87.8	29,909	30,048	30,510	31,212	32,104	32,984	33,452	34,056	33,140	33,321	33,271	32,499
1917	2,111	38,420	90.6	36,359	36,501	37,446	38,024	38,607	39,822	39,757	40,134	39,584	38,821	38,234	37,750
1918	2,556	38,376	90.5	37,629	37,562	38,345	38,997	39,720	40,327	39,546	39,421	38,666	36,505	36,615	37,185
1919	2,563	40,175	90.3	37,555	37,862	38,475	39,629	40,772	41,498	41,247	41,579	40,814	41,187	40,764	40,715
1920	3,847	46,421	90.2	43,646	43,741	44,568	45,823	46,823	48,033	48,392	48,350	48,099	47,421	46,694	45,458
1921	2,823	46,163	93.5	45,334	45,270	45,887	47,295	47,164	47,793	47,130	46,113	46,142	45,765	45,384	44,674
1922	3,032	48,745	86.8	44,965	45,137	46,118	47,237	48,229	49,845	50,219	50,449	51,790	50,975	50,213	49,768
1923	3,341	56,224	86.2	51,430	52,225	53,242	54,430	56,058	58,159	57,362	57,944	59,664	58,736	57,956	57,476
1924	4,233	62,834	91.3	59,582	60,341	61,206	63,607	64,545	65,244	63,934	63,527	64,329	63,702	62,509	61,486
Males:															
1914	1,069	12,230	94.3	12,110	12,087	12,181	12,432	12,448	12,515	12,332	12,325	12,318	12,179	12,039	11,799
1915	1,469	16,878	84.9	15,536	15,558	15,912	16,635	16,928	17,260	18,308	18,261	18,212	16,799	16,653	16,479
1916	1,788	19,553	85.9	17,908	17,965	18,316	18,878	19,505	19,948	20,244	20,853	20,134	20,450	20,383	20,054
1917	2,111	22,895	90.5	21,630	21,687	22,335	22,756	23,079	23,805	23,686	23,901	23,692	23,046	22,755	22,366
1918	2,556	22,855	87.0	22,856	22,731	23,352	23,704	24,158	24,214	23,470	23,299	22,553	21,070	21,210	21,643
1919	2,563	24,236	87.9	22,180	22,412	22,892	23,891	24,764	25,160	24,918	25,232	24,794	24,937	24,799	24,856
1920	3,847	28,432	88.6	26,514	26,521	27,142	28,171	28,918	29,741	29,936	29,910	29,500	28,911	28,351	27,568
1921	2,823	27,330	92.5	26,467	26,435	26,812	28,149	28,060	28,455	28,086	27,563	27,538	27,170	26,904	26,315
1922	3,032	29,474	83.1	26,652	26,814	27,457	28,580	29,242	30,111	30,744	31,000	32,059	31,071	30,319	29,638
1923	3,341	33,379	84.5	30,230	30,718	31,451	32,382	33,406	34,518	33,890	34,573	35,778	34,982	34,447	34,169
1924	4,233	37,483	89.7	35,102	35,677	36,362	38,046	38,727	39,120	38,320	38,299	38,803	38,015	37,060	36,264
Females:															
1914	1,069	9,347	93.2	9,392	9,289	9,349	9,424	9,610	9,644	9,479	9,331	9,334	9,180	9,146	8,990
1915	1,469	11,312	93.4	10,955	10,900	11,042	11,224	11,371	11,670	11,570	11,645	11,394	11,364	11,311	11,300
1916	1,788	12,656	90.9	12,001	12,083	12,194	12,334	12,599	13,036	13,208	13,203	13,006	12,871	12,888	12,445
1917	2,111	15,525	90.7	14,729	14,814	15,111	15,268	15,528	16,017	16,071	16,233	15,892	15,775	15,479	15,384
1918	2,556	15,522	91.6	14,773	14,831	14,993	15,293	15,562	16,113	16,076	16,122	16,113	15,435	15,405	15,542
1919	2,563	15,939	94.1	15,375	15,450	15,583	15,738	16,008	16,338	16,329	16,347	16,020	16,250	15,965	15,859
1920	3,847	17,989	92.1	17,132	17,220	17,426	17,652	17,905	18,292	18,456	18,440	18,599	18,510	18,343	17,890
1921	2,823	18,833	94.9	18,867	18,835	19,075	19,146	19,104	19,338	19,044	18,550	18,604	18,595	18,480	18,359
1922	3,032	19,272	91.0	18,313	18,323	18,661	18,657	18,987	19,734	19,475	19,449	19,731	19,904	19,894	20,130
1923	3,341	22,845	88.8	21,200	21,507	21,791	22,048	22,652	23,641	23,472	23,371	23,886	23,754	23,509	23,307
1924	4,233	25,351	93.7	24,480	24,664	24,844	25,561	25,818	26,124	25,614	25,228	25,526	25,687	25,449	25,222

[1] Arithmetic average of the 12 months.

TABLE 40.—WAGE EARNERS: **SERVICE—LAUNDRIES AND DRY CLEANERS**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	237	6,757	92.3	6,771	6,683	6,759	6,886	6,992	6,987	6,869	6,741	6,747	6,630	6,558	6,457
1915	270	7,732	89.8	7,419	7,302	7,481	7,985	8,131	7,952	7,677	7,718	7,815	7,799	7,741	7,769
1916	281	8,439	91.6	8,076	8,097	8,194	8,404	8,537	8,510	8,692	8,817	8,665	8,589	8,588	8,101
1917	295	8,627	93.9	8,543	8,537	8,671	8,761	8,681	8,696	8,837	8,825	8,710	8,563	8,404	8,299
1918	294	7,765	89.6	8,102	7,788	8,038	8,141	8,075	7,981	7,701	7,597	7,581	7,412	7,293	7,472
1919	281	7,837	94.3	7,570	7,579	7,758	7,947	7,864	7,883	7,992	7,854	7,851	8,026	7,934	7,782
1920	332	8,325	94.5	8,077	8,087	8,385	8,531	8,488	8,431	8,398	8,156	8,363	8,463	8,459	8,059
1921	291	7,308	92.2	7,461	7,413	7,555	7,545	7,507	7,390	7,343	7,051	7,142	7,199	7,130	6,964
1922	287	7,172	87.1	6,580	6,664	6,959	7,070	7,085	7,275	7,257	7,243	7,422	7,477	7,478	7,551
1923	305	8,890	89.3	8,222	8,316	8,691	8,788	9,002	9,187	9,067	9,033	9,211	9,172	9,032	8,957
1924	344	9,717	91.5	9,258	9,353	9,622	10,113	10,065	9,804	9,873	9,627	9,789	9,760	9,677	9,657
Males:															
1914	237	2,180	95.6	2,141	2,127	2,155	2,213	2,225	2,221	2,200	2,182	2,195	2,194	2,176	2,131
1915	270	2,622	82.2	2,422	2,394	2,469	2,846	2,914	2,872	2,559	2,594	2,629	2,620	2,583	2,563
1916	281	2,766	91.7	2,620	2,635	2,686	2,783	2,818	2,782	2,853	2,858	2,787	2,786	2,839	2,747
1917	295	2,807	92.3	2,751	2,745	2,828	2,910	2,870	2,848	2,832	2,843	2,806	2,801	2,771	2,685
1918	294	2,599	87.9	2,797	2,529	2,660	2,748	2,727	2,672	2,574	2,518	2,524	2,514	2,464	2,458
1919	281	2,784	89.3	2,584	2,593	2,677	2,809	2,774	2,841	2,840	2,843	2,851	2,892	2,879	2,828
1920	332	3,091	90.1	2,885	2,910	3,064	3,178	3,201	3,183	3,156	3,071	3,148	3,197	3,164	2,935
1921	291	2,836	93.1	2,750	2,780	2,890	2,930	2,943	2,864	2,833	2,761	2,805	2,871	2,860	2,741
1922	287	2,709	87.0	2,479	2,523	2,609	2,731	2,713	2,758	2,746	2,729	2,793	2,848	2,796	2,780
1923	305	3,319	89.1	3,080	3,109	3,240	3,341	3,401	3,455	3,275	3,396	3,403	3,415	3,409	3,308
1924	344	3,707	88.3	3,422	3,464	3,626	3,866	3,876	3,794	3,770	3,685	3,806	3,773	3,721	3,681
Females:															
1914	237	4,577	90.7	4,630	4,556	4,604	4,673	4,767	4,766	4,669	4,559	4,552	4,436	4,382	4,326
1915	270	5,110	94.1	4,997	4,908	5,012	5,139	5,217	5,080	5,118	5,124	5,186	5,179	5,158	5,206
1916	281	5,673	89.8	5,456	5,462	5,508	5,621	5,719	5,728	5,839	5,959	5,878	5,803	5,749	5,354
1917	295	5,820	93.5	5,792	5,792	5,843	5,851	5,811	5,848	6,005	5,982	5,904	5,762	5,633	5,614
1918	294	5,166	89.5	5,305	5,259	5,378	5,393	5,348	5,309	5,127	5,079	5,057	4,898	4,829	5,014
1919	281	5,052	96.2	4,986	4,986	5,081	5,138	5,090	5,042	5,152	5,011	5,000	5,134	5,055	4,954
1920	332	5,234	95.0	5,192	5,177	5,321	5,353	5,287	5,248	5,242	5,085	5,215	5,266	5,295	5,124
1921	291	4,473	89.6	4,711	4,633	4,665	4,615	4,564	4,526	4,510	4,290	4,337	4,328	4,270	4,223
1922	287	4,463	86.0	4,101	4,141	4,350	4,339	4,372	4,517	4,511	4,514	4,629	4,629	4,682	4,771
1923	305	5,570	88.5	5,142	5,207	5,451	5,447	5,601	5,732	5,792	5,637	5,808	5,757	5,623	5,649
1924	344	6,010	93.4	5,836	5,889	5,996	6,247	6,189	6,010	6,103	5,942	5,983	5,987	5,956	5,976

[1] Arithmetic average of the 12 months.

TABLE 41.—WAGE EARNERS: SERVICE—HOTELS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	166	5,410	95.4	5,493	5,431	5,474	5,450	5,339	5,521	5,405	5,346	5,389	5,404	5,401	5,267
1915	246	7,955	79.9	7,302	7,386	7,401	7,470	7,632	7,594	8,877	9,014	9,240	7,895	7,839	7,724
1916	300	8,680	91.1	8,273	8,299	8,321	8,456	8,695	8,646	8,784	9,085	8,915	9,007	8,907	8,769
1917	351	9,924	93.3	9,690	9,608	9,748	9,742	9,706	9,966	9,865	10,074	10,257	10,293	10,155	9,988
1918	356	9,923	94.2	9,771	9,852	9,759	9,992	10,020	10,262	10,234	10,170	9,855	9,799	9,664	9,694
1919	330	10,700	90.5	10,258	10,249	10,290	10,529	10,806	11,330	11,187	11,287	10,744	10,736	10,484	10,497
1920	352	10,914	84.7	10,275	10,147	10,199	10,371	10,613	11,471	11,891	11,980	11,149	11,204	10,941	10,731
1921	318	10,470	85.6	10,100	10,180	10,240	10,537	10,531	11,258	11,381	11,203	10,343	10,171	9,959	9,741
1922	303	10,561	79.3	9,392	9,412	9,634	9,826	10,079	10,724	11,577	11,847	11,430	11,319	10,892	10,598
1923	348	11,444	81.0	10,150	10,195	10,282	10,494	10,977	12,457	12,408	12,526	12,256	12,290	11,875	11,422
1924	390	11,725	84.4	10,845	11,114	11,174	11,638	11,903	12,846	12,661	12,489	11,803	11,718	11,398	11,105
Males:															
1914	166	3,383	94.8	3,449	3,406	3,440	3,425	3,291	3,467	3,384	3,317	3,388	3,389	3,352	3,288
1915	246	5,163	72.4	4,651	4,634	4,650	4,698	4,850	4,796	6,154	6,225	6,402	5,020	4,970	4,902
1916	300	5,599	91.0	5,357	5,350	5,332	5,493	5,644	5,570	5,624	5,829	5,718	5,857	5,748	5,672
1917	351	6,232	93.2	6,226	6,071	6,155	6,073	6,022	6,187	6,199	6,270	6,461	6,426	6,409	6,281
1918	356	5,790	89.6	5,922	5,941	5,865	5,972	5,925	6,058	5,939	5,837	5,594	5,556	5,430	5,442
1919	330	6,171	90.0	5,885	5,901	5,932	6,104	6,326	6,538	6,427	6,448	6,212	6,190	6,058	6,030
1920	352	6,204	83.3	5,795	5,716	5,761	5,889	6,085	6,619	6,821	6,860	6,297	6,366	6,173	6,065
1921	318	6,040	85.5	5,764	5,799	5,825	6,105	6,044	6,502	6,577	6,506	6,026	5,938	5,772	5,623
1922	303	6,433	74.2	5,539	5,499	5,616	5,891	6,080	6,372	7,136	7,411	7,300	7,158	6,781	6,414
1923	348	6,669	82.0	5,998	5,949	6,009	6,071	6,396	7,222	7,155	7,213	7,183	7,256	6,924	6,647
1924	390	6,655	83.2	6,049	6,304	6,285	6,603	6,787	7,268	7,176	7,079	6,752	6,721	6,520	6,319
Females:															
1914	166	2,027	96.3	2,044	2,025	2,034	2,025	2,048	2,054	2,021	2,029	2,001	2,015	2,049	1,979
1915	246	2,793	94.7	2,741	2,752	2,751	2,772	2,782	2,798	2,723	2,789	2,838	2,875	2,869	2,822
1916	300	3,080	89.6	2,916	2,949	2,989	2,963	3,051	3,076	3,160	3,256	3,197	3,150	3,159	3,097
1917	351	3,693	89.6	3,464	3,537	3,593	3,669	3,684	3,779	3,666	3,804	3,796	3,867	3,746	3,707
1918	356	4,133	88.8	3,849	3,911	3,894	4,020	4,095	4,204	4,295	4,333	4,261	4,243	4,234	4,252
1919	330	4,529	89.9	4,373	4,348	4,358	4,425	4,480	4,792	4,760	4,839	4,532	4,546	4,426	4,467
1920	352	4,710	86.5	4,480	4,431	4,438	4,482	4,528	4,852	5,070	5,120	4,852	4,838	4,768	4,666
1921	318	4,430	85.7	4,336	4,381	4,415	4,432	4,487	4,756	4,804	4,697	4,317	4,233	4,187	4,118
1922	303	4,128	86.8	3,853	3,913	4,018	3,935	3,999	4,352	4,441	4,436	4,130	4,161	4,111	4,184
1923	348	4,776	78.1	4,152	4,246	4,273	4,423	4,581	5,235	5,253	5,313	5,073	5,034	4,951	4,775
1924	390	5,069	85.8	4,796	4,810	4,889	5,035	5,116	5,578	5,485	5,410	5,051	4,997	4,878	4,786

[1] Arithmetic average of the 12 months.

TABLE 42.—WAGE EARNERS: SERVICE—RESTAURANTS

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	167	2,300	96.6	2,283	2,258	2,277	2,316	2,337	2,335	2,323	2,301	2,321	2,294	2,287	2,271
1915	220	3,190	95.1	3,105	3,108	3,105	3,157	3,191	3,212	3,218	3,221	3,265	3,263	3,231	3,201
1916	272	4,003	82.5	3,679	3,674	3,734	3,824	3,816	3,931	3,867	4,074	4,143	4,419	4,454	4,418
1917	280	4,698	89.7	4,432	4,461	4,468	4,572	4,599	4,683	4,719	4,783	4,907	4,886	4,933	4,939
1918	327	5,177	94.7	5,107	5,092	5,075	5,197	5,249	5,272	5,217	5,248	5,354	5,163	5,085	5,068
1919	406	5,860	87.3	5,414	5,439	5,476	5,471	5,821	6,021	5,990	6,056	6,192	6,200	6,145	6,093
1920	440	7,368	86.0	6,795	6,803	6,917	7,072	7,345	7,846	7,900	7,797	7,891	7,615	7,345	7,091
1921	365	6,306	93.8	6,255	6,124	6,174	6,220	6,375	6,433	6,244	6,324	6,532	6,387	6,343	6,265
1922	421	7,803	77.5	6,842	6,819	6,924	7,148	7,756	7,987	8,206	8,363	8,801	8,426	8,262	8,102
1923	465	8,076	88.7	7,551	7,564	7,695	7,708	8,012	8,144	8,362	8,261	8,516	8,412	8,331	8,351
1924	615	8,825	94.1	8,516	8,506	8,600	8,664	8,797	9,011	8,963	8,913	8,998	9,036	9,018	8,872
Males:															
1914	167	1,134	95.4	1,128	1,116	1,123	1,139	1,158	1,152	1,152	1,146	1,149	1,121	1,115	1,105
1915	220	1,702	93.6	1,650	1,646	1,643	1,665	1,693	1,700	1,720	1,724	1,756	1,756	1,745	1,732
1916	272	2,233	78.3	2,026	2,008	2,042	2,097	2,098	2,176	2,141	2,264	2,289	2,562	2,566	2,531
1917	280	2,368	91.2	2,255	2,275	2,252	2,331	2,346	2,381	2,358	2,415	2,469	2,426	2,442	2,461
1918	327	2,339	86.8	2,478	2,465	2,461	2,498	2,492	2,381	2,236	2,256	2,216	2,169	2,179	2,232
1919	406	2,920	86.8	2,711	2,701	2,718	2,701	2,865	2,961	2,988	3,026	3,111	3,090	3,099	3,074
1920	440	3,706	83.7	3,433	3,423	3,460	3,532	3,743	4,071	4,089	3,975	3,947	3,756	3,588	3,458
1921	365	3,007	93.7	2,990	2,922	2,934	2,962	3,061	3,079	2,994	3,014	3,120	3,039	3,013	2,959
1922	421	4,213	69.7	3,485	3,498	3,615	3,780	4,190	4,313	4,545	4,664	5,003	4,607	4,518	4,338
1923	465	3,952	88.4	3,724	3,691	3,777	3,758	3,919	3,981	4,070	4,028	4,176	4,085	4,070	4,144
1924	615	4,399	91.9	4,215	4,226	4,286	4,263	4,364	4,589	4,512	4,479	4,469	4,474	4,466	4,446
Females:															
1914	167	1,167	96.5	1,155	1,142	1,154	1,177	1,179	1,183	1,171	1,155	1,172	1,173	1,172	1,166
1915	220	1,487	96.2	1,455	1,462	1,462	1,492	1,498	1,512	1,498	1,497	1,509	1,507	1,486	1,469
1916	272	1,769	87.6	1,653	1,666	1,692	1,727	1,718	1,755	1,726	1,810	1,854	1,857	1,888	1,887
1917	280	2,331	87.4	2,177	2,186	2,216	2,241	2,253	2,302	2,361	2,368	2,438	2,460	2,491	2,478
1918	327	2,839	83.3	2,629	2,627	2,614	2,699	2,757	2,891	2,981	2,992	3,138	2,994	2,906	2,836
1919	406	2,939	86.9	2,703	2,738	2,758	2,770	2,956	3,060	3,002	3,030	3,081	3,110	3,046	3,019
1920	440	3,662	85.2	3,362	3,380	3,457	3,540	3,602	3,775	3,811	3,822	3,944	3,859	3,757	3,633
1921	365	3,299	93.8	3,265	3,202	3,240	3,258	3,314	3,354	3,250	3,310	3,412	3,348	3,330	3,306
1922	421	3,590	86.6	3,357	3,321	3,309	3,368	3,566	3,674	3,661	3,699	3,798	3,819	3,744	3,764
1923	465	4,124	88.2	3,827	3,873	3,918	3,950	4,093	4,163	4,292	4,233	4,340	4,327	4,261	4,207
1924	615	4,425	93.8	4,301	4,280	4,314	4,401	4,433	4,422	4,451	4,434	4,529	4,562	4,552	4,426

[1] Arithmetic average of the 12 months.

TABLE 43.—WAGE EARNERS: TRANSPORTATION AND PUBLIC UTILITIES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	798	34,380	80.0	31,443	31,292	30,625	32,705	35,323	37,189	38,193	38,305	36,771	35,831	33,622	31,255
1915	996	45,179	80.4	41,409	39,330	40,286	42,826	45,717	48,926	47,370	47,488	48,036	47,089	46,848	46,824
1916	1,137	50,098	81.1	45,201	43,813	44,657	47,622	49,946	51,722	53,025	53,978	54,026	53,053	52,827	51,307
1917	1,149	53,084	88.0	49,600	48,941	50,882	52,734	55,449	55,405	55,615	55,023	54,208	53,950	53,690	51,511
1918	1,134	52,037	94.0	50,952	51,340	51,979	52,162	52,702	53,462	53,156	53,082	52,054	52,044	51,253	50,263
1919	1,081	53,357	94.5	51,545	51,622	51,776	52,805	53,807	53,953	54,551	54,570	54,519	53,981	54,064	53,094
1920	1,146	56,115	87.5	52,467	51,702	52,778	54,155	55,596	57,360	57,748	58,147	58,359	59,061	58,487	57,521
1921	1,048	51,368	94.0	51,082	49,881	50,042	51,718	51,265	52,858	52,914	52,612	52,138	51,193	50,983	49,725
1922	1,071	51,462	83.9	46,538	46,899	46,764	47,932	50,051	52,181	54,614	55,420	55,500	54,156	54,129	53,363
1923	1,129	56,877	84.6	52,076	51,568	53,004	54,772	56,807	58,909	59,841	60,955	59,423	59,476	58,544	57,144
1924	1,271	59,320	91.0	56,669	56,966	57,450	59,158	60,589	61,807	62,277	61,427	60,326	59,300	58,452	57,415
Males:															
1914	798	28,221	77.1	25,436	25,340	24,586	26,504	29,148	30,859	31,817	31,897	30,444	29,727	27,592	25,298
1915	996	37,350	78.0	33,645	31,814	32,685	35,089	37,923	40,770	39,465	39,612	40,148	39,286	39,026	38,738
1916	1,137	41,620	79.2	37,331	35,859	36,538	39,534	41,656	43,199	44,380	45,140	45,295	44,343	43,819	42,349
1917	1,149	42,637	87.3	40,111	39,320	40,941	42,553	45,016	44,774	44,704	44,167	43,486	43,146	42,812	40,619
1918	1,134	40,664	92.1	40,197	40,257	40,803	41,042	41,695	41,732	41,591	41,606	40,723	40,369	39,529	38,426
1919	1,081	41,846	90.8	39,437	39,507	39,879	41,101	42,234	42,398	43,171	43,429	43,363	42,905	42,875	41,853
1920	1,146	43,759	87.1	40,880	40,176	41,111	42,250	43,547	44,809	44,806	45,451	45,675	46,116	45,512	44,774
1921	1,048	40,423	92.5	39,814	38,755	38,977	40,729	40,284	41,853	41,898	41,666	41,335	40,399	40,303	39,067
1922	1,071	40,564	80.5	35,751	36,215	36,085	37,417	39,421	44,223	43,400	44,403	44,437	43,153	42,985	42,274
1923	1,129	45,132	82.8	40,869	40,387	41,483	43,116	45,046	46,975	47,778	48,801	47,472	47,729	46,756	45,167
1924	1,271	47,241	89.6	44,743	44,801	45,211	46,897	48,358	49,470	49,928	49,186	48,478	47,590	46,724	45,505
Females:															
1914	798	6,159	92.9	6,007	5,952	6,039	6,201	6,175	6,330	6,376	6,408	6,327	6,104	6,030	5,957
1915	996	7,829	92.2	7,764	7,516	7,601	7,737	7,794	8,156	7,905	7,876	7,888	7,803	7,822	8,086
1916	1,137	8,478	87.4	7,870	7,954	8,119	8,088	8,290	8,523	8,645	8,838	8,731	8,710	9,008	8,958
1917	1,149	10,447	87.0	9,489	9,621	9,941	10,181	10,433	10,631	10,911	10,856	10,722	10,804	10,878	10,892
1918	1,134	11,373	90.9	10,755	11,083	11,176	11,120	11,007	11,730	11,565	11,476	11,331	11,675	11,724	11,837
1919	1,081	11,511	91.4	12,108	12,115	11,897	11,704	11,573	11,555	11,380	11,141	11,156	11,076	11,189	11,241
1920	1,146	12,356	88.8	11,587	11,526	11,667	11,905	12,049	12,551	12,942	12,696	12,684	12,945	12,975	12,747
1921	1,048	10,944	94.6	11,268	11,126	11,065	10,989	10,981	11,005	11,016	10,946	10,803	10,794	10,680	10,658
1922	1,071	10,899	93.8	10,787	10,684	10,679	10,515	10,630	10,958	11,214	11,017	11,063	11,003	11,144	11,089
1923	1,129	11,745	92.0	11,207	11,181	11,521	11,656	11,761	11,934	12,063	12,154	11,951	11,747	11,788	11,977
1924	1,271	12,079	94.8	11,926	12,165	12,239	12,261	12,231	12,337	12,349	12,241	11,848	11,710	11,728	11,910

[1] Arithmetic average of the 12 months.

TABLE 44.—WAGE EARNERS: **TRANSPORTATION AND PUBLIC UTILITIES—TELEGRAPH AND TELEPHONE (INCLUDING MESSENGER SERVICE)**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	297	9,558	89.9	9,396	9,572	9,272	9,469	9,431	9,806	10,110	9,945	9,726	9,547	9,330	9,091
1915	341	13,188	77.4	13,262	11,787	11,818	12,204	12,587	14,836	13,390	13,210	13,351	13,173	13,405	15,232
1916	403	14,611	87.6	14,242	13,495	13,993	13,994	14,088	14,609	15,030	15,283	15,157	14,879	15,406	15,162
1917	414	18,147	87.6	16,812	16,926	17,901	18,339	18,944	19,017	19,202	18,596	18,109	17,987	18,023	17,910
1918	389	17,760	94.9	17,335	17,823	17,881	17,933	17,597	18,272	18,019	17,908	17,416	17,688	17,708	17,542
1919	360	17,730	96.2	17,987	18,029	17,919	17,735	17,778	17,673	17,679	17,351	17,401	17,533	17,726	17,949
1920	387	19,237	90.4	18,265	18,071	18,332	18,884	18,988	19,575	19,942	19,705	19,641	20,000	19,880	19,567
1921	365	17,526	96.3	17,875	17,561	17,447	17,525	17,600	17,669	17,675	17,549	17,452	17,464	17,288	17,213
1922	405	17,596	91.9	17,175	17,004	16,761	16,802	17,073	17,633	18,240	18,109	18,097	18,054	18,136	18,064
1923	399	19,024	91.9	18,237	18,140	18,215	18,558	18,897	19,320	19,560	19,747	19,488	19,291	19,293	19,537
1924	390	19,697	94.5	19,387	19,686	19,573	19,674	19,871	20,111	20,336	20,125	19,694	19,334	19,216	19,351
Males:															
1914	297	3,521	83.0	3,481	3,709	3,323	3,364	3,386	3,638	3,894	3,693	3,549	3,564	3,420	3,231
1915	341	5,460	59.4	5,579	4,351	4,301	4,556	4,890	6,798	5,607	5,456	5,586	5,468	5,681	7,243
1916	403	6,271	85.7	6,487	5,662	5,994	6,030	5,931	6,232	6,542	6,610	6,586	6,306	6,536	6,331
1917	414	7,839	83.1	7,444	7,425	8,080	8,282	8,630	8,524	8,428	7,890	7,532	7,356	7,304	7,174
1918	389	6,649	86.8	6,757	6,921	6,892	6,997	6,791	6,755	6,675	6,666	6,443	6,438	6,379	6,071
1919	360	6,549	89.4	6,267	6,267	6,374	6,385	6,554	6,452	6,616	6,534	6,550	6,762	6,817	7,009
1920	387	7,188	92.0	6,938	6,797	6,935	7,252	7,237	7,331	7,327	7,344	7,286	7,385	7,262	7,161
1921	365	6,832	95.6	6,874	6,683	6,632	6,788	6,862	6,923	6,934	6,858	6,885	6,908	6,846	6,795
1922	405	6,921	86.0	6,610	6,538	6,299	6,501	6,650	6,903	7,263	7,321	7,264	7,270	7,225	7,208
1923	399	7,553	87.7	7,262	7,201	6,942	7,146	7,389	7,654	7,827	7,914	7,842	7,834	7,792	7,834
1924	390	7,885	92.3	7,734	7,799	7,615	7,699	7,917	8,042	8,253	8,151	8,108	7,880	7,739	7,687
Females:															
1914	297	6,037	93.7	5,915	5,863	5,949	6,105	6,045	6,168	6,216	6,252	6,177	5,983	5,910	5,860
1915	341	7,728	92.5	7,683	7,436	7,517	7,648	7,697	8,038	7,783	7,754	7,765	7,705	7,724	7,989
1916	403	8,341	87.4	7,755	7,833	7,999	7,964	8,157	8,377	8,488	8,673	8,571	8,573	8,870	8,831
1917	414	10,308	87.0	9,368	9,501	9,821	10,057	10,314	10,493	10,774	10,706	10,577	10,631	10,719	10,736
1918	389	11,111	91.8	10,578	10,902	10,989	10,936	10,806	11,517	11,344	11,242	10,973	11,250	11,329	11,471
1919	360	11,181	91.6	11,720	11,762	11,545	11,350	11,224	11,221	11,063	10,817	10,851	10,771	10,909	10,940
1920	387	12,050	89.3	11,327	11,274	11,397	11,632	11,751	12,244	12,615	12,361	12,355	12,615	12,618	12,406
1921	365	10,694	94.7	11,001	10,878	10,815	10,737	10,738	10,746	10,741	10,691	10,567	10,556	10,442	10,418
1922	405	10,675	93.8	10,565	10,466	10,462	10,301	10,423	10,730	10,977	10,788	10,833	10,784	10,911	10,856
1923	399	11,470	92.4	10,975	10,939	11,273	11,412	11,508	11,666	11,733	11,833	11,646	11,457	11,501	11,703
1924	390	11,811	94.8	11,653	11,887	11,958	11,975	11,954	12,069	12,083	11,974	11,586	11,454	11,477	11,664

[1] Arithmetic average of the 12 months.

TABLE 45.—WAGE EARNERS: **TRADE, RETAIL AND WHOLESALE**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	3,361	26,744	93.4	25,801	25,693	26,175	26,665	26,917	27,335	27,060	26,762	27,497	27,296	27,054	26,668
1915	4,112	33,178	86.9	31,433	30,891	31,974	32,992	33,313	32,988	32,539	32,498	33,743	35,159	35,066	35,536
1916	4,437	38,461	86.5	36,120	36,017	36,817	38,204	38,199	38,365	37,759	37,636	39,051	40,507	41,210	41,651
1917	4,908	42,374	96.2	41,279	41,463	42,035	42,449	42,701	42,854	42,677	42,202	42,528	42,629	42,781	42,890
1918	5,330	43,464	96.5	42,898	42,968	43,900	43,896	43,834	44,227	43,944	43,433	42,697	43,085	42,890	43,795
1919	5,657	45,754	84.7	42,099	41,812	42,688	44,117	44,705	45,874	46,553	47,103	47,707	48,225	48,809	49,354
1920	6,589	51,736	94.2	50,831	49,701	50,953	51,392	51,308	52,289	52,741	52,475	52,540	52,420	52,197	51,983
1921	5,638	45,286	95.5	45,193	44,521	44,741	45,375	45,009	45,789	44,684	44,370	44,942	46,169	46,443	46,192
1922	6,067	48,364	83.3	45,297	44,695	45,307	46,726	47,591	48,500	48,780	48,518	49,155	50,335	51,802	53,663
1923	6,276	52,663	88.3	49,831	49,716	50,971	52,021	52,536	53,388	52,503	52,310	53,195	53,885	55,307	56,293
1924	7,689	56,070	90.7	54,221	54,320	54,669	55,618	55,919	55,806	55,505	55,292	56,225	57,488	57,997	59,783
Males:															
1914	3,361	21,722	92.4	20,844	20,804	21,033	21,348	21,862	22,509	22,441	22,407	22,474	21,898	21,640	21,405
1915	4,112	27,067	87.9	25,483	25,366	25,887	26,525	27,073	27,038	27,018	27,204	27,653	28,354	28,343	28,861
1916	4,437	31,632	87.6	29,897	29,886	30,098	30,904	31,173	31,595	31,369	31,623	32,227	33,043	33,675	34,100
1917	4,908	34,726	96.1	33,819	34,085	34,160	34,282	34,832	35,118	35,205	34,967	34,983	34,957	35,148	35,157
1918	5,330	34,597	94.1	34,700	34,848	34,991	35,144	35,211	35,448	35,117	34,963	33,767	33,735	33,355	33,889
1919	5,657	36,138	84.2	33,007	32,711	33,337	34,327	35,128	36,512	37,214	37,833	37,924	38,263	38,572	38,829
1920	6,589	41,359	93.9	40,855	39,902	40,538	40,915	41,084	41,894	42,485	42,250	42,000	41,763	41,508	41,111
1921	5,638	36,581	95.6	36,433	35,897	35,839	36,368	36,346	37,142	36,432	36,348	36,644	37,404	37,489	36,627
1922	6,067	39,528	85.1	36,955	36,639	36,953	37,975	38,998	39,784	40,252	40,141	40,439	41,128	42,021	43,057
1923	6,276	42,892	90.2	40,586	40,820	41,584	42,396	42,837	43,677	43,049	43,055	43,501	43,736	44,463	45,003
1924	7,689	46,103	92.3	44,567	44,791	44,893	45,503	45,971	46,035	46,052	46,043	46,532	47,176	47,377	48,299
Females:															
1914	3,361	5,021	80.4	4,957	4,889	5,142	5,317	5,055	4,826	4,619	4,355	5,023	5,398	5,414	5,263
1915	4,112	6,111	77.8	5,950	5,525	6,087	6,467	6,240	5,950	5,521	5,294	6,090	6,805	6,723	6,675
1916	4,437	6,829	79.6	6,223	6,131	6,719	7,300	7,026	6,770	6,390	6,013	6,824	7,464	7,535	7,551
1917	4,908	7,648	88.6	7,460	7,378	7,875	8,167	7,869	7,736	7,472	7,235	7,545	7,672	7,633	7,733
1918	5,330	8,867	82.0	8,198	8,120	8,909	8,752	8,623	8,779	8,827	8,470	8,930	9,350	9,535	9,906
1919	5,657	9,616	86.4	9,092	9,101	9,351	9,790	9,577	9,362	9,339	9,270	9,783	9,962	10,237	10,525
1920	6,589	10,377	90.1	9,976	9,799	10,415	10,477	10,224	10,395	10,256	10,225	10,540	10,657	10,689	10,872
1921	5,638	8,705	83.9	8,760	8,624	8,902	9,007	8,663	8,647	8,252	8,022	8,298	8,765	8,954	9,565
1922	6,067	8,836	76.0	8,342	8,056	8,354	8,751	8,593	8,716	8,528	8,377	8,716	9,207	9,781	10,606
1923	6,276	9,771	78.8	9,245	8,896	9,387	9,625	9,699	9,711	9,454	9,255	9,694	10,149	10,844	11,290
1924	7,689	9,967	80.5	9,654	9,529	9,776	10,115	9,948	9,771	9,453	9,249	9,693	10,312	10,620	11,484

[1] Arithmetic average of the 12 months.

TABLE 46.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: **ALL INDUSTRIES**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in— January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	14,149	58,889	98.3	58,799	58,601	58,835	59,208	59,011	59,182	59,273	59,184	59,024	58,695	58,239	58,612
1915	17,981	66,574	91.2	63,926	63,973	64,608	64,917	65,523	66,506	66,836	67,314	67,913	68,361	68,959	70,057
1916	20,017	79,360	88.2	74,114	75,002	76,666	77,267	77,921	79,083	80,237	81,180	81,624	82,223	83,016	83,988
1917	21,624	91,247	92.5	87,121	87,753	88,497	89,440	90,397	91,513	92,339	93,182	93,060	93,450	94,137	94,070
1918	22,709	104,264	92.9	99,427	100,119	101,477	101,797	103,259	105,384	106,687	107,030	106,749	106,260	106,761	106,223
1919	23,652	116,185	87.6	108,982	109,652	110,757	112,013	112,862	114,476	117,523	119,914	120,076	120,856	122,749	124,364
1920	27,241	130,857	91.7	127,527	129,878	131,663	133,173	133,591	134,724	135,528	134,056	131,133	128,539	126,213	124,258
1921	23,562	110,481	91.5	116,749	114,827	113,728	111,968	111,706	110,431	109,146	108,414	107,555	106,849	106,994	107,409
1922 [2]															
1923	25,904	126,470	93.8	121,208	122,166	123,829	124,678	126,076	127,599	128,644	128,815	128,529	128,306	128,538	129,248
1924	30,439	133,235	98.8	132,263	132,726	133,194	133,934	133,320	132,966	133,639	133,479	133,435	132,991	133,091	133,781
Males:															
1914	14,149	35,050	97.4	34,864	34,663	34,750	35,200	35,116	35,340	35,499	35,521	35,293	34,984	34,581	34,790
1915	17,981	39,052	90.6	37,284	37,274	37,644	37,852	38,299	39,009	39,418	39,807	40,024	40,297	40,585	41,127
1916	20,017	46,352	88.2	43,096	43,667	44,714	44,989	45,463	46,298	47,121	47,808	47,786	48,031	48,400	48,856
1917	21,624	51,559	94.1	49,668	50,151	50,589	51,089	51,397	52,062	52,602	52,764	52,290	52,015	52,130	51,949
1918	22,709	53,996	93.8	54,128	54,227	54,850	54,512	55,032	55,512	55,392	54,770	53,269	52,068	52,133	52,056
1919	23,652	58,848	83.8	53,778	54,419	55,255	56,001	56,746	57,935	59,689	61,670	61,486	61,933	63,094	64,169
1920	27,241	66,545	90.5	65,586	66,605	67,448	68,081	68,244	68,561	68,951	68,208	66,382	64,676	63,407	62,385
1921	23,562	55,803	90.7	59,388	58,340	57,621	56,732	56,328	55,624	54,965	54,722	54,241	53,877	53,925	53,871
1922 [2]															
1923	25,904	63,997	93.6	61,217	61,785	62,712	63,104	63,693	64,432	65,154	65,390	65,134	65,065	65,067	65,216
1924	30,439	67,456	98.9	67,089	67,367	67,464	67,810	67,459	67,282	67,784	67,798	67,556	67,292	67,218	67,354
Females:															
1914	14,149	23,838	98.2	23,935	23,938	24,085	24,008	23,895	23,842	23,774	23,663	23,731	23,711	23,658	23,822
1915	17,981	27,523	92.1	26,642	26,699	26,964	27,065	27,224	27,497	27,418	27,507	27,889	28,064	28,374	28,930
1916	20,017	33,008	88.3	31,018	31,335	31,952	32,278	32,458	32,785	33,116	33,372	33,838	34,192	34,616	35,132
1917	21,624	39,688	88.9	37,453	37,602	37,908	38,351	39,000	39,451	39,737	40,418	40,770	41,435	42,007	42,121
1918	22,709	50,269	82.9	45,299	45,892	46,627	47,285	48,227	49,872	51,295	52,260	53,480	54,192	54,628	54,167
1919	23,652	57,337	91.7	55,204	55,233	55,502	56,012	56,116	56,541	57,834	58,244	58,590	58,923	59,655	60,195
1920	27,241	64,312	92.9	61,941	63,273	64,215	65,092	65,347	66,163	66,571	65,848	64,751	63,863	62,806	61,873
1921	23,562	54,678	92.3	57,361	56,487	56,107	55,236	55,378	54,807	54,181	53,692	53,314	52,972	53,069	53,538
1922 [2]															
1923	25,904	62,472	93.7	59,991	60,381	61,117	61,574	62,383	63,167	63,490	63,425	63,395	63,241	63,471	64,032
1924	30,439	65,779	98.1	65,174	65,359	65,730	66,124	65,861	65,684	65,855	65,681	65,879	65,699	65,873	66,427

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 47.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: **TRADE, RETAIL AND WHOLESALE**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	3,361	16,537	96.4	16,549	16,565	16,596	16,640	16,518	16,513	16,323	16,312	16,485	16,516	16,504	16,927
1915	4,112	16,279	93.4	16,008	15,950	16,009	16,068	16,122	16,190	16,141	16,179	16,393	16,502	16,701	17,085
1916	4,437	19,438	91.1	18,718	18,813	19,108	19,133	19,064	19,126	19,407	19,470	19,732	19,935	20,201	20,551
1917	4,908	23,159	94.0	22,612	22,622	22,696	22,828	22,836	23,081	23,241	23,264	23,322	23,585	23,761	24,061
1918	5,330	22,303	96.2	22,016	21,948	22,132	21,976	22,166	22,340	22,451	22,490	22,577	22,307	22,421	22,818
1919	5,657	26,638	87.9	24,967	25,180	25,484	25,765	25,998	26,302	27,111	27,345	27,580	27,587	27,943	28,391
1920	6,589	30,905	95.2	29,988	30,128	30,514	30,815	30,832	30,979	31,487	31,485	31,220	31,059	31,159	31,196
1921	5,638	27,778	93.4	28,938	28,425	28,377	28,120	27,925	27,763	27,538	27,191	27,182	27,033	27,180	27,667
1922 [2]															
1923	6,276	31,839	93.1	30,697	30,838	31,255	31,218	31,673	31,982	32,252	32,263	32,316	32,063	32,526	32,986
1924	7,689	34,070	96.3	33,633	33,693	33,953	34,213	33,958	33,874	33,992	33,975	34,289	34,122	34,224	34,917
Males:															
1914	3,361	8,611	97.9	8,604	8,597	8,585	8,613	8,559	8,602	8,564	8,570	8,629	8,630	8,628	8,746
1915	4,112	7,730	93.9	7,567	7,511	7,578	7,614	7,656	7,711	7,705	7,780	7,825	7,875	7,932	8,003
1916	4,437	9,009	92.8	8,664	8,754	8,956	8,901	8,803	8,842	9,044	9,119	9,177	9,243	9,273	9,335
1917	4,908	10,297	97.9	10,192	10,235	10,275	10,333	10,275	10,346	10,412	10,377	10,255	10,269	10,307	10,287
1918	5,330	8,288	89.6	8,681	8,642	8,635	8,555	8,587	8,426	8,253	8,200	7,971	7,808	7,782	7,912
1919	5,657	9,716	84.3	8,801	8,930	9,145	9,215	9,409	9,624	10,005	10,193	10,197	10,257	10,373	10,440
1920	6,589	11,362	95.2	11,022	11,043	11,231	11,304	11,284	11,354	11,574	11,648	11,526	11,361	11,579	11,417
1921	5,638	10,642	94.2	11,048	10,884	10,823	10,753	10,682	10,679	10,590	10,496	10,482	10,402	10,404	10,464
1922 [2]															
1923	6,276	12,046	93.9	11,546	11,651	11,873	11,888	12,028	12,074	12,226	12,259	12,293	12,147	12,287	12,282
1924	7,689	13,055	96.5	12,834	12,909	13,016	13,018	12,978	12,994	13,064	13,124	13,081	13,162	13,179	13,295
Females:															
1914	3,361	7,927	94.6	7,945	7,968	8,011	8,027	7,959	7,911	7,759	7,742	7,856	7,886	7,876	8,181
1915	4,112	8,549	92.5	8,441	8,439	8,431	8,454	8,466	8,479	8,436	8,399	8,568	8,627	8,769	9,082
1916	4,437	10,429	89.6	10,054	10,059	10,152	10,232	10,261	10,284	10,363	10,351	10,555	10,692	10,928	11,216
1917	4,908	12,862	89.9	12,420	12,387	12,421	12,495	12,561	12,735	12,829	12,887	13,067	13,316	13,454	13,774
1918	5,330	14,016	89.3	13,335	13,306	13,497	13,421	13,579	13,914	14,198	14,290	14,606	14,499	14,639	14,906
1919	5,657	16,922	90.1	16,166	16,250	16,339	16,550	16,589	16,678	17,106	17,152	17,383	17,330	17,570	17,951
1920	6,589	19,543	95.2	18,966	19,085	19,283	19,511	19,548	19,625	19,913	19,837	19,694	19,698	19,580	19,779
1921	5,638	17,136	93.0	17,890	17,541	17,554	17,367	17,243	17,084	16,948	16,695	16,700	16,631	16,776	17,203
1922 [2]															
1923	6,276	19,793	92.5	19,151	19,187	19,382	19,330	19,645	19,908	20,026	20,004	20,023	19,916	20,239	20,704
1924	7,689	21,016	96.1	20,799	20,784	20,937	21,195	20,980	20,880	20,928	20,851	21,208	20,960	21,045	21,622

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 48.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: **TRADE—STORES, RETAIL AND WHOLESALE**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	2,708	11,688	93.7	11,754	11,741	11,730	11,799	11,646	11,624	11,431	11,392	11,614	11,678	11,689	12,160
1915	3,157	10,871	92.1	10,742	10,655	10,657	10,703	10,752	10,780	10,753	10,738	10,907	11,006	11,183	11,573
1916	3,366	12,681	91.1	12,312	12,315	12,468	12,506	12,472	12,490	12,585	12,579	12,751	12,965	13,214	13,514
1917	3,695	14,052	92.1	13,795	13,670	13,720	13,803	13,837	13,901	14,009	14,008	14,138	14,371	14,527	14,849
1918	4,021	14,754	94.3	14,597	14,494	14,645	14,468	14,612	14,672	14,701	14,773	14,972	14,828	14,951	15,340
1919	4,271	16,576	89.0	15,793	15,818	15,937	16,137	16,233	16,302	16,702	16,844	17,017	17,039	17,340	17,753
1920	4,932	18,161	93.6	17,543	17,569	17,771	17,994	18,032	18,088	18,403	18,459	18,455	18,323	18,556	18,742
1921	4,218	16,992	94.6	17,608	17,258	17,248	17,105	16,978	16,864	16,810	16,663	16,710	16,661	16,789	17,209
1922 [2]															
1923	4,634	19,006	91.9	18,428	18,459	18,662	18,521	18,759	18,959	19,189	19,143	19,183	19,197	19,519	20,056
1924	5,666	19,453	95.3	19,287	19,231	19,420	19,579	19,356	19,263	19,305	19,275	19,603	19,393	19,537	20,187
Males:															
1914	2,708	5,562	95.9	5,586	5,569	5,532	5,570	5,517	5,540	5,497	5,496	5,570	5,566	5,573	5,729
1915	3,157	4,470	92.7	4,370	4,336	4,372	4,387	4,420	4,438	4,461	4,507	4,531	4,550	4,595	4,678
1916	3,366	5,007	93.3	4,863	4,877	4,993	4,980	4,897	4,903	4,997	5,038	5,052	5,123	5,155	5,211
1917	3,695	5,204	96.9	5,139	5,138	5,157	5,181	5,181	5,184	5,222	5,223	5,205	5,248	5,276	5,300
1918	4,021	4,751	90.2	4,990	4,946	4,949	4,886	4,943	4,795	4,670	4,649	4,568	4,509	4,502	4,604
1919	4,271	5,212	85.2	4,778	4,826	4,920	5,005	5,091	5,192	5,303	5,397	5,415	5,461	5,546	5,609
1920	4,932	5,626	92.2	5,395	5,391	5,489	5,551	5,546	5,605	5,751	5,786	5,755	5,623	5,847	5,772
1921	4,218	5,703	95.4	5,906	5,791	5,752	5,710	5,676	5,659	5,666	5,634	5,655	5,637	5,660	5,685
1922 [2]															
1923	4,634	6,148	93.4	5,926	5,996	6,108	6,063	6,090	6,118	6,177	6,219	6,216	6,228	6,283	6,347
1924	5,666	6,370	96.6	6,301	6,302	6,368	6,357	6,315	6,315	6,338	6,370	6,380	6,417	6,451	6,522
Females:															
1914	2,708	6,126	91.7	6,168	6,172	6,198	6,229	6,129	6,084	5,934	5,896	6,044	6,112	6,116	6,431
1915	3,157	6,400	90.4	6,372	6,319	6,285	6,316	6,332	6,342	6,292	6,231	6,376	6,456	6,588	6,895
1916	3,366	7,673	89.6	7,449	7,438	7,475	7,526	7,575	7,587	7,588	7,541	7,699	7,842	8,059	8,303
1917	3,695	8,848	89.3	8,656	8,532	8,563	8,622	8,656	8,717	8,787	8,785	8,933	9,123	9,251	9,549
1918	4,021	10,003	88.9	9,607	9,548	9,696	9,582	9,669	9,877	10,031	10,124	10,404	10,319	10,449	10,736
1919	4,271	11,364	90.5	11,015	10,992	11,017	11,132	11,142	11,110	11,399	11,447	11,602	11,578	11,794	12,144
1920	4,932	12,535	93.7	12,148	12,178	12,282	12,443	12,486	12,483	12,652	12,673	12,700	12,700	12,709	12,970
1921	4,218	11,289	94.2	11,702	11,467	11,496	11,395	11,302	11,205	11,144	11,029	11,055	11,024	11,129	11,524
1922 [2]															
1923	4,634	12,859	90.9	12,502	12,463	12,554	12,458	12,669	12,841	13,012	12,924	12,967	12,969	13,236	13,709
1924	5,666	13,083	94.4	12,986	12,929	13,052	13,222	13,041	12,948	12,967	12,905	13,223	12,976	13,086	13,665

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 49.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: **TRADE—OFFICES**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	235	3,816	97.0	3,819	3,854	3,880	3,845	3,845	3,819	3,790	3,809	3,790	3,790	3,790	3,763
1915	289	4,151	96.5	4,071	4,100	4,138	4,139	4,124	4,145	4,122	4,157	4,189	4,190	4,213	4,219
1916	369	5,389	90.8	5,103	5,194	5,310	5,290	5,242	5,266	5,428	5,497	5,581	5,561	5,577	5,619
1917	488	7,537	95.8	7,324	7,450	7,456	7,481	7,433	7,587	7,614	7,619	7,587	7,615	7,644	7,634
1918	515	5,856	95.9	5,768	5,771	5,809	5,834	5,858	5,928	6,016	5,987	5,903	5,790	5,796	5,810
1919	594	8,430	85.5	7,630	7,822	7,995	8,061	8,179	8,379	8,754	8,820	8,868	8,850	8,875	8,925
1920	803	11,001	94.6	10,749	10,855	11,015	11,075	11,062	11,144	11,323	11,263	11,007	10,984	10,833	10,708
1921	676	9,230	90.7	9,736	9,586	9,570	9,476	9,400	9,320	9,169	8,971	8,917	8,834	8,855	8,927
1922	722	9,361	91.7	8,806	9,041	9,109	9,279	9,299	9,373	9,553	9,556	9,572	9,567	9,601	9,580
1923	779	10,989	93.7	10,520	10,621	10,788	10,888	11,096	11,177	11,180	11,219	11,231	10,975	11,105	11,069
1924	982	12,691	97.3	12,440	12,562	12,637	12,728	12,695	12,695	12,755	12,747	12,736	12,771	12,733	12,789
Males:															
1914	235	2,405	97.9	2,405	2,415	2,434	2,419	2,411	2,407	2,393	2,396	2,391	2,401	2,405	2,384
1915	289	2,452	96.3	2,430	2,409	2,431	2,443	2,439	2,464	2,427	2,442	2,463	2,487	2,501	2,492
1916	369	3,123	91.5	2,951	3,026	3,103	3,055	3,042	3,062	3,157	3,189	3,223	3,219	3,223	3,224
1917	488	4,143	96.1	4,128	4,167	4,182	4,204	4,138	4,192	4,220	4,171	4,095	4,076	4,090	4,054
1918	515	2,595	88.6	2,717	2,698	2,705	2,703	2,680	2,654	2,626	2,606	2,485	2,422	2,408	2,431
1919	594	3,643	81.8	3,214	3,297	3,410	3,380	3,479	3,578	3,825	3,912	3,884	3,898	3,913	3,928
1920	803	4,809	95.5	4,723	4,744	4,818	4,829	4,812	4,823	4,891	4,929	4,841	4,811	4,779	4,707
1921	676	4,109	90.9	4,309	4,268	4,246	4,228	4,182	4,173	4,084	4,020	3,984	3,935	3,918	3,956
1922	722	4,079	89.1	3,743	3,935	3,979	4,065	4,068	4,114	4,192	4,199	4,185	4,164	4,156	4,153
1923	779	4,879	93.0	4,666	4,687	4,772	4,826	4,934	4,931	5,002	4,985	5,019	4,862	4,952	4,909
1924	982	5,665	96.2	5,527	5,596	5,638	5,650	5,649	5,664	5,710	5,719	5,671	5,714	5,700	5,746
Females:															
1914	235	1,411	95.4	1,414	1,439	1,446	1,426	1,434	1,412	1,397	1,413	1,399	1,389	1,385	1,379
1915	289	1,698	95.0	1,641	1,691	1,707	1,696	1,685	1,681	1,695	1,715	1,726	1,703	1,712	1,727
1916	369	2,266	89.9	2,152	2,168	2,207	2,235	2,200	2,204	2,271	2,308	2,358	2,342	2,354	2,395
1917	488	3,394	89.3	3,196	3,283	3,274	3,277	3,295	3,395	3,394	3,448	3,492	3,539	3,554	3,580
1918	515	3,261	89.3	3,051	3,073	3,104	3,131	3,178	3,274	3,390	3,381	3,418	3,368	3,388	3,379
1919	594	4,787	88.4	4,416	4,525	4,585	4,681	4,700	4,801	4,929	4,908	4,984	4,952	4,962	4,997
1920	803	6,193	93.3	6,026	6,111	6,197	6,246	6,250	6,321	6,432	6,334	6,166	6,173	6,054	6,001
1921	676	5,121	90.3	5,427	5,318	5,324	5,248	5,218	5,147	5,085	4,951	4,933	4,899	4,937	4,971
1922	722	5,282	93.0	5,063	5,106	5,130	5,214	5,231	5,259	5,361	5,357	5,387	5,403	5,445	5,427
1923	779	6,110	93.7	5,854	5,934	6,016	6,062	6,162	6,246	6,178	6,234	6,212	6,113	6,153	6,160
1924	982	7,025	97.7	6,913	6,966	6,999	7,078	7,046	7,031	7,045	7,028	7,065	7,057	7,033	7,043

[1] Arithmetic average of the 12 months.

TABLE 50.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: **ALL MANUFACTURES**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	6,749	35,576	97.0	35,661	35,453	35,633	35,809	35,658	35,795	36,031	35,944	35,654	35,344	34,937	34,993
1915	7,884	41,512	89.9	39,309	39,730	40,199	40,288	40,732	41,307	41,824	42,215	42,595	42,936	43,297	43,717
1916	8,299	49,079	87.2	45,322	46,074	47,292	47,649	48,266	49,076	49,817	50,589	50,573	50,881	51,402	52,002
1917	8,600	55,741	91.6	52,865	53,359	53,936	54,519	55,270	55,871	56,479	57,207	57,086	57,273	57,700	57,332
1918	8,858	62,155	91.7	58,750	59,485	60,500	60,612	61,518	62,637	63,488	63,983	63,795	63,623	64,093	63,371
1919	9,011	68,249	87.2	64,064	64,355	65,003	65,647	65,949	66,872	68,740	70,616	70,453	71,254	72,592	73,444
1920	9,652	73,035	85.4	72,282	74,244	75,234	76,012	76,080	76,563	76,396	74,699	72,306	69,814	67,405	65,385
1921	8,632	57,965	88.1	62,858	61,417	60,504	59,477	58,782	57,674	56,584	56,310	55,731	55,381	55,445	55,417
1922 [2]															
1923	8,701	65,538	93.9	62,685	63,486	64,558	65,190	65,767	66,429	66,770	66,661	66,443	66,245	66,041	66,177
1924	9,125	65,963	98.4	65,984	66,279	66,365	66,653	66,105	65,585	65,941	65,813	65,695	65,621	65,769	65,743
Males:															
1914	6,749	22,224	95.9	22,213	22,024	22,088	22,417	22,321	22,439	22,616	22,590	22,337	22,067	21,691	21,881
1915	7,884	26,150	89.4	24,703	24,949	25,186	25,253	25,557	26,036	26,467	26,717	26,892	27,114	27,302	27,630
1916	8,299	30,959	87.0	28,492	29,007	29,756	29,948	30,448	31,017	31,595	32,131	31,945	32,054	32,360	32,752
1917	8,600	34,306	93.2	32,819	33,188	33,558	33,899	34,123	34,616	35,010	35,203	34,897	34,749	34,820	34,785
1918	8,858	35,315	94.7	34,991	35,200	35,847	35,478	35,801	36,154	36,161	35,964	35,054	34,227	34,469	34,438
1919	9,011	38,489	83.9	35,395	35,759	36,257	36,707	37,003	37,588	38,747	40,303	40,034	40,464	41,414	42,194
1920	9,652	41,863	85.0	41,980	42,840	43,380	43,765	43,816	43,823	43,767	42,806	41,188	39,616	38,149	37,230
1921	8,632	32,713	86.7	35,899	34,986	34,386	33,553	33,200	32,418	31,780	31,592	31,300	31,129	31,196	31,121
1922 [2]															
1923	8,701	37,379	93.9	35,775	36,197	36,846	37,188	37,457	37,842	38,085	38,042	37,874	37,797	37,685	37,755
1924	9,125	37,743	97.9	37,855	37,992	37,983	38,247	37,882	37,507	37,802	37,683	37,607	37,452	37,429	37,478
Females:															
1914	6,749	13,352	96.8	13,448	13,429	13,545	13,392	13,337	13,356	13,415	13,354	13,317	13,277	13,246	13,112
1915	7,884	15,362	90.8	14,606	14,781	15,013	15,035	15,175	15,271	15,357	15,498	15,703	15,822	15,995	16,087
1916	8,299	18,120	87.4	16,830	17,067	17,536	17,701	17,818	18,059	18,222	18,458	18,628	18,827	19,042	19,250
1917	8,600	21,436	87.6	20,046	20,171	20,378	20,620	21,147	21,255	21,469	22,004	22,189	22,524	22,880	22,547
1918	8,858	26,839	80.2	23,759	24,285	24,653	25,134	25,717	26,483	27,327	28,019	28,741	29,396	29,624	28,933
1919	9,011	29,760	91.5	28,669	28,596	28,746	28,940	28,946	29,284	29,993	30,313	30,419	30,790	31,178	31,250
1920	9,652	31,172	86.0	30,302	31,404	31,854	32,247	32,264	32,740	32,629	31,893	31,118	30,198	29,256	28,155
1921	8,632	25,252	89.9	26,959	26,431	26,118	25,924	25,582	25,256	24,804	24,718	24,431	24,252	24,249	24,296
1922 [2]															
1923	8,701	28,159	93.8	26,910	27,289	27,712	28,002	28,310	28,587	28,685	28,619	28,569	28,448	28,356	28,422
1924	9,125	28,220	98.8	28,129	28,287	28,382	28,406	28,223	28,078	28,139	28,130	28,088	28,169	28,340	28,265

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 51.—SALES PEOPLE (NOT TRAVELING): **ALL INDUSTRIES**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	14,149	29,710	83.1	29,193	28,717	29,307	30,204	29,835	29,595	28,684	27,967	28,907	29,932	30,540	33,641
1915	17,981	32,188	81.0	31,185	30,445	31,409	31,924	32,251	31,661	31,000	30,490	31,832	32,853	33,611	37,591
1916	20,017	36,909	78.5	35,073	34,405	35,330	36,976	36,403	36,045	35,723	34,773	36,747	38,249	39,363	43,818
1917	21,624	40,422	83.4	39,151	38,023	40,097	40,527	40,119	39,854	39,516	38,641	40,628	41,158	41,758	45,598
1918	22,709	42,002	85.5	41,027	40,847	42,098	41,891	41,492	41,800	40,809	40,237	41,700	42,120	42,934	47,068
1919	23,652	46,861	80.6	43,506	43,732	44,458	45,543	45,704	46,285	46,225	46,335	47,661	48,407	50,512	53,967
1920	27,241	50,173	85.2	48,434	47,923	48,992	49,572	49,823	49,672	49,675	49,041	50,121	50,621	51,971	56,236
1921	23,562	46,784	84.2	46,773	45,573	46,683	46,670	46,435	46,314	45,326	44,727	45,374	46,835	47,597	53,099
1922 [2]															
1923	25,904	54,901	77.9	51,062	51,028	52,793	53,461	53,495	54,323	53,910	53,082	55,663	56,145	58,327	65,525
1924	30,439	62,106	81.5	58,947	59,279	61,622	62,608	61,353	61,264	60,621	59,934	61,432	62,142	64,307	72,363
Males:															
1914	14,149	14,636	95.2	14,451	14,435	14,536	14,690	14,644	14,675	14,523	14,456	14,552	14,712	14,792	15,169
1915	17,981	16,602	91.1	16,254	16,108	16,201	16,458	16,528	16,613	16,534	16,389	16,632	16,771	17,043	17,690
1916	20,017	18,421	90.7	17,825	17,797	18,004	18,257	18,323	18,298	18,326	18,292	18,529	18,759	19,018	19,626
1917	21,624	20,348	95.1	19,969	20,061	20,360	20,368	20,370	20,406	20,370	20,218	20,331	20,296	20,434	20,991
1918	22,709	20,116	95.4	20,399	20,339	20,588	20,504	20,286	20,263	19,963	19,647	19,729	19,557	19,617	20,495
1919	23,652	22,465	83.8	20,573	20,873	21,168	21,627	22,044	22,324	22,777	22,954	23,230	23,509	23,932	24,564
1920	27,241	24,848	93.2	24,028	24,137	24,488	24,658	24,826	24,976	25,018	24,819	25,044	25,114	25,273	25,790
1921	23,562	24,278	94.4	23,859	23,890	24,107	24,278	24,320	24,355	24,187	24,084	24,178	24,305	24,500	25,271
1922 [2]															
1923	25,904	28,870	87.9	27,212	27,448	28,015	28,255	28,506	29,017	29,094	28,890	29,536	29,449	30,067	30,947
1924	30,439	34,136	90.6	32,628	32,965	33,364	34,056	34,141	34,355	34,308	34,184	34,416	34,431	34,782	36,000
Females:															
1914	14,149	15,074	73.1	14,742	14,282	14,771	15,514	15,191	14,920	14,161	13,511	14,355	15,220	15,748	18,472
1915	17,981	15,586	70.9	14,931	14,337	15,208	15,466	15,723	15,048	14,466	14,101	15,200	16,082	16,568	19,901
1916	20,017	18,488	68.1	17,248	16,608	17,326	18,719	18,080	17,747	17,397	16,481	18,218	19,490	20,345	24,192
1917	21,624	20,075	73.0	19,182	17,962	19,737	20,159	19,749	19,448	19,146	18,423	20,297	20,862	21,324	24,607
1918	22,709	21,886	77.2	20,628	20,508	21,510	21,387	21,206	21,537	20,846	20,590	21,971	22,563	23,317	26,573
1919	23,652	24,397	77.7	22,933	22,859	23,290	23,916	23,660	23,961	23,448	23,381	24,431	24,898	26,580	29,403
1920	27,241	25,326	78.1	24,406	23,786	24,504	24,914	24,997	24,696	24,657	24,222	25,077	25,507	26,698	30,446
1921	23,562	22,506	74.2	22,914	21,683	22,576	22,392	22,115	21,959	21,139	20,643	21,196	22,530	23,097	27,828
1922 [2]															
1923	25,904	26,031	87.9	23,850	23,580	24,778	25,206	24,989	25,306	24,816	24,192	26,127	26,696	28,260	34,578
1924	30,439	27,970	70.8	26,319	26,314	27,658	28,552	27,212	26,909	26,313	25,750	27,016	27,711	29,525	36,363

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 52.—SALES PEOPLE (NOT TRAVELING): ALL MANUFACTURES

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	6,749	3,902	96.1	3,825	3,839	3,858	3,904	3,908	3,908	3,909	3,899	3,921	3,934	3,937	3,980
1915	7,884	3,762	95.9	3,683	3,678	3,692	3,743	3,789	3,768	3,787	3,797	3,787	3,780	3,807	3,837
1916	8,299	5,035	94.5	4,870	4,915	4,986	4,988	5,012	5,055	5,098	5,153	5,060	5,066	5,098	5,122
1917	8,600	5,316	94.8	5,104	5,241	5,328	5,289	5,335	5,363	5,365	5,379	5,382	5,340	5,314	5,349
1918	8,858	5,103	97.0	5,077	5,072	5,081	5,131	5,152	5,175	5,160	5,163	5,061	5,018	5,042	5,103
1919	9,011	5,346	85.3	4,886	4,979	5,067	5,135	5,251	5,322	5,456	5,520	5,556	5,584	5,669	5,731
1920	9,652	5,735	93.7	5,507	5,586	5,648	5,717	5,723	5,749	5,774	5,759	5,803	5,875	5,843	5,838
1921	8,632	5,680	96.3	5,622	5,613	5,625	5,652	5,629	5,660	5,654	5,695	5,725	5,725	5,729	5,831
1922 [2]															
1923	8,701	6,363	90.9	6,061	6,129	6,154	6,198	6,316	6,380	6,459	6,385	6,548	6,505	6,558	6,665
1924	9,125	7,002	94.0	6,722	6,753	6,842	6,940	6,986	7,053	7,108	7,137	7,117	7,075	7,146	7,149
Males:															
1914	6,749	3,153	97.5	3,098	3,109	3,132	3,151	3,160	3,166	3,165	3,165	3,168	3,176	3,170	3,172
1915	7,884	3,013	95.2	2,918	2,917	2,942	3,010	3,056	3,039	3,063	3,050	3,046	3,032	3,046	3,043
1916	8,299	4,025	94.3	3,894	3,938	3,988	3,987	4,023	4,046	4,079	4,128	4,047	4,050	4,058	4,062
1917	8,600	4,243	95.8	4,129	4,222	4,287	4,254	4,287	4,308	4,306	4,288	4,265	4,210	4,181	4,182
1918	8,858	4,005	95.9	4,015	4,007	4,019	4,042	4,062	4,080	4,070	4,056	3,953	3,912	3,915	3,927
1919	9,011	4,214	86.3	3,860	3,920	4,002	4,030	4,132	4,208	4,330	4,351	4,391	4,405	4,469	4,471
1920	9,652	4,507	94.4	4,335	4,387	4,454	4,494	4,505	4,545	4,552	4,537	4,548	4,593	4,581	4,555
1921	8,632	4,646	96.4	4,575	4,583	4,597	4,614	4,604	4,646	4,644	4,680	4,686	4,691	4,690	4,747
1922 [2]															
1923	8,701	5,171	92.2	4,925	4,976	5,007	5,054	5,140	5,165	5,266	5,221	5,335	5,293	5,332	5,341
1924	9,125	5,834	94.2	5,605	5,654	5,719	5,774	5,831	5,896	5,936	5,949	5,946	5,878	5,923	5,894
Females:															
1914	6,749	749	89.9	727	730	726	753	748	742	744	734	753	758	767	808
1915	7,884	749	91.2	765	761	750	733	733	729	724	747	741	748	761	794
1916	8,299	1,010	92.1	976	977	998	1,001	989	1,009	1,019	1,025	1,013	1,016	1,040	1,060
1917	8,600	1,072	83.5	975	1,019	1,041	1,035	1,048	1,055	1,059	1,091	1,117	1,130	1,133	1,167
1918	8,858	1,098	90.3	1,062	1,065	1,062	1,089	1,090	1,095	1,090	1,107	1,108	1,106	1,127	1,176
1919	9,011	1,132	81.4	1,026	1,059	1,065	1,105	1,119	1,114	1,126	1,169	1,165	1,179	1,200	1,260
1920	9,652	1,228	91.3	1,172	1,199	1,194	1,223	1,218	1,204	1,222	1,222	1,255	1,282	1,262	1,283
1921	8,632	1,034	93.2	1,047	1,030	1,028	1,038	1,025	1,014	1,010	1,015	1,039	1,034	1,039	1,084
1922 [2]															
1923	8,701	1,192	85.8	1,136	1,153	1,147	1,144	1,176	1,215	1,193	1,164	1,213	1,212	1,226	1,324
1924	9,125	1,169	87.6	1,117	1,099	1,123	1,166	1,155	1,157	1,172	1,188	1,171	1,197	1,223	1,255

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 53.—SALES PEOPLE (NOT TRAVELING): **TRADE, RETAIL AND WHOLESALE**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum.	Number employed in— January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	3,361	24,874	80.3	24,486	23,993	24,535	25,377	25,003	24,691	23,776	23,081	24,065	25,062	25,681	28,743
1915	4,112	27,355	78.4	26,480	25,748	26,677	27,101	27,383	26,797	26,107	25,603	26,973	27,999	28,720	32,667
1916	4,437	30,156	75.5	28,638	27,938	28,769	30,345	29,700	29,256	28,815	27,830	29,885	31,363	32,458	36,871
1917	4,908	32,761	80.3	31,775	30,508	32,420	32,871	32,425	32,066	31,758	30,891	32,850	33,467	34,129	37,969
1918	5,330	34,605	82.2	33,587	33,401	34,628	34,367	33,968	34,240	33,288	32,766	34,377	34,974	35,806	39,858
1919	5,657	38,745	79.5	36,089	36,144	36,698	37,615	37,622	38,159	37,962	38,009	39,228	39,990	42,014	45,406
1920	5,689	41,593	83.4	40,348	39,678	40,609	41,033	41,236	41,029	40,919	40,329	41,338	41,805	43,233	47,556
1921	5,638	38,346	81.3	38,475	37,290	38,315	38,192	37,973	37,831	36,874	36,233	36,842	38,391	39,159	44,576
1922 [2]															
1923	6,276	44,671	75.3	41,568	41,351	42,931	43,443	43,231	43,863	43,440	42,712	45,160	45,687	47,768	54,895
1924	7,689	50,188	79.0	47,736	47,846	49,348	50,643	49,279	49,043	48,378	47,727	49,345	50,153	52,338	60,421
Males:															
1914	3,361	10,630	93.4	10,538	10,508	10,561	10,691	10,637	10,617	10,465	10,413	10,536	10,671	10,773	11,154
1915	4,112	12,624	89.8	12,410	12,271	12,319	12,475	12,501	12,584	12,482	12,371	12,619	12,772	13,019	13,666
1916	4,437	13,006	89.2	12,677	12,597	12,734	12,959	12,930	12,843	12,776	12,699	13,005	13,242	13,494	14,117
1917	4,908	14,035	93.3	13,835	13,825	13,992	14,020	13,999	13,952	13,949	13,832	13,944	14,025	14,233	14,819
1918	5,330	14,220	92.1	14,405	14,351	14,582	14,489	14,263	14,216	13,949	13,699	13,921	13,900	14,002	14,866
1919	5,657	16,058	82.6	14,743	14,906	15,034	15,396	15,659	15,907	16,229	16,378	16,545	16,846	17,208	17,841
1920	5,689	17,839	92.8	17,419	17,401	17,619	17,686	17,806	17,878	17,849	17,698	17,883	17,940	18,148	18,741
1921	5,638	17,171	93.3	16,916	16,943	17,083	17,147	17,195	17,194	17,047	16,899	16,970	17,167	17,381	18,113
1922 [2]															
1923	6,276	20,240	87.2	19,231	19,308	19,699	19,781	19,835	20,211	20,231	20,087	20,660	20,613	21,156	22,064
1924	7,689	23,838	89.1	22,973	23,076	23,252	23,711	23,682	23,765	23,694	23,625	23,944	24,084	24,479	25,774
Females:															
1914	3,361	14,244	72.0	13,948	13,485	13,974	14,686	14,366	14,074	13,311	12,668	13,529	14,391	14,908	17,589
1915	4,112	14,731	69.6	14,070	13,477	14,358	14,626	14,882	14,213	13,625	13,232	14,354	15,227	15,701	19,001
1916	4,437	17,150	66.5	15,961	15,341	16,035	17,386	16,770	16,413	16,039	15,131	16,880	18,121	18,964	22,754
1917	4,908	18,725	72.1	17,940	16,683	18,428	18,851	18,426	18,114	17,809	17,059	18,906	19,442	19,896	23,150
1918	5,330	20,385	76.2	19,182	19,050	20,046	19,878	19,705	20,024	19,339	19,067	20,456	21,074	21,804	24,992
1919	5,657	22,687	77.0	21,346	21,238	21,664	22,219	21,963	22,252	21,733	21,631	22,683	23,144	24,806	27,565
1920	5,689	23,754	77.3	22,929	22,277	22,990	23,347	23,430	23,151	23,070	22,631	23,455	23,865	25,085	28,815
1921	5,638	21,175	73.1	21,559	20,347	21,232	21,045	20,778	20,637	19,827	19,334	19,872	21,224	21,778	26,463
1922 [2]															
1923	6,276	24,431	67.1	22,337	22,043	23,232	23,662	23,396	23,652	23,209	22,625	24,500	25,074	26,612	32,831
1924	7,689	26,350	69.6	24,763	24,770	26,096	26,932	25,597	25,278	24,684	24,102	25,401	26,069	27,859	34,647

[1] Arithmetic average of the 12 months.

[2] Figures not obtainable.

TABLE 54.—SALES PEOPLE (NOT TRAVELING): **TRADE—STORES, RETAIL AND WHOLESALE**

Year	Number of establishments reporting	Average number of employees [1]	Per cent minimum employment is of maximum	Number employed in—											
				January	February	March	April	May	June	July	August	September	October	November	December
All employees:															
1914	2,708	24,550	80.1	24,158	23,663	24,209	25,047	24,672	24,356	23,441	22,751	23,733	24,735	25,351	28,414
1915	3,157	26,506	77.8	25,642	24,912	25,843	26,262	26,539	25,944	25,251	24,746	26,114	27,144	27,868	31,816
1916	3,366	29,768	75.2	28,268	27,562	28,386	29,962	29,310	28,858	28,425	27,437	29,489	30,972	32,065	36,481
1917	3,695	32,298	80.1	31,329	30,055	31,958	32,405	31,955	31,596	31,287	30,416	32,386	33,005	33,668	37,512
1918	4,021	33,990	81.8	32,992	32,799	34,038	33,761	33,361	33,601	32,646	32,155	33,751	34,379	35,217	39,287
1919	4,271	38,093	79.5	35,504	35,554	36,082	36,989	36,993	37,508	37,297	37,345	38,554	39,311	41,307	44,674
1920	4,932	40,840	83.2	39,627	38,951	39,871	40,273	40,482	40,256	40,160	39,555	40,589	41,050	42,466	46,798
1921	4,218	37,058	80.8	37,240	36,042	37,034	36,909	36,713	36,543	35,571	34,936	35,548	37,065	37,834	43,259
1922	4,473	38,842	73.2	36,438	35,507	36,350	38,697	38,287	38,721	37,583	36,843	38,001	39,729	41,451	48,495
1923	4,634	43,146	74.8	40,139	39,904	41,474	41,977	41,732	42,323	41,862	41,122	43,572	44,125	46,200	53,321
1924	5,666	48,293	78.3	45,950	46,028	47,518	48,747	47,353	47,089	46,439	45,800	47,424	48,244	50,423	58,506
Males:															
1914	2,708	10,306	93.1	10,216	10,184	10,241	10,367	10,312	10,288	10,135	10,087	10,210	10,349	10,448	10,830
1915	3,157	11,780	89.2	11,576	11,439	11,489	11,640	11,661	11,735	11,630	11,519	11,765	11,921	12,171	12,819
1916	3,366	12,620	89.0	12,308	12,222	12,353	12,578	12,541	12,448	12,389	12,309	12,612	12,853	13,103	13,729
1917	3,695	13,576	93.0	13,392	13,375	13,533	13,558	13,534	13,487	13,483	13,362	13,484	13,566	13,774	14,364
1918	4,021	13,635	91.6	13,830	13,769	14,013	13,903	13,677	13,598	13,328	13,109	13,316	13,325	13,432	14,316
1919	4,271	15,525	82.7	14,271	14,422	14,535	14,888	15,143	15,374	15,685	15,828	15,980	16,279	16,637	17,263
1920	4,932	17,123	92.7	16,734	16,709	16,916	16,959	17,086	17,141	17,126	16,966	17,173	17,224	17,419	18,023
1921	4,218	15,911	92.9	15,706	15,721	15,828	15,891	15,961	15,933	15,776	15,631	15,704	15,873	16,085	16,825
1922	4,473	16,414	85.8	15,670	15,589	15,770	16,215	16,178	16,335	16,323	16,296	16,566	16,784	17,067	18,179
1923	4,634	18,750	86.9	17,833	17,891	18,273	18,348	18,369	18,706	18,688	18,533	19,108	19,089	19,627	20,529
1924	5,666	21,994	88.8	21,227	21,300	21,466	21,872	21,813	21,862	21,804	21,746	22,073	22,229	22,620	23,914
Females:															
1914	2,708	14,244	72.0	13,942	13,479	13,968	14,680	14,360	14,068	13,306	12,664	13,523	14,386	14,903	17,584
1915	3,157	14,726	69.6	14,066	13,473	14,354	14,622	14,878	14,209	13,621	13,227	14,349	15,223	15,697	18,997
1916	3,366	17,148	66.5	15,960	15,340	16,033	17,384	16,769	16,410	16,036	15,128	16,877	18,119	18,962	22,752
1917	3,695	18,722	72.1	17,937	16,680	18,425	18,847	18,421	18,109	17,804	17,054	18,902	19,439	19,894	23,148
1918	4,021	20,364	76.2	19,162	19,030	20,025	19,858	19,684	20,003	19,318	19,046	20,435	21,054	21,785	24,971
1919	4,271	22,568	77.1	21,233	21,132	21,547	22,101	21,850	22,134	21,612	21,517	22,574	23,032	24,670	27,411
1920	4,932	23,717	77.3	22,893	22,242	22,955	23,314	23,396	23,115	23,034	22,589	23,416	23,826	25,047	28,775
1921	4,218	21,147	73.0	21,534	20,321	21,206	21,018	20,752	20,610	19,795	19,305	19,844	21,192	21,749	26,434
1922	4,473	22,428	65.7	20,768	19,918	20,580	22,482	22,109	22,386	21,260	20,547	21,435	22,945	24,384	30,316
1923	4,634	24,396	67.1	22,306	22,013	23,201	23,629	23,363	23,617	23,174	22,589	24,464	25,036	26,573	32,792
1924	5,666	26,300	69.5	24,723	24,728	26,052	26,875	25,540	25,227	24,635	24,054	25,351	26,015	27,803	34,592

[1] Arithmetic average of the 12 months.

APPENDIXES

APPENDIX A.—SCHEDULE FORM, DIVISION OF LABOR STATISTICS, OHIO

[FRONT OF SCHEDULE]

Return promptly. Retain duplicate. See instructions on reverse side.

STATE OF OHIO DEPARTMENT OF INDUSTRIAL RELATIONS, DIVISION OF LABOR STATISTICS

In correspondence, please refer to this file number.

REPORT FOR YEAR ENDING DECEMBER 31, 1924

NOTES: A. If engaged in more than one industry, use a separate sheet for each. Report on Ohio operations only.
B. If operating in more than one county, separate reports must be made for each county.
C. Send for additional copies of this form if you need them.
D. When it is impossible to give an exact answer to an inquiry, enter the best possible estimate and add to the answer "E."
E. Your report is not acceptable to this department until each of the following 11 questions has been answered.

1. Name of firm and establishment _____
(Answer for both when names differ)
2. Address of principal office: Street and number _____; post office _____
3. Location of operations covered by this report _____
(Give both city and county location. See notes B and C at top of form)
4. Nature of business (if manufacturing, name principal products) _____
(See notes A and C at top of form)

5. Give date if plant changed hands during year 1924 _____
Give name and address of former owner _____
Give name and address of present owner _____
6. Number of days in operation during year 1924 _____
7. Number of hours normally worked—

	Office help	Other help	
		Male	Female
a. Per day or shift			
b. Per week			

8. Give total wage and salary payments in dollars only during year 1924, including bonuses and premiums and value of board and lodging, if furnished (do not include salaries of officials):
a. To wage earners _____ $_____
b. To bookkeepers, stenographers, and office clerks _____ _____
c. To salespeople (not traveling) _____ _____
d. To superintendents and managers _____ _____
Total of above items _____ _____

9. Number of persons employed on 15th of each month. If data are not obtainable for the 15th of the month, enter data for the nearest representative day.

Number employed on the 15th of—	Wage earners (include both time and piece workers)		Bookkeepers, stenographers, and office clerks		Sales people (not traveling)	
	Males	Females	Males	Females	Males	Females
Jan.						
Feb.						
Mar.						
Apr.						
May						
June						
July						
Aug.						
Sept.						
Oct.						
Nov.						
Dec.						

10. Classified weekly rates of wages and salaries for week of greatest employment during year.
IMPORTANT.—Please note that it is weekly rate of wage rather than actual weekly wage which is asked for under this question. See instructions for question 10 on the back of this form.
If your pay roll shows rates for 2 weeks or for 1 month, divide rates for 2 weeks by 2 and the rates for a calendar month by 4⅓. Include both time workers and piece workers. In reporting rates of piece workers use a normal week's earnings as a basis. Bonuses and premiums, if any, should be prorated and included with rates of wages or salaries. If board or lodging is furnished in addition to wages or salaries, estimate the value and include in reporting rates of wages or salaries. In reporting for retail stores do not report for week of special sales or week during holiday period.

[FRONT OF SCHEDULE—continued]

Classified rates of wages per week for the week ending— _____, 1924	Wage earners (include both time and piece workers)				Bookkeepers, stenographers, and office clerks				Sales people (not traveling)			
	Males		Females		Males		Females		Males		Females	
	Adults (18 years of age or over)	Young persons (under 18 years of age)	Adults (18 years of age or over)	Young persons (under 18 years of age)	Adults (18 years of age or over)	Young persons (under 18 years of age)	Adults (18 years of age or over)	Young persons (under 18 years of age)	Adults (18 years of age or over)	Young persons (under 18 years of age)	Adults (18 years of age or over)	Young persons (under 18 years of age)
Under $5												
$5 but under $10												
$10 but under $12												
$12 but under $15												
$15 but under $20												
$20 but under $25												
$25 but under $30												
$30 but under $35												
$35 but under $40												
$40 but under $50												
$50 or over												

11. IMPORTANT.—If manufacturing, give total value of products manufactured in 1924. Value reported should be in dollars for all products f. o. b. factory, less selling expense $ _____
Give name and value of different articles manufactured.

Name	Value	Name	Value	Name	Value
	$		$		$

(Do not use this space.)

This is to certify that the answers to the inquiries on this sheet are complete and correct to the best of my knowledge and belief.

Signed _____

By _____
(Name) (Official capacity)

[BACK OF SCHEDULE]

GENERAL EXPLANATIONS AND INSTRUCTIONS FOR ANNUAL INDUSTRIAL REPORT OF ALL OPERATIONS IN OHIO DURING 1924

For authorization and penalties see section 885 of the General Code, section 4 of the act defining the powers, duties, and jurisdiction of the State Liability Board of Awards, and section 22, paragraph 10, and sections 24 and 43 of the act creating the Industrial Commission of Ohio.

Questions 1 to 7.—These questions are self-explanatory.

Question 8.—The total wage and salary payments during the year should be given separately for each of the four classes of employees indicated under 8a, 8b, 8c, and 8d. Do not include officials of the company.

Question 8a. — Wage earners: Include mechanics of all kinds, factory employees, shop foremen, laborers, laundry employees, cleaners and caretakers in buildings, employees of alteration departments and of delivery departments in stores, cash girls, check boys, farm hands, etc.

Question 8b.—Bookkeepers, stenographers, and office clerks: Include bookkeepers, typists, stenographers, copyists, timekeepers, draftsmen, filing clerks, sales office employees, cashiers, etc.

Question 8c.—Sales people (not traveling): Include the selling force in stores and other establishments. Do not include traveling sales people. Office clerks handling sales should be included under 8b rather than under this heading.

Question 8d.—Superintendents and managers: Include all superintendents and managers but not shop foremen. Shop foremen should be included under 8a.

Question 9.—The information desired is the number of persons, under each of the classifications given, in your employ on or near the 15th of each month, as shown by the pay-roll records. Employees should be grouped under the same classifications as in 8a, 8b, and 8c. Superintendents and managers should not be reported under question 9.

Question 10.—Under this question we wish you to select the week of greatest employment, except as noted in regard to retail establishments, and enter your people in the proper column opposite the weekly wage which they would have received had they been in your employ full time during the entire week selected.

The usual timekeeper's rate book, in which is shown the amount earned per week at each rate per hour and each number of hours per week, will be of great assistance in bringing hourly rates to a weekly basis.

Enter sales people who work on a strictly commission basis opposite their average weekly rate of wage for the year.

Employees should be grouped under the same classifications as in 8a, 8b, and 8c. Superintendents and managers should not be reported under question 10.

Question 11.—This question is self-explanatory.

Fill this form as indicated above and return it as promptly as possibly to the division of labor statistics in the inclosed self-addressed envelope.

THE DEPARTMENT OF INDUSTRIAL RELATIONS.

Form 1124.

APPENDIX B.—STATE CLASSIFICATION OF WAGE EARNERS IN 1923[1]

GENERAL GROUPS

Agriculture.
Construction.
Fisheries.
Manufactures:
- Chemicals and allied products.
- Food and kindred products.
- Iron and steel and their products.
- Leather and leather products.
- Liquors and beverages.
- Lumber and its products.
- Metals and metal products other than iron and steel.
- Paper and printing.
- Rubber products.
- Stone, clay, and glass products.
- Textiles.
- Tobacco manufactures.
- Vehicles.
- Miscellaneous manufactures.

Service.
Trade, retail and wholesale.
Transportation and public utilities.

DETAILS OF CLASSIFICATION

AGRICULTURE

Dairy farming.
Florists, fruit growers and nurserymen; seedmen; hothouses.
General farming.
Operating farm machinery, not by farmers; threshing; ensilage cutting; corn shredding; hay baling.
Agriculture not otherwise classified.

CONSTRUCTION

Brick, stone and cement work; mantle setting.
Electrical contracting.
Erecting or installing machinery.
General contracting, includes wrecking.
Oil, gas, and water; drilling or producing.
Painting and decorating.
Plastering, includes lathing.
Plumbing and steam fitting.
Sand and gravel excavating.
Sheet-metal work and roofing.
Street, road, and sewer contracting; water mains; grading, excavating, and teaming.
Ventilating and heating.
Construction not otherwise classified.

FISHERIES (no subheads)

MANUFACTURES

Chemicals and allied products:
- Baking powder and yeast.
- Blacking, cleaning, and polishing preparations.
- Bluing.
- Bone, carbon, and lamp black.

[1] This list includes many items for which no figures appear in the 1923 report.

Chemicals and allied products—Continued.
- Chemicals, acids, and wood distillation; sulphuric, nitric and mixed acids, not including turpentine and rosin charcoal.
- Dyestuffs and extracts.
- Explosives.
- Fertilizers, tankage.
- Ink, printing and writing.
- Oil, linseed, lubricating, and cottonseed, and oil cake.
- Paint and varnish.
- Patent medicines and drug compounds, includes drug grinding.
- Petroleum refining.
- Salt.
- Soap, candles, grease and tallow.
- Chemicals and allied products not otherwise classified.

Food and kindred products:
- Bakery products.
- Canning and preserving.
- Coffee, spices, and peanuts, roasting and grinding.
- Confectionery.
- Cordials, sirups, and flavoring extracts.
- Dairy products and ice cream.
- Flour-mill and grist-mill products; grain elevators and small businesses connected with them.
- Food preparations; breakfast foods; stock foods; macaroni; ice cream cones.
- Glucose and starch.
- Oleomargarine.
- Slaughtering and meat packing.
- Sugar.
- Vinegar and cider.
- Food and kindred products not otherwise classified.

Iron and steel and their products:
- Blast-furnace products.
- Boilers and tanks.
- Bolts, nuts, washers, and rivets.
- Burial vaults, steel.
- Calculating machines, includes cash registers; time clocks and locks; gas and water meters.
- Cutlery and tools.
- Doors and shutters, iron and steel.
- Files.
- Forgings.
- Foundry and machine-shop products; bells; plumbers' supplies; steam fittings; hardware; structural-steel fabrications.
- Gas engines and tractors.
- Horseshoes not made in steel works or rolling mills.
- Locomotives not made by railroad companies.
- Nails and spikes, cut, wrought, and wire.
- Pipe, wrought.
- Pumps and windmills.
- Safes and vaults.
- Saws.
- Scales and balances.
- Screws, machine and wood.
- Sewing machines, cases and attachments.
- Springs, coil.
- Springs, steel car and carriage.
- Steel works and rolling mills.
- Stoves and furnaces.
- Tin plate and terneplate.
- Typewriters and parts.
- Wire.
- Wirework, wire rope, and cable.
- Iron and steel and their products not otherwise classified.

Leather and leather products:
- Belting, leather.
- Boots, shoes, cut stock and findings.
- Gloves and mittens, leather.

Leather and leather products—Continued.
Leather, tanned, curried, and finished.
Saddlery and harness.
Trunks and valises.
Leather and leather products not otherwise classified.

Liquors and beverages:
Liquors, malt.
Liquors, vinous.
Malt.
Mineral waters and beverages.
Liquors and beverages not otherwise classified.

Lumber and its products:
Baskets, wood, rattan, and willow.
Billiard tables and materials.
Boxes, cigar.
Boxes and packing crates.
Coffins and undertakers' goods.
Cooperage and related goods.
Furniture.
Furniture, wicker and reed.
Lasts.
Looking-glass and picture frames.
Matches.
Wood pulp.
Saw-mill and planing-mill products.
Show cases.
Wood bending, turning, carving.
Wood preserving.
Lumber and its products not otherwise classified.

Metals and metal products other than iron and steel:
Babbitt metal and solder.
Brass, bronze, and aluminum products.
Clocks, watches, and materials.
Copper, tin, and sheet-iron products, includes stamped and enameled ware.
Electro plating.
Galvanizing.
Furniture (metal) and office fixtures.
Gas and electric fixtures and lamps and reflectors.
Gold and silver, leaf and foil.
Jewelry, includes reducing and refining.
Lead, bar, pipe, and sheet.
Needles, pins, hooks and eyes.
Silverware and plated ware.
Smelting and refining, aluminum, brass, and copper.
Smelting and refining not from the ore.
Metals and metal products other than iron and steel not otherwise classified.

Paper and printing:
Bags, paper.
Boxes, fancy and paper; drinking cups.
Card cutting and designing.
Engraving and die sinking.
Envelopes.
Labels and tags.
Paper, includes stationery.
Photo-engraving.
Printing and publishing.
Stereotyping and electrotyping.
Type founding and printing materials.
Wall paper.
Paper and printing not otherwise classified.

Rubber products:
Druggists' sundries and toys, rubber.
Tires and tubes.
Rubber garments.
Rubber products not otherwise classified.

Stone, clay, and glass products:
- Brick and tile, clay.
- Cement.
- Concrete products.
- Crucibles.
- Burial vaults, concrete.
- Emery wheels and other abrasives, includes sand and emery cloth.
- Glass.
- Glass cutting and ornamenting.
- Lime.
- Marble and stone work; stone yards.
- Mirrors.
- Pottery, terra-cotta, and fire-clay products.
- Statuary and art goods.
- Stone and clay, crushing and grinding.
- Wall plaster, includes hydrated lime.
- Stone, clay, and glass products not otherwise classified.

Textiles:
- Awnings, tents, and sails, includes auto fabrics.
- Bags other than paper.
- Buttonholes.
- Carpets and rugs.
- Clothing, men's, includes shirts and coat pads.
- Clothing, women's, includes corsets.
- Cordage, twine, jute and linen goods.
- Cotton goods and small wares.
- Custom tailoring, men's and women's.
- Dyeing and finishing textiles, includes sponging.
- Flags, banners, and regalia.
- Furnishing goods, men's.
- Gloves, cloth.
- Hats and caps other than felt, straw, or wool.
- Horse clothing.
- Hosiery and knit goods.
- Mattresses, pillows, and cotton felts.
- Millinery and lace goods, includes artificial flowers and feathers.
- Oilcloth and linoleum.
- Shoddy.
- Silk and silk goods, includes throwsters.
- Upholstering materials.
- Waste.
- Wool pulling, includes scouring.
- Woolen, worsted, and wool-felt goods, includes fur and felt hats.
- Textiles not otherwise classified.

Tobacco manufactures:
- Chewing and smoking tobacco and snuff.
- Cigars and cigarettes.
- Tobacco rehandlers.

Vehicles:
- Airplanes and parts.
- Automobiles and parts.
- Bicycles, motor cycles, and parts.
- Carriages and sleds, children's.
- Carriages, wagons and materials, includes repairing.
- Cars, steam and street railroad, not including operations of railroad companies.
- Ship and boat building.
- Wheelbarrows.
- Vehicles not otherwise classified.

Miscellaneous manufactures:
- Agricultural implements.
- Artists' materials.
- Belting and hose, woven and rubber.
- Brooms and mops.
- Brushes.
- Buttons.
- Coke.

Miscellaneous manufactures—Continued.
Dairymen's, poulterers', and apiarists' supplies.
Dentists' supplies.
Electrical machinery, apparatus, and supplies.
Enameling and japanning.
Engravers' materials.
Fancy articles.
Fire extinguishers, chemical.
Fire arms and ammunition.
Fireworks.
Foundry supplies.
Fuel, manufactured.
Fur goods.
Hair work.
Hand stamps, stencils, and brands.
House-furnishing goods, miscellaneous.
Ice, manufactured.
Instruments, professional and scientific.
Jewelry and instrument cases.
Lapidary work.
Models and patterns other than paper.
Mucilage and paste.
Munitions.
Musical instruments and materials other than pianos and organs.
Optical goods.
Paving materials.
Pens, fountain, stylographic, and gold.
Photographic apparatus and materials.
Pianos, organs, and materials.
Roofing materials.
Signs and advertising novelties.
Soda-water apparatus.
Sporting and athletic goods.
Steam packing.
Surgical appliances and artificial limbs.
Toys and games.
Umbrellas and canes.
Washing machines and clothes wringers.
Window shades and fixtures.
Miscellaneous manufactures not otherwise classified.

SERVICE

Advertising.
Banks.
Barbers and hair dressers.
Bowling alleys and parks.
Garages.
Hospitals.
Hotels.
Laundries and dry cleaners.
Office buildings, includes window cleaning.
Photographers.
Professional.
Restaurants.
Saloons.
Schools and colleges.
Shoe repair.
Social agencies.
Theaters.
Undertakers.
Service not otherwise classified, includes horseshoeing, cemetery care, etc.

TRADE, RETAIL AND WHOLESALE

Offices.
Retail delivery, milk, ice, and water.
Stores, retail and wholesale.
Yards, lumber, coal, and scrap.
Trade not otherwise classified.

TRANSPORTATION AND PUBLIC UTILITIES

Drayage and storage, includes livery stables and teaming.
Electric light and power.
Electric railroads.
Gas, illuminating and heating.
Natural gas.
Pipe lines (petroleum).
Steam railroads (intrastate).
Stockyards.
Taxicab service.
Telegraph and telephone, includes messenger service.
Transportation by water, includes stevedoring.
Waterworks.
Transportation and public utilities not otherwise classified.

APPENDIX C.—VARIATIONS IN MEN'S AND WOMEN'S EMPLOYMENT IN IRON AND STEEL AND TEXTILE MANUFACTURING

The report in earlier pages of this volume has shown in a general way some of the outstanding variations in trends of men's and women's employment and has illustrated the influence of different factors in causing these variations. With so great a mass of material as that involved in the monthly employment figures by sex for a period of 11 years in 54 classifications,[1] obviously it is impracticable to give a detailed analysis of each set of figures and curves. Nevertheless, in many instances such analysis will yield most significant information regarding the many economic factors that influence employment trends. To illustrate the importance of detailed information about the industry in any attempt to interpret the real meaning of the trends of employment indicated in the curves and figures, there is presented in the pages following an analysis of the figures for two industrial classifications—the manufacture of iron and steel and their products and the manufacture of textiles.

These two classifications represent two very different situations, as far as women's employment is concerned. In iron and steel manufacturing women form a very small percentage of the wage earners, but their proportionate importance has tended to increase during the 11-year period under discussion, and changes and developments in industrial practices of recent years indicate that women may become a more essential part of the working force in the industries that form a part of or are allied with this leading industrial classification in Ohio.

In the manufacture of textiles women form by far the greater part of the working force. Their proportionate importance in the industry as a whole changed practically not at all during the 11-year period 1914 to 1924. In fact, textile manufacturing has been for many years one of the chief strongholds of wage-earning women, and the comparative variations in employment for men and women in this classification should afford examples of the influence of factors very different from those applying in iron and steel manufacturing, where women's employment is comparatively new and unimportant.

THE MANUFACTURE OF IRON AND STEEL AND THEIR PRODUCTS.

The manufacturing group that is of the greatest importance in the State of Ohio is the iron and steel industry. In fact, the production of iron and steel and the manufacture of their products is one of the basic industries in the United States. With it are clearly interrelated other great industries, from which it buys materials, as fuel, certain minerals, transportation services, etc., or to which it sells its products. There is no manufacturing industry that does not consume iron or steel or their products in one form or another and in varied quantities.

The conditions and fluctuations in other industries, therefore, are quickly reflected in the iron and steel industry, while the latter, in turn, influences other industries to a very marked degree. Therein lies the reason why the iron and steel industry is counted as belonging to the "basic group" of the Nation's industries and why it is considered as being a "barometer of trade." The trend of employment in this industry should, therefore, be of more than local significance. In fact, figures showing the employment of men and women in this basic industry are indicative of trade and industrial activity throughout a very broad field.

Especially is this true in Ohio, for this State contributes a large part of the total iron and steel output of the country.

Within the State itself the industry assumes an even more important position, so that employment figures may become of even greater significance when they are considered from the viewpoint of the State.

In the first place, the industries classified by the Ohio Division of Labor Statistics cover a wide range of industrial activity, from the basic process in the

[1] For four of the classifications figures from 1914 to 1918 were not available.

making of pig iron to the production of finished articles for consumption use. The list of specific industries so included in 1923 is as follows:

Blast-furnace products.
Boilers and tanks.
Bolts, nuts, washers, and rivets.
Burial vaults, steel.
Calculating machines (including cash registers, time clocks and locks, and gas and water meters).
Cutlery and tools.
Doors and shutters, iron and steel.
Files.
Forgings.
Foundry and machine-shop products.
Gas engines and tractors.
Horseshoes, not made in steel works and rolling mills.
Locomotives, not made by railroad companies.
Nails and spikes, cut, wrought, and wire.
Pipe, wrought.
Pumps and windmills.
Safes and vaults.
Saws.
Scales and balances.
Screws, machine and wood.
Sewing machines, cases and attachments.
Springs, coil.
Springs, steel car and carriage.
Steel works and rolling mills.
Stoves and furnaces.
Tin plate and terneplate.
Typewriters and parts.
Wire.
Wire work, wire rope, and cable.
Iron and steel and their products, not otherwise classified.

In view of the scope of this list it is not surprising that more than one-fourth of all the wage earners in the industries of the State are engaged in the production of iron and steel and their products.[2] For this reason the figures showing trend of employment for the industry as a whole will repay careful analysis as an index of conditions throughout the State. As an example of variations between the trends of employment for men and for women the figures for iron and steel are less important in view of the very small proportion of women employed. Nevertheless, the figures and curves for this industry make possible an illustration of the significance of total figures when one of the component groups is very much in the minority. They provide also an opportunity to study the comparative effects on the two sexes of the war, the 1920–21 depression, and the steel strike of 1919, in an industry that was, of all the industries in the State, probably the most seriously affected by each of these events.

From the standpoint of women's employment it will be necessary also to consider certain branches of this industrial classification, as in the majority of individual industries included women form so unimportant an element in the labor force.

Of the various branches of the iron and steel industry, foundries and machine shops and steel works and rolling mills employ the largest numbers of workers. Together they employed over two-thirds of the men in the iron and steel group of the State in 1923. Women, however, are but a small proportion of the total working force in this group of industries, being only 3 per cent of the average number of wage earners in 1923. More women were employed in foundries and machine shops than in any other branch of the industry, but here, too, only a small proportion of the total working force of those plants was made up of women. The next largest group of women was that engaged in the manufacture of bolts, nuts, washers, and rivets, and here they formed approximately one-sixth of the wage earners. Although the number of women employed in the manufacture of screws was smaller than in any of these other groups, they formed a much larger proportion of the working force in this branch of the industry than in the others, one-third of the total in 1923. Therefore, the industrial groups last mentioned—the manufacture of bolts, nuts, washers, and rivets and the manufacture of screws—have been selected for supplementary analysis.

Seasonal fluctuations.

The figures on employment for the years 1914 to 1924 indicate no normal seasonal movement of employment of any significance for either sex. In this respect, therefore, the curve for the total is representative of conditions for each sex.

Nor does the lack of seasonality in the iron and steel group seem to arise from a balancing of the slack and dull seasons of the individual industries of which it is composed. For none of these industries do the figures for either sex indicate any fluctuations that tend to reappear each year.

[2] U. S. Bureau of the Census. Biennial Census of Manufactures: 1923, pp. 1346–1352.

There were years in which there were wide differences between minimum and maximum employment of both men and women, but such differences were due ordinarily to conditions peculiar to the year rather than to recurring seasonal factors. Changes from periods of great depression to periods of prosperity, or the reverse movement, had more effect on employment of both men and women than had seasonal demand.

Secular trend in iron and steel industry in Ohio.

The upward secular or long-time trend in the growth of the iron and steel industry in Ohio from 1914 to 1924 had more bearing upon the trend of employment than had any small seasonal fluctuations.

During the severest depression in 1921 employment fell by 600 persons below the lowest level in 1914. The average for the year 1924 shows a growth of employment over the year 1914 of 64,000 persons. On the whole, discounting the big fluctuations due to the war, depressions, and strikes, there has been a steady secular trend upward, and this upward movement has been more marked for women than for men.

Another factor that would materially affect the employment figures for the period under consideration is that labor-saving devices and improved machinery were being introduced in great volume into iron and steel mills and metal-working establishments. Each year brought its own special inducements for plants to save on human labor. The war years made workers scarce and high-priced and at the same time called upon the factories to produce an additional amount of work. The years of depression, 1914, 1921, and 1924, reduced or eliminated profits and forced plants to center attention on means to reduce labor costs.

So the effort to replace labor by machinery and by more intelligent planning was never ending. And the results were successful. Fewer and fewer men became necessary to produce the same or even an increased quantity of finished material. An illustration of a plant in which the labor force was cut practically in half is as follows:

In 1916 a Cleveland factory making automobile springs employed 1,800 men, working in three shifts of 8 hours; they fabricated 2,500 tons of steel a month. In 1917, by improvement of the internal transportation system, the addition of more efficient methods of production, the introduction of labor-saving devices, and the more intelligent application of the energy expended, the factory was able to fabricate about the same amount of steel, 2,500 tons a month, with a force of only 950 men, still working in three shifts of 8 hours.[3]

Wire mills were enabled, by the introduction of improved material-handling machinery, to increase the size of the wire bundles handled from the 50-to-75-pound bundles in the early days to 200-pound bundles and, in 1923 or 1924, to 300-pound bundles. A mill that substituted 300-pound bundles for 150-pound bundles could discharge 25 per cent of its employees, and at the same time increase the capacity of the mill.[4]

In view of this constant and successful movement to replace labor by mechanical means, it is evident that the number of workers in the industry in Ohio did not rise so high toward the end of the period 1914–1924 as it would have done without the labor-saving installations and inventions. Although it is difficult to estimate the actual extent of the influence of such changes in manufacturing methods they are important factors for consideration in connection with any figures showing trend of employment. It is especially important to take into account these changes when examining the greater increase among women during the 11-year period. With so few women employed in the industry changes leading to greater efficiency in production probably would apply to the greatest extent among men's occupations, thereby giving women's employment a position of apparently greater importance.

General factors affecting trends of employment.

For both men and women wage earners in the iron and steel industry in Ohio the curves of employment based on the average of 1914 as 100 rose and fell from 1914 to 1924 in response to the general expansions and contractions of trade. This was the great influence shaping the course of employment in the industry. Strikes were a secondary cause; their influence was responsible for

[3] Daily News Record. June 4, 1917. p. 5. Fairchild publications, New York.
[4] Bennington, E. T. Standardization of Product Aids Handling. *In* The Iron Age, Jan. 29, 1925, pp. 344, 345. Iron Age Publishing Co., New York.

the sharp and sudden descent of the curve of employment for men late in 1919 and for many of the slight fluctuations in other years.

In general it is clear that the industry has a tendency to make rapid changes in the employment of both sexes. Even so, however, the declines in the employment curves due to business depression or inactivity do not show the full extent of the decline in production, for "In slack times in the iron and steel industry a larger number of men are carried on the pay roll than are required for mere production. * * * As the industry picks up, more full-time operation develops, and the output per man-hour does not rise so greatly as does the output per man." [5]

The period 1914–1924 opened with a year of marked depression. The curve of employment consequently was very low and descended in November to a point approached only once thereafter, and that in July of 1921, a time of most acute depression.

Throughout 1915 and 1916, urged upward by the tremendous growth and expansion of the industry that began shortly after the outbreak of the World War, largely due to the great volume of war orders placed with the iron and steel trade in Ohio, the curve of total employment rose in an almost unbroken line, arriving at a position about 70 points above the 1914 average. Until the close of 1916 the trend of men's and women's employment was very similar and is accurately represented by the total curve. For the next two years, however, the trend of women's employment showed great fluctuations and marked deviation both from the total curve and from that of the men.

With the exception of these two war years, 1917 and 1918, when women workers were being introduced into iron and steel plants in great numbers, and of the latter part of 1919, when the steel-strike influence was active, the employment curve of women paralleled that of men with great exactness. Differences were outweighed by similarities. It might be observed, however, that the employment of women was more sensitive than that of men, increasing in greater proportion during periods of advancing activity and decreasing with greater proportionate rapidity when the specter of depression appeared. This occurred during the periods of rising employment in the early part of 1920, in 1922–23, and in the first months of 1924; and in the periods of declining employment found after the armistice, in 1920–21, and in the middle months of 1924.

Certain of the factors that apparently have influenced a deviation in trend between women's employment and that of men are of interest in estimating the validity of the total curve as an indication of trends for both sexes. For example, in 1917 the employment curve for men showed throughout the year a slight increase and no very great fluctuation. On the other hand, the employment of women declined during the year from a high point in January and was very erratic. January showed an increase of 43.8 per cent over the preceding December, and it was the high point in 1917. The number of women on the pay roll was 7,227, or 2.8 per cent of the total, for January. Their numbers declined sharply until the low point for the year was recorded in May at 4,871, or 32.6 per cent below January.

The employment of women increased somewhat in June but dropped again slightly in July, so that from May through July it was far below the high points of employment in the spring and fall. Large increases were made in September and October, and employment in the latter month was only 9.9 per cent below January. In November and December considerable declines again were recorded, and the year ended with the number of women at 5,462, or 24.4 per cent below January.

The declaration of war by the United States in 1917 affected industries in two direct ways: First, after some weeks it greatly increased war orders, and second, it made an inordinate demand upon the man power of the country for both military and industrial purposes. The orders for war supplies continued to come from the Allies abroad and now came from the home Government in a continuous and ever-increasing stream. Accordingly, the manufacturers of war implements and other war supplies constantly had to enlarge production facilities. The producers of iron and steel and the manufacturers of their products in the State of Ohio got their due share of the orders.

As a result, the iron and steel mills and the plants manufacturing their products were busy as never before. Employment increased, as seen in the employment figures. The production of iron and steel, as a basic industry, was essential

[5] Haney, Lewis H. Labor: Employment—Earnings—Efficiency. *In* The Iron Age, Jan. 29, 1925, p. 357. Iron Age Publishing Co., New York.

for the carrying on of the war, and therefore the men employed in this industry were exempt from conscription, which meant that the men already employed held to their jobs and new men were taken on. This explains why the employment of men increased during the year while the number and the proportion of women tended to decrease in the total group of iron and steel. Not only that, but it throws light on the fluctuations in the employment of women. Men were pressing for employment, while women could easily find more suitable work in the industries not exempt from conscription and therefore more in need of workers.

But the entrance of the United States into the war in April was not followed immediately by a stream of contracts for iron and steel products. On the contrary, there was a period of comparative quiet for two months or so—domestic buyers and foreign governments hesitated, standing aside until the United States Government should make known its wants. This uncertainty was a dominant factor in the market as late as the end of May. On June 7 it was reported in The Iron Age, from the Cleveland district, that iron and steel mills were taking on as little additional tonnage as possible, holding themselves in readiness for the Government's call upon them. Additional Government orders had been placed, but only for small lots. The Iron Age of June 14 stated that metal-working plants as a class had felt for some weeks that Washington was too slow to take advantage of the manufacturing facilities of the country. At this same time the machine-tool industry of the Cleveland district was said to be still marking time pending Government orders. By the end of June Government buying of iron and steel was steadily increasing.[6]

Production in the industry was hampered from beginning to end of the year by an insufficient fuel supply and insufficient railroad service. The lack of coke caused the pig-iron output of 1917 to fall behind that of 1916—blast furnaces were banked for days at a time waiting for coke. And steel works fell short of normal output at times because there was no coal for gas producers.[7] All these influences played a definite part in the fluctuation in the employment curve for both men and women in this and other industries.

It is in 1918 that the greatest difference in the trends for the two sexes occurs—in fact, the employment curves show an enormous increase for the women but only a small one for the men. Nineteen-eighteen was almost entirely a war year. Orders for war supplies were more pressing than ever before. This explains the increasing employment in the manufacture of iron and steel and their products. At the same time the heavy drafts of men for military service overseas, approximately 2,500,000 men during the year, began to weigh even upon the industries exempt from conscription, and among these the iron and steel industry was constantly expanding, which meant that there was a constant need for new hands. As men became scarce, women had to be taken on. This in part explains the proportionate gain of women's employment over that of men during the year, which was, in that sense, a women's year in the iron and steel industry. The number of establishments reporting in 1918 was 1,635, an increase of only 52 over the previous year. Men's employment fluctuated even less during 1918 than during the preceding year, the minimum figure being 96.3 per cent of that for the peak. Although women did not replace men they formed an additional labor force to meet the pressure for increased production. Their employment advanced rapidly until November, when 88 per cent more women were employed than had been on the rolls in January.

The almost perpendicular rise in the employment of women was unbroken through November, in which month more than 10,000 women were employed in the manufacture of iron and steel products in Ohio, the largest number at any time during the period 1914–1924. The bulk of this increase came in foundries and machine shops and in factories normally engaged in the manufacture of calculating machines but at that time devoting a large part of their capacity to the manufacture of war materials. The gains were most conspicuous in the latter industry, with an increase of over 30 per cent in each of three successive months in the spring of 1918. Although the peak of women's employment in these factories was reached in July, the number employed throughout the rest of the year remained far in advance of employment at its opening. In the foundries and machine shops women's employment, although advancing more slowly, continued to increase steadily through November, and it was not until after the armistice that it showed any slump. The number of men employed in the iron and steel

[6] The Iron Age, June 7, 1917, p. 1421; June 14, pp. 1446, 1475; and June 28, p. 1575. Iron Age Publishing Co., New York.
[7] Ibid., Jan. 3, 1918, p. 55.

group in December was slightly in advance of what it had been at the beginning of the year, in spite of the fact that by that month their employment had begun to fall off.

After 1918 the trends for men and women were very similar, with the exception of the temporary decrease for the men resulting from the steel strike in 1919. This strike, which caused a great break in the employment figures, lasted about three months, beginning September 22 and ending officially early in January.

The Ohio employment figures for September were not affected by the strike, since the call was issued for the 22d of the month. By October 15, total employment showed a drop of 44,464 (of whom 44,386 were men and 78 were women), although on October 9 the union estimated that the number of men out in the Ohio districts was 107,000.[8] By the time the November reports were compiled, more than 25,000 men had returned to work. By December the numbers of both men and women employed were in excess of the numbers employed in September before the calling of the strike. It is evident that the employment of women was affected very little by the strike.

The effect of the 1920–21 depression was similar for women and men. Late in September, 1920, the iron and steel industry in Ohio, as elsewhere, came to the turn of the year and felt the beginning of the business recession that was to continue into the following year. Iron and steel remained active longer than did some of the other industries. Declines in silk, cotton, rubber, and wool, that started early in the year, caused a disturbance in mercantile lines in May. The automobile slump started in June. There was a sharp decline in building contracts in the first half of 1920. These and other branches of industry began their declines because of the final revolt of buyers against high prices, and the consequent very effective, though unorganized, general strike of buyers.

There was a feeling in the steel industry, in the summer and early fall, when other lines were slowing up, that for once steel was not a barometer of general trade, for signs of reaction were not noticed in steel until September. Employment in the industry in Ohio was higher at the middle of September than in August, and almost as high as in March.

Many in the trade thought that the industry would run at a good rate practically until the end of the year. "October gave a blow to all such hopes. It was proved again that the industries of the country are bound together in a way that makes prosperity in one impossible alongside of depression in another. The steel industry's readjustment might lag a little behind that of others, but it was inevitable."[9]

Women's employment in iron and steel industries began to decline in August, 1920, and their number continued to fall off with each month throughout the rest of the year. Although men's employment was less in August than in July, it increased again in September and it was not until October that the depression showed itself. However, although activity began to fall off in October, employment of men in October was only 3.7 per cent below the September figure and in some of the 25 branches under which the industry is classified in 1920 there was an increase rather than a decrease. Most of the men who were out in October had been in foundries and machine shops. Steel works and rolling mills practically held their own, while tinplate and terneplate mills actually were taking men on. The per cent of loss was highest in the factories making gas engines and tractors. By November men were being laid off much more rapidly. About 7,000 men were let out of foundries and machine shops alone, and steel works and rolling mills also began to feel the real force of the depression, letting almost 5,000 men go in one month. Tin mills practically held their own. December saw a decrease approximately half again as great as that in November. Over 10,000 men were laid off in steel works and rolling mills alone and 10,000 more were let out of foundries and machine shops. Tinplate and terneplate mills, which had maintained their forces well up to this time, turned off almost 2,500 workers, or more than two-fifths of their labor force of November. Blast-furnace workers dropped in number more than during any previous month. By the close of the year employment in the iron and steel industries had been hard hit, although activity had been maintained longer in these industries than in most others. In the opinion of the leading trade journals, the steel strike of 1919 served to keep activity high in the early part of the year because of the resulting scarcity of steel. Eventually slackening of work in other industries caused a reaction in the steel industry.[10]

[8] U. S. Bureau of Labor Statistics. Monthly Labor Review. December, 1919, p. 84.
[9] The Iron Age, Jan. 6, 1921, p. 2. Iron Age Publishing Co., New York.
[10] Ibid., p. 1.

Not only did women's employment begin to fall off earlier in 1920 than did men's, but up to the end of the year their decline had been more rapid than was the case with the men. In May women formed 3.2 per cent of the total number of wage earners in the iron and steel industry, but by the end of the year only 2.7 per cent of those employed were women.

On the whole, however, the depression of 1920–21 hit men and women in the iron and steel industry with approximately equal force. Men's employment showed a decrease of 54.8 per cent between the month of highest employment in 1920 and the time of least activity in 1921, while the number of women wage earners decreased 55.2 per cent during the same period.

In the recovery after the depression women seemed to share almost equally with men. This may have been due somewhat to the fact that partly because of the shortage of labor—its numbers being wholly inadequate to the demands of the industry as orders came pouring in—and partly because of its high cost, efforts were continued this year to find means of securing the same production at a lower labor cost. To this end, in the machine-tool industry many of the simple types of automatic machines were, in 1922, originated or modified.

The use of single-purpose or special machines, for which there was such an enthusiasm during the time of the war, was markedly diminishing in favor of the standard or all-purpose types of machine tools, but special machines still were being used to some extent, often to handle the second operation on work coming from automatic screw machines. This may have had some effect on maintaining the employment of women, for women had been, during the war, considered especially adapted for work at the special-purpose machines.

Conclusions.

Variations in employment in the iron and steel industry in Ohio were frequent and comparatively large during the period 1914–1924.

The variations were caused usually by changes in the state of trade, rising demand or falling demand. Behind this were overexpansion and overcapacity.

Strikes and lockouts were a secondary influence upon the course of employment.

Seasonal influences appeared to be absent and consequently had no effect upon employment.

The employment curve for women followed very closely that of men in the total group of iron and steel manufacturing, except for 1917 and 1918.

The proportion of women workers increased during the war years and after the war remained higher than it had been before.

The employment of women was not so adversely affected by strikes as was that of men. During the great steel strike in 1919 women's employment declined by an amount that was small in comparison with the decrease of men, so that the result was an increase in the proportion of women workers.

The employment curve of women tended to be more sensitive than that of men. It often rose comparatively higher during periods of advancing activity and declined comparatively lower during periods of depression. In almost every movement shared by the employment curves of both men and women, that of women rose or fell with comparatively greater sharpness.

During the period 1914–1924 there were in the iron and steel industry many improvements in machinery, many introductions of labor-saving devices. Consequently, for the same or a greater production toward the end of the period the employment curve did not rise so high as it had done in the earlier years.

BOLTS, NUTS, WASHERS, AND RIVETS

The manufacture of bolts, nuts, washers, and rivets not made in rolling mills is not a large branch of the iron and steel industry, but Ohio has more wage earners thus employed than has any other State.[11] Furthermore, it is of more importance as a woman's industry than are most of the others in the group. In 1923, foundries and machine shops were the only establishments employing a greater number of women and screw factories were the only ones in which women formed a larger proportion of the wage earners. In fact, compared with the figures for the iron and steel industry as a whole women appear to be a fairly important factor in this smaller group, as in 1914 they formed 17.3 per cent and in 1924 they were 17.5 per cent of the total employees.

In spite of the small number of establishments reporting in the group classified as manufacturing bolts, nuts, washers, and rivets (from 15 to 30) there is a very striking similarity between the general trends of employment in this industrial

[11] U. S. Bureau of the Census. Biennial Census of Manufactures: 1923, p. 423.

group and those for all iron and steel. In the smaller group the fluctuations both up and down are more extreme than for the larger, but the shape of the two curves, for the total employees, is remarkably similar. This is not so, however, when the trends for men and women are considered separately. The relative importance of the two sexes in the manufacture of bolts, nuts, etc. does not seem to have altered to any significant extent as it has done in the entire industry. The greater proportion of women in the smaller group naturally would result in a closer resemblance between the curve for women and the curve for all employees, but an even more potent factor in bringing about this similarity probably is the small number of establishments reporting and the consequent homogeneous character of the entire classification.

On the whole, the total curve in the manufacture of bolts, nuts, etc. could be accepted as a very reliable indication of the trend for each sex. The only period during which there appear marked differences in trend for the men and the women is the year 1918, when the men's employment stayed practically on a level throughout the year while women's increased considerably. This difference was anticipated in 1917, when men's employment decreased slightly and women's increased, and it is due, of course, to the war. From the late months of 1917 the employment of women increased until by the end of 1918 their index had about reached that of the men, a condition that had not existed since 1914.

The depression of 1920–21 did not affect the women in this industry quite so severely as it did the men, although trends for the two sexes were very similar. Decreases for the women began a couple of months earlier than for the men and the recovery of the women in 1921 began a month later.

SCREWS, MACHINE AND WOOD

Fewer workers were employed in the manufacture of screws than in most of the industries of the iron and steel group for which the Ohio employment figures were secured. However, the figures for this group are given separate consideration here because of the fact that in Ohio women form a larger proportion of the workers than in any other industry of the iron and steel group. Several branches employ a larger number of women than does the manufacture of screws, but the State employment figures show that in 1924 more than a third of all the wage earners in screws were women. Furthermore, according to the census of 1923 Ohio has more people employed in manufacturing machine screws than has any other State in the Union.[12]

Figures for this industry are available for all the years from 1914 to 1924 except 1915, when too few establishments reported to justify publishing separate figures. From the records of these 10 years there is no indication of a repeated seasonal movement in activity. Although there were years in which there was a rather wide range between minimum and maximum employment, these same variations did not tend to recur year after year but rather were due to cyclical fluctuations that varied in character from year to year.

The figures for 1914 are scarcely comparable with any of the other years for which reports were made. More establishments reported during that year than in any other and the minimum employment of men in 1914 was more than twice the maximum employment of men in any other year. The probable explanation of this has been discussed elsewhere in the report (see p. 10). In this industry, therefore, it is more satisfactory to start comparisons with 1916. In the graph showing fluctuations from month to month based on the 1914 average the changes in men's employment in the later years appear less important because of the fact that the number for the base year was very high in comparison with the other years.

The chief value of the curves for this very small group is as an illustration of the violent fluctuations and deviations from the general trends in the larger group that may be expected when a classification includes so few establishments. In a classification that covers only from three to eight establishments, employing only from 68 to 337 women over the 11-year period, the fluctuations of the curve of employment necessarily are violent and can not be considered as indicative of any but very local situations. It is apparent that in these few establishments there were great irregularities in the employment of women and that these irregularities did not affect the men, whose employment was steadier. Even so, however, study of the trend of employment within each year indicates a certain general similarity in a number of years. Women apparently increased and

[12] U. S. Bureau of the Census. Biennial Census of Manufactures: 1923, p. 427.

decreased more rapidly than did men and their increases were likely to come after and their decreases before those of men.

The numbers included probably are too small to shed much light on the effect of the war and the depression of 1920–21 on the relative trends for the two sexes. The curves for this group should be used merely as an example of the greater sensitiveness of women's employment than men's and the violent irregularities that can be looked for when the figures are so small that the effect of any local situation is not minimized by the counteracting influence of conditions in other localities.

THE MANUFACTURE OF TEXTILES

Textiles is the manufacturing group that employs the largest number and next to the largest proportion of women wage earners. In this group as a whole an average of more than 26,000 women were employed in 1924, and those women formed 66.1 per cent of all the wage earners in the group. The curves of employment in textile manufacturing illustrate, therefore, the very opposite of the situation that is shown in the manufacture of iron and steel and their products, where the women employed in 1924 amounted to only 2.9 per cent of the total employees.

The textile group as a whole, however, does not yield especially significant information when considering the differences in trend of men's and women's employment and the factors that influence these differences. For the classification "textiles" includes not only the various stages in the manufacture of the products ordinarily included under that designation but their products—articles made from cloth. The list of industries included under this classification is as follows:

Awnings.
Tents and sails.
Bags, other than paper.
Buttonholes.
Carpets and rugs.
Clothing, men's.
Clothing, women's.
Cordage, twine, jute, and linen goods.
Cotton goods and small wares.
Custom tailoring, men's and women's.
Dyeing and finishing textiles.
Flags, banners, and regalia.
Furnishing goods, men's.
Gloves, cloth.
Hats and caps, other than felt, straw, and wool.
Horse clothing.
Hosiery and knit goods.
Mattresses, pillows, and cotton felts.
Millinery and lace goods.
Oilcloth and linoleum.
Shoddy.
Silk and silk goods.
Upholstering materials.
Waste.
Wool pulling.
Woolen, worsted, and wool-felt goods.
Textiles, not otherwise specified.

It is evident, with a knowledge of the great diversity of products within this group, that the curves showing trends of employment will show little that is significant in the likeness or unlikeness between the trends of men's and of women's employment in textile manufacturing.

Examination of the curves for this industrial group reveals an astonishing degree of similarity between the employment trends for the two sexes. In no other of the groups studied is there so close a resemblance in the trends of employment for men and women. It is possible that this marked resemblance may be due in part to a tendency when men are in the minority for their employment to follow closely the development of women's employment, but more probably the similarity is due to the combination of individual industries, with conflicting trends, into the larger classification.

The possibility of such a balancing effect is well illustrated by the lack of indication of distinct seasonal trend for either sex in the curves for all textiles. In none of the years reported did the textile group show marked seasonal fluctuation. In 8 of the 11 years the number of men employed during the lowest month was 85 per cent or more of the maximum employment for the year, while for women the percentage was at least that high in 7 years. For both men and women the greatest difference between minimum and maximum employment came in 1920 and was due to the general business depression rather than to sharp changes of a seasonal character.

During most of the other years there tended to be two peaks of employment, spring and fall, but the contrast with the slack months was not startling. Probably this tendency is due primarily to the prominent part that the clothing industry forms of the larger textile group. The figures for textiles are the result of combining those for industries that have marked busy and slack seasons at certain times of the year with others whose seasons are in direct contrast or just miss of coinciding, as well as those that show no tendency for brisk and slow months to succeed each other in the same order each year. The spring and fall

seasons for women's clothing normally begin before those of men's clothing, while hosiery and knit goods have a single extended season with a tendency for employment to be at its lowest in December, January, and February, and the manufacture of cloth gloves shows no regular seasonal movement in employment. Scrutiny of seasonal changes in other subindustries that employ considerable numbers of workers indicates the variety of conditions that exists within the textile group. The manufacture of millinery and lace goods has two definite busy seasons, but ordinarily the spring season comes earlier than in the two main clothing groups, while the two busy seasons in custom tailoring come somewhat later than in the ready-made-garment industry. The manufacture of cordage, twine, jute, and linen and the manufacture of woolen, worsted, and wool-felt goods show very little seasonal variation. These examples indicate the way in which some industries tend to balance others within the same group and to lessen the extent of fluctuation in the textile group as a whole. It is probable that a person out of work because of the slack season in one branch of the textile classification is able to secure work in another branch whose busy season is on when he is out of work. Thus the combined figures really fail to indicate the seriousness of the fluctuations.

Taking the textile groups as a whole, apparently the war had little effect on the employment of either men or women. Here again it is probable that this is due to the combination of conflicting figures for various groups. However, it is interesting to see that for this group as a whole the only marked fluctuation of employment came as a result of the depression of 1920–21, when employment for both men and women started to decrease in April, 1920, and reached a low point in January of the following year. From the middle of 1923 on there was a tendency to a decrease in employment but it was not nearly so severe as the decrease in 1920. In both cases the decreases applied alike to men and women. There was also a short slump in employment at the close of the war, in the last months of 1918, but the amount lost was rapidly regained during the latter half of 1919 and employment for both men and women reached a high point in the early months of 1920.

For this industrial group the curve for the total gives an almost completely accurate picture of the trends for either sex. As a significant indication of the trends for an industrial group, however, the curves for all textiles combined probably are not of great value, as the classification covers too varied a group to be fitted into an apparently limited industrial classification, while at the same time it does not include a sufficiently great variety of products to make the classification representative of a broader and more generally significant grouping.

The clothing industry.

Among the varied industries that are included in the classification of textiles by far the most important is the manufacture of men's and women's clothing. The manufacture of men's clothing employed in the year 1924 an average of 13,139 wage earners, of whom 70.6 per cent were women. This was not far from one-third of all the wage earners included in the textile group, and the women in the manufacture of men's clothing formed more than one-third of the women wage earners in the larger classification. Closely allied to the manufacture of men's clothing is the manufacture of women's clothing, and although it does not rank so importantly a very considerable proportion of the wage earners in textiles are employed in the manufacturing of women's clothing. In 1924 the average employment in this industry was 4,748, of whom 73.4 per cent were women, and this was 11.8 per cent of all wage earners in textiles. These two industries form outstanding examples of the so-called women's industries, and, as such, examination of their employment curves should throw much light on whether or not the similarity indicated in the all-textiles curves between the trends for the two sexes can be considered typical for these more limited, but far more significant, classifications.

For there are certain conditions that are characteristic of the clothing trades. In the first place, small manufacturing units prevail. In 1914 there were 14,953 establishments in the United States engaged in these industries, 85.2 per cent of which employed not more than 50 wage earners, almost two-thirds employing not more than 20. Only 24 establishments in all had more than 1,000 employees.[13] Establishments in Ohio have been, in general, of greater size than those in New York or in the United States as a whole.

[13] U. S. Bureau of the Census. Census of Manufactures: 1914, vol. 2, p. 177.

The manufacturing units are not in the hands of great corporations. On the contrary, a large proportion of the plants belong to or are under the control of individuals. Of the 5,564 women's clothing establishments in the United States in 1914, 42.9 per cent were under individual control, 16.8 per cent were operated by corporations, and 40.2 per cent were under other forms of ownership, such as partnerships, cooperative associations, etc. Of the 4,830 men's clothing establishments in the country in 1914, 52.2 per cent, or more than half, were under individual control, 14.8 per cent were operated by corporations, and 33 per cent were under other forms of ownership.[14]

Among these many small establishments there is little teamwork. Lack of organization in the industry, lack of cooperation among the manufacturing units and among the various markets, were named by one of the leading men's clothing trade journals [15] as being responsible in part for the sorry plight of the industry in the years of business depression beginning in 1920. This authority also said that the clothing industry was the only important one without a central, organized system of technical and business information, which accounted largely for the crudities of the business. The many independent manufacturers have not been governed by a clear and comprehensive purpose that would have enabled them to control certain conditions to the benefit of their industry.

A third characteristic of the men's and women's clothing industries is that they employ a larger proportion of women than of men as wage earners. Over 68 per cent of the average number of wage earners in 1919 were women.[16]

Fourth, in the needle industries at least, the number of highly skilled workers is small. Most of the operations require a degree of skill that is easily acquired.[17]

Fifth, the clothing industries are seasonal, some of them highly so. Since most people buy their clothes for the summer in April and May and their winter clothes in October and November, the industries that supply this clothing naturally are seasonal industries, working to capacity during the months just previous to the buying seasons, then slowing down until the approach of the next season causes renewed activity.

In the men's clothing industry in Ohio the employment figures for 1914–1924 show that February, March, and April were months of increasing employment, the increase sometimes beginning earlier, in January, sometimes extending later, into May. After a period of decreased employment, activity recommenced, and the months of August, September, and October witnessed increasing employment, which sometimes reached its height in November.

In the women's clothing industry the Ohio employment figures show that January to March was the period of greatest activity, in preparation for the spring buying season, the second peak of employment being reached in July, August, or September. Frequently from 1,000 to 1,500 more workers were employed at the height of the season than during the dullest month preceding or following it.

From these figures it is evident that the two busy seasons in the women's garment industry tend to occur earlier than the corresponding seasons in the manufacture of men's clothing and to be more sharply defined.

This is true in Ohio because the men's clothing industry in this State does a good deal of special-order business, in which the manufacturer sells directly to the individual who wears the suit, so that he gets his orders only a short time before the wearing season.

The manufacture of men's clothing tends to be less sharply seasonal than that of women's clothing. In each of the nine years for which data were supplied by the Ohio Division of Labor Statistics, except two, the per cent that minimum employment was of maximum was higher for men's clothing than for women's, indicating that employment was steadier and did not suffer such large increases and decreases as did employment in the women's clothing branch.

This is accounted for originally by the different demands that men and women have in buying clothes. Men's garments have become standardized along certain lines that change little from season to season, while women's garments change a great deal.[18]

The differences in the seasonal character of the two industries and the demand that they make on their men and women wage earners would not appear, therefore,

[14] U. S. Bureau of the Census. Census of Manufactures: 1914, vol. 2, pp. 179, 188.
[15] Clothing Trade Journal. July, 1924. Editorial. New York.
[16] U. S. Bureau of the Census. Fourteenth census: 1920. vol. 9, Manufactures, 1919, p. 1143.
[17] *See* Experience with Trade Union Agreements—Clothing Industries. National Industrial Conference Board. Research Report No. 38. The Century Co., New York. June, 1921. p. 8.
[18] Bryner, Edna. The Garment Trades. Survey Committee of the Cleveland Foundation. Cleveland, Ohio. 1916. p. 29.

where figures are combined for the two. Instead, the tendency would be to flatten out the curve so that the seasonal tendency for both industries would appear to be much less marked. It is because the seasonal character of the clothing industry presents such problems from the standpoint of both men and women workers that the employment figures showing trends for the two sexes are especially important. In studying these figures, moreover, it is well to bear in mind that in respect to the seasonal problem the clothing industry is in a better situation in Ohio than in many other localities, and the difference in trends for the two sexes resulting from seasonal demands therefore would be less apparent.

Manufacturers of men's and women's clothing in Ohio have made determined efforts to bridge over the dull seasons and to make employment more constant throughout the year. It was said in 1918 that Cleveland appeared to be the only women's clothing manufacturing center of any significance in which certain methods were applied successfully for the regularizing of employment.[19]

Dovetailing of products is the principal method adopted. There are several forms of this. One form is the manufacturing of simpler or lower-priced garments during the slack season. This is possible because the seasons for products in the lower grades do not coincide with those for goods in the higher grades.

Another form of dovetailing is used by some firms that manufacture several different lines of goods. One house makes eight lines of lighter garments for women and shows practically no seasonal fluctuation.

Manufacturing one other line at such times as will fill in the slack season of the principal line is a third form of dovetailing. The dress and waist factory that supplemented this line with petticoats was an early example.

The manufacture of garments for stock is still another type of dovetailing. For this purpose there is selected a garment so staple and so much in demand that it can be made without regard to style or season. The foremost example of this is the blue serge suit.[20]

One large Cleveland men's wear house makes the suit during slack periods when last season's contracts have been filled and before orders have come in for the next season. The entire force is then engaged in making blue serge suits, lighter weight for summer and heavier weight for winter. There are six weeks in the fall and eight weeks in the summer thus occupied.[21]

A policy adopted by some Ohio firms to regularize employment is that of extensive advertising of a few specific styles. This advertising creates a large and permanent demand for a few styles and thus enables firms to manufacture in advance of sales without incurring great business risks.

Some firms have adopted the policy of demanding longer delivery dates, to obviate the necessity of temporary short-time expansion.

Another method used is that of engaging in some contract work for an allied trade during the slack season of the year, and of giving the overflow during the busy season to contract houses in order to avoid putting additional people on the pay roll.[22]

The Clothing Trade Journal for May, 1924, speaks of the wonderful results obtained by two firms from specializing on a few lines in place of the old-fashioned endless diversity of styles and models. It does not, however, disclose where the firms are located. The paper says:

> A complete line of 150 models reduced to 24; another cut from 60 to 8; 30 to 60 layers cut at one time, instead of as few as 3 or 4 under the old system; overhead reduced one-tenth and production and selling costs one-third; prices lowered, sales doubled, profits increased; production continuous the whole year around; salesmen on the road 12 months of the year; number of customers from two to seven times greater than before—these are some of the remarkable benefits reaped.[23]

There are two large clothing firms in Cleveland, one of which may have been described in the paragraph above, that have been very successful in achieving continuity of employment. One of them, manufacturing men's clothing, had had in 1921 continuous production of from 45 to 51 weeks a year for several years. This result was secured by standardizing products, adjusting them to a large class of consumers who valued durability and service above style. By concentrating its advertising on this product, by giving proper inducements to its retail distributors in return for their accepting deliveries over an extended period

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[19] Emmet, Boris. Labor Survey of Cleveland Cloak Industry. U. S. Bureau of Labor Statistics. Monthly Labor Review, August, 1918. p. 221.

[20] U. S. Department of Labor. United States Training Service. Training Workers in the Women's Cloak, Suit, and Skirt Industry. Bul. 17. 1919. pp. 67–68.

[21] Bryner, Edna. The Garment Trades. Survey Committee of the Cleveland Foundation. Cleveland, Ohio. 1916. p. 78.

[22] Emmet, Boris. Labor Survey of Cleveland Cloak Industry. U. S. Bureau of Labor Statistics. Monthly Labor Review, August, 1918. p. 222.

[23] Clothing Trade Journal. May, 1924. p. 71. New York.

instead of at the opening of the season, the plant managed to have continuous work.

The other firm manufactures women's garments. This company has closely coordinated its selling policy with its production policy under scientific management. It follows the rule of "selling what it makes" instead of "making what it sells." Months before the selling season it determines the number and kinds of garments it wants to make the following season in order to keep its plant at capacity production. Designs are approved and quantity manufacture is begun. The company has inspired its retailers with confidence in its judgment, the reliability of its promises, and the value of its merchandise. Its salesmen are given their quota and expected to sell it. Usually they do so. They are helped because the goods of the company are sold under a trade-mark, widely known to the public through national advertising. In the long run the firm is eminently successful in maintaining production 51 weeks in the year, one week, during which workers have a vacation with pay, being devoted to plant repair.[24]

The unions in their agreements with employers have attempted always to do what they could to distribute employment more evenly throughout the months of the year. They have made equal distribution of work and no overtime during the dull season part of their contract. They have constantly endeavored to raise wages to such an extent that the annual income of a garment worker would enable him to maintain his family in comfort and decency, considering that most of the workers are either totally or partially unemployed about 21 weeks yearly. They have tried to reduce the hours of work so as to make room for the employment of a larger number of workers who otherwise would be unemployed.[25]

There was inaugurated in 1921 in Cleveland an agreement between the union and employers in the women's clothing industry under which the employers guaranteed to the workers a certain number of weeks of employment each year. This is discussed in greater detail below, under the heading "Cleveland plan."

Although equal distribution of work in dull seasons is the rule, in many cases it becomes necessary finally to lay off some workers. In Cleveland several firms have a regular method of laying off so as to work as little hardship as possible. "One method is to distribute the lay-off among the workers, each being laid off from four to six and one-half weeks, one or two weeks at a time. * * * Another method is to lay off the workers in proportion to the period of service they have had with the firm, those longest with the firm having 100 per cent of employment during the year. Some firms maintain that the extra workers they take on in busy seasons are only makeshifts, not of a grade of skill that would warrant keeping them."

In Cleveland methods of laying off are supplemented sometimes by devices to assist workers over the dull seasons. "In one establishment the workers are paid a regular weekly wage, and account is kept of what they do at piece rates. What they make above their regular weekly wage is held back each week and paid in a lump sum at the end of the season to tide them over the dull period."[26]

The results of these various methods of regulating employment in Ohio are apparent in a study of the regularity of employment in the women's ready-to-wear-garment industry undertaken by the United States Bureau of Labor Statistics in 1915. This study gives a comparison of regularity of employment in this industry as it occurred in Cleveland, New York, Chicago, and Boston. This survey used variation in the amount of pay roll from week to week as the index of unemployment. The average weekly pay roll for the year, found by dividing the annual total pay roll for the establishment by 52, was taken as the standard, 100 per cent.[27]

In the cloak, suit, and skirt industry the greater irregularity in the trade in New York was found to be very marked. Cleveland showed the greatest regularity of employment, with Boston ranking second, Chicago third, and New York fourth. Cleveland's range of variation from the average weekly pay roll was 74 per cent, as compared with 121 per cent in New York. The number of weeks during which the variation was at least 20 per cent amounted to 21, as compared

[24] Stone, N. I. Continuity of Production in the Clothing Industry. The American Labor Legislation Review. March, 1921. pp. 29–31.
[25] Reisberg, Elias. Combating Seasonal Unemployment in the Women's Garment Industry. American Federationist. September, 1927. pp. 1078–1083.
[26] Bryner, Edna. The Garment Trades. Survey Committee of the Cleveland Foundation. Cleveland, Ohio. 1916. pp. 75–76.
[27] U. S. Bureau of Labor Statistics. Regularity of Employment in the Women's Ready-to-Wear-Garment Industries. Bul. 183. 1916. pp. 11–12.

with 38 in New York. Violent fluctuations occurred in only two weeks of the year, as compared with eight weeks in New York.

The report said that Cleveland should rank next to New York in irregularity if specialization were the only cause of irregularity, since the Ohio city was second to New York in the extent to which its manufacturers confined themselves to the one broad line of cloaks, suits, and skirts. But Cleveland had two steadying factors—the somewhat cheaper quality of the goods made and the method of selling goods.[28]

This difference in method of selling was described as follows:

> New York City is, as far as women's garments are concerned, what is technically called a "buying" market; that is, the goods are sold on the premises of the manufacturer to buyers who come for the purpose of purchasing. Cleveland, on the other hand, is a "selling" market; that is, the goods are disposed of by traveling salesmen who secure orders from buyers outside the city. These salesmen make every effort to secure orders as far in advance of the season as possible, a method that diminishes the manufacturer's risk and tends to regularize production.[29]

In the dress and waist industry, Cleveland showed greater regularity of employment than did New York, but less than did Boston, while its position in regard to Chicago could not be exactly determined.[30]

Other factors that undoubtedly were partly responsible for the greater regularity of employment in Cleveland were the relatively larger size of establishments in Ohio than in the country as a whole and the greater proportion of regular factories as distinguished from contract shops, for it was brought out in the Bureau of Labor Statistics survey that large-scale production tends to regularize employment and that steadier employment is found in regular factories than in contract shops. Data on the size of establishments and the proportion of regular factories in the women's clothing industry will be found in the section of this report devoted to the women's clothing industry.

Although no study is available comparing regularity of employment in the men's clothing industry in Ohio with that of other States, all the evidence tends to show that employment in this industry has been steadier in Ohio than in New York or many of the other clothing centers. Among the facts pointing to this conclusion are the following: Seasonal variations shown by the curve of employment from 1914 to 1924 are very slight; establishments in Ohio are of relatively larger size than in the country as a whole, much larger than in New York City, where most of the firms are of medium size or small, the industry being particularly in the hands of small manufacturers;[31] Ohio has a larger proportion of regular factories and a smaller proportion of contract shops than are found in the United States as a whole; in a survey made in Cleveland of 15 of the largest manufacturing industries, the men's clothing industry led all the others in regularity of employment.

This greater regularity in the clothing industries of Ohio in comparison with other localities should be borne in mind constantly when the Ohio figures showing trends of employment for men and women wage earners are studied. If the seasonal curve is more accentuated for women than for men in Ohio, it may be supposed that an even greater difference will appear between the seasonal trends for the two sexes elsewhere.

THE MEN'S CLOTHING INDUSTRY

The men's clothing industry in 1914 ranked seventeenth among the industries of Ohio according to value of product and thirteenth according to number of wage earners employed.[32] In 1919 the industry took fifteenth place according to both value of product and number of wage earners.[33]

Cincinnati and Cleveland are the two great centers in the State for the making of men's clothing. Cincinnati employed in 1923 one-half of all the men's clothing workers in Ohio, and Cleveland more than one-third,[34] so that over five-sixths of the men's clothing made in the State was manufactured in these two cities. The percentage of women employed in making men's clothing is high. In fact, this industry can be called one of the outstanding women's industries. In Ohio, during the period from 1914 to 1924, there were about 70 per cent of

[28] U. S. Bureau of Labor Statistics. Regularity of Employment in the Women's Ready-to-wear Garment Industries. Bul. 183. 1916. p. 78.
[29] Ibid., p. 60.
[30] Ibid., p. 80.
[31] U. S. Department of Commerce. Bureau of Foreign and Domestic Commerce. The Men's Factory-Made Clothing Industry. Miscellaneous Series, No. 34. 1916. p. 145.
[32] U. S. Bureau of the Census. Census of Manufactures: 1914. vol. 1, p. 1148.
[33] U. S. Bureau of the Census. Fourteenth census: 1920. vol. 9, Manufactures, 1919. p. 1142.
[34] U. S. Bureau of the Census. Biennial Census of Manufactures: 1923. pp. 1404, 1405.

women workers to about 30 per cent of men workers. Because of this great preponderance of women and because of the extremely seasonal character of the work the figures showing trends of employment for the two sexes will illustrate the effects of some very important factors.

Since size of establishment has its relation to regularity of employment, and since form of ownership throws some light upon size of establishment, it is of interest to examine the prevailing forms of ownership in the industry.

The percentage of men's clothing establishments owned by corporations is slightly higher in Ohio than for the country as a whole, for in the same year, 1919, almost three-tenths of the establishments were in the hands of corporations as against one-fifth in the United States. Almost one-half were owned by individuals and one-fourth by other forms, including partnerships. Furthermore, 66.9 per cent of all the men's clothing workers in Ohio were employed in corporate-owned factories.[35]

In 1914 the average number of wage earners to an establishment (found by dividing total average number of wage earners by number of establishments) was 39 in Ohio, 28 in New York, 27 in Massachusetts, 59 in Illinois, and 20 in Pennsylvania.[36] In 1923 the average was 75 in Ohio, 26 in New York, 33 in Massachusetts, 92 in Illinois, and 35 in Pennsylvania.[37]

From this it is seen that Ohio and Illinois continued to report larger establishments than did the other States foremost in the manufacture of men's clothing.

This fact, that the men's clothing factories of Ohio tended to be of larger size than those of the rest of the country, should have had its influence in making employment in this industry somewhat steadier in Ohio, since greater regularity of employment has been found to exist in larger plants.

Regularity of employment also depends to a certain extent upon whether the establishment is a regular factory or a contract shop.

In 1923 Ohio had a larger proportion of regular factories than had the United States as a whole. Of the men's clothing establishments in Ohio, 63.8 per cent were regular factories, whereas of men's clothing establishments in the United States 59.6 per cent were regular factories. In Ohio 36.2 per cent of the establishments were contract shops, whereas in the United States 40.4 per cent were contract shops.[38]

This fact of having a larger proportion of regular factories, combined with that of having, in general, shops of larger size and a larger proportion owned by corporations, should make employment in the men's clothing industry in Ohio more regular than in the country as a whole.

Another and a very important factor in stabilizing employment in the clothing industries is the extent of trade-union organization among the workers. The history of the employment of trade-unionism in this industry in Ohio therefore is of great significance in connection with a study of trends of employment.

Prior to 1914 the United Garment Workers had jurisdiction over the men's clothing and shirt industries. However, its membership had always been uncertain and small in these trades, whereas it kept a fairly steady membership in the overall industry. In 1914 the Amalgamated Clothing Workers of America split from the United Garment Workers and claimed jurisdiction over the men's clothing and shirt industries.

With the Amalgamated, unionism spread rapidly in the men's clothing industry. The union was accepted in New York, Chicago, and Rochester in 1919, a year in which a series of strikes occurred. By 1920 the Amalgamated wielded a preponderating influence in these three cities and in most of the other men's clothing centers. It has become a highly effective industrial union, with a membership increased to 170,000. During the prolonged period of depression in the clothing industry, beginning late in 1920, the Amalgamated lost heavily in number of members, but by 1923 it showed a slight increase.[39]

Cincinnati and Cleveland were two men's clothing markets that remained persistently nonunion. In 1918 Cincinnati was not in "the column of organized clothing centers." [40] In 1924 it was reported that the union's attempts to organ-

[35] U. S. Bureau of the Census. Fourteenth Census: 1920. Manufactures, 1919, vol. 8, p. 110, and vol. 9, p. 1160.
[36] Ibid. Census of Manufactures: 1914. vol. 2, p. 180.
[37] Ibid. Biennial Census of Manufacturers: 1923. p. 288.
[38] Ibid., pp. 282, 288.
[39] Wolman, Leo. The Growth of American Trade Unions, 1880–1923. National Bureau of Economic Research. New York. 1924. pp. 50–52. Also Gilbertson, H. S. Meeting the Labor Problem in the Clothing Industry. Administration, February, 1923, pp. 181–189.
[40] Amalgamated Clothing Workers of America. Documentary History, 1914–1920. (Section 1916–1918.) p. 128.

ize the Cincinnati market met with distressingly little success. All forces appeared to combine to keep the market nonunion. The press was hostile, organized labor unfriendly, the city authorities not averse to using their influence against the union. A very important factor in the market was the large firm of A. Nash Co. By refusing to accept the union, this company contributed to "the prestige of Cincinnati as a flourishing nonunion center." [41]

However, during all these years, 1914 to 1924, the Amalgamated was striving to create a permanent, effective union organization of the Cincinnati market. Many strikes and lockouts occurred in the course of the long struggle. There was a hard-fought strike of about three months in 1919, following which collective-bargaining agreements were signed between the Amalgamated and a number of individual clothing firms. The union did not remain at peace very long, for a series of strikes and lockouts was brought into Cincinnati in 1920 by the open-shop wave that was then sweeping the country. Agreements were renewed with a number of houses in 1922, but on the whole the union's attempts to organize the market made little headway until the close of 1925, when an agreement was effected between the Amalgamated and the A. Nash Co.[42]

The Cleveland market has been only partly unionized, and only since 1920, though a few agreements were signed with individual houses between 1915 and 1920. The first collective agreement in Cleveland was the indirect result of a strike terminated in February, 1920, by acceptance of the decision of an arbitrator, who recommended that an agreement be concluded. Such an agreement was made in October, 1920, between the Cleveland Clothing Manufacturers' Association and the Amalgamated Clothing Workers of America. The contract followed the Chicago contract of 1919 in the main, but omitted the trade board. It was for one year. Among the nonunion shops in Cleveland are two very large ones.

Most of the strength of the United Garment Workers is now in the overall industry, and this union has agreements with a number of individual firms in Cincinnati and Cleveland.[43]

An examination of the Ohio employment figures shows that the proportion of women employed in men's clothing in that State during the nine years for which statistics are available remained extremely close to 70 per cent throughout. The lowest such figure was for 1914, at 68.2 per cent, or 1.8 points below 70. The year 1915 showed the next lowest percentage, 69.4. In all the other years except 1921 and 1923, which reported the highest proportions of 71.2 and 71.6 per cent, respectively, the average proportion of women remained almost stationary at a few tenths of a point above 70 per cent.

The proportion of women varied very slightly within the year. In only one of the nine years did it vary by as much as 3.4 points, and that was in 1921, the year of depression. Within the other eight years the proportion varied by less than 2 points; indeed, in one year it changed by only eight-tenths of a point.

Thus the proportion of women was far more constant in the men's clothing industry than in the women's clothing industry, where in four of the years the proportion varied by 2 to 4 points and in two of the years by as many as 6.4 points. Furthermore, throughout the period 1914–1924 the figure showing proportion of women for the year varied by only 3.4 points in the men's clothing industry though in the women's clothing industry, where the tendency was for the proportion to increase, it varied by as much as 13.7 points.

The curve of employment for wage earners in men's clothing does not at all resemble that for wage earners in all manufacturing industries in the State, except during 1924, the last year of the period. The chief difference, at once apparent, is that employment in men's clothing, instead of rising as high as 80 points above the 1914 average during the war years 1915–1918 and the two years immediately following, as did employment in the total of all wage earners in manufacturing, remained close to the 1914 average until the end of 1919. In 1920 it did go above this average, as high as 20 points above it, declining in December to below the average, but in this same year employment of wage earners in all manufacturing was for the most part about 80 points above the average, declining by December to about 25 points above the average.

In 1915 orders from Europe for war materials, giving a vast incentive to the production of all kinds of metals, caused the curve of employment in all manu-

[41] Amalgamated Clothing Workers of America. Documentary History, 1924–1926. pp. 17–18.
[42] The Amalgamated in Cincinnati: A Record of Struggle and Achievement. Cincinnati Joint Board, Amalgamated Clothing Workers of America. May, 1928. pp. 23–30.
[43] U. S. Bureau of Labor Statistics. Development of Collective Bargaining in the Men's Clothing Industry in the United States. Monthly Labor Review. June, 1922, pp. 1093–1108.

facturing to rise sharply almost from the beginning of the year, but the rise of employment in men's clothing was not nearly so great. This industry was a branch of the purely domestic trade, which was repressed earlier in the year by uncertainty and the fear of involvement in war. At the end of the year the industry was somewhat stimulated by a wave of purchasing that followed large earnings in industrial centers and the harvesting of record food crops.

Employment figures for men's clothing are lacking for 1916 and 1917, but considering the fact that the curves for 1915 and 1918 showed no tendency to rise above the 1914 average there is no reason to suppose that they rose far above it, if at all, in 1916 and 1917. In 1916 there was record activity throughout, due to the enormous European orders for war materials, especially food and munitions. The year was conceded by all to have been prosperous; wages were high. It is evident, from reports in Bradstreet's, that clothing manufacturers in Ohio did a business considerably above that in 1915. Without doubt, therefore, the curve of employment in 1916 was somewhat higher than in 1915. In 1917, when the United States itself was at war, the same influences were active as in 1918, and in all probability the curve of employment in men's clothing was very much the same as in 1918, that is, close to the 1914 average.

Total employment was, of course, at a high level during 1917 and 1918, because of the feverish activity in supplying food, munitions, and other manufactures to the armed forces. Men's clothing, however, was an industry that was not stimulated by the war; at any event, not in Ohio. To understand this one must realize that the clothing industry is one that suffers readily from changes in the prosperity of the consumer. "Clothing in the bulk may be a necessity, but the garments that are actually sold include a large proportion of semiluxuries, which are cut off in time of crisis." [44] During the war people were forced to economize. Numerous campaigns were carried on to induce economy where it was not forced. People were urged to wear old clothes and to be proud of doing so. It is noted in Bradstreet's many times in the course of these two years that the buying of wearing apparel had failed to broaden in a degree commensurate with employment and record wages, presumably because of high prices dictating economies, because of economy campaigns, and because saving by small investors for the purpose of participating in the Liberty loans was quite general. Everywhere there was a turning away from luxuries and a tendency to forego anything that was not essential. Also, of course, there were many thousands of young men who had little or no use for civilian garb. For these reasons 1917 and 1918 saw greatly slackened production in men's civilian clothing.

It is true that the uniform trade partly filled the breach. But, though considerable work in the making of uniforms, overcoats, overalls, and other clothing for the Army was carried on in Ohio, the great bulk of these contracts were placed in New York, Philadelphia, and Baltimore.[45] In all the long list of war contracts of $100,000 and over placed from April 6, 1917, to June 1, 1919, covering 1,116 pages, there were only seven contracts with men's clothing houses in Ohio, and two of these were for the manufacture of canteen or breech mechanism covers. It can be assumed that Ohio did not enjoy any larger share of the clothing contracts of less than $100,000. It was stated in the Daily News Record of January 1, 1928, that little uniform work was being done in Cleveland in proportion to the contracts being executed in the New York market.[46]

Another factor that reduced employment in the clothing industries, even when there were plenty of orders, was the inability of manufacturers at times to get as much material as was needed. Firms frequently had contracts but no goods, and they were even forced to lay off workers. As an example of the inability of companies to deliver on contracts, one men's clothing house of Cleveland received on June 7, 1917, a contract of $148,665 for the making of wool service coats. Eight months later, on February 2, 1918, the greater part of the contract was canceled, leaving the net contract as amended at only $25,000.[47]

During the first half of 1919 employment in the men's clothing industry in Ohio was still below the 1914 average, although employment in the total of all wage earners in manufacturing was far above such average. The war, with its

[44] Budish, Jacob M., and Soule, George. The New Unionism in the Clothing Industry. Harcourt, Brace, and Howe. New York. 1920. p. 32.

[45] United States House of Representatives. 66th Cong., 1st and 2d sessions. Select Committee on Expenditures in the War Department. Hearings. War contracts of $100,000 and over. Serial 1, vol. 2, pp. 675–1791. Washington. 1919.

[46] Daily News Record. Jan. 1, 1918. Fairchild publications, New York.

[47] United States House of Representatives. 66th Cong., 1st and 2d sessions. Select Committee on Expenditures in the War Department. Hearings. War contracts of $100,000 and over. Serial 1, vol. 2, p. 1114. Washington. 1919.

emphasis on economy, was over, but high prices were holding down sales of clothing; merchants were slow in placing orders, anticipating price reductions; the mildest winter in years discouraged the buying of heavy winter apparel; there was a good deal of unemployment, especially in centers that had specialized in war work. Throughout the country wearing apparel was one of the least favorably situated industries as regards new business coming in.

However, from about the middle of 1919 employment in the men's clothing industry rose sharply to well above the 1914 average and remained there till December, 1920. It was remarked in Bradstreet's that consumptive demand seemed to have singled out lines that had been under the ban of war necessity and that men's and women's clothing of all kinds was leading in activity. The pent-up demand of the past years and buying by returned soldiers were incentives. There were large crop yields, sold at high prices. The country was prosperous and labor well employed. Men's clothing manufacturers of Cincinnati and Cleveland reported business very good, their only difficulty being to secure enough labor and material to fill all the orders.

At the close of 1920 and in the early part of 1921 employment in men's clothing declined again below the 1914 average. In doing so it reflected the general business depression prevailing at the time. As the chairman of the board of arbitration in the clothing industry in Chicago said in one of his decisions, "The clothing industry is a very dependent one; very dependent upon the ups and downs in the general business situation." [48]

The fact that employment in men's clothing rose again above the 1914 average by the spring of 1921 and remained at varying heights of from 20 to 40 degrees above this average during the remaining years of the series is due not so much to improved business and better demand for clothing as to conditions in the industry peculiar to Ohio.

One factor that alone accounted for much of the increase was the men's clothing firm of A. Nash Co., famed for its application of the "golden rule" policy. This establishment was said by the Amalgamated [49] to have been by all odds the most important and the largest factor in the Cincinnati market between 1920 and 1924. Organized in 1918, when it employed 29 persons, it grew by leaps and bounds until in 1925 it reached a volume of business of more than $12,000,000 and employed several thousand wage earners. The number of wage earners was said to have been about 6,000 in 1924.[50] Since the average of the total number of wage earners in the industry in Ohio in 1924 was 13,139, it can easily be seen what a determining influence the growth of this firm had upon the employment curve of the industry during these years.

Another condition responsible for much of the increase in employment from 1921 to 1924 was the fact that Cincinnati, as a clothing market, was known as the place favorable to nonunion settlement. The Amalgamated had failed to unionize the market, although it had some agreements with separate houses. The influence of the A. Nash Co. was felt here, too. The Amalgamated has said [51] that with regard to unionization Mr. Nash "maintained a policy of silence and inaction. Whatever his intentions, the leadership of his firm in the market contributed to add to the prestige of Cincinnati as a flourishing nonunion center."[52]

In 1924 the employment curve for men's clothing in Ohio declined somewhat, very much as did that for all manufacturing, influenced by the general business depression of 1924, but it still remained well above the 1914 average, due to the factors outlined.

In the course of almost every year certain seasonal variations in the curve of employment of the men's clothing industry will be noted. The spring peak is reached anywhere in the five months February to June, and the fall peak in the five months August to December. The two points of minimum employment are reached in April, July, or August and in December or January. However, it will also be noted that the seasonal variations are not sharp nor decided, sometimes being barely perceptible or conceded by other movements. This is in marked contrast to the sharp seasonal fluctuations shown in the women's clothing industry, and is an evidence of the greater regularity of employment in the manufacture of men's clothing.

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[48] Amalgamated Clothing Workers of America. Research Department. The Clothing Workers of Chicago, 1910–1922. Chicago Joint Board. 1922. p. 180.
[49] Ibid. Documentary History, 1924–1926. p. 17.
[50] The Golden Rule's Success in Business. Literary Digest. July 12, 1924. p. 30.
[51] Amalgamated Clothing Workers of America. Documentary History, 1924–1926. p. 18.
[52] In 1925, however, an agreement was effected between the Nash company and the Amalgamated. See The Amalgamated in Cincinnati: A Record of Struggle and Achievement. Cincinnati Joint Board, Amalgamated Clothing Workers of America. May, 1928. p. 102.

Perhaps the most significant thing about the trends of employment in the men's clothing industry is the degree to which they are similar for men and women. Both the long-term and seasonal trends are remarkably alike for the two sexes. The curve for the total wage earners indicates within a very few degrees the trend for each sex. It does not show the very slightly increased superiority gained by the women by the end of the 11-year period, and it does not show a somewhat more rapid and more extensive decrease among the women wage earners at the time of the depression of 1920. With these exceptions, however, it can be accepted as a remarkably accurate presentation of the situation for the two sexes.

THE WOMEN'S CLOTHING INDUSTRY

The women's clothing industry in Ohio is not so important as the men's clothing industry, but nevertheless it is an important employer of women and illustrates trends of employment for the two sexes in an industry that has very distinct seasonal problems and in which the proportionate employment of women has increased during the 11-year period.

In Ohio in 1919 the industry ranked eighteenth according to the value of its product and twentieth according to the total number of wage earners employed,[53] so it does not assume a leading place among the State's industries. From the standpoint of women, however, it has a more significant rank, for in 1924 the Ohio employment figures show that only seven of the individual manufacturing industries considered in this study employed more women workers and only three employed a larger proportion of women.

In this industry, as in the manufacture of men's clothing, the seasonal trends are somewhat modified in Ohio by local conditions that make for greater steadiness in employment. For example, in Ohio a far larger proportion of the women's clothing establishments were owned by corporations and a much higher percentage of the workers were employed in such establishments than in the United States as a whole. In 1919, 50.3 per cent of the Ohio establishments were owned by corporations and 30.3 per cent by individuals, while in the United States the figures were 21.3 per cent corporate owned and 35.5 per cent individually owned establishments. Of the wage earners in the industry in Ohio, 78.5 per cent, but in the United States only 37.5 per cent, were in the corporate-owned factories, and only 12.3 per cent in Ohio, but 24.4 per cent in the United States, were in plants owned by individuals.[54]

Since factories owned by corporations tend to be of larger size and to be governed by better accounting systems, and since greater regularity of employment is found in such establishments, the fact that Ohio has a far higher proportion of corporate-owned establishments and of workers employed in such establishments than the United States as a whole should indicate, other things being equal, that employment in the women's clothing industry is more regular in Ohio than in the country as a whole.

The proportion of workers employed by corporations is smaller in the women's clothing industry than in the men's clothing industry for the United States, namely 37.5 per cent as compared with 56.2 per cent. However, the opposite is true in Ohio, where 78.5 per cent of the wage earners making women's clothing are found in corporate-owned factories, against 66.9 per cent of the wage earners making men's clothing.[55]

Another factor making for greater steadiness of employment in the manufacture of women's clothing in Ohio is the larger size of the establishments. In 1924 the small shop dominated the women's clothing industry as compared with the period 10 years earlier. In size of establishment the industry had become decentralized and the small shop had gained on the large shop in a striking degree. This was in direct contrast to the tendency in the men's clothing field, where the average size of establishment increased during these years. Although there was a distinct decrease in size of establishment in Ohio as well as in the rest of the country during this period, the average number of employees per establishment remained considerably higher than in other States.

In Ohio the average number of wage earners to an establishment in the industry, found by dividing the total average number of wage earners by number of establishments, decreased from 58 in 1914 to 45 in 1923; in New York State it decreased

[53] U. S. Bureau of the Census. Fourteenth Census: 1920, vol. 9, Manufactures, 1919. p. 1142.
[54] Ibid., vol. 8, p. 110, and vol. 9, p. 1160.
[55] Idem.

from 28 to 16; in Massachusetts, from 30 to 19; in Illinois, from 34 to 20; in Pennsylvania, from 36 to 24.[56]

The trend toward decentralization in the industry, in marked contrast to the trend in industry generally, is explained by the growth of submanufacturing and the fact that there were practically no changes in the technical conditions of manufacture from 1914 to 1924. Most important of all, the experiments made in scientific management and in efficiency schemes have shown that the large shop based on division of labor becomes merely a collection of small shops under one roof and that the advantages of such a large shop can be offset by the small shops in a number of ways.[57]

The encroachment of the small shop upon the larger one in the various branches of the industry has gone the furthest in the older centers of the industry, namely, New York, Chicago, Philadephia, Boston, Cleveland, and Baltimore. In the smaller communities to which the various branches of the industry migrated between 1914 and 1924 the trend was to establish medium-sized and at times even fairly large shops.[58] It will be noted from the census figures quoted that from the beginning to the end of the period 1914–1924 Ohio had women's clothing establishments of larger average size than had the other States of importance in the industry. The fact of the superior size of Ohio's establishments is brought out by other census statistics, as follows: Ohio had in 1914 a smaller proportion of women's clothing establishments employing as few as 50 wage earners than had the United States as a whole, namely 75.9 per cent against 84.8 per cent; it had a larger proportion of such establishments employing 51 to 250 wage earners than had the United States as a whole, namely 19.4 per cent against 14.3; it had a larger proportion employing 251 to 1,000 wage earners than had the United States, namely 4.1 per cent against 0.9 per cent. Also, Ohio had one establishment employing over 1,000 wage earners, and as only one establishment employing over 1,000 wage earners was reported for the United States, that one must have been in Ohio.[59]

In Cleveland, though the average number of workers per cloak-and-suit shop decreased from 126 in 1914 to 66 in 1921, it still remained over three times greater than the average for New York, which was 19 workers per cloak-and-suit shop in 1921.[60]

About one-fifth of the cloak-and-suit houses of Cleveland employed in 1918 about two-thirds of the total workers in that branch of the industry, indicating a considerable degree of concentration.[61]

Ohio had, in 1923, a much larger proportion of regular factories and a much smaller proportion of contract shops than had the United States as a whole. Of the women's clothing establishments in Ohio 92 per cent were regular factories, whereas of women's clothing establishments in the United States only 77.4 per cent were regular factories. In Ohio only 8 per cent of the establishments were contract shops, whereas in the United States 22.6 per cent were contract shops.[62]

The final factor that should be considered in determining to what extent the employment fluctuations in a State or locality are typical of a broader field is the extent to which the industry is organized and operating under trade-union agreements.

It is in the clothing industry that perhaps the most conspicuous examples are found of trade agreements tending to regularize wages and employment and it is quite possible that in a well-organized locality trends of employment may appear far less fluctuating and seasonal than would be the case where no such trade agreements exist.

The International Ladies' Garment Workers' Union is the one great union exercising jurisdiction over the women's clothing industry.

The women's dress trade, in general, using lighter materials and requiring less skilled work, employs great numbers of inexperienced girls and has been very largely unorganized, even in New York City where the union is powerful. Women's coats and suits, however, require expert tailoring and are made very largely by men.

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[56] U. S. Bureau of the Census. Census of Manufactures: 1914, vol. 2, p. 189; Biennial Census of Manufactures: 1923, p. 303.
[57] Levine, Louis. The Women's Garment Workers. B. W. Huebsch, Inc. New York. 1924. p. 415.
[58] Ibid., p. 394.
[59] U. S. Bureau of the Census. Census of Manufactures: 1914, vol. 1, p. 1174, and vol. 2, p. 177.
[60] Levine, Louis. The Women's Garment Workers. B. W. Huebsch, Inc. New York. 1924. p. 395.
[61] Emmet, Boris. Labor Survey of Cleveland Cloak Industry. U. S. Bureau of Labor Statistics. Monthly Labor Review, August, 1918, p. 229.
[62] U. S. Bureau of the Census. Biennial Census of Manufactures: 1923, pp. 297, 304.

The cloak-and-suit industry had been highly organized, and the union controlled the trade to a very large extent in Cleveland, Cincinnati, and Toledo.[63] In Cincinnati, effective collective bargaining on a large scale existed in the women's ready-to-wear industries. In 1918 more than two-thirds of the cloak and suit workers of the city were members of the union and worked under union conditions. They were organized in three locals of the International, and all trade agreements with employers were entered into in the name of the joint board that connected the locals.

There was no unionism to speak of in the house-dress, kimono, and white-goods trade. The branch last named, however, was of comparatively little importance, since of the 1,600 garment workers estimated to be in Cincinnati in 1918, about 1,200 were in cloaks, suits, and skirts and only 400 in house dresses, kimonos, and white goods.[64]

In Cleveland, the International Ladies' Garment Workers' Union, beginning with an unsuccessful strike in 1911, attempted for several years to build up an organization but made little progress. In the summer of 1918 a strike was called, the demands including a higher wage and machinery for adjusting disputes. As some of the firms affected were engaged on Army contracts, Secretary of War Baker intervened, and the questions at issue were submitted to a board of referees. The awards of the referees were observed down to December 24, 1919, when an agreement was signed by the Cleveland Garment Manufacturers' Association, the International Ladies' Garment Workers' Union, and the joint board of six locals, and the board of referees. The agreement was to run for two years. It was renewed in December of the years 1921, 1922, and 1923.[65] Thus the women's clothing market in Cleveland was nonunion until the close of 1919, after which it was for the most part a union market, though there were some women's clothing firms, including the largest, that did not sign the agreement with the union.

The agreement entered into on December 24, 1919, between the Cleveland Manufacturers' Association and the Cleveland joint board of locals of the International Ladies' Garment Workers contained several new and unusual features. In fact, the agreement marked a revolution in the relations of Cleveland manufacturers and union members. The new understanding was well expressed in the preamble of the agreement:

> In view of their primary responsibility to the consuming public, workers and owners are jointly and separately responsible for the cost and quality of the service rendered. It is agreed that cooperation and mutual helpfulness are the basis of right and progressive industrial relations, and that intimidation and coercion have no proper place in American industry.[66]

Under the agreement a permanent board of referees was established, with power to adjust matters that could not be settled between the parties, to provide periodical wage scales for the industry, and to see that the agreement was fairly observed. The agreement contained many customary arrangements in the industry, such as the following: Inside subcontracting was eliminated, each worker to be employed directly by the firm; workers in outside shops were to receive union wages; during slack periods work was to be distributed among all workers as equitably as possible; strikes and lockouts during the agreement were forbidden unless authorized by the referees.[67]

The most serious friction between employers and employees in the women's clothing industry is caused by the alternation of busy and slack seasons. In the slack season it is thought to be in the employer's interest to lay off as many as possible; in the busy season it is sometimes said to be to the interest of workers to decrease their rate of production as much as possible to keep them at work for a longer period. In an effort to eliminate this seasonal difficulty, week work was to be introduced into the shops under the agreement, but week work that was based on "fair and accurate" standards of production. The distinctive feature of the agreement was the provision that the union and the association should jointly engage and pay industrial engineers to establish by means of time studies fair and accurate standards of average production for a minimum weekly wage. Each worker was to receive additional pay for every unit he or she produced in excess of the minimum standard.[68]

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[63] National Industrial Conference Board. Experience with Trade-Union Agreements—Clothing Industries. Research Report No. 38. June, 1921. p. 96.

[64] Emmet, Boris. Trade Agreements in the Women's Clothing Industries of Cincinnati and St. Louis, U. S. Bureau of Labor Statistics. Monthly Labor Review, March, 1918, p. 554.

[65] National Industrial Conference Board. Experience with Trade-Union Agreements—Clothing Industries. Research Report No. 38. June, 1921. pp. 90-91. Also, Levine, Louis. The Women's Garment Workers. 1924.

[66] Mack, William J. Industrial Peace in Cleveland. The Nation. Feb. 16, 1921, p. 262. New York.

[67] U. S. Bureau of Labor Statistics. Adjustment of Labor Disputes in the Garment Industries in Cleveland. Monthly Labor Review, July, 1920, p. 56.

[68] Mack, William J. Industrial Peace in Cleveland. The Nation. Feb. 16, 1921, p. 263. New York.

In the two years that followed, the distinctive features of the agreement were developed and put into operation. The report of the industrial engineers was submitted in March, 1920, and in June of that year one of the plans of the engineers was put into operation. In July a joint bureau of standards was organized, maintained by the manufacturers and the workers.

At a hearing in April, 1921, a scheme for continuity of employment in the industry was adopted by the board of referees, and became the first experiment of its kind in America. The board declared that the time had come to "break up one of the vicious features of seasonal industry by providing for as much continuity of employment as possible."

Under the plan adopted, all regular workers were guaranteed 41 weeks of employment during the year. If a worker failed to receive such employment he was entitled to two-thirds of his minimum weekly wage for every week during which he was unemployed. The employer's liability was limited to 7½ per cent of his direct labor cost for the guaranty period. To provide for the payment of unemployment benefits, each employer was to deposit each week a sum equal to 7½ per cent of his pay roll for the week. All the guaranty funds were placed in the custody of the impartial chairman.[69]

With the adoption of this scheme the essential features of the Cleveland plan were complete. After six months' operation of the employment-guaranty plan it was said that in four plants the full 20 weeks' employment guaranteed was provided and the fund was returned to the employers. A number of establishments saved the greater part of their guaranty deposit. In four plants the entire fund was consumed and in two of these the fund was insufficient and a deficit was incurred.[70] According to the manufacturers' association—

> The result of the plan has, without any doubt, been an increase of work in the shops. It is true that the work has often been increased at a loss to the employer and it is a question whether some manufacturers would not rather take a loss through the employment fund. However, the incentive is direct and appealing, and appears to be the only way in which the evil of unemployment can be eradicated or limited in this seasonal industry.[71]

The agreement was renewed in 1921, 1922, and 1923, but only after some friction and maneuvering and due to the patient efforts of the board of referees. In May, 1923, the workers were granted an increase in wages. But in December, 1923, the board reduced the obligations of the employers. The guaranteed period of employment was reduced to 40 weeks, and the compensation of the workers during the time of unemployment was reduced from two-thirds to one-half of the minimum weekly wage. Employers were to give a surety bond to the board of referees each week for an amount equal to 10 per cent of their direct labor pay roll. The worker was not to draw on the fund until he had accumulated the full 12 weeks of permissible unemployment, but during his lay-off he could work at another job and still draw his unemployment pay. Each employer was permitted to employ once in each of the two seasons, for a period not exceeding four weeks, additional "casual" workers not to exceed 20 per cent of the workers in any department of his plant.

Also under the agreement going into effect on January 1, 1924, the joint board of standards was abolished and thus was admitted to have failed of its purpose. The failure was due to several causes, one of them being the personal element, in that the time-study men were young and inexperienced. In general, the workers felt that the standards were neither fair nor accurate and that the machinery was unduly influenced by the employers. Nevertheless, the idea of maintaining production standards under joint control of the workers and the employers still remained part of the working agreement in Cleveland.

As to the employment-guaranty feature of the Cleveland plan, Dr. Levine believes it has given the most satisfactory results.

> This scheme was prompted by the two-fold purpose of making the industry partly responsible for the enforced idleness of the workers and of supplying an incentive to the employers to reduce seasonality of employment. Both purposes have been achieved in marked measure. The employers have devised various ways of keeping their employees working to the fullest extent possible. They have increased their sales force, and have cut garments ahead of sales. They have added other lines of work and have accepted orders to be made up in idle time without any profit and at times even at a slight loss. * * *
>
> The Cleveland plan has given the workers and the employers in the Cleveland garment market six years of unbroken peace. In the words of the board of referees, it has passed out of the period of experiment.

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[69] Levine, Louis. The Women's Garment Workers. B. W. Huebsch, Inc. New York. 1924. pp. 370–372.

[70] U. S. Bureau of Labor Statistics. Experience Under Employment Guaranty in Cleveland Garment Industry. Monthly Labor Review. August, 1922, pp. 365–368.

[71] Ibid., p. 368.

Still, its future depends on many uncertain factors, * * *. If the Cleveland market should continue to shrink in size and importance, it may soon not have a wide enough basis for the maintenance of the "plan". [72]

In considering what effect the operation of the Cleveland plan might have in reducing irregularity of employment as shown by the Ohio employment figures, it must be remembered that the number of wage earners who were directly or indirectly affected by the Cleveland plan was only about 3,000, while the total average number of wage earners in the industry reported to the Ohio Division of Labor Statistics was 6,091 in 1921, 5,671 in 1922, 5,883 in 1923, and 4,748 in 1924. The largest plant in Cleveland did not sign the agreement. The number of workers employed by the 28 firms that signed the agreement with the union in 1919 was about 3,000, but this decreased to about 2,000 between 1919 and 1924.[73]

In spite of the fact that the agreement under the Cleveland plan covered around 45 per cent of the workers reported by the Ohio employment figures, the curves of employment do not show that the seasonal trend in the industry was very greatly diminished.

In 1914 there were two periods of depression, during which the number of wage earners was reduced 10.9 and 21.9 points, respectively, below the average of that year, while the peak of employment in February was 16.4 points above the yearly average and in August it was 7.8 points above that figure.

During 1921, 1922, 1923, and 1924 such peaks and depressions were somewhat lessened but not eliminated. By 1924 the numbers for the times of greatest employment were increased only 12.6 and 2.8 points above the average for the year, while for the slack periods the numbers declined 6 and 17.6 points below such average.

The following tabulation shows, for the two periods of greatest and least employment, the deviation from the average for the year.

High and low employment in women's clothing

[Average for the year equals 100]

1914	1915	1916 and 1917	1918	1919	1920	1921	1922	1923	1924
116.4	107.1	(1)	107.4	99.6	116.7	108.6	106.8	106.9	112.6
89.1	91.0	(1)	97.1	90.5	98.3	101.8	94.0	101.5	94.0
107.8	107.3	(1)	108.1	110.4	100.5	109.6	104.8	108.5	102.8
78.1	88.3	(1)	88.3	95.5	71.0	83.9	92.0	82.4	82.4

[1] Figures not available.

It is evident from this tabulation that more detailed employment figures would be needed if the exact effect of this agreement were to be measured. In spite of the fact that the majority of workers affected by this agreement were men, and although the Ohio employment figures show a considerable degree of seasonal fluctuation, the curves indicate a great similarity in the seasonal trends for the two sexes. From this standpoint the total figures seem to give a very reliable indication of the trend for each sex.

But the total figures do not indicate a conspicuous change that had come about in the employment of women in this industry. In Ohio, from 1914 to 1924, the proportion of women employed in the women's clothing industry showed a distinct tendency to increase. The average proportion of women in 1924 was 73.4 per cent, 11.6 points higher than the proportion in 1914, which was 61.8 per cent. An increase was recorded in each year of the series (1916 and 1917 not being reported) except 1920 and 1924.

There is no evidence that the war and the drafting of men was responsible for any of the increase in the proportion of woman labor. As already stated, figures for 1916 and 1917 are lacking, but in 1918, the year in which the greatest substitution of women for men in factories took place, the proportion of women was very little higher than in 1915. In 1918 the average for women was 67.4 per cent of the total, only nine-tenths of a point higher than in 1915, three years previous.

[72] Levine, Louis. The Women's Garment Workers. B. W. Huebsch Inc., New York. 1924. pp. 372-380.

[73] Ibid., p. 374.

This was not so large an increase as was usually shown from year to year throughout the rest of the period. And 1919, the year of demobilization and the return of men to industry, showed an increase of 1.8 points over 1918 in the percentage of women employed. Furthermore, the average number of both men and women workers was lower in 1918 than in 1915. It may be concluded that war conditions caused no increase in the proportion of women employed in the industry and may even have contributed to the decline in their actual numbers, although a decline in number of workers was a continuing tendency in the women's clothing trade. This conclusion is in harmony with the recognized fact that the trend of woman labor during the war was away from the older food and fabric industries to the newer war-implement industries.

During the first part of the period under discussion, from 1914 to 1920, the percentage of women employed in the manufacture of women's clothing was lower than the percentage in the manufacture of men's clothing. But, with the tendencies noted for women wage earners to increase proportionately in the women's clothing industry and to remain at a more or less fixed proportion in the men's clothing industry, the average proportion of women employed became very nearly identical for the two industries in 1921: It was 71 per cent for women's clothing and 71.2 per cent for men's clothing. After that, from 1922 to 1924, with the same tendencies continuing, a higher percentage of women were engaged in the making of women's clothing than of men's.

An explanation that may account for the lower proportion of women in women's clothing during the earlier years of the period is that the making of men's garments was more fully standardized and subject to fewer changes than the making of women's garments, with the result that more women could be used to advantage; and that styles in women's garments were more changeable and their manufacture not so routine in nature, with the result that fewer women could be used than in the older and more stable branch of the work.[74] The increased proportion from 1922 to 1924 of women engaged in making women's clothing is believed to be largely due to a trend toward the making of lower priced garments in Ohio, lower priced garments allowing greater standardization.

Although the long-term trend for the men and women seems to have been slightly different, resulting in an increased employment of women in the later years, there is only one time during the entire period when the trends for the two sexes appear very different. This was during the last part of 1920, when women's employment decreased more rapidly, and then in the first half of 1921 women increased more rapidly and did not experience the seasonal depression that occurred for men. Obviously this was the result of the business depression that occurred during those years. This depression apparently affected the women's-clothing industry a few weeks earlier than the men's clothing industry, but the more rapid decline of women was typical of both. In the recovery from the depression the women's curve quickly resumed its normal position in relation to the men's in both industries.

On the whole, although no very extensive deviations from the total curve occurred for either sex, differences in trend were somewhat more marked in women's than in men's clothing and very much more marked than in all textile manufacturing.

Hosiery and knit goods.

A third group of industries classified as textiles in which women form a very important proportion of the wage earners is the manufacture of hosiery and knit goods. Only two of the industrial groups for which the Ohio employment figures were secured (cloth gloves and cigars and cigarettes) showed a proportion of women wage earners larger than the 76.6 per cent they formed of the wage earners in hosiery and knit goods.

In this industry, the curve of the total wage earners follows more closely the trend for women than the trend for men. In fact, the curve for the total can be considered to be accurately representative of the trends and fluctuations of women's employment throughout the 11-year period. This is due, of course, to the great numerical superiority of women among the wage earners. The men's curve does not deviate very greatly from the curve for the total but shows certain minor differences.

Periods of depression apparently hit men's employment somewhat less severely than they did women's. This is probably because, in this industry, many of the men's occupations might be classed almost as part of the "overhead." In

[74] Bryner, Edna. The Garment Trades. Survey Committee of the Cleveland Foundation. Cleveland, Ohio. 1916. p. 19.

periods of depression work usually can be reduced easily by laying off the women, but the men, being already employed practically to the minimum extent, can not be let out without a greater dislocation of the plant.

Women constituted the major part of the working force, but in all the years since 1914 they formed a slightly smaller percentage of the total than they did in that year. In 1914 women were 80.8 per cent of all workers, on the average, while in 1924, 76.6 per cent of the employees were women. This probably is due to the increased employment of men on full-fashioned knitting machines.

Cloth gloves.

Of the industries studied under the textile classification, the group that employed the largest proportion of women in 1924 (86.5 per cent) was the manufacture of cloth gloves. Although the number of women employed was not very large (2,017 was the average for 1924), in no other industrial group for which figures were obtained was there so great a proportion of women among the wage earners. This industrial group, therefore, offers a conspicuous example of the validity of total employment figures as an indication of trends for women when women are in the majority among the employees. It is evident from a study of the employment curves for the seven years (from 1918) for which figures were obtainable, that the curve for the total number of wage earners is almost identical with that for the women only. The curves showing the fluctuations within each year indicate even more strongly than in the manufacture of hosiery that women's employment is more sensitive than men's. Apparently women are taken on more rapidly during periods of rising employment and laid off more rapidly when employment is decreasing. This probably is due—also as in hosiery manufacturing—to the fact that this is a woman's industry and men are employed to a minimum extent at all times, so that reductions in the staff of men are not made so easily as are reductions in the women's end of the work. During the entire 7-year period, apparently, there has been little permanent change in the relative importance of the two sexes, although during the period of rising employment in 1919 and 1920 the men's index increased slightly more than the women's, and in 1922 and 1923 the increases for the men lagged a little behind those of the women. On the whole, however, the developments were very similar for men and women. Unfortunately, the figures for this industry were not procurable before 1918, so the effect of the war on the relative trends of the two sexes can not be estimated. The effect of the depression of 1920–21, however, is indicated in the curves. Apparently this depression hit cloth glove manufacturing a few months later than hosiery, and more than half a year later than the manufacture of women's clothing. In fact, the beginning of the depression in the manufacture of cloth gloves coincides more nearly with the depression in iron and steel manufacturing than with the other textile groups for which figures were secured. The fact that cloth gloves are work gloves, used by trainmen and men in various forms of heavy manual work, explains this similarity in trend between the manufacture of cloth gloves and that of iron and steel.

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[Any of these bulletins still available will be sent free of charge upon request]

No. 1. Proposed Employment of Women During the War in the Industries of Niagara Falls, N. Y. 16 pp. 1918.
No. 2. Labor Laws for Women in Industry in Indiana. 29 pp. 1919.
No. 3. Standards for the Employment of Women in Industry. 8 pp. Third ed., 1921.
No. 4. Wages of Candy Makers in Philadelphia in 1919. 46 pp. 1919.
*No. 5. The Eight-Hour Day in Federal and State Legislation. 19 pp. 1919.
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No. 7. Night Work Laws in the United States. (1919), 4 pp. 1920.
*No. 8. Women in the Government Service. 37 pp. 1920.
*No. 9. Home Work in Bridgeport, Conn. 35 pp. 1920.
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No. 17. Women's Wages in Kansas. 104 pp. 1921.
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No. 19. Iowa Women in Industry. 73 pp. 1922.
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*No. 22. Women in Georgia Industries. 89 pp. 1922.
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No. 34. Women in Alabama Industries. 86 pp. 1924.
No. 35. Women in Missouri Industries. 127 pp. 1924.
No. 36. Radio Talks on Women in Industry. 34 pp. 1924.
No. 37. Women in New Jersey Industries. 99 pp. 1924.
No. 38. Married Women in Industry. 8 pp. 1924.
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No. 68. Summary: The Effects of Labor Legislation on the Employment Opportunities of Women. (Reprint of Chapter II of Bulletin 65.) 22 pp. 1928.
No. 69. Causes of Absence for Men and for Women in Four Cotton Mills. 24 pp. 1929.
No. 70. Negro Women in Industry in 15 States. 74 pp. 1929.
No. 71. Selected References on the Health of Women in Industry. 8 pp. 1929.
No. 72. Conditions of Work in Spin Rooms. 41 pp. 1929.
No. 73. Variations in Employment Trends of Women and Men. 143 pp. 1929.
No. 74. The Immigrant Woman and Her Job. 175 pp. 1929.
No. 75. What the Wage-Earning Woman Contributes to Family Support. 20 pp. 1929.
No. 76. Women in 5-and-10-Cent Stores and Limited-Price Chain Department Stores. 58 pp. 1929.
No. 77. A Study of Two Groups of Denver Married Women Applying for Jobs. 10 pp. 1929.
Annual reports of the Director, 1919*, 1920*, 1921*, 1922, 1923, 1924*, 1925, 1926, 1927*, 1928*, 1929.

* Supply exhausted.

U. S. DEPARTMENT OF LABOR

WOMEN'S BUREAU

WASHINGTON, D. C.

CHARTS TO ACCOMPANY BULLETIN 73, VARIATIONS IN EMPLOYMENT TRENDS OF WOMEN AND MEN

In the process of reproduction, slight variations have developed in the width of the charts. The bureau believes that these discrepancies do not impair the value of the charts to a degree that makes it necessary to incur the expense of their reprinting.

CHART 1.—ALL EMPLOYEES: TREND OF EMPLOYMENT IN **ALL INDUSTRIES,** OHIO, 1914 TO 1924, BY SEX

[Excludes mines and quarries and interstate railroads]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

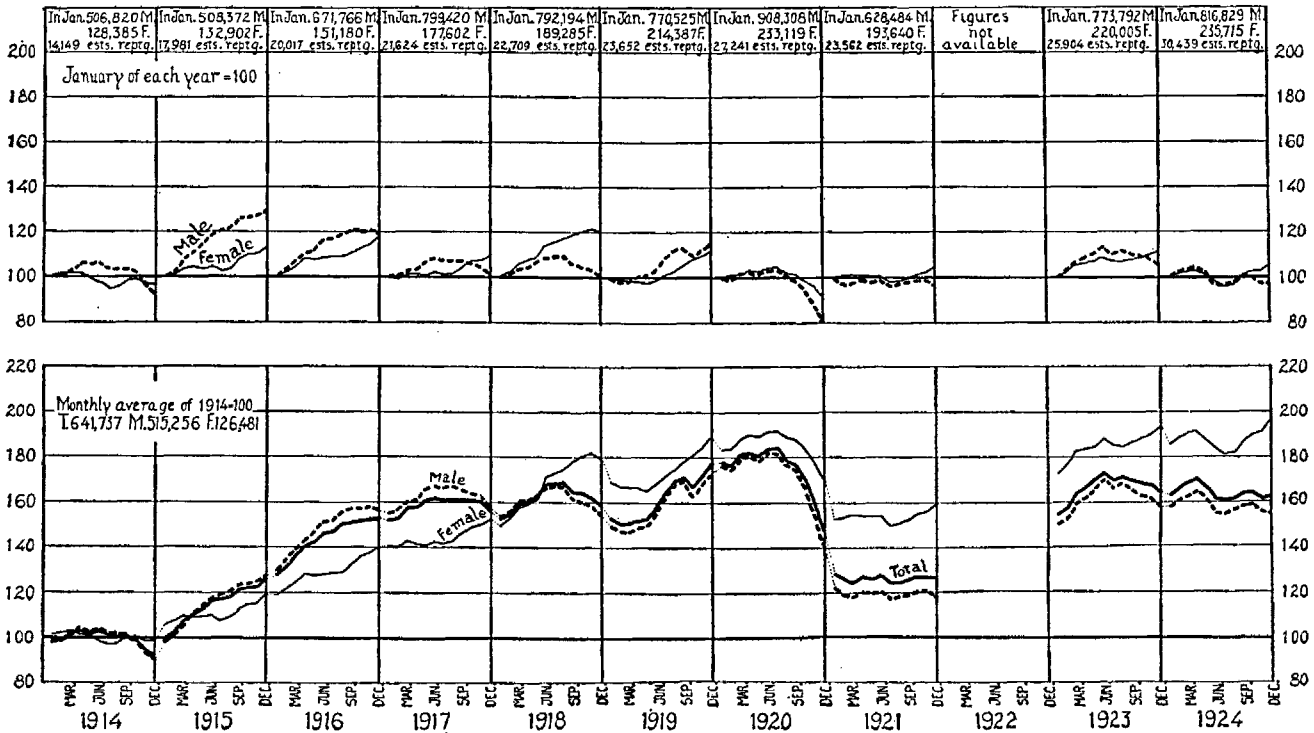

CHART 2.—WAGE EARNERS: TREND OF EMPLOYMENT IN **ALL INDUSTRIES**, OHIO, 1914 TO 1924, BY SEX

[Excludes mines and quarries and interstate railroads]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

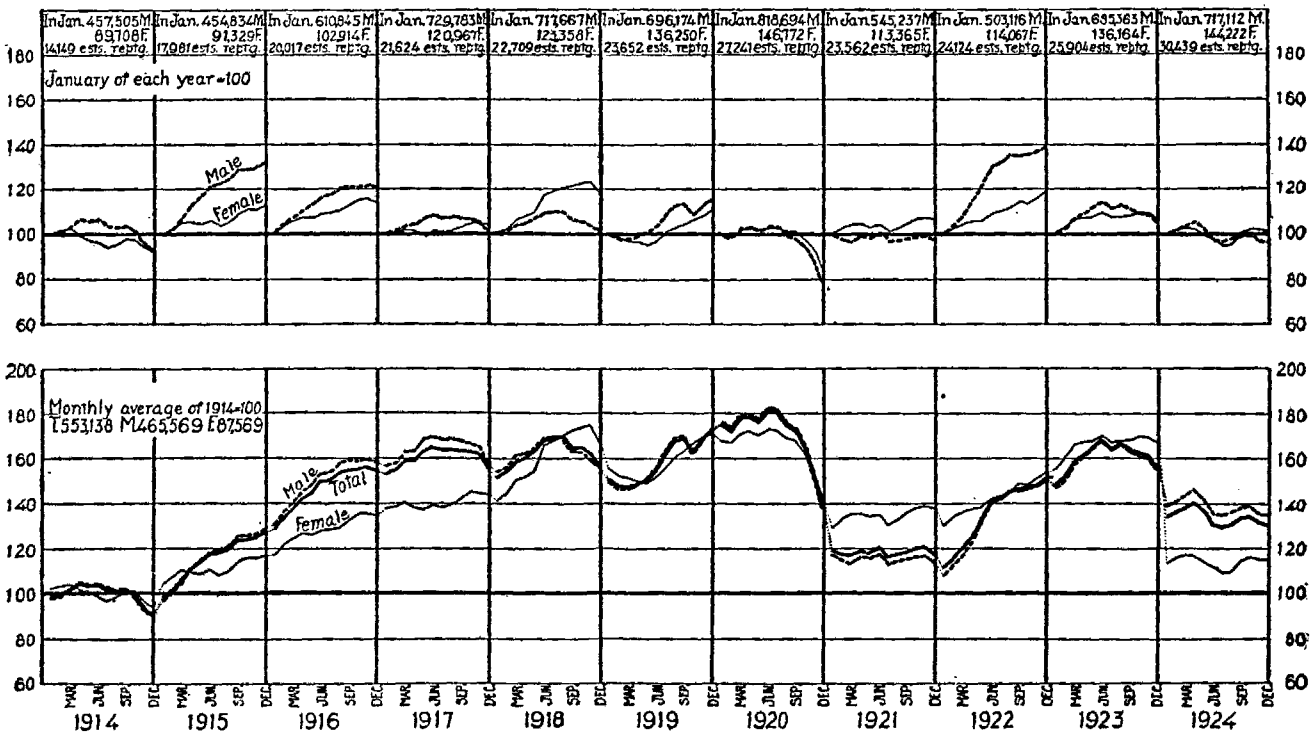

CHART 3a.—WAGE EARNERS: TREND OF EMPLOYMENT IN **AGRICULTURE**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

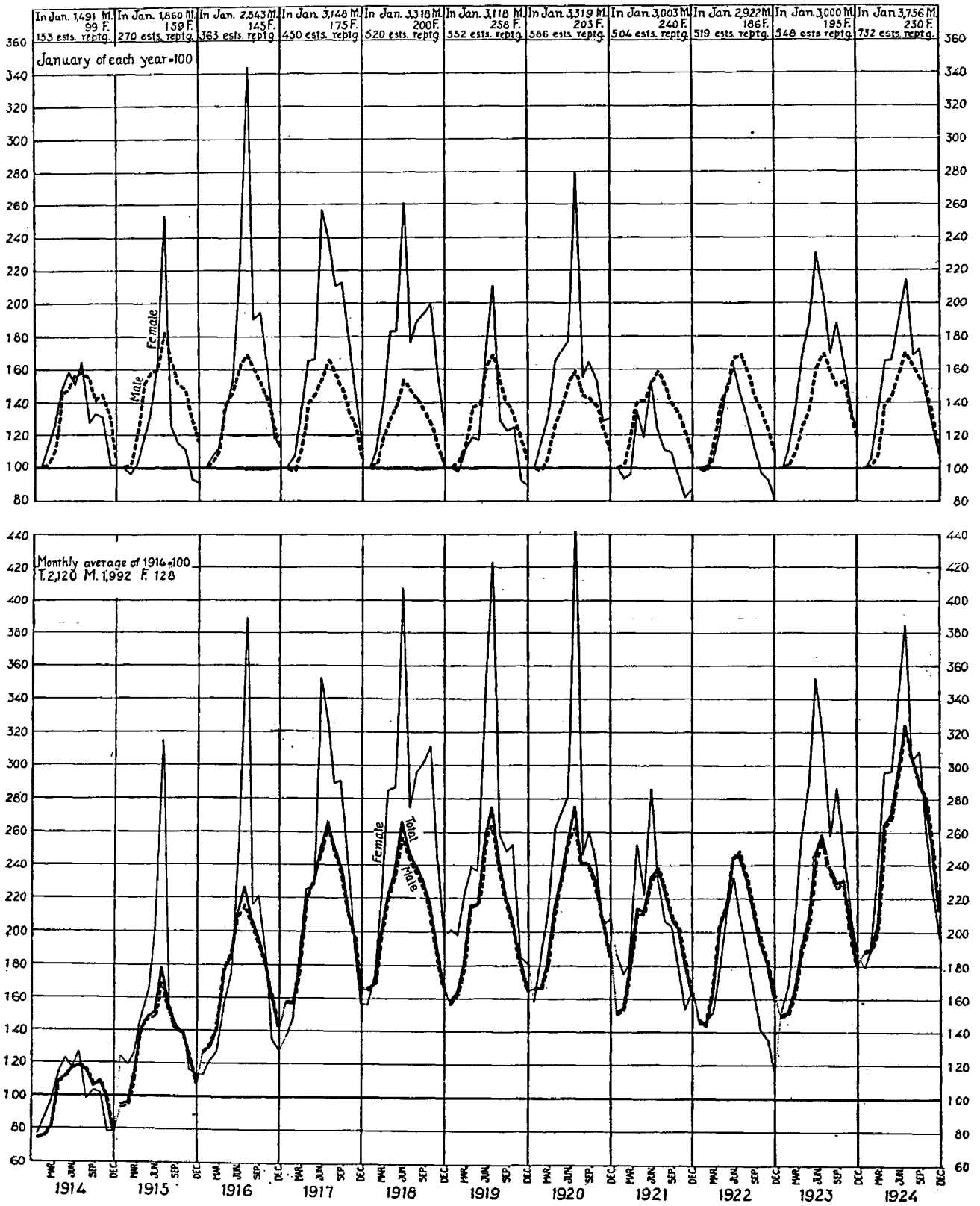

CHART 3b.—WAGE EARNERS: TREND OF EMPLOYMENT IN AGRICULTURE, OHIO, 1914 TO 1924, BY SEX

[Based on the same figures as Chart No. 3a but smoothed by a 12-month moving average, centered at the middle of each month]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

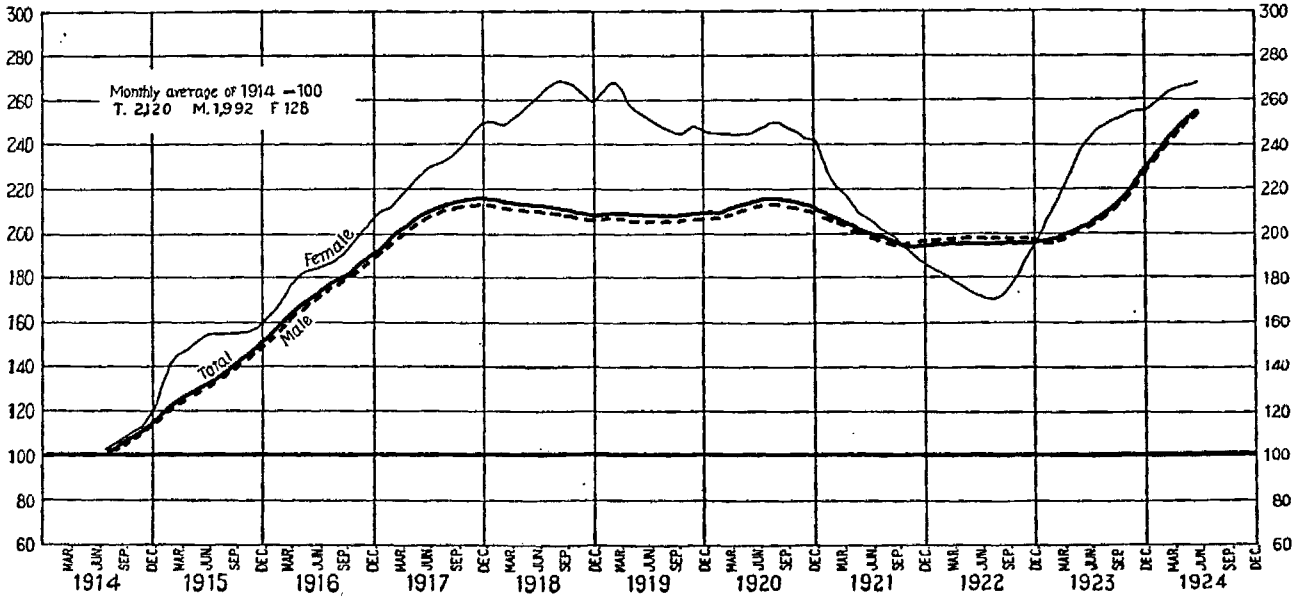

CHART 4.—WAGE EARNERS: TREND OF EMPLOYMENT IN **ALL MANUFACTURES**, OHIO, 1914 TO 1924, BY SEX

[Excludes manufacturing by railroad companies]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

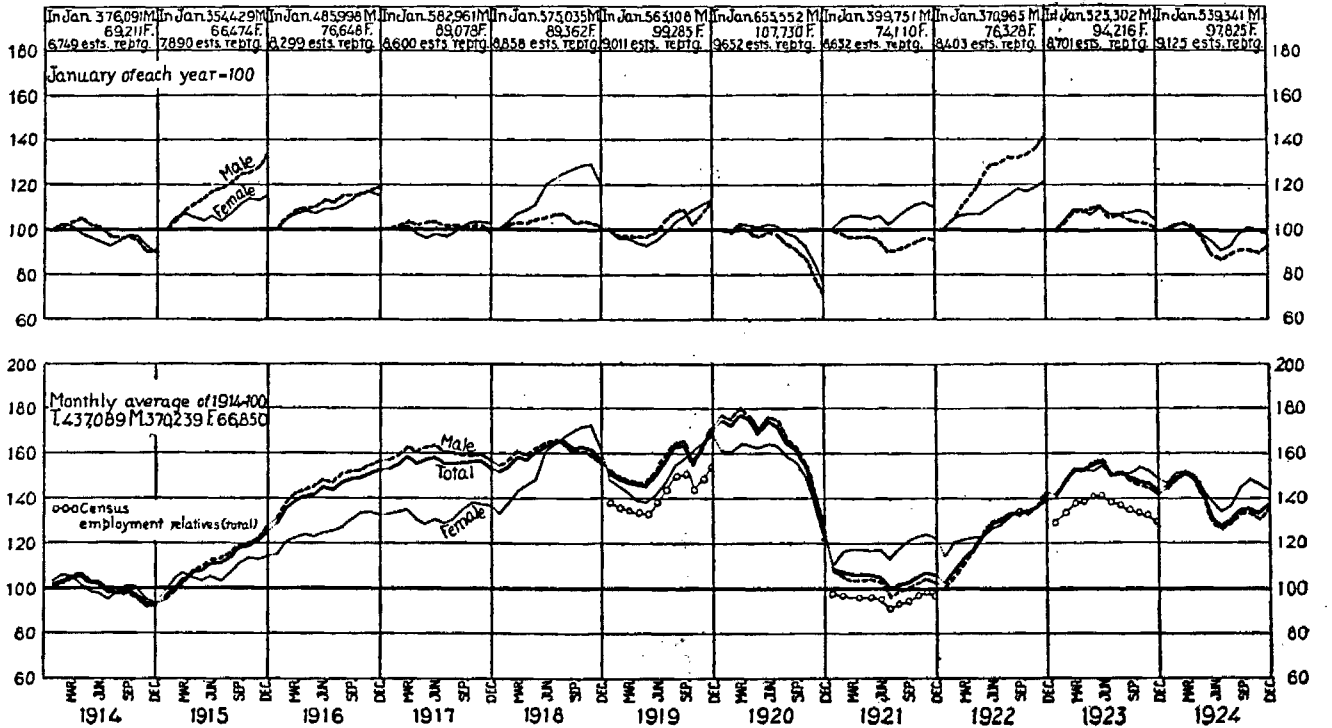

CHART 5.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF CHEMICALS AND ALLIED PRODUCTS,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

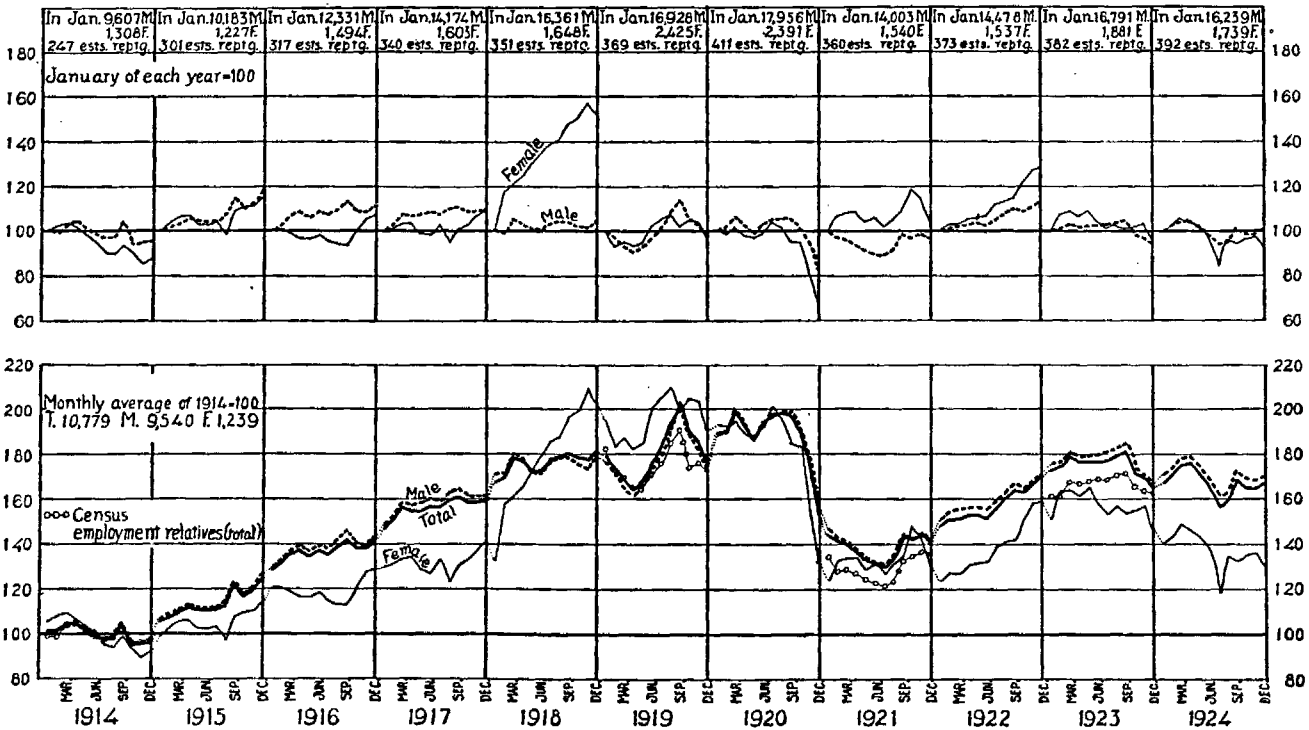

CHART 6.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF IRON AND STEEL AND THEIR PRODUCTS,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

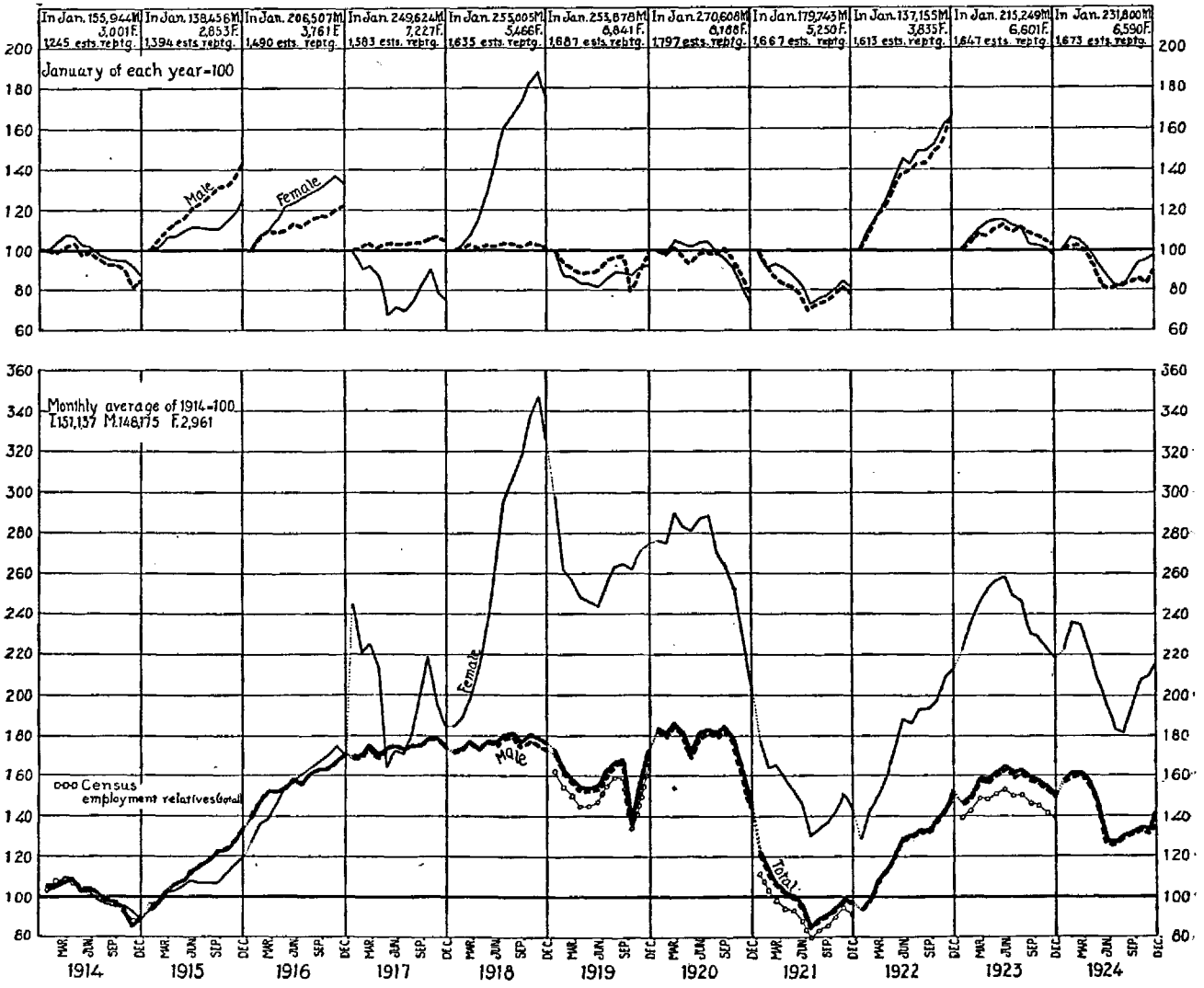

CHART 7.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF IRON AND STEEL—BOLTS, NUTS, WASHERS, AND RIVETS, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

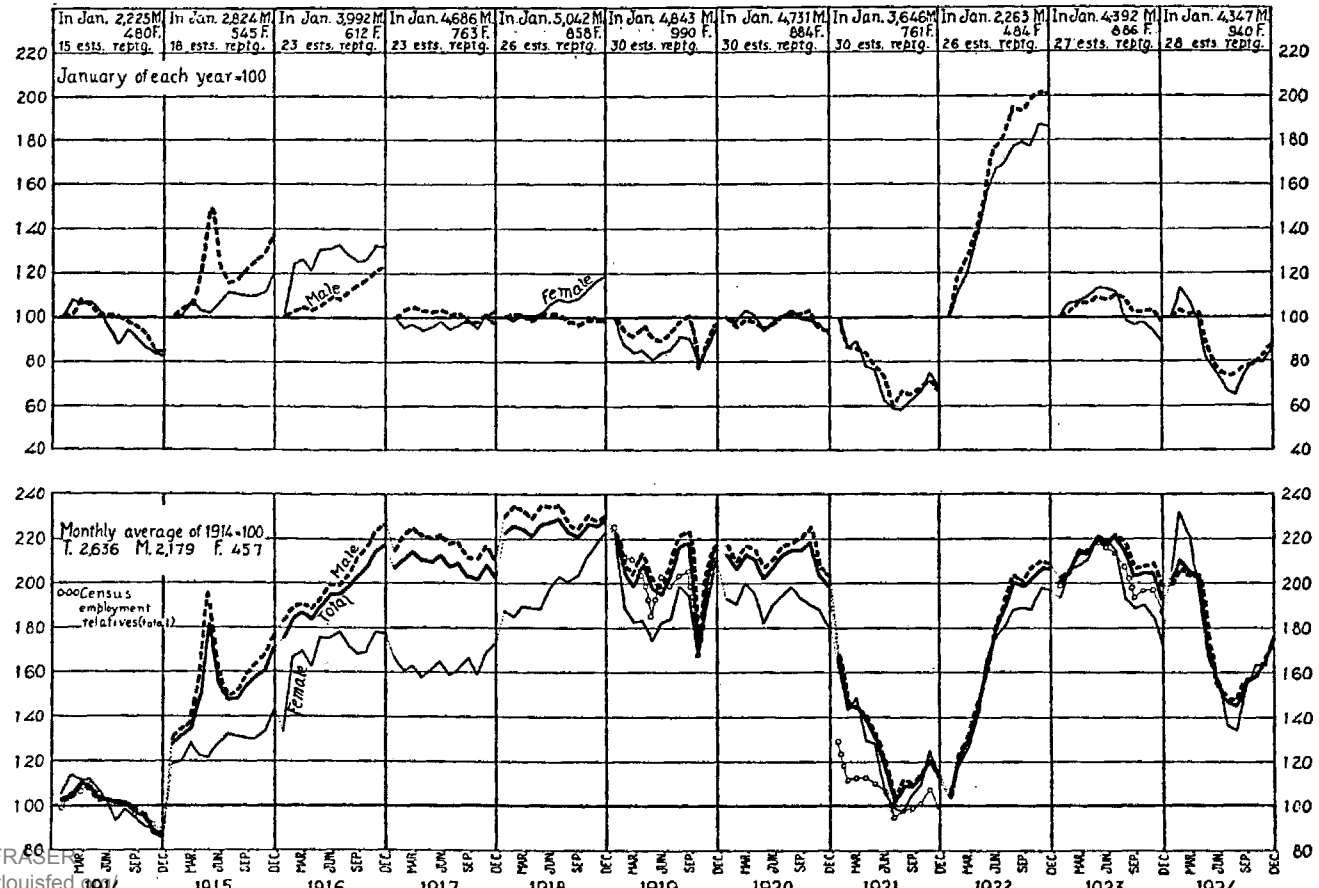

CHART 8.—WAGE EARNERS TREND OF EMPLOYMENT IN **MANUFACTURE OF IRON AND STEEL—SCREWS, MACHINE AND WOOD,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

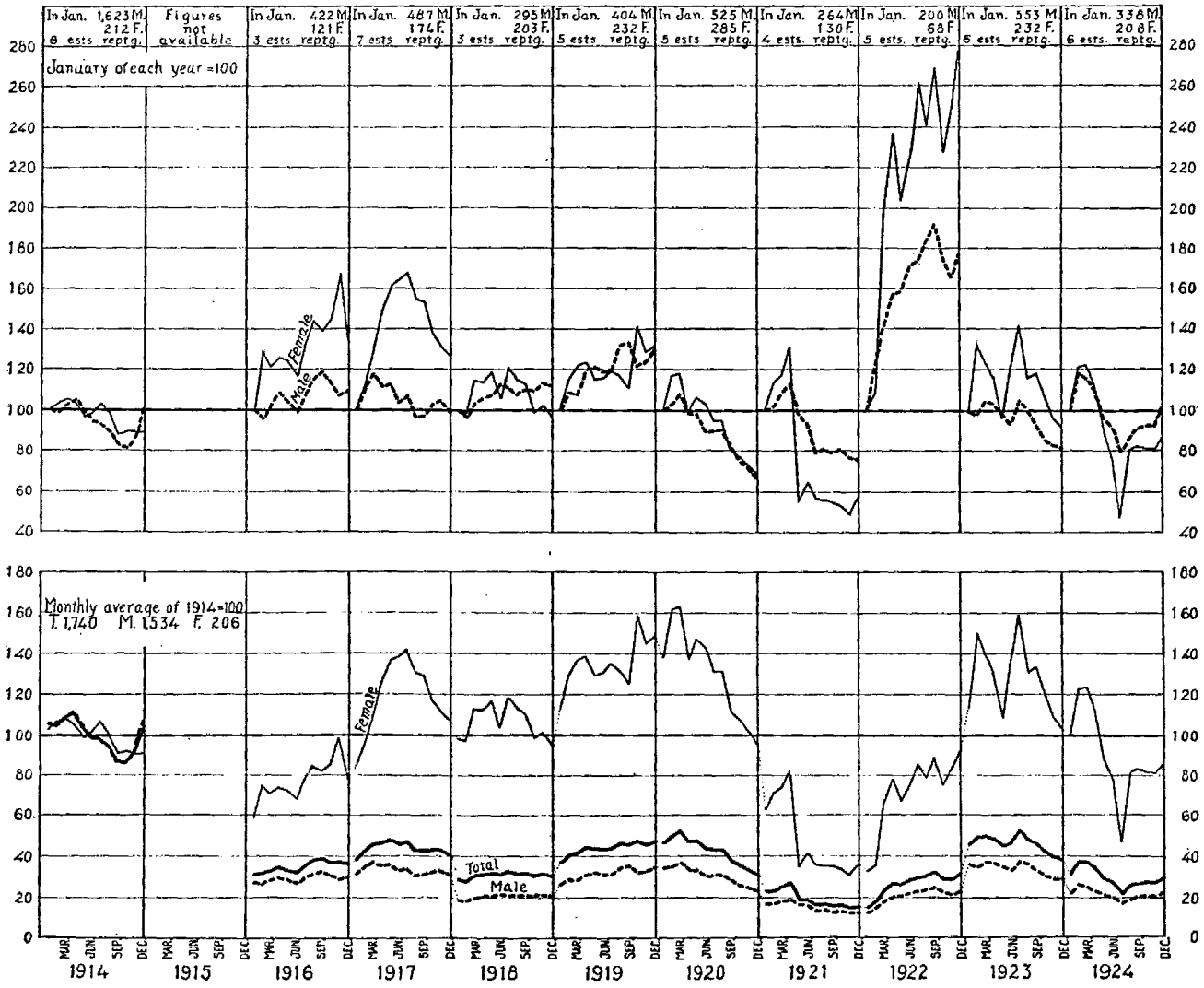

CHART 9.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF FOOD AND KINDRED PRODUCTS,** OHIO, 1914 TO 1924, by SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

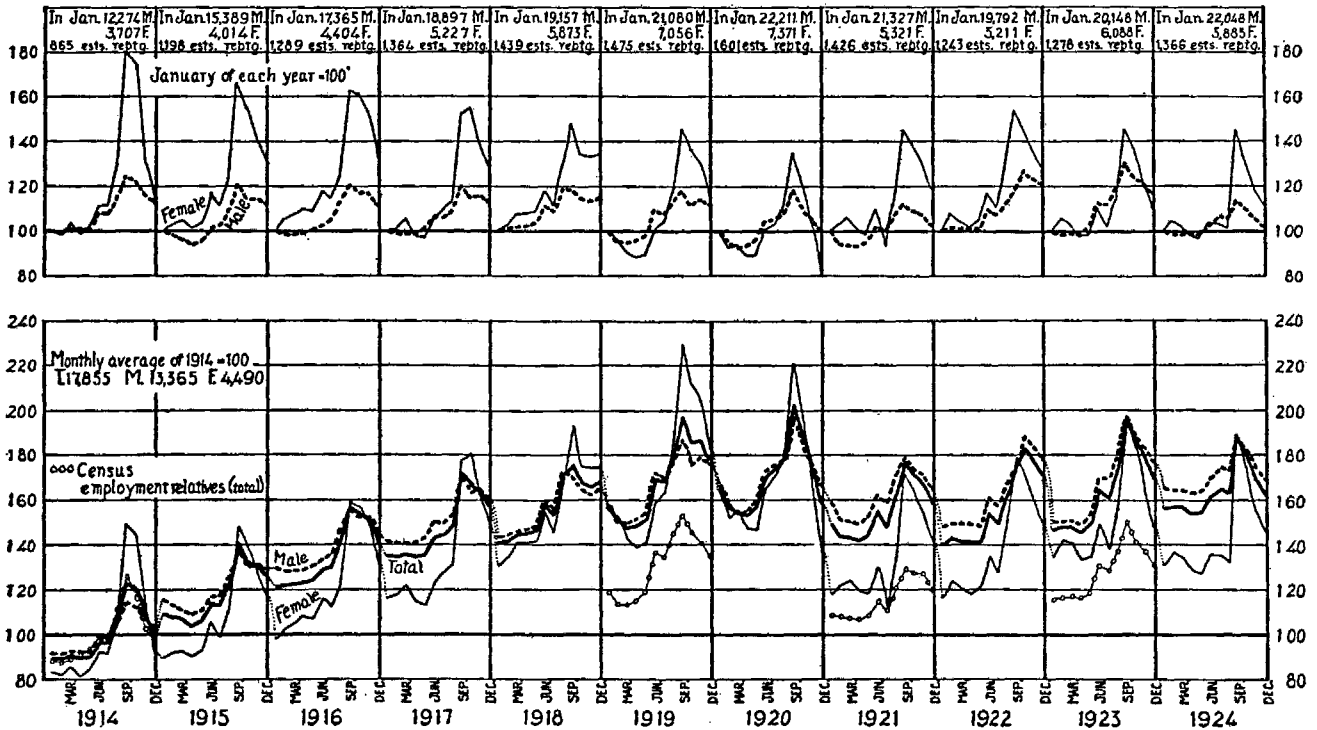

CHART 10.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF FOOD—BAKERY PRODUCTS,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

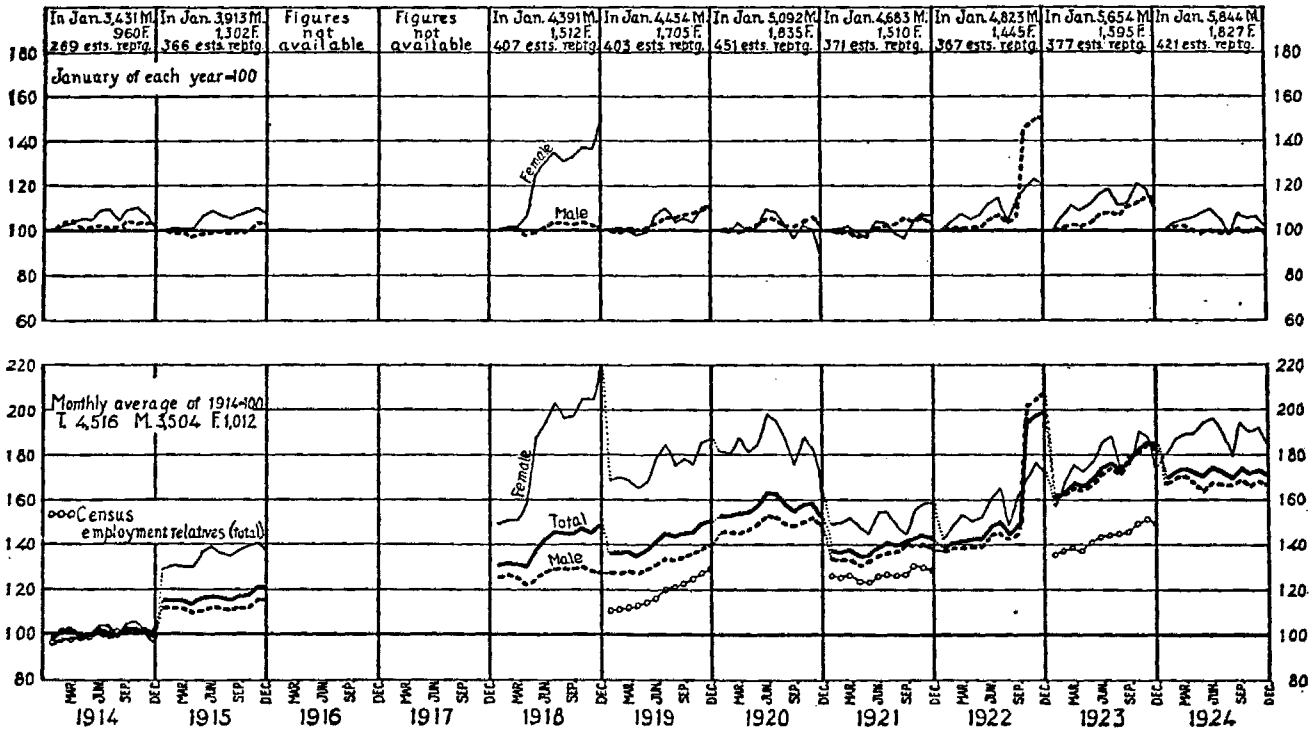

CHART 11.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF FOOD—CANNING AND PRESERVING**, OHIO, 1914 TO 1924, BY SEX

[Scale reduced because of extreme fluctuation]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

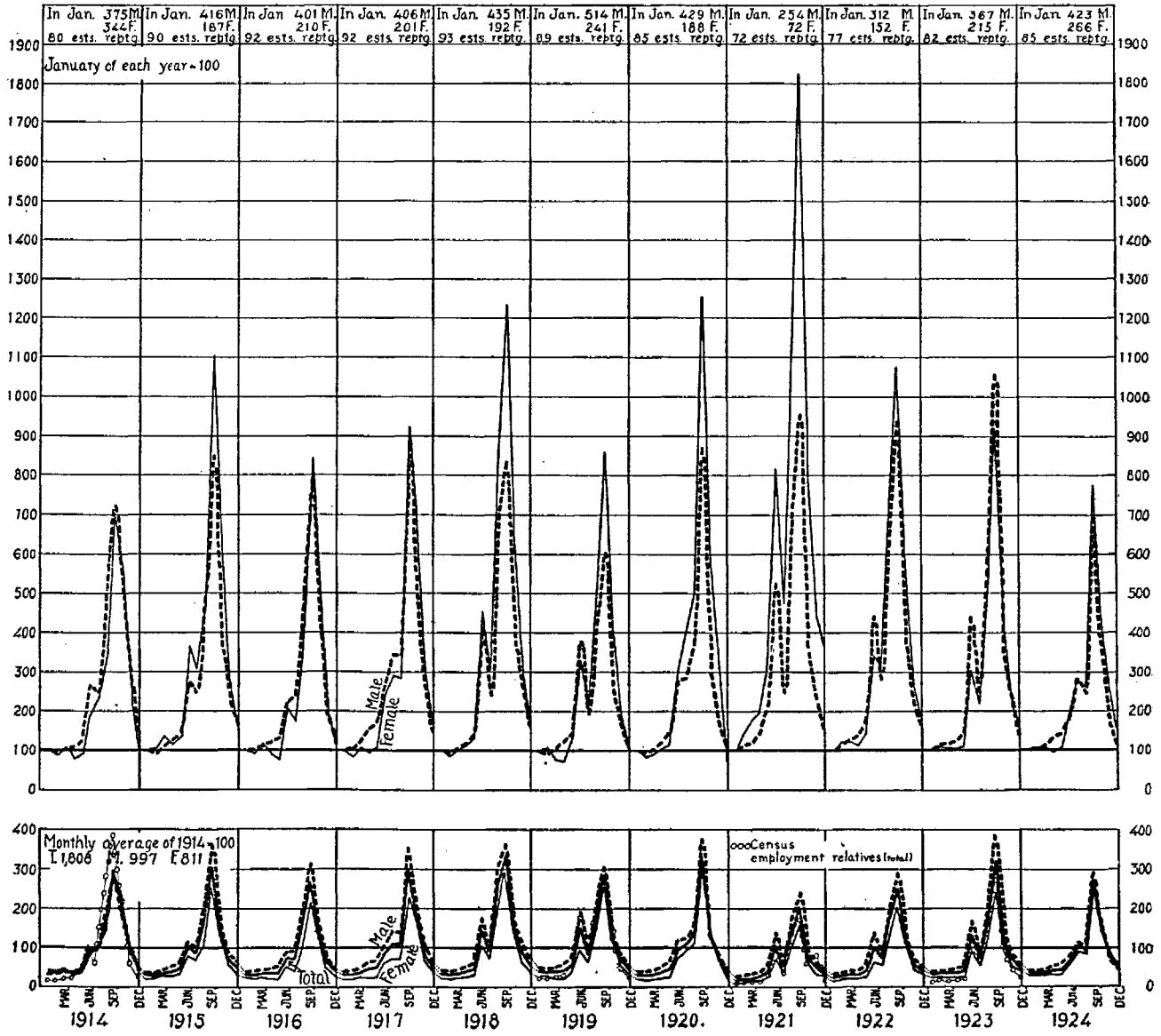

CHART 12.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF FOOD—CONFECTIONERY, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

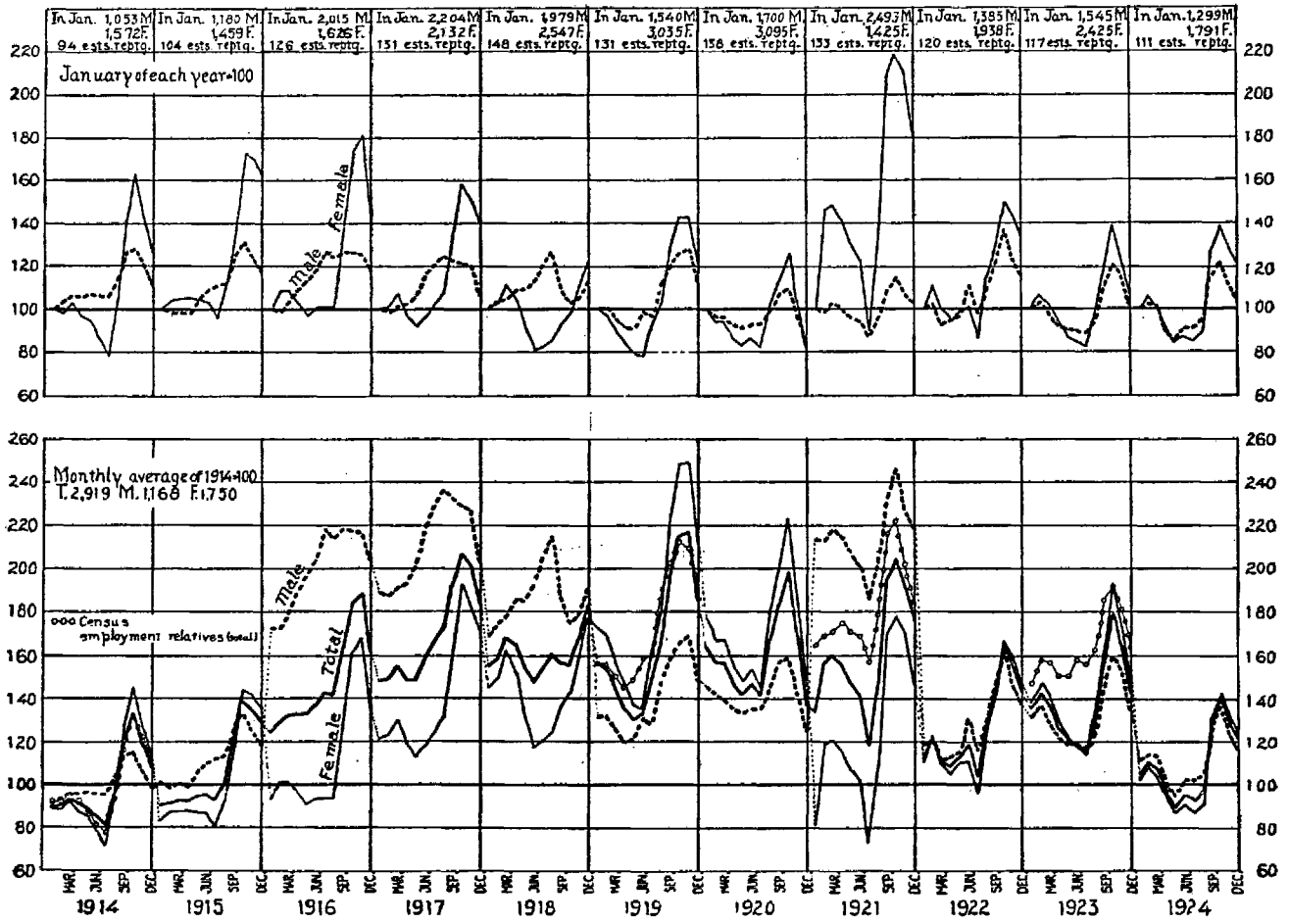

CHART 13.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF LEATHER AND LEATHER PRODUCTS,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

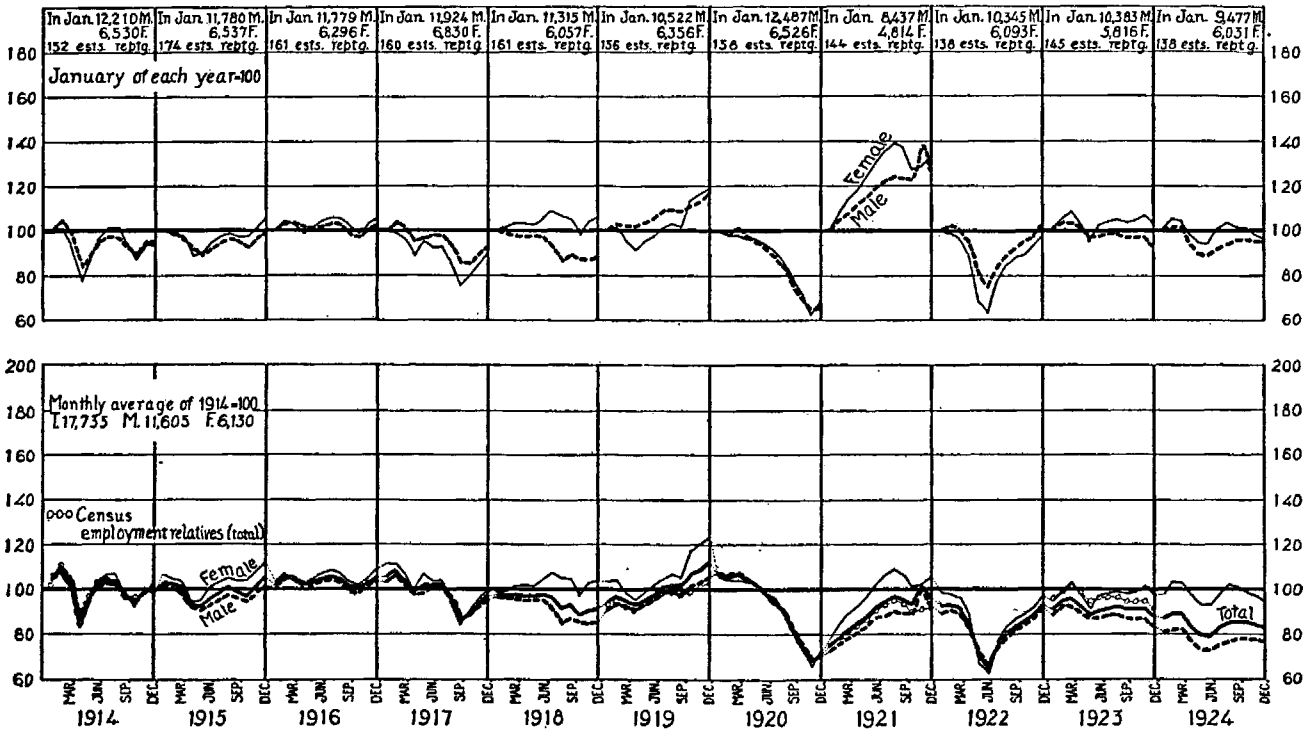

CHART 14.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF LEATHER—BOOTS, SHOES, CUT STOCK AND FINDINGS, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

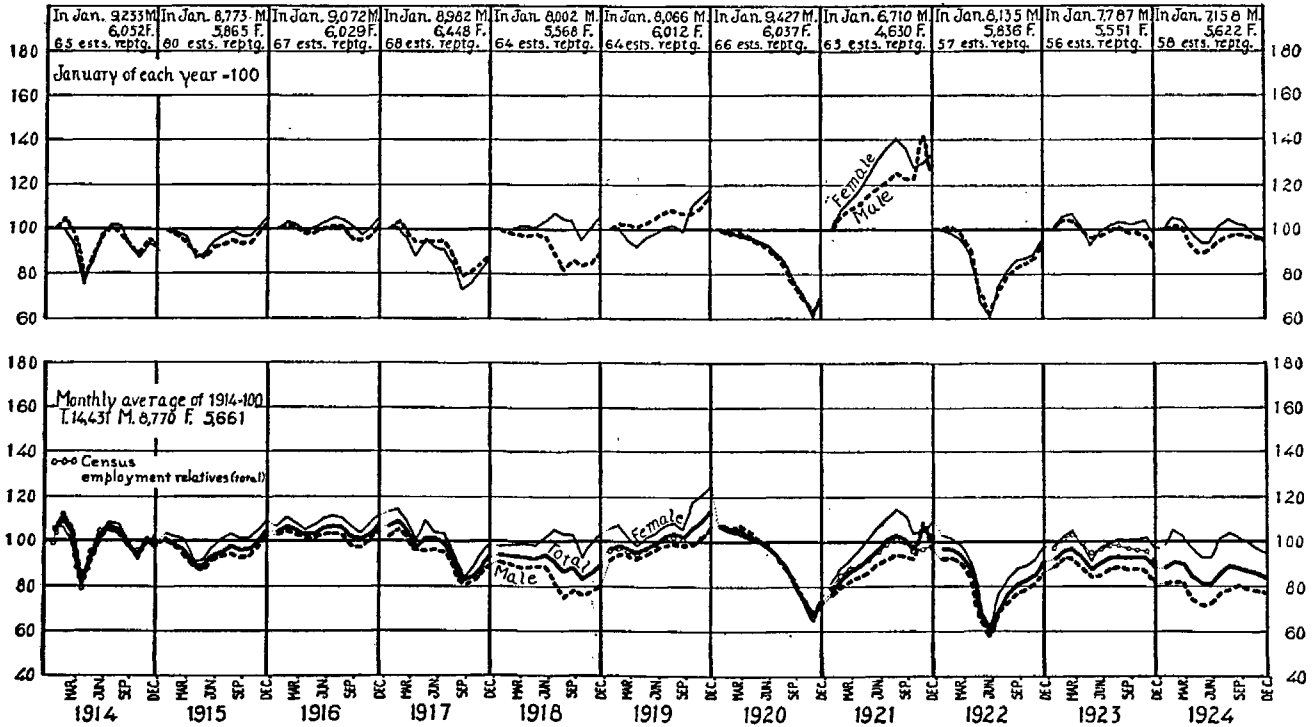

CHART 15.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF LIQUORS AND BEVERAGES**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

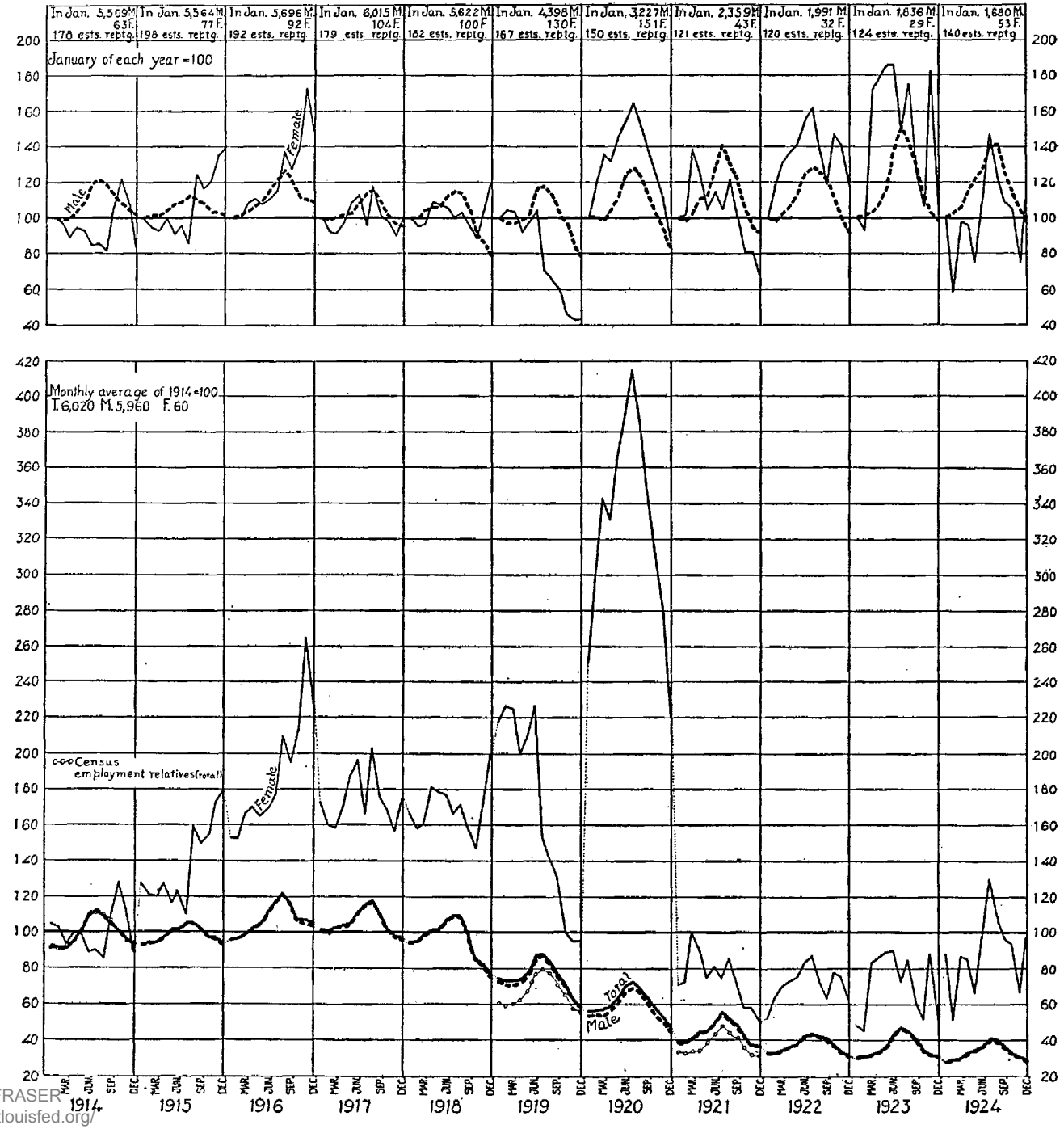

CHART 16.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF LUMBER AND ITS PRODUCTS**, OHIO, 1914 to 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

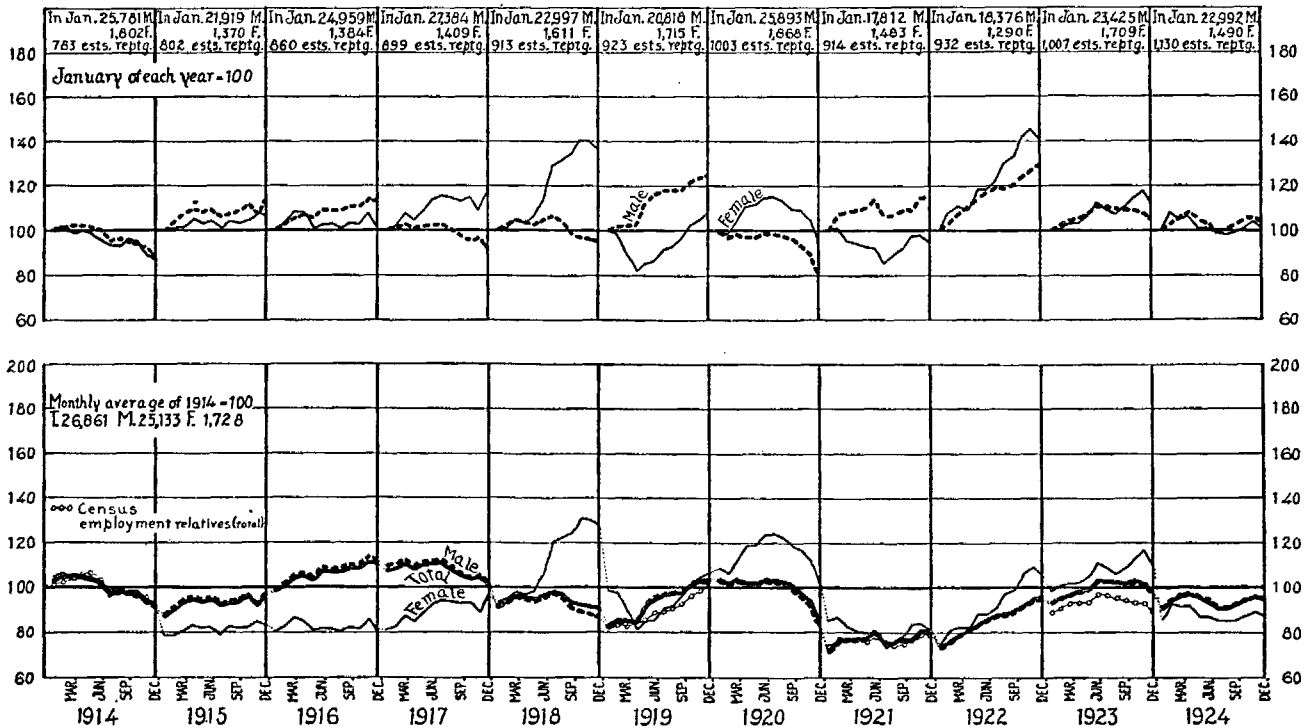

CHART 17.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF METALS AND METAL PRODUCTS OTHER THAN IRON AND STEEL, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

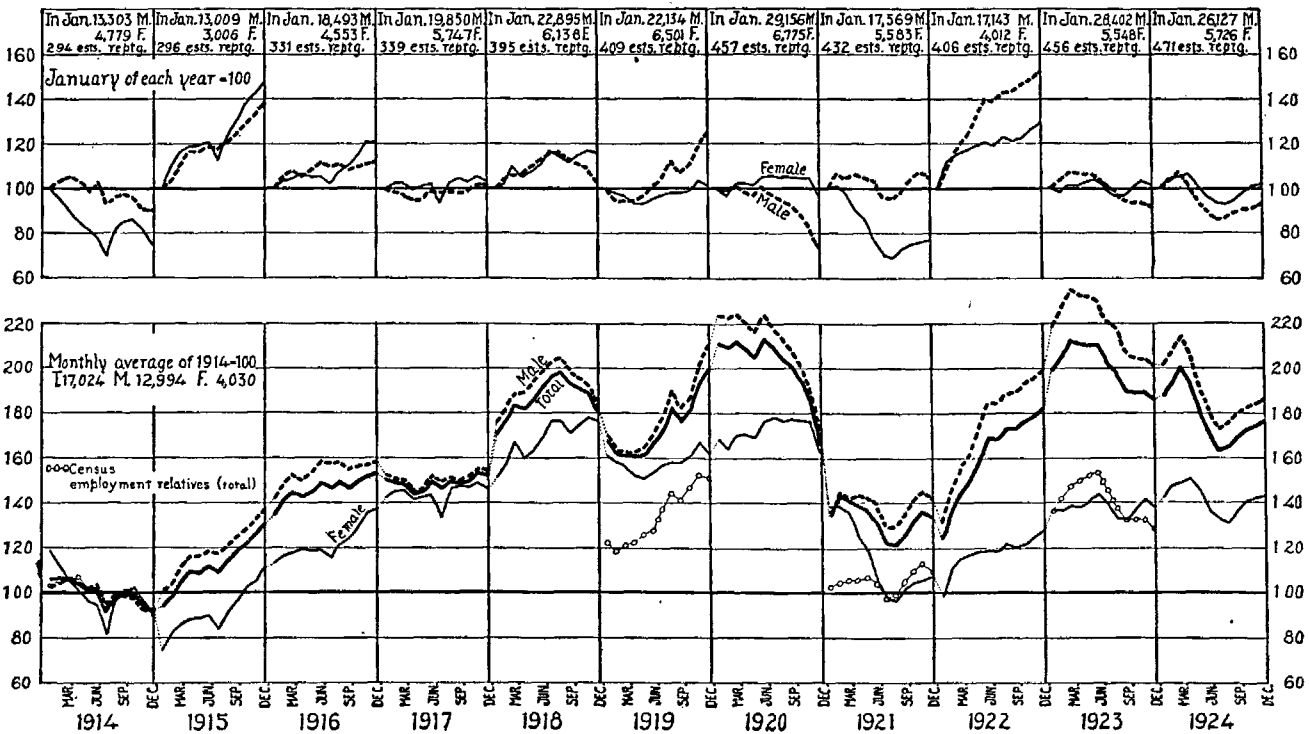

CHART 18.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF METALS—GAS AND ELECTRIC FIXTURES AND LAMPS AND REFLECTORS,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

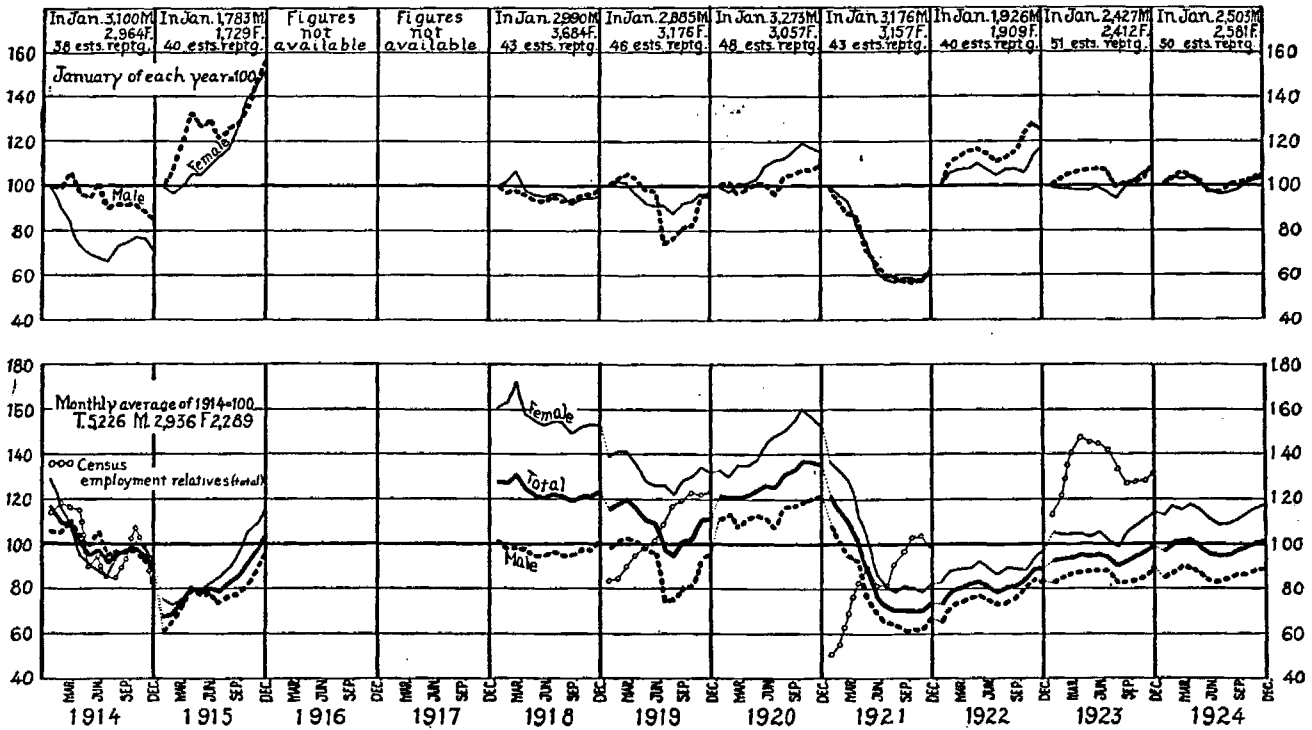

CHART 19.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF PAPER AND PRINTING**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

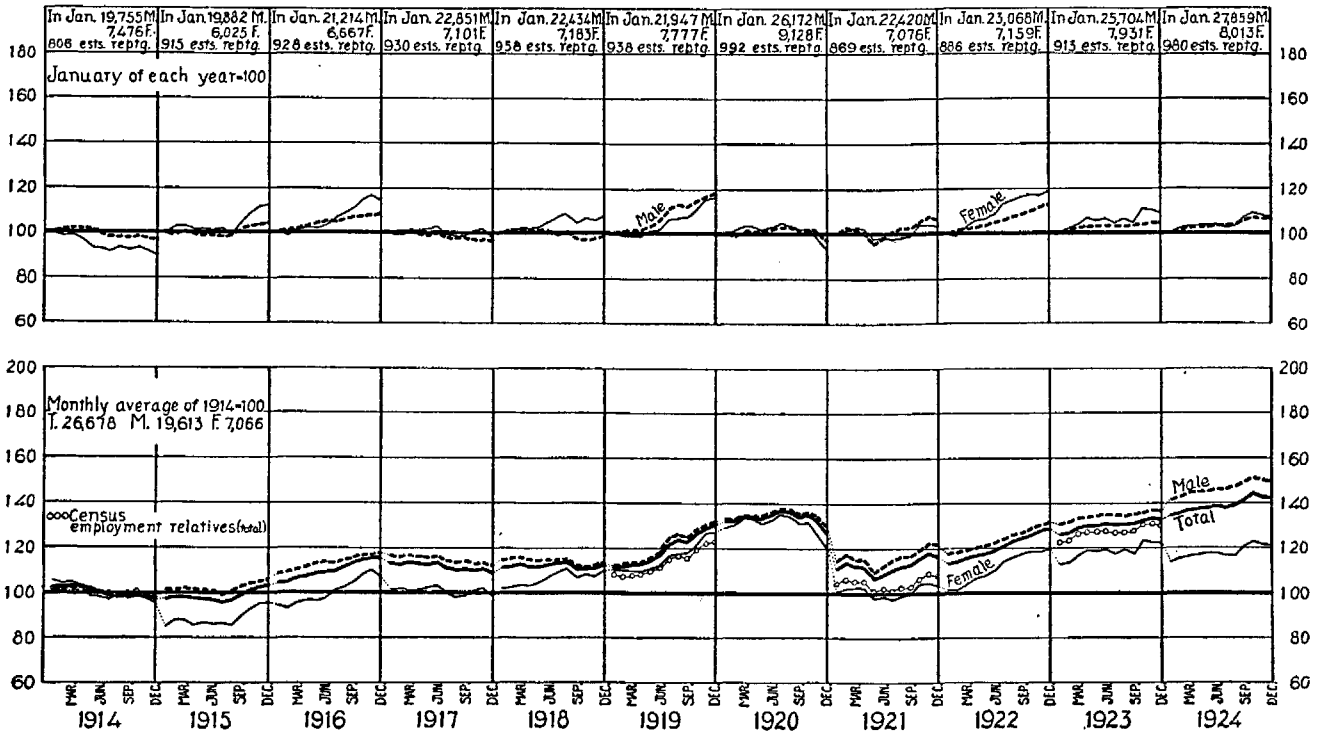

CHART 20.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF PAPER—PRINTING AND PUBLISHING**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

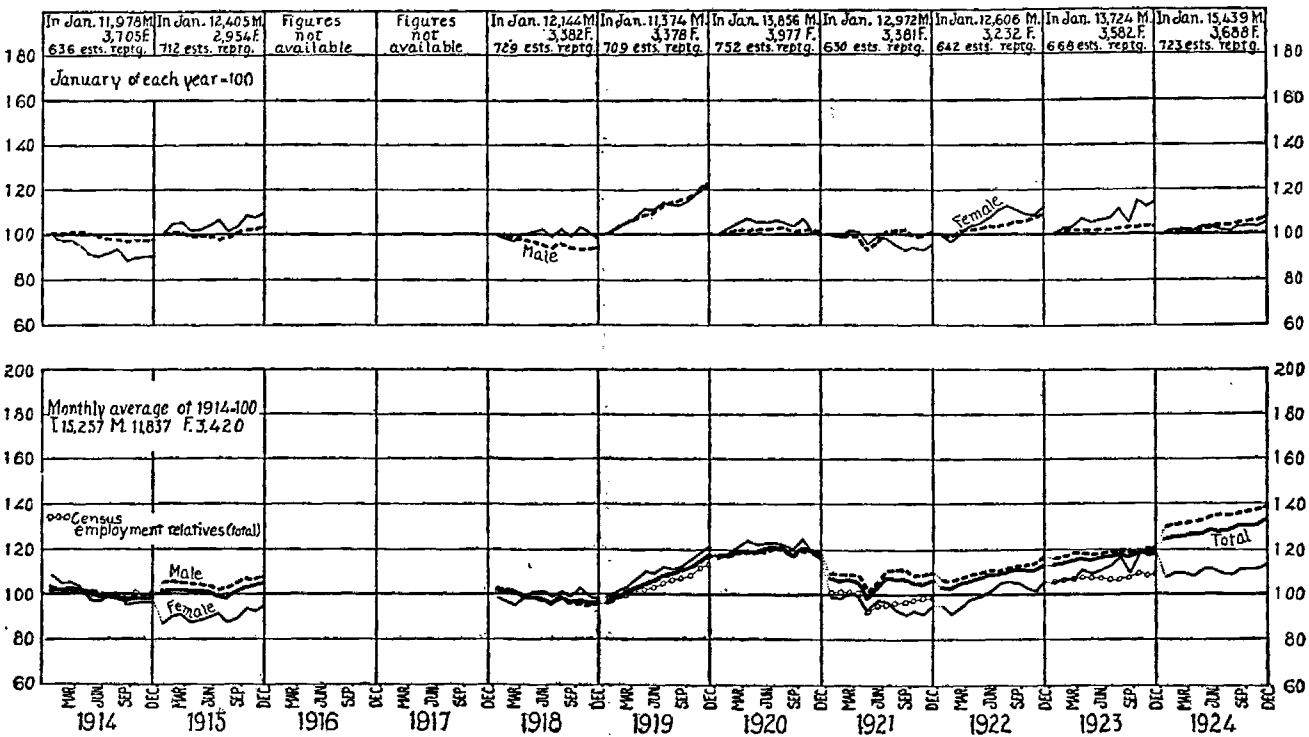

CHART 21.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF PAPER—BOXES (FANCY AND PAPER) AND DRINKING CUPS, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

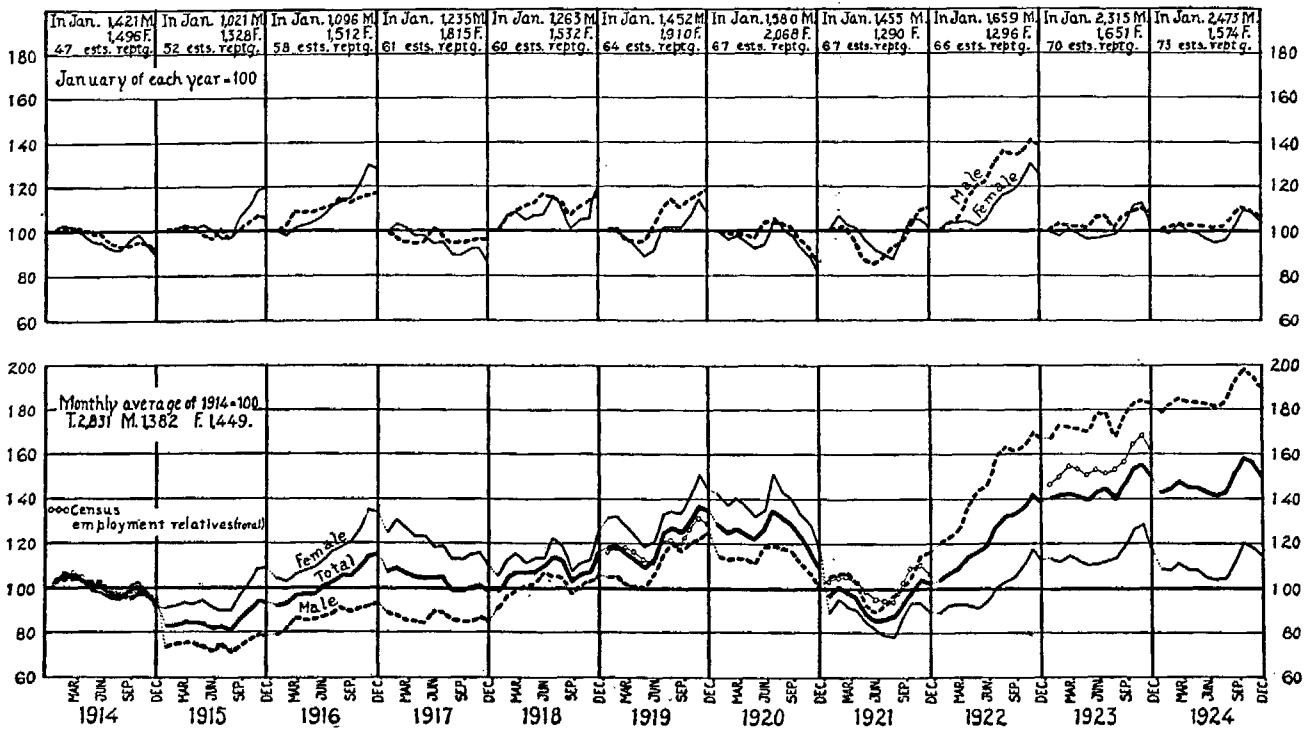

CHART 22.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF STONE, CLAY, AND GLASS PRODUCTS, OHIO, 1914, TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

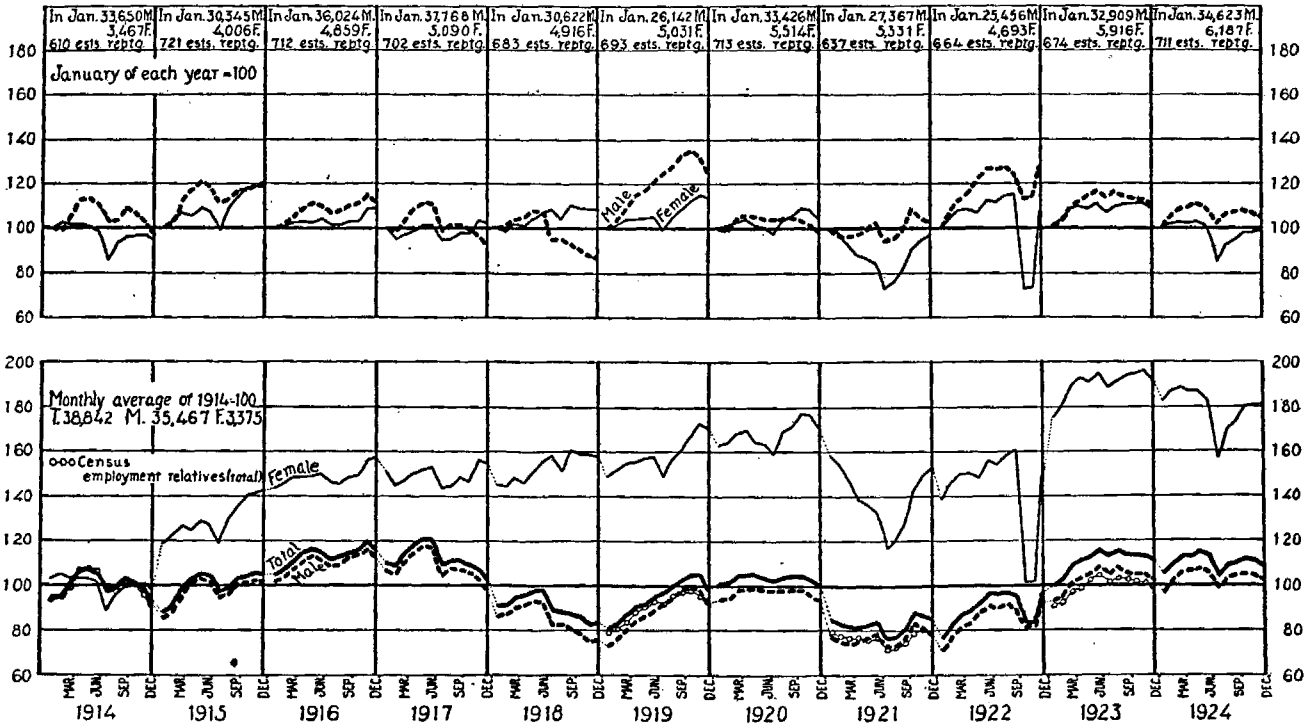

CHART 23.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF STONE, CLAY, AND GLASS—GLASS**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

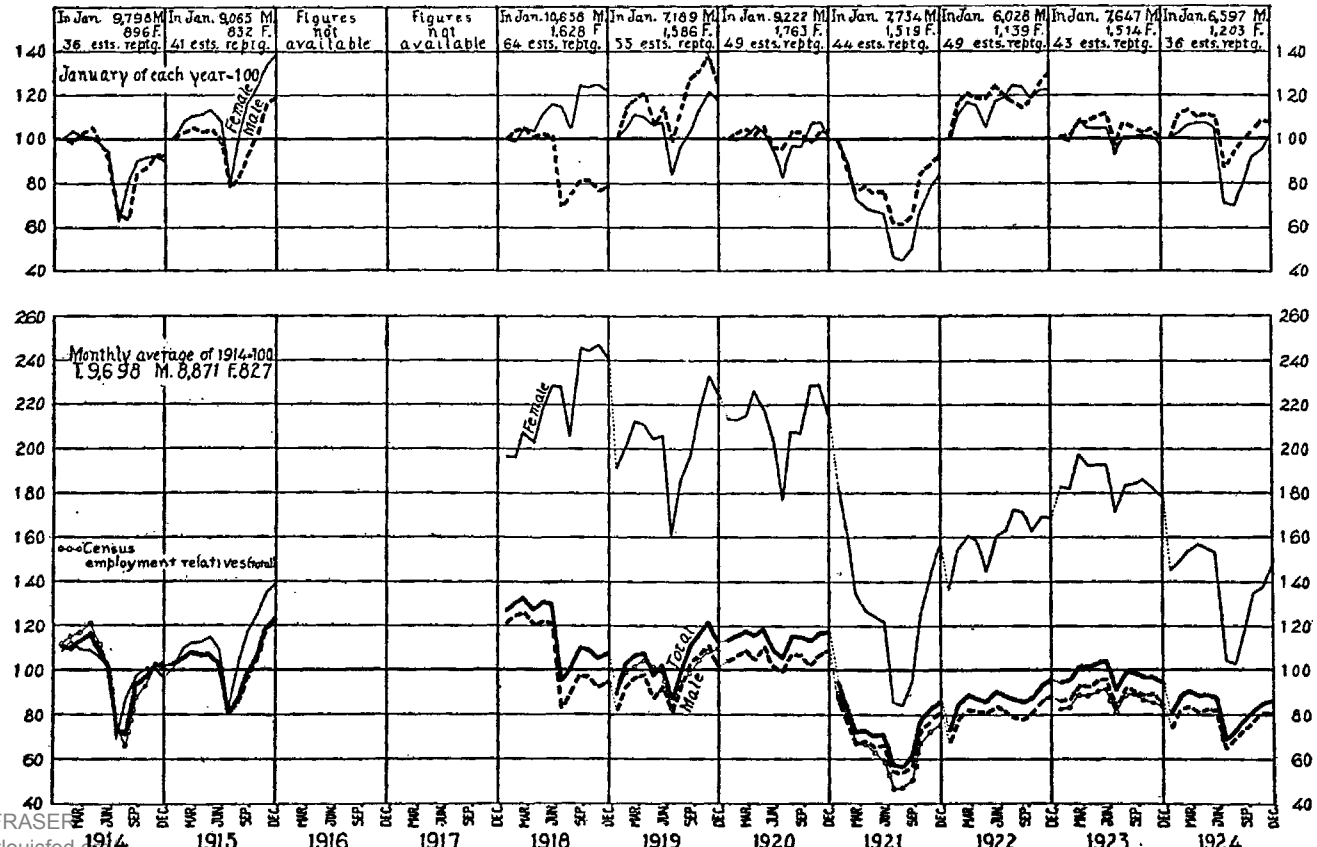

CHART 24.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF STONE, CLAY, AND GLASS—POTTERY, TERRA-COTTA AND FIRE-CLAY PRODUCTS, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

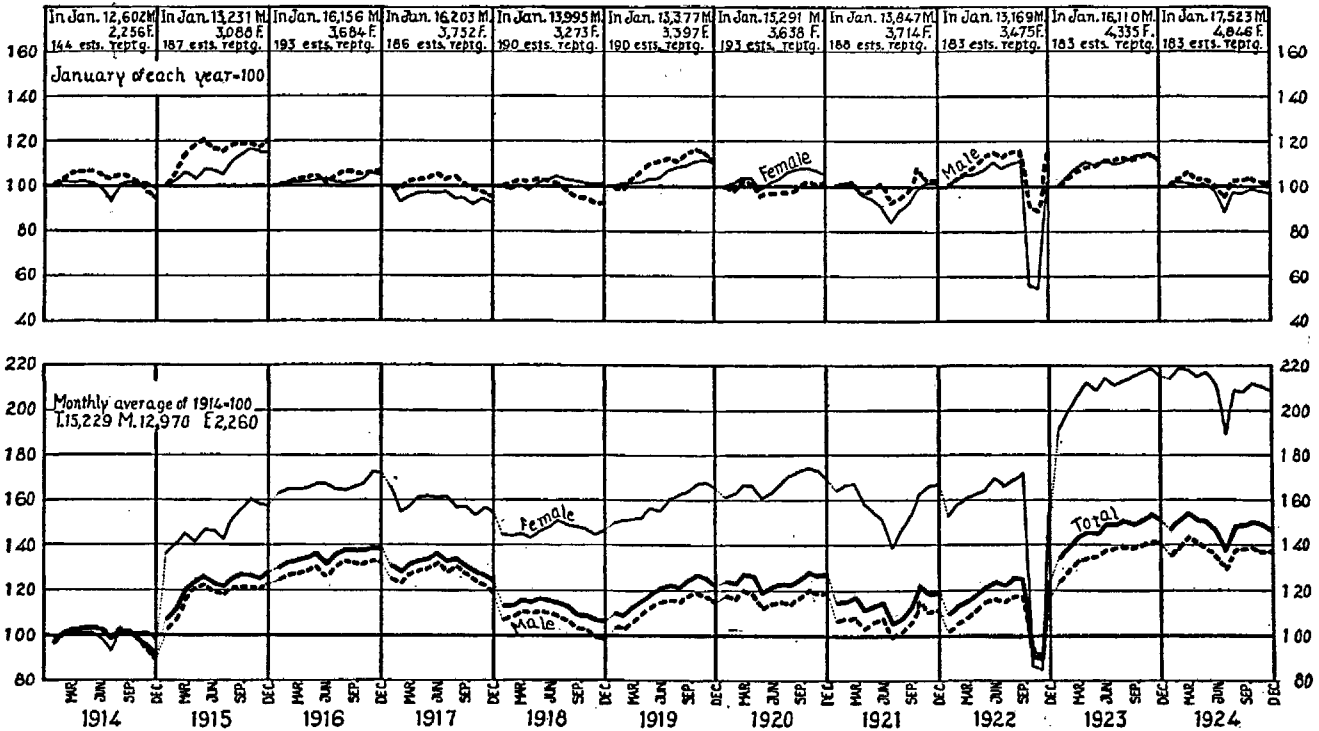

CHART 25.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF RUBBER PRODUCTS, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

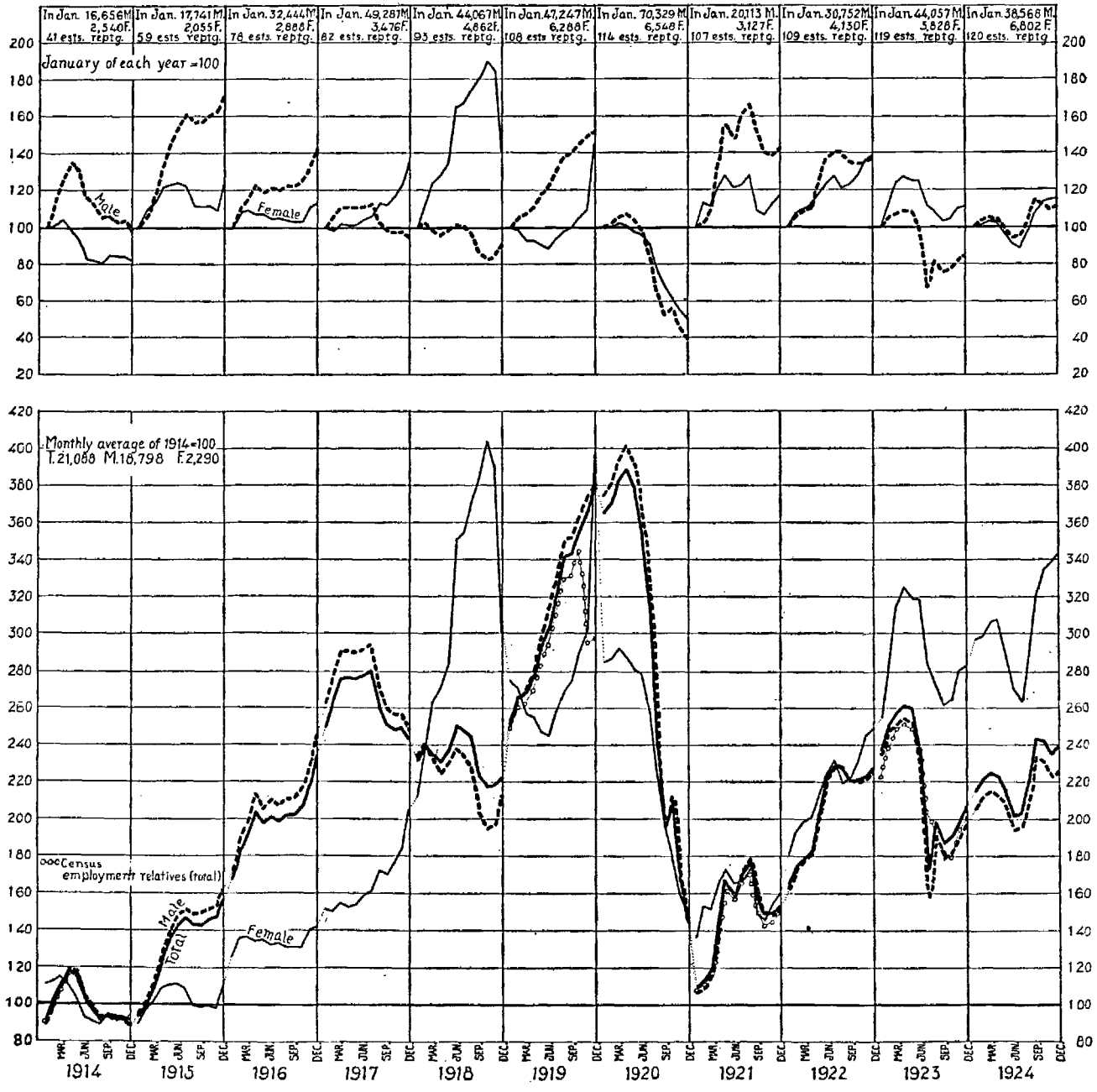

CHART 26.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF RUBBER—TIRES AND TUBES**, OHIO, 1918 TO 1924, BY SEX

[Figures for 1918 same as entire group, rubber products]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

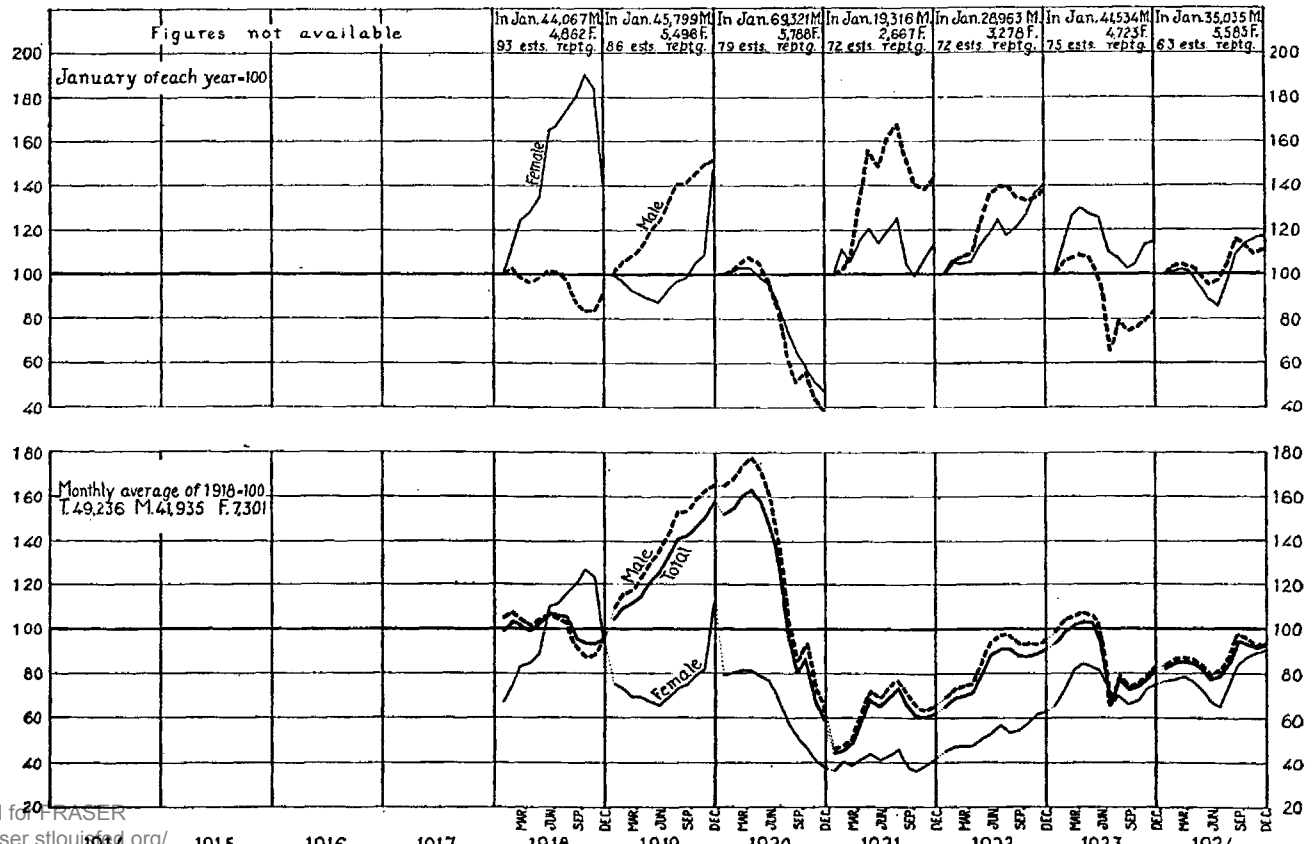

CHART 27.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF TEXTILES**, OHIO, 1914 TO 1924, BY SEX

[U. S. Census does not collect statistics of custom-tailoring and dressmaking establishments]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

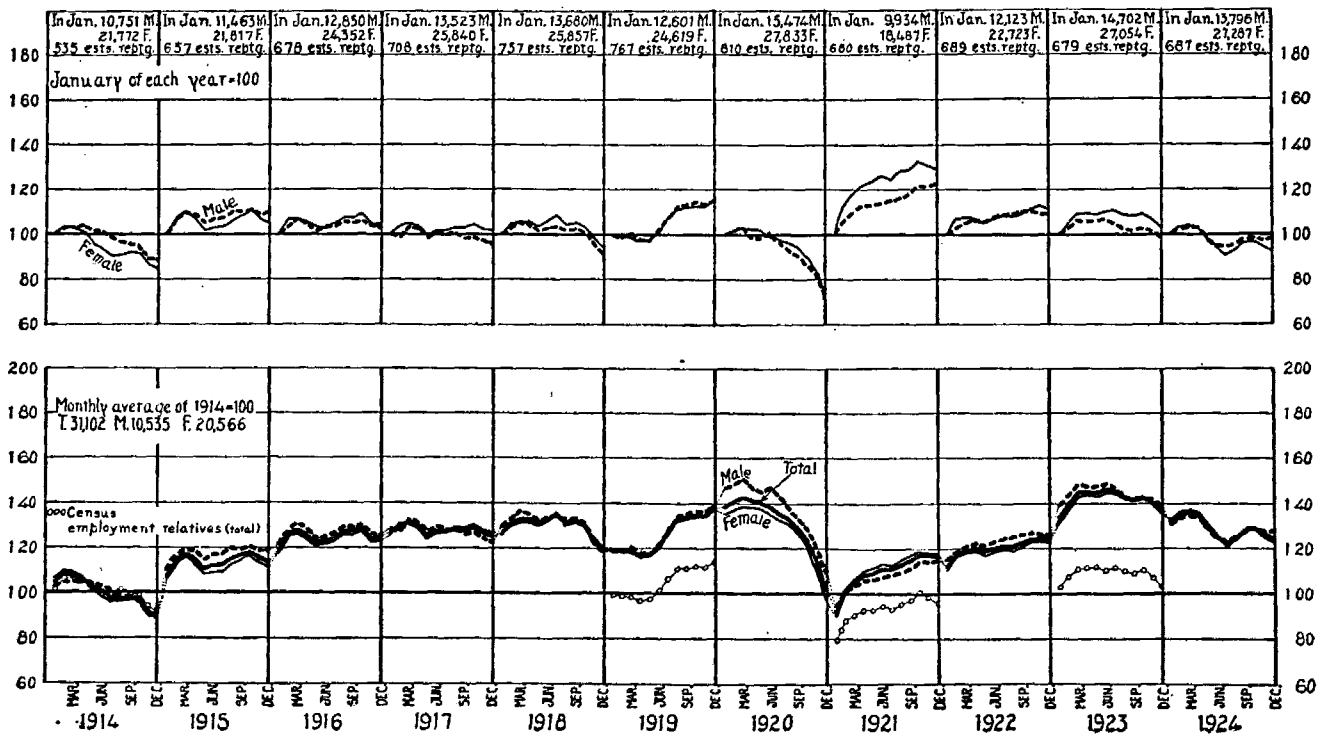

CHART 28.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF TEXTILES—HOSIERY AND KNIT GOODS**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

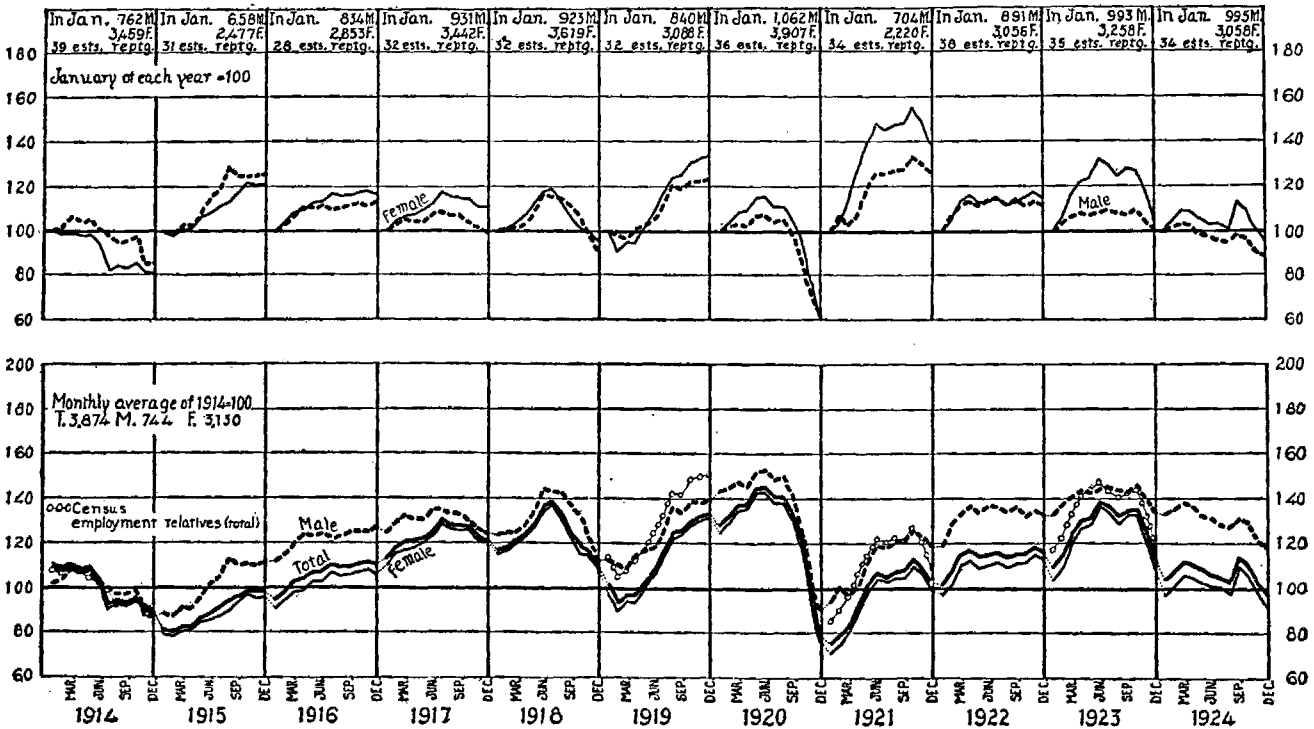

CHART 29.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF TEXTILES—MEN'S CLOTHING (INCLUDING SHIRTS AND COAT PADS)**, OHIO, 1914 TO 1924, BY SEX

[U. S. Census does not collect statistics of custom-tailoring establishments]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

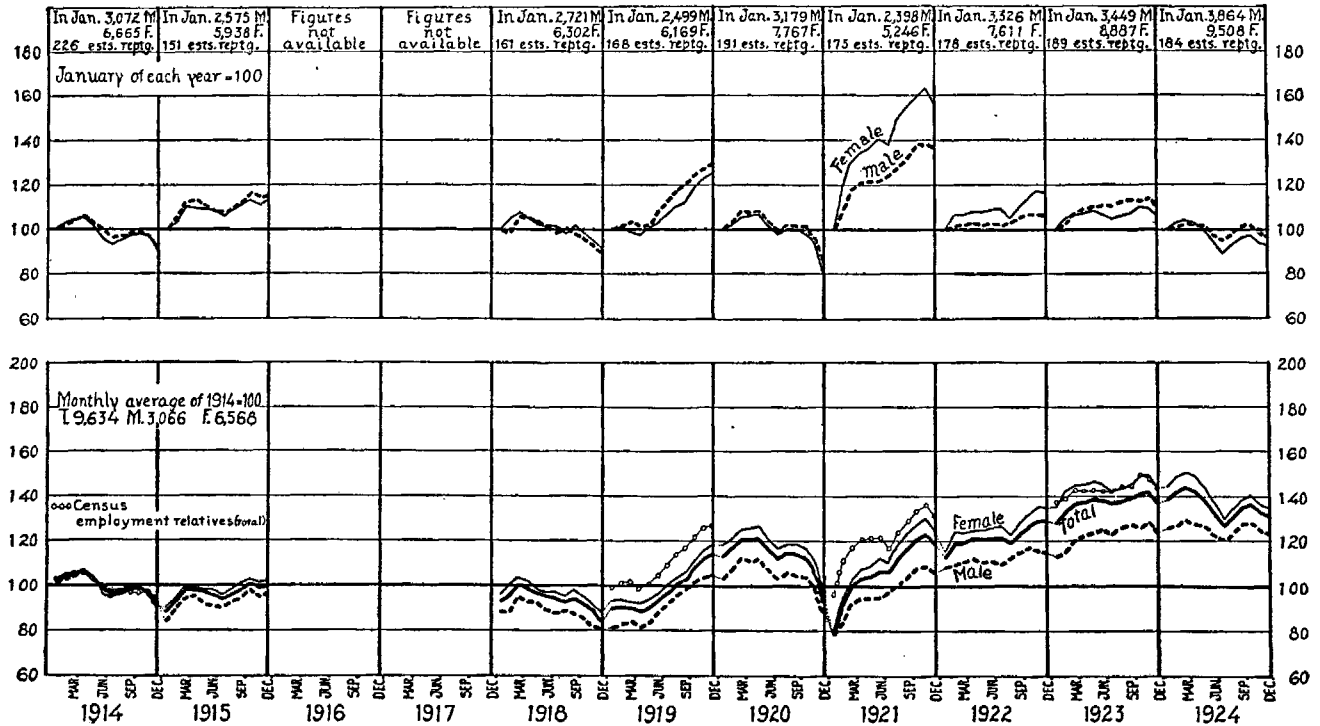

CHART 30.—WAGE EARNERS: TREND OF EMPLOYMENT IN **TEXTILES—WOMEN'S CLOTHING (INCLUDING CORSETS)**, OHIO, 1914 TO 1924, BY SEX

[U. S. Census does not collect statistics of custom-tailoring and dressmaking establishments]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

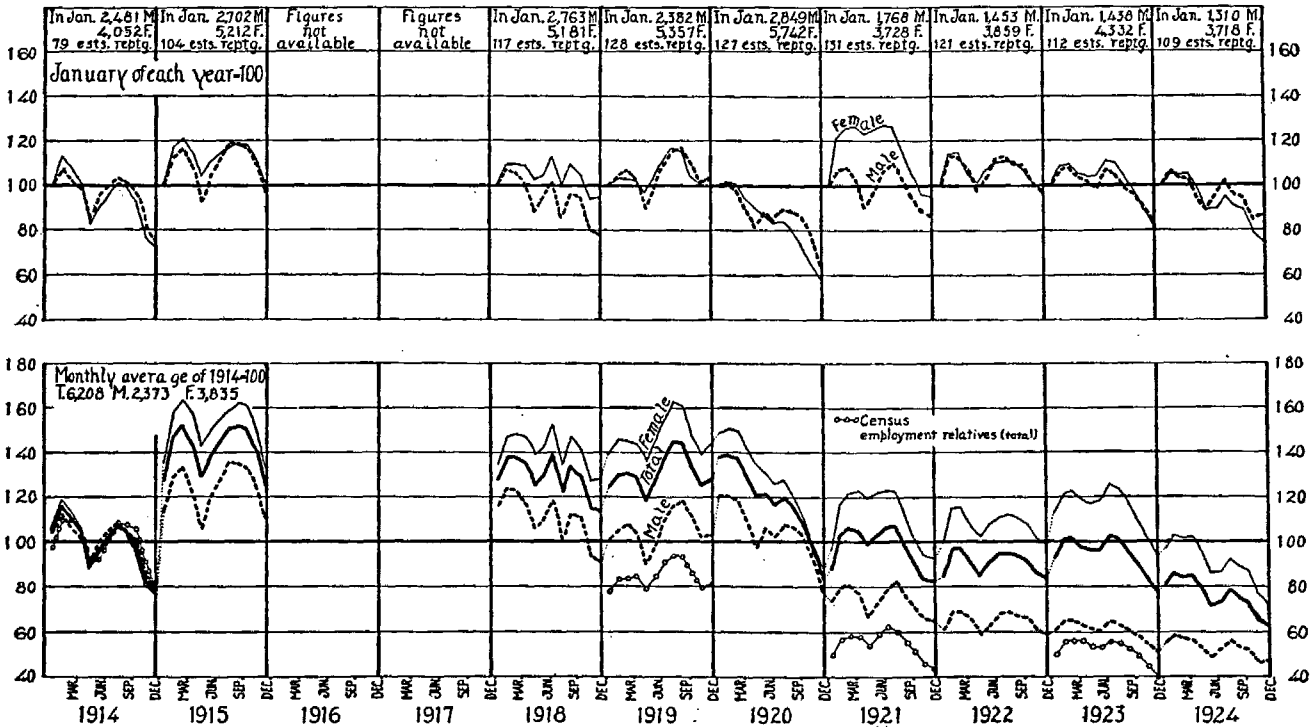

CHART 31.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF TEXTILES—CLOTH GLOVES**, OHIO, 1918 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

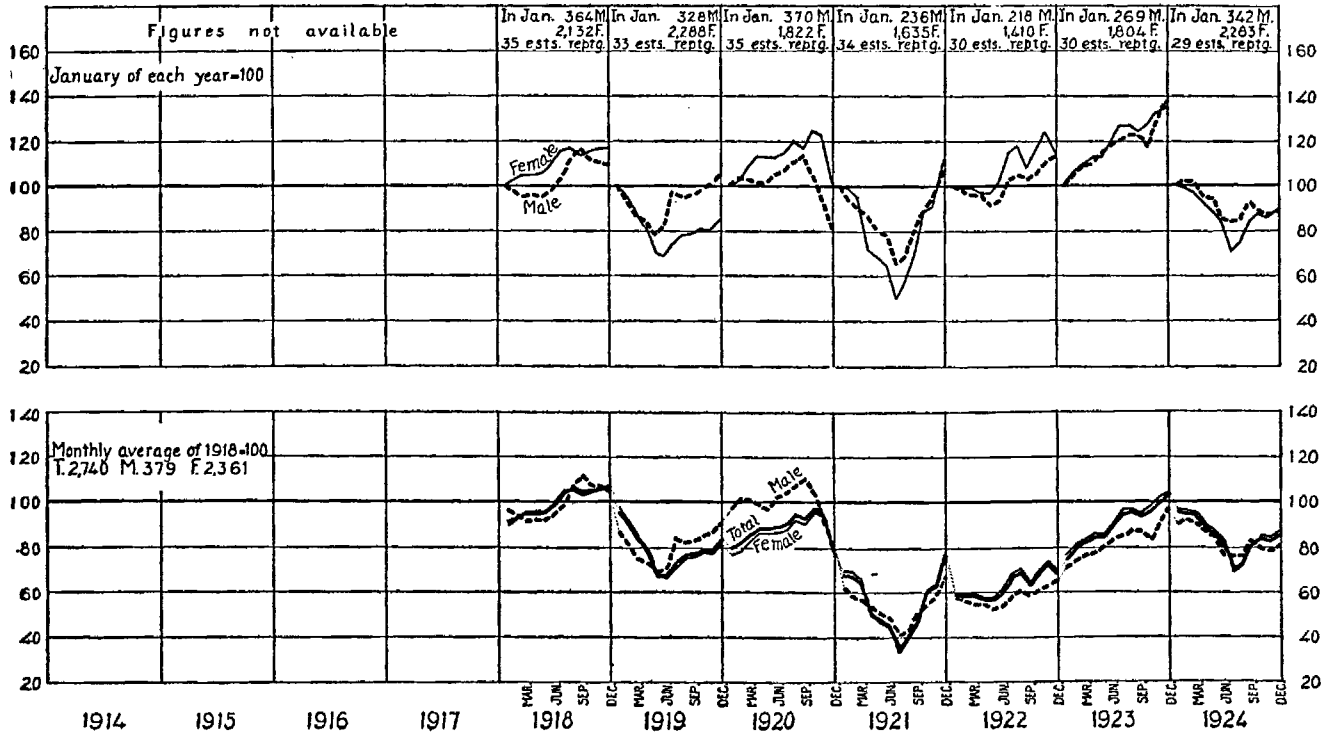

CHART 32.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF TOBACCO**, OHIO, 1914 TO 1924, BY SEX

[U. S. Census does not collect statistics of rehandling]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

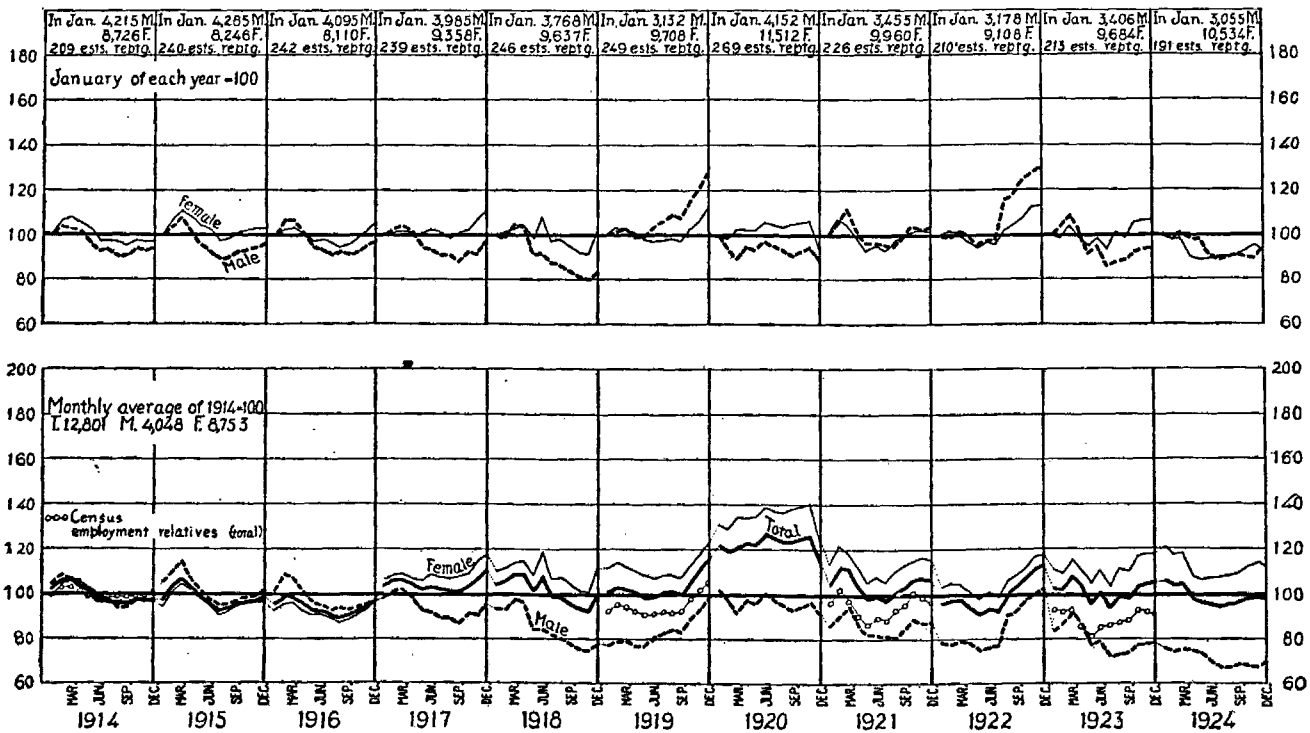

CHART 33.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF TOBACCO—BEHANDLING**, OHIO, 1918 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

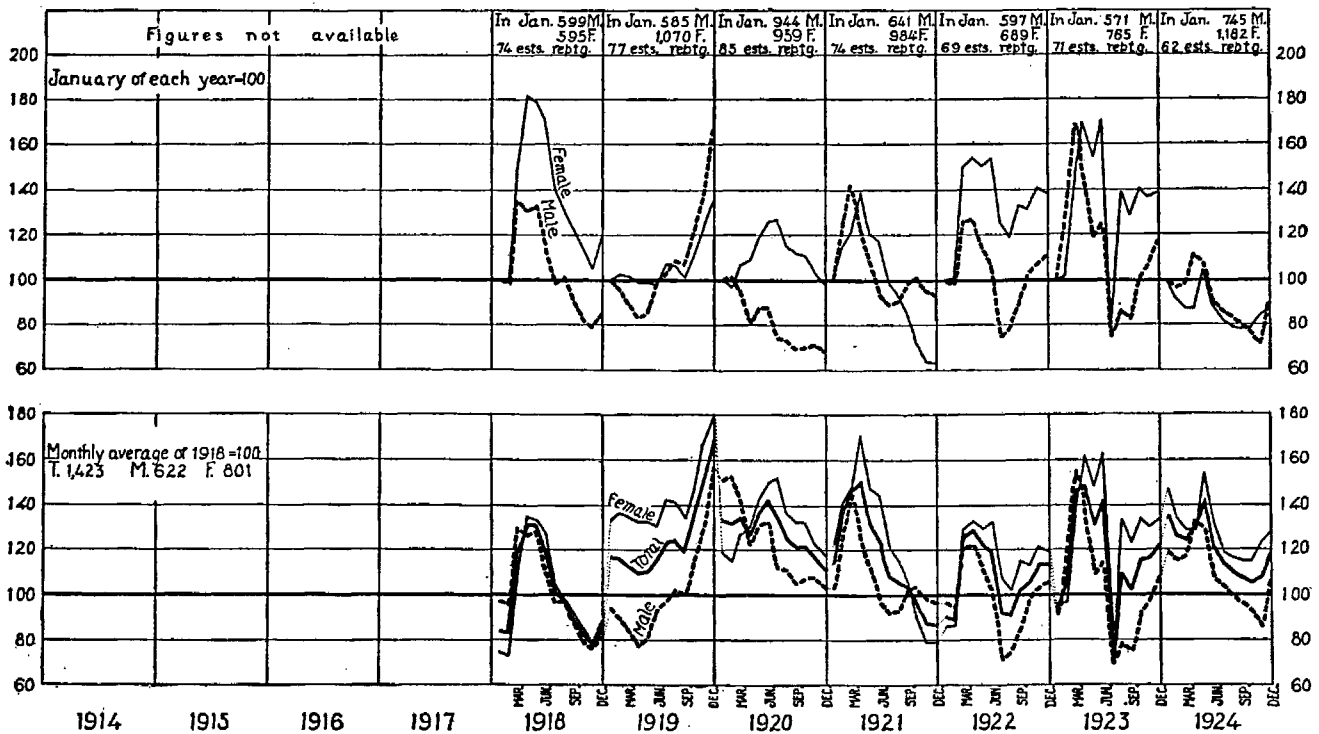

CHART 34.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF TOBACCO—CIGARS AND CIGARETTES, CHEWING AND SMOKING TOBACCO, AND SNUFF**, OHIO, 1918 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

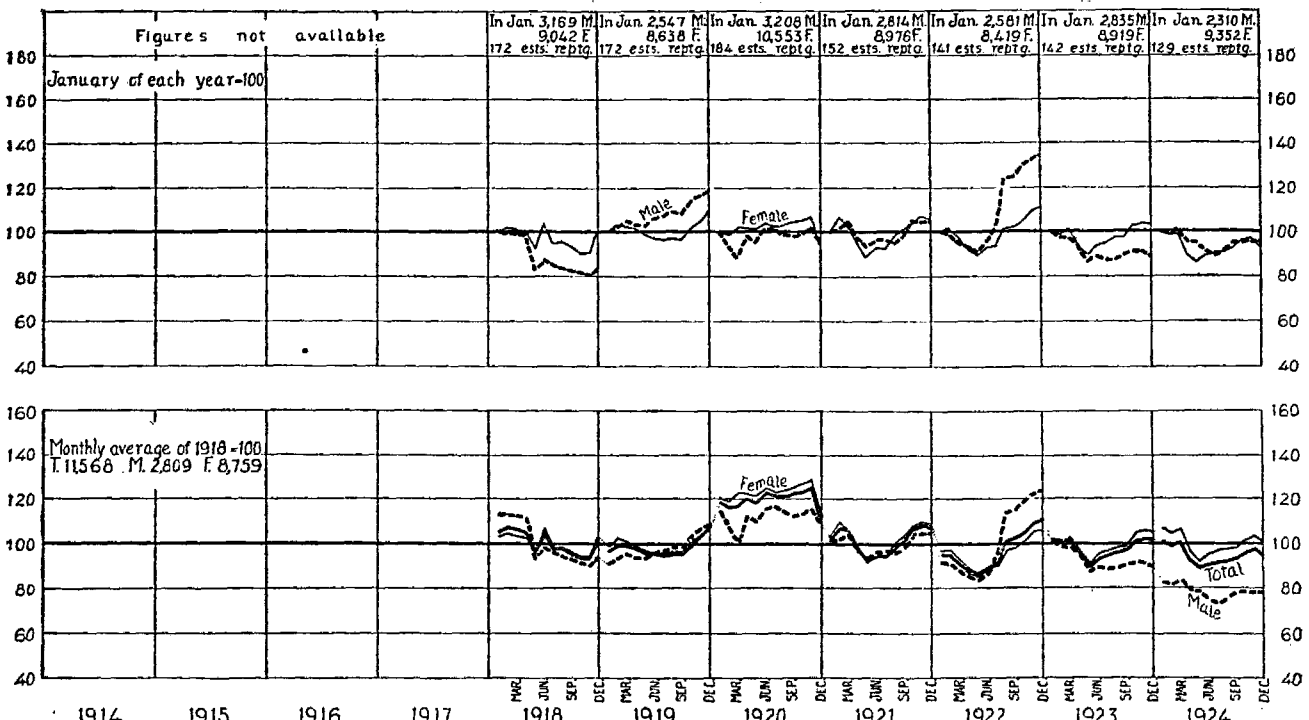

CHART 35.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF VEHICLES, OHIO, 1914 TO 1924, BY SEX

[Excludes manufacturing by railroad companies]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

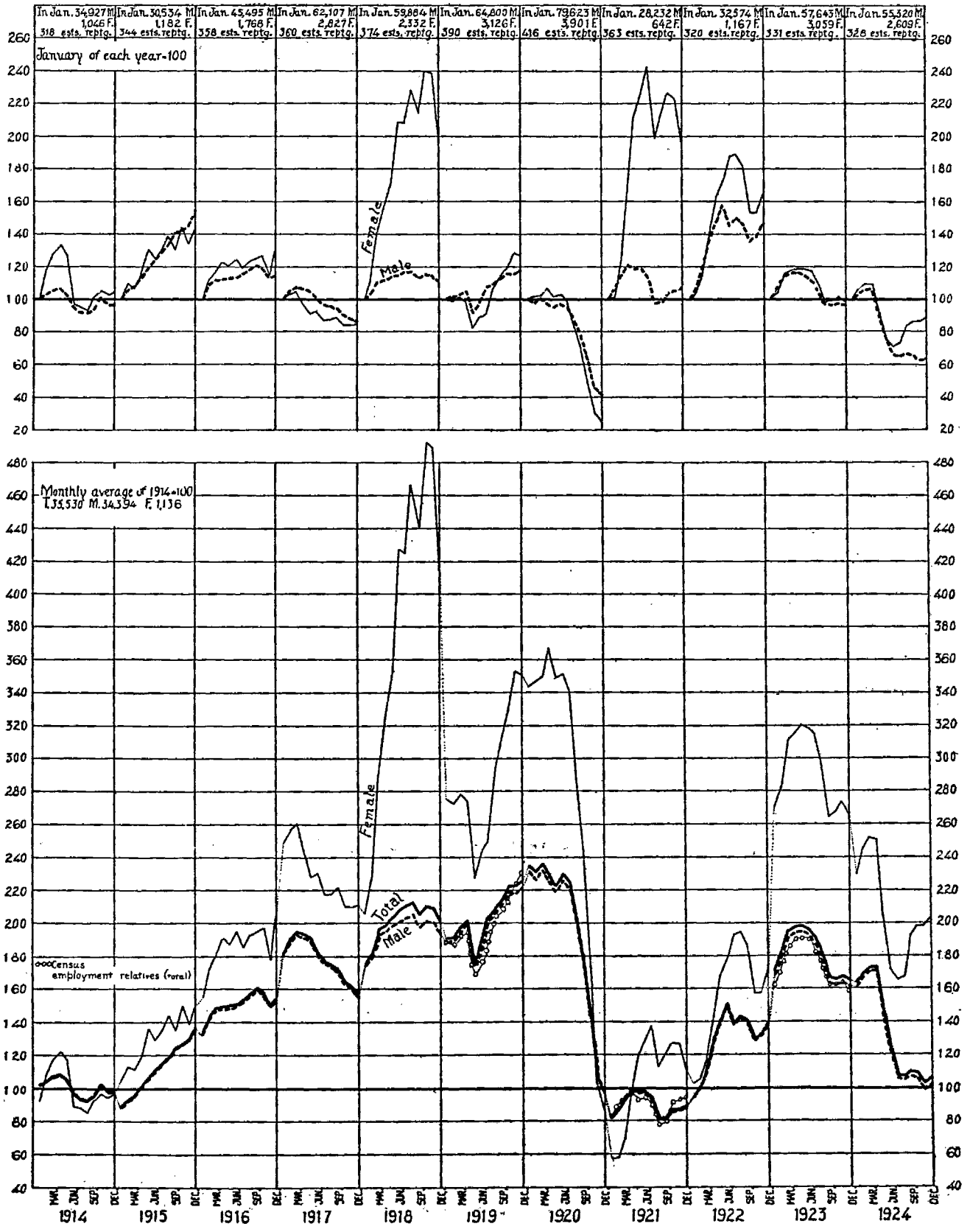

CHART 30.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF VEHICLES—AUTOMOBILES AND PARTS, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

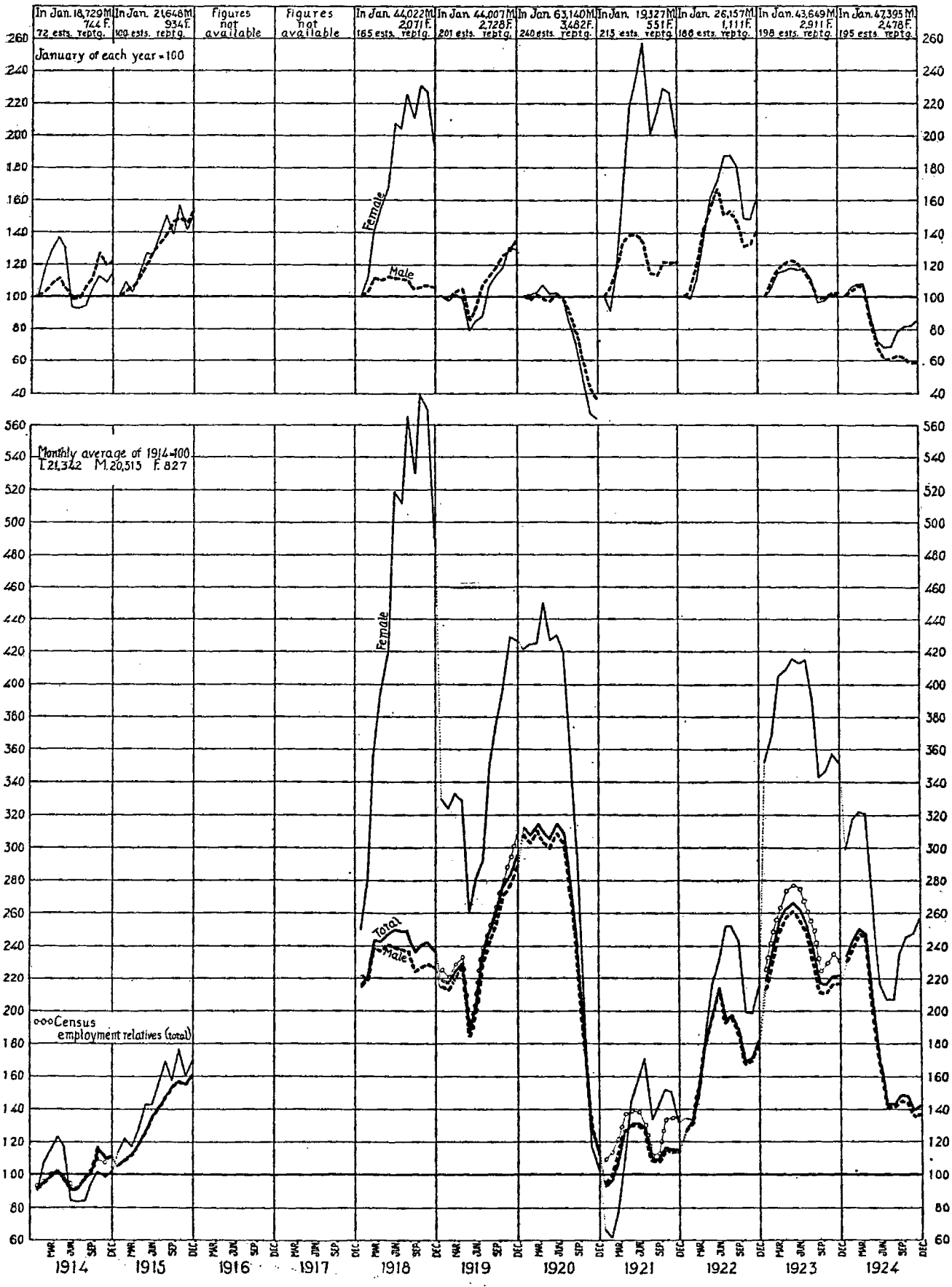

CHART 37.—WAGE EARNERS: TREND OF EMPLOYMENT IN **MANUFACTURE OF MISCELLANEOUS PRODUCTS**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

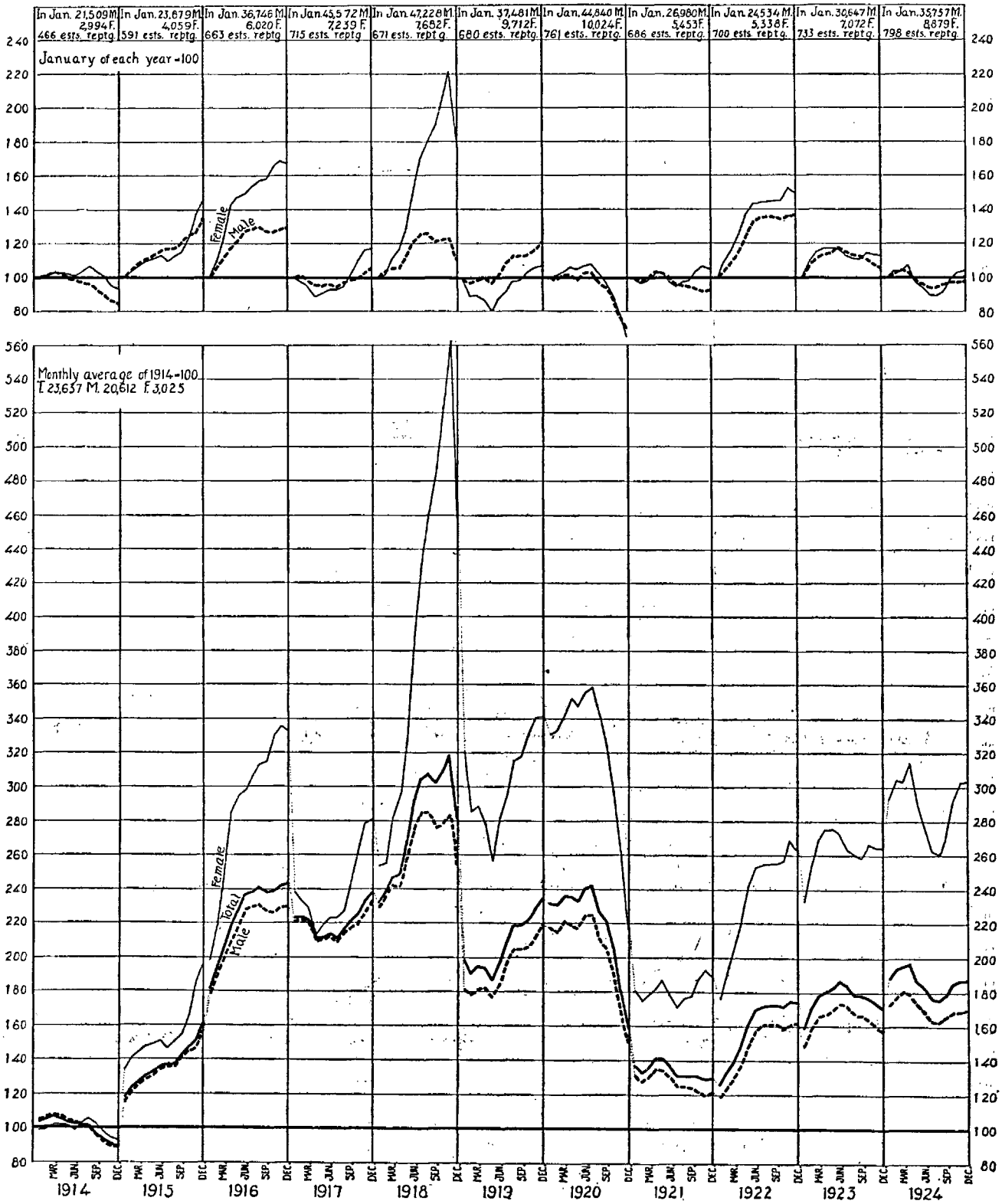

CHART 38.—WAGE EARNERS: TREND OF EMPLOYMENT IN MANUFACTURE OF MISCELLANEOUS PRODUCTS—ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

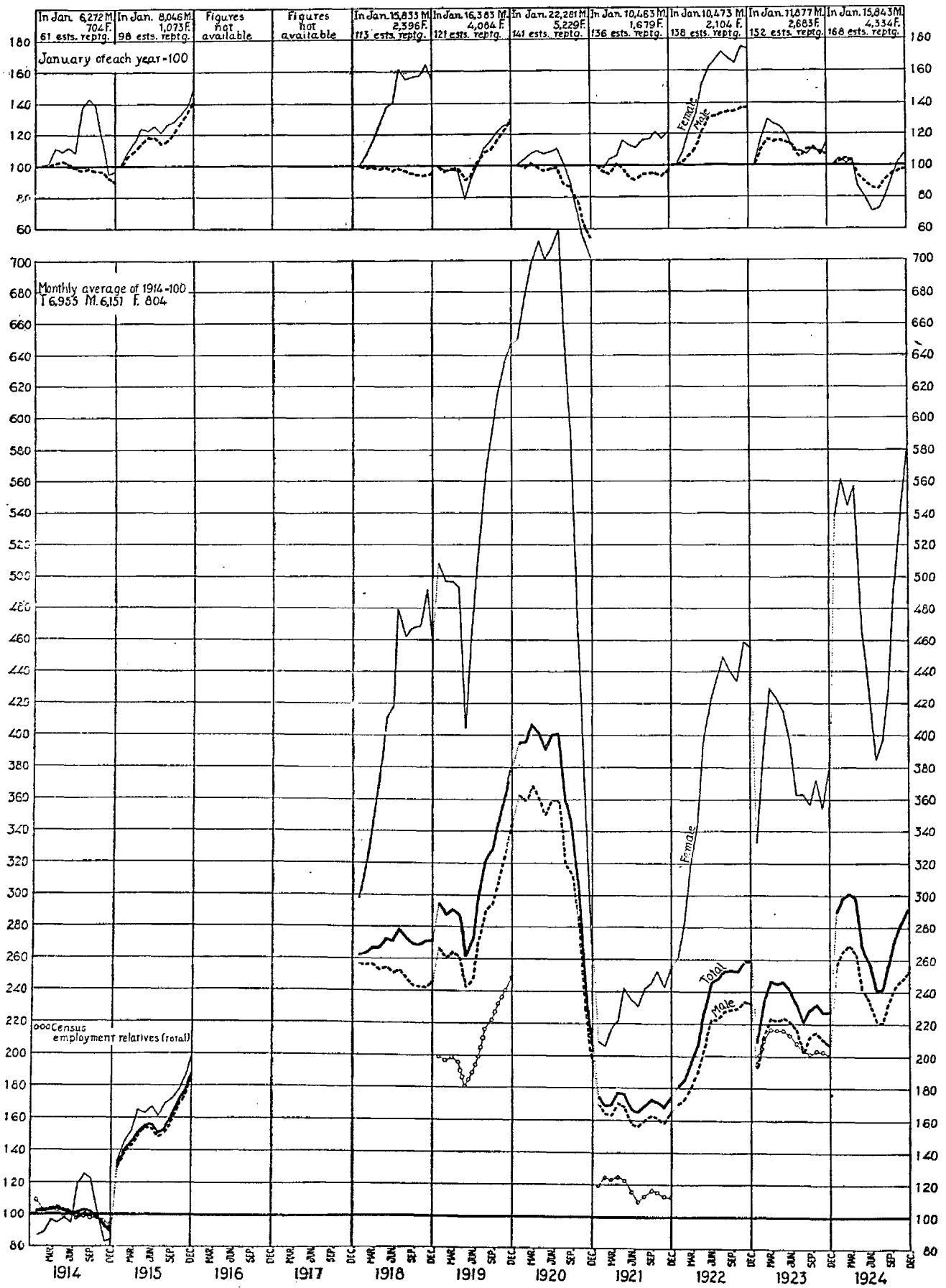

CHART 39.—WAGE EARNERS: TREND OF EMPLOYMENT IN **SERVICE**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

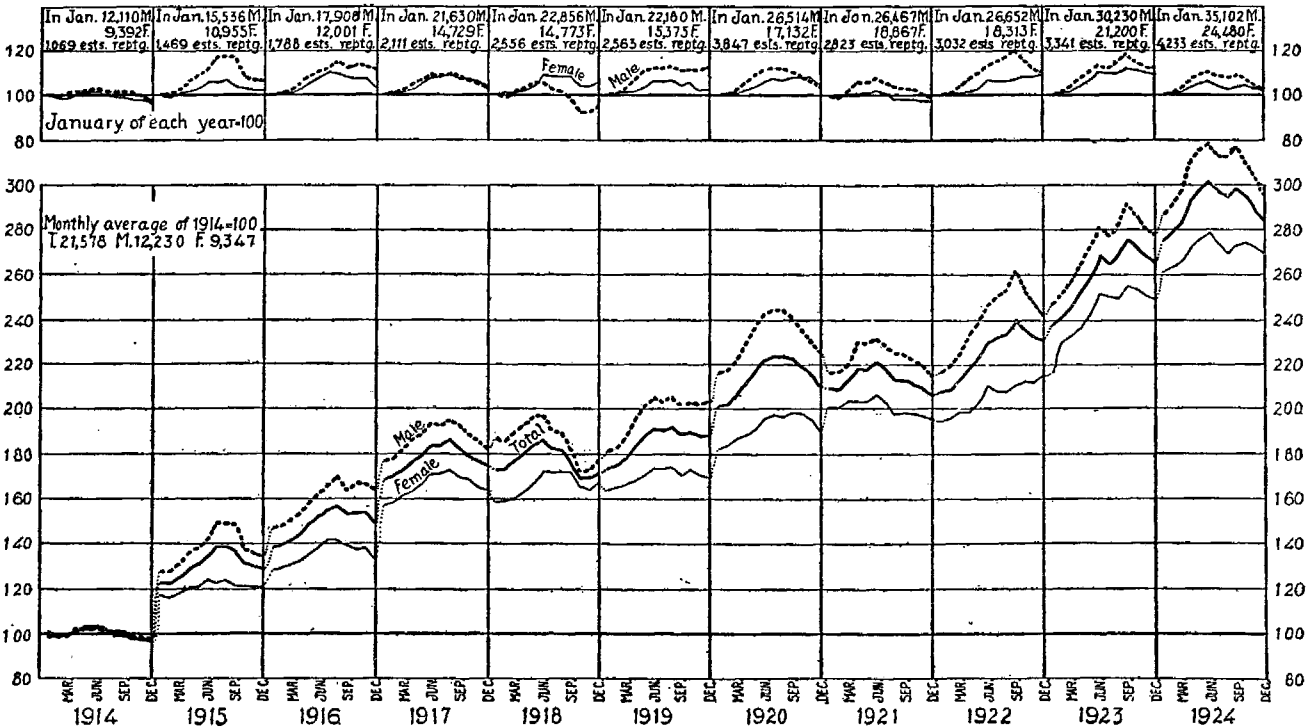

CHART 40.—WAGE EARNERS: TREND OF EMPLOYMENT IN **SERVICE—LAUNDRIES AND DRY CLEANERS**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

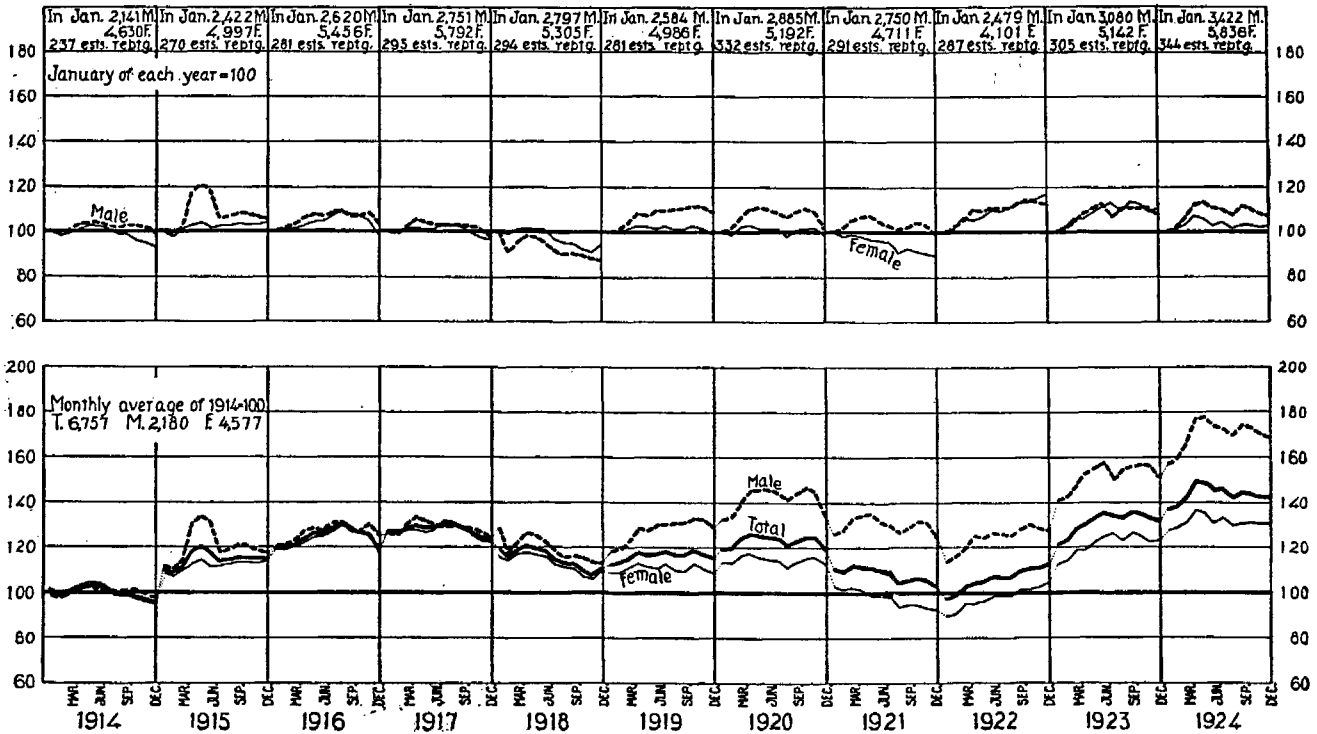

CHART 41.—WAGE EARNERS: TREND OF EMPLOYMENT IN **SERVICE—HOTELS,** OHIO, 1914 TO 1924, BY SEX

U.S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

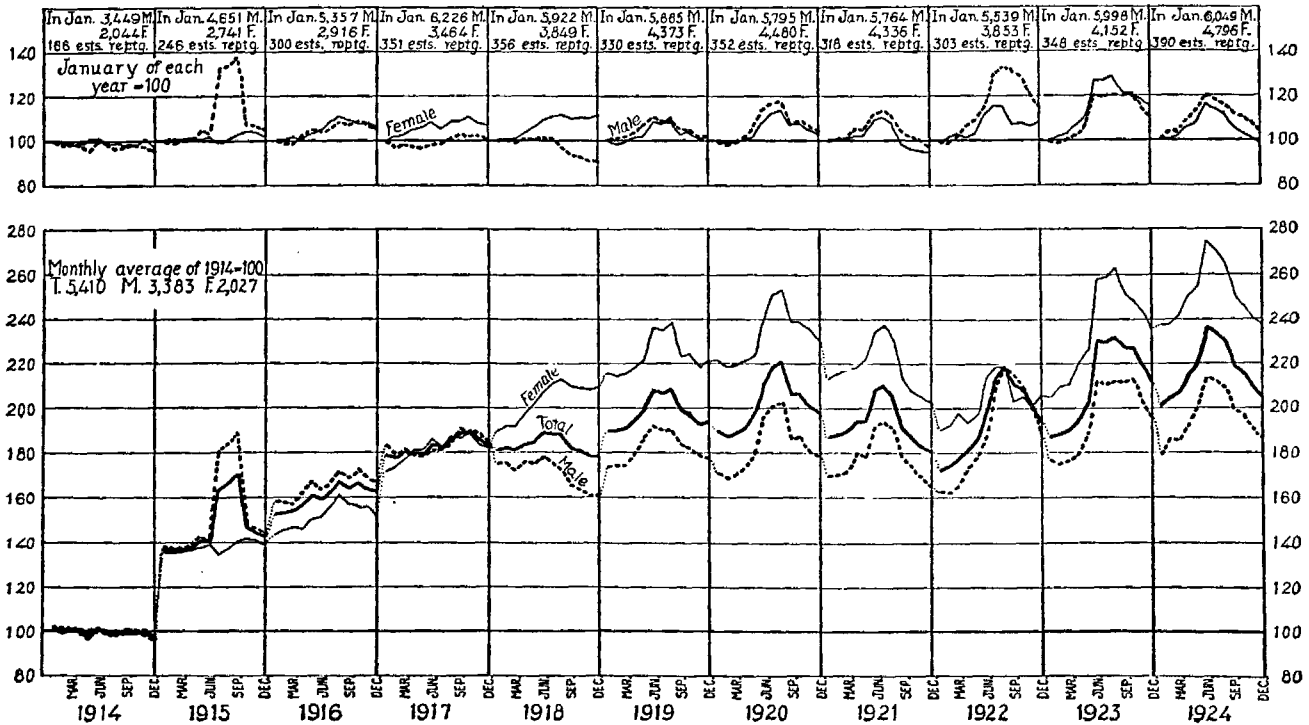

CHART 42.—WAGE EARNERS: TREND OF EMPLOYMENT IN **SERVICE—RESTAURANTS**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

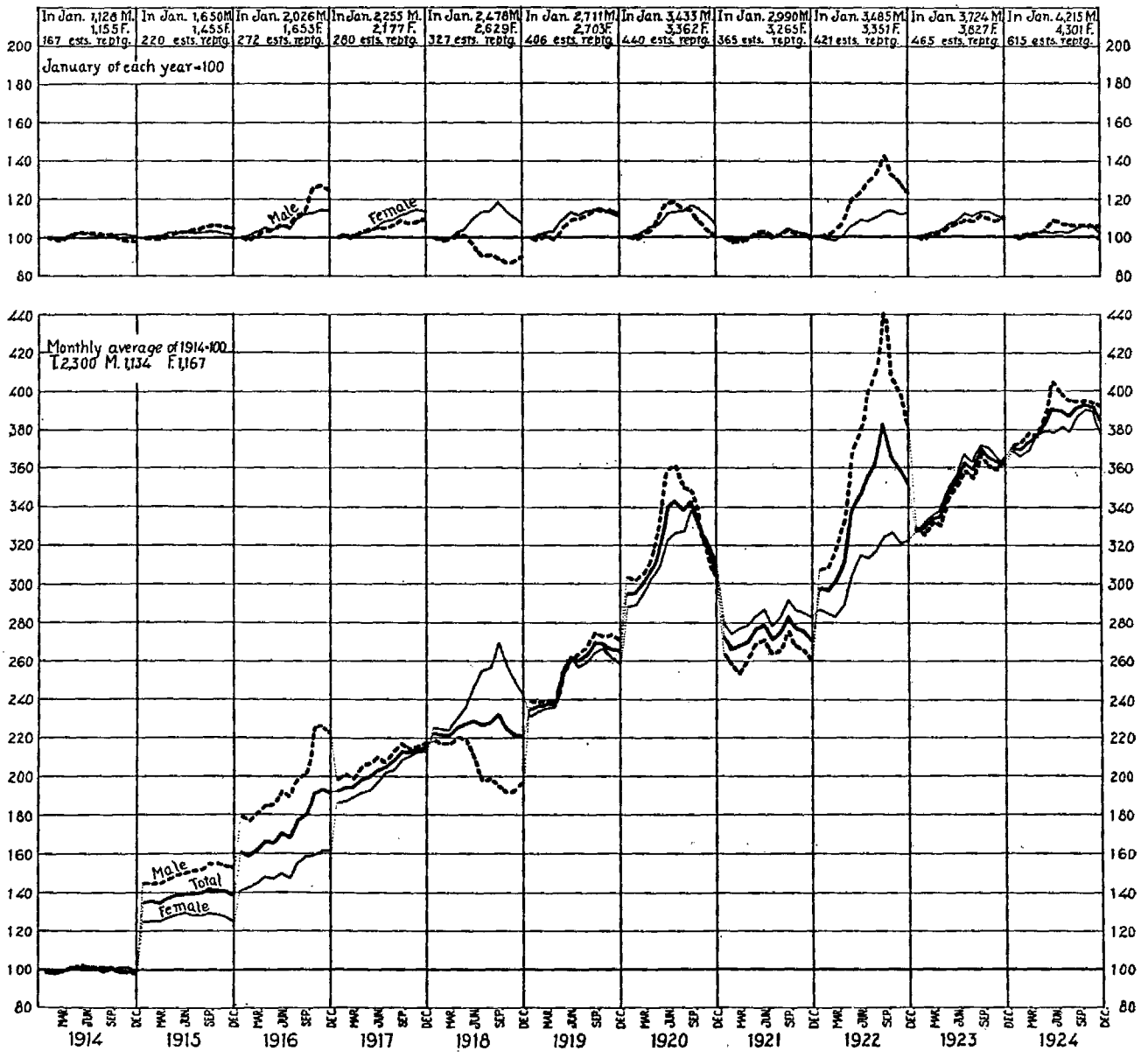

CHART 43.—WAGE EARNERS: TREND OF EMPLOYMENT IN **TRANSPORTATION AND PUBLIC UTILITIES,** OHIO, 1914 TO 1924, BY SEX

[Excludes interstate railroads]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

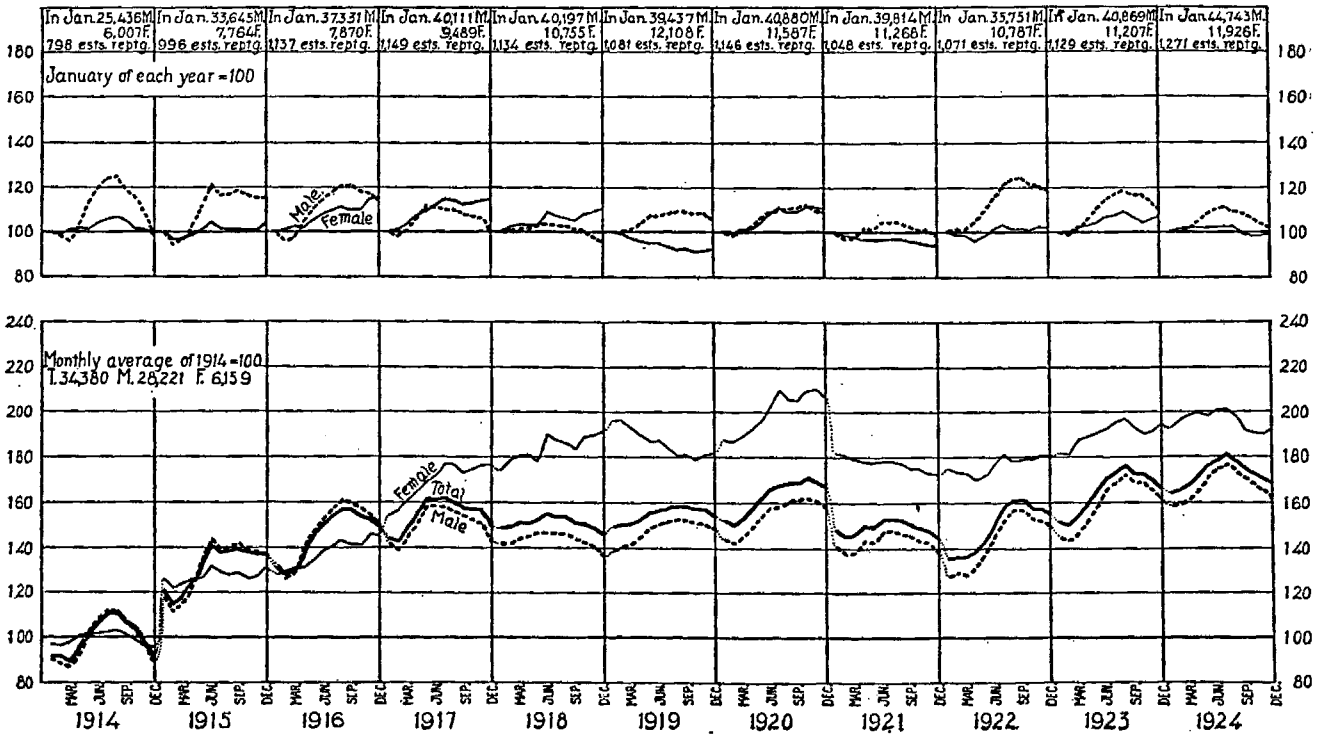

CHART 44.—WAGE EARNERS: TREND OF EMPLOYMENT IN **TRANSPORTATION AND PUBLIC UTILITIES—TELEGRAPH AND TELEPHONE (INCLUDING MESSENGER SERVICE)**, OHIO, 1914 TO 1924, BY SEX

[Excludes interstate railroads]

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

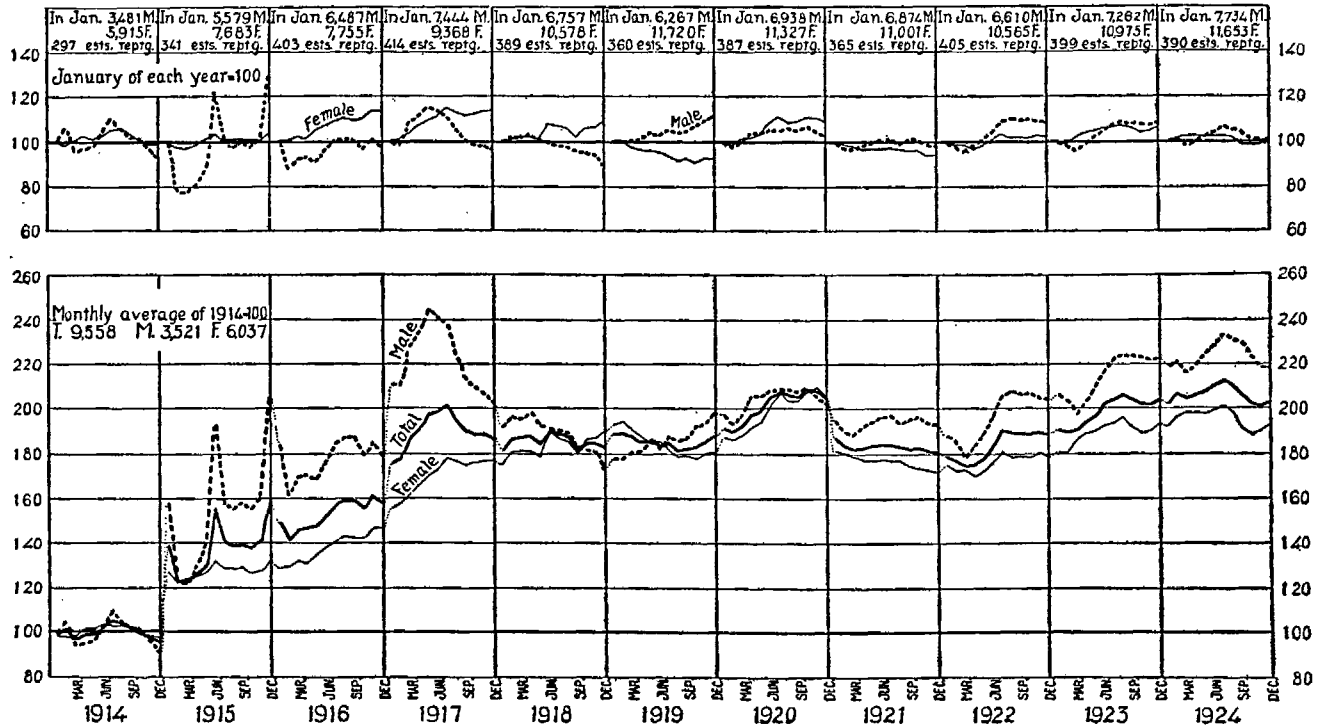

CHART 45.—WAGE EARNERS: TREND OF EMPLOYMENT IN **TRADE, RETAIL AND WHOLESALE,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

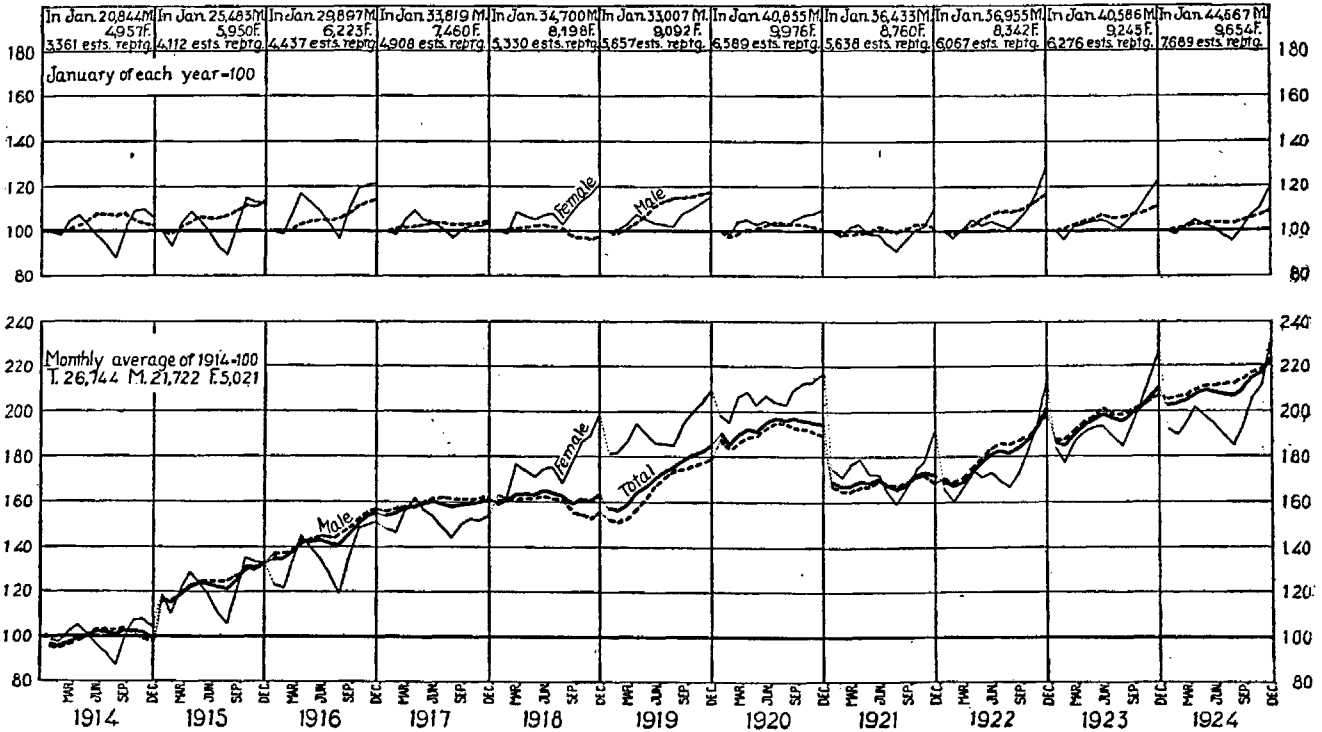

CHART 46.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: TREND OF EMPLOYMENT IN **ALL INDUSTRIES**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

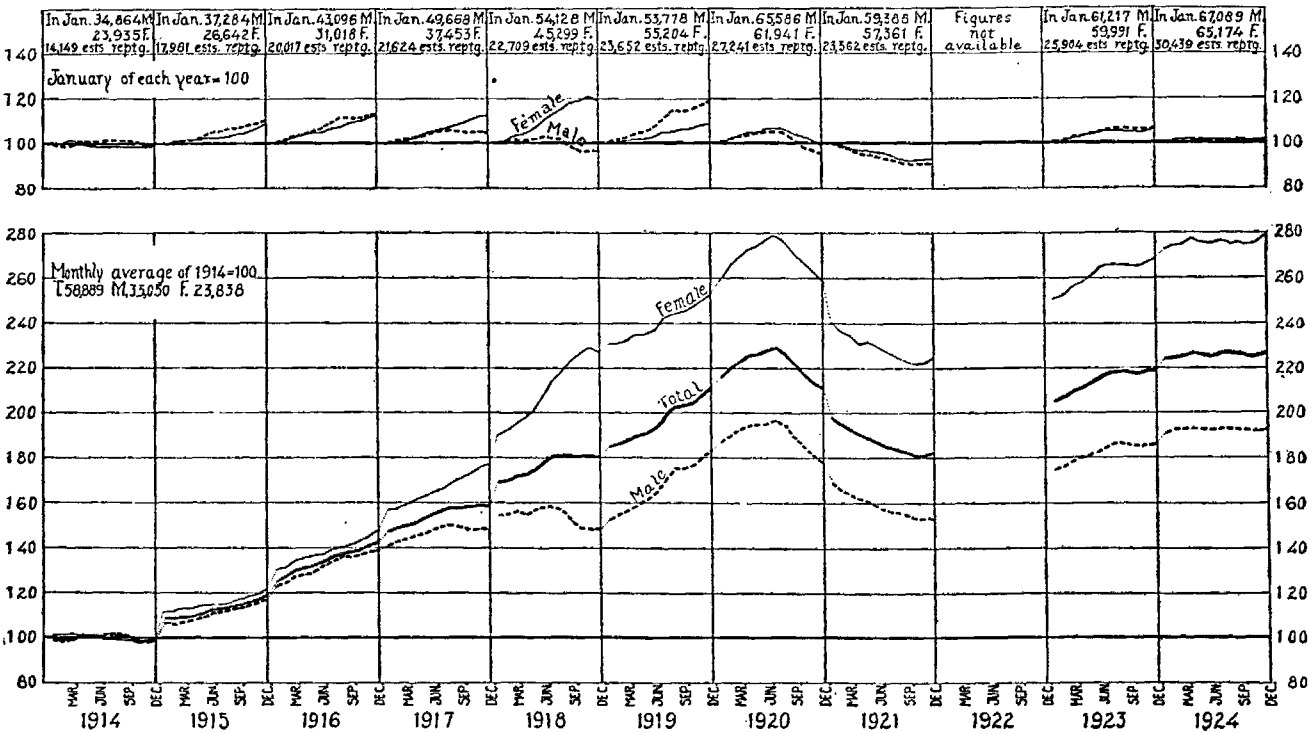

CHART 47.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: TREND OF EMPLOYMENT IN **TRADE, RETAIL AND WHOLESALE,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

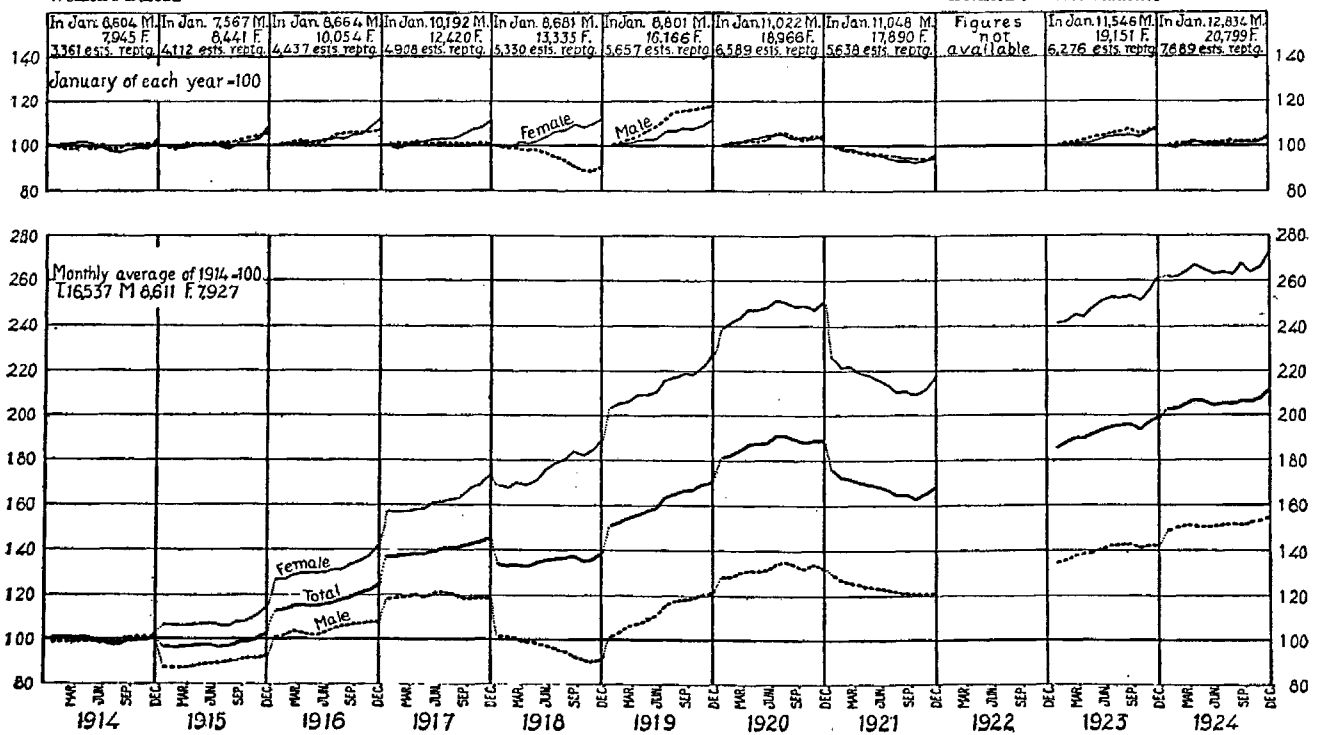

CHART 48.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: TREND OF EMPLOYMENT IN **TRADE—STORES, RETAIL AND WHOLESALE,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

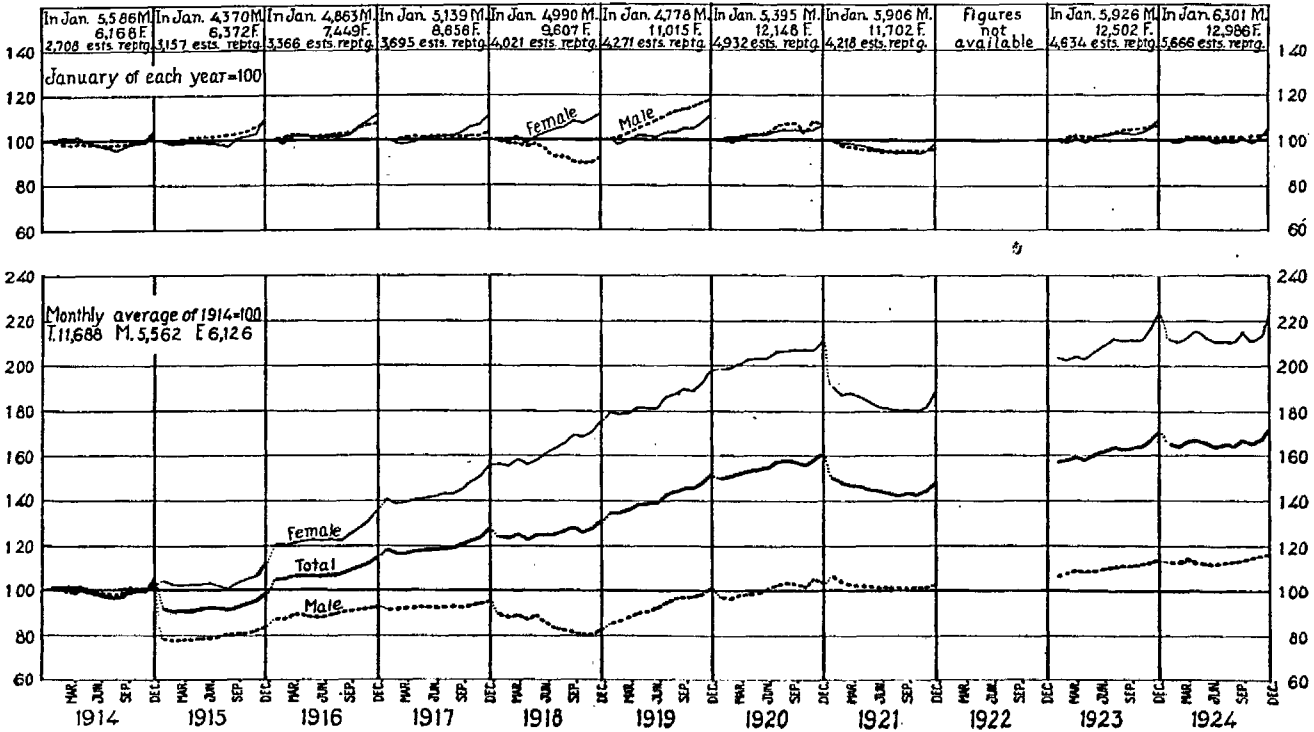

CHART 49.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: TREND OF EMPLOYMENT IN **TRADE—OFFICES**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

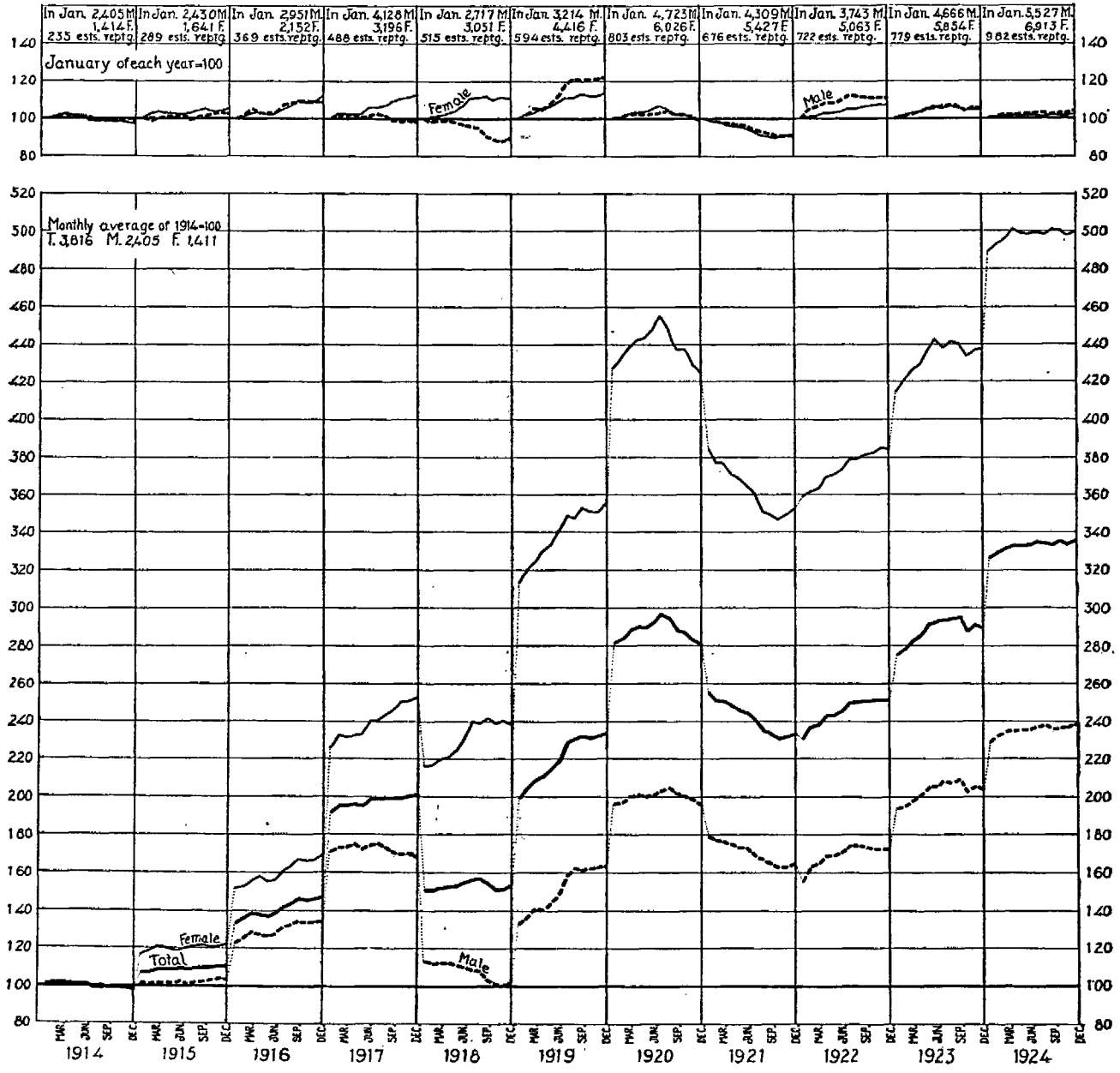

CHART 50.—BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS: TREND OF EMPLOYMENT IN **ALL MANUFACTURES**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

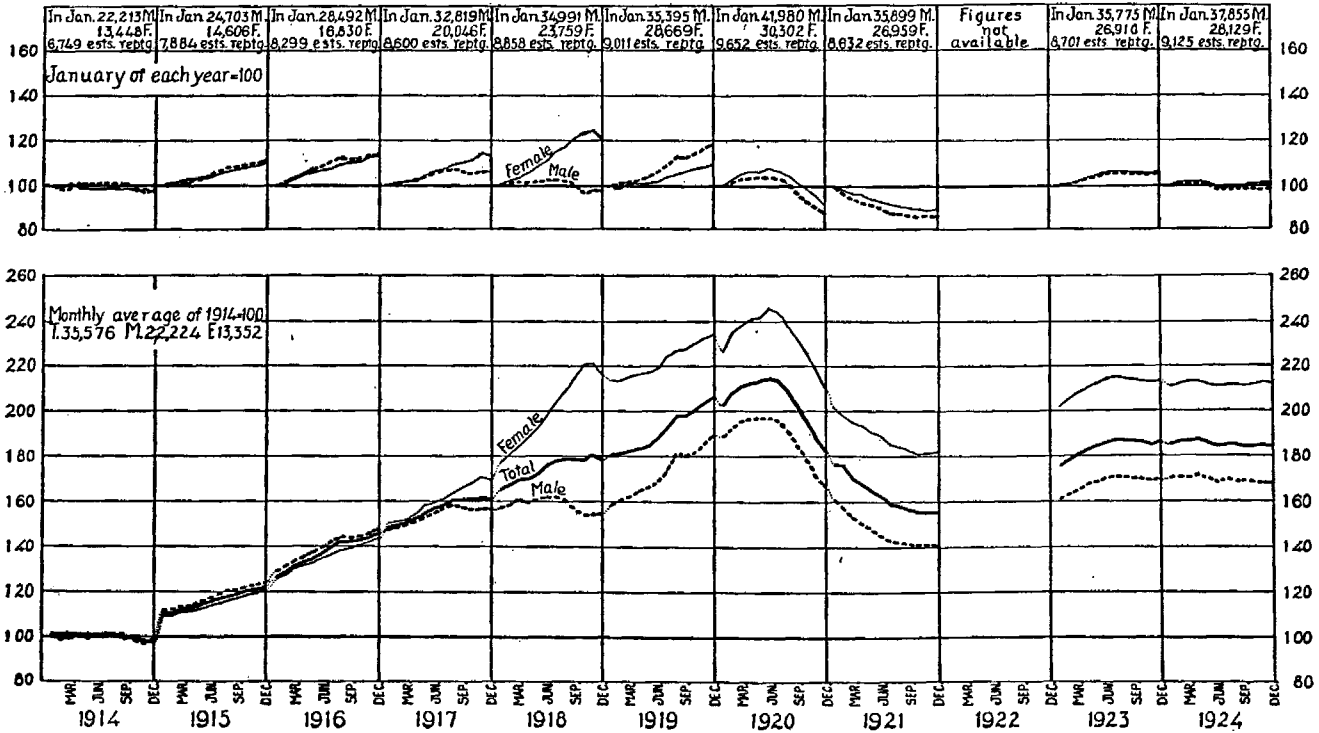

CHART 51.—SALESPEOPLE (NOT TRAVELING): TREND OF EMPLOYMENT IN **ALL INDUSTRIES**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

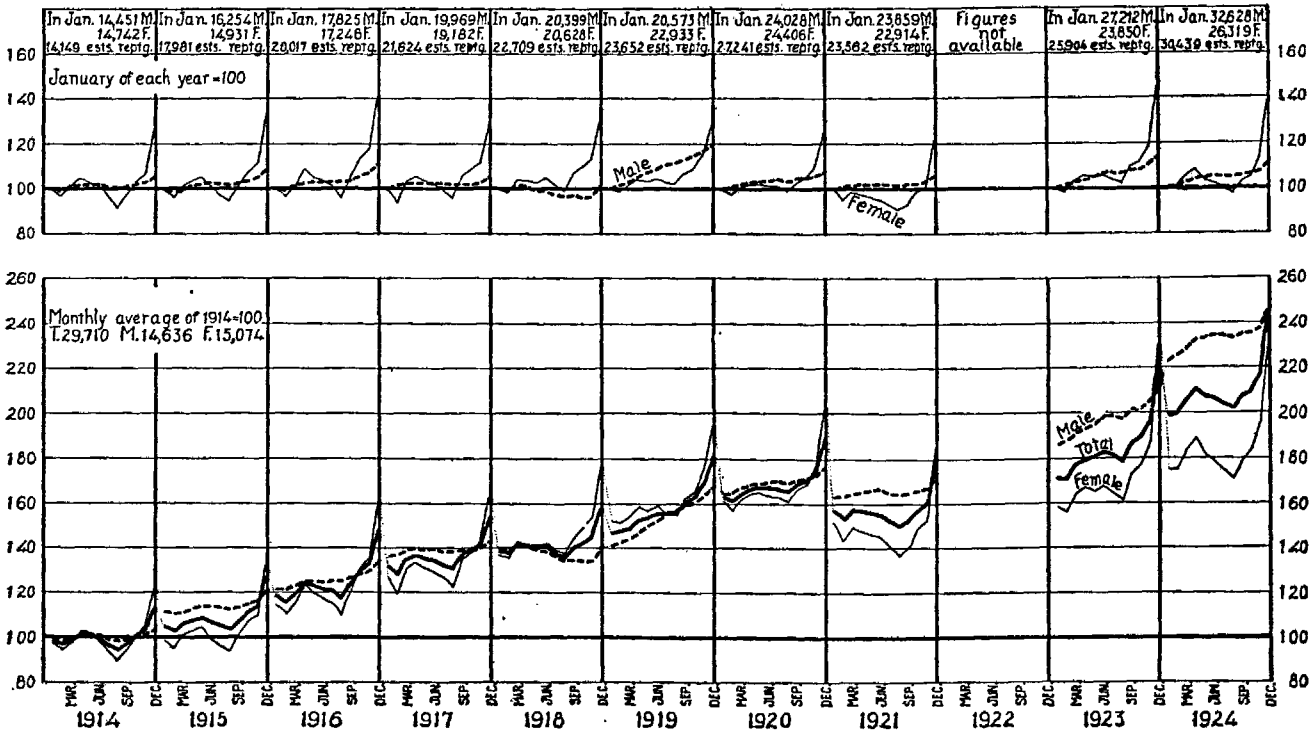

CHART 52.—SALESPEOPLE (NOT TRAVELING): TREND OF EMPLOYMENT IN **ALL MAUNFACTURES**, OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

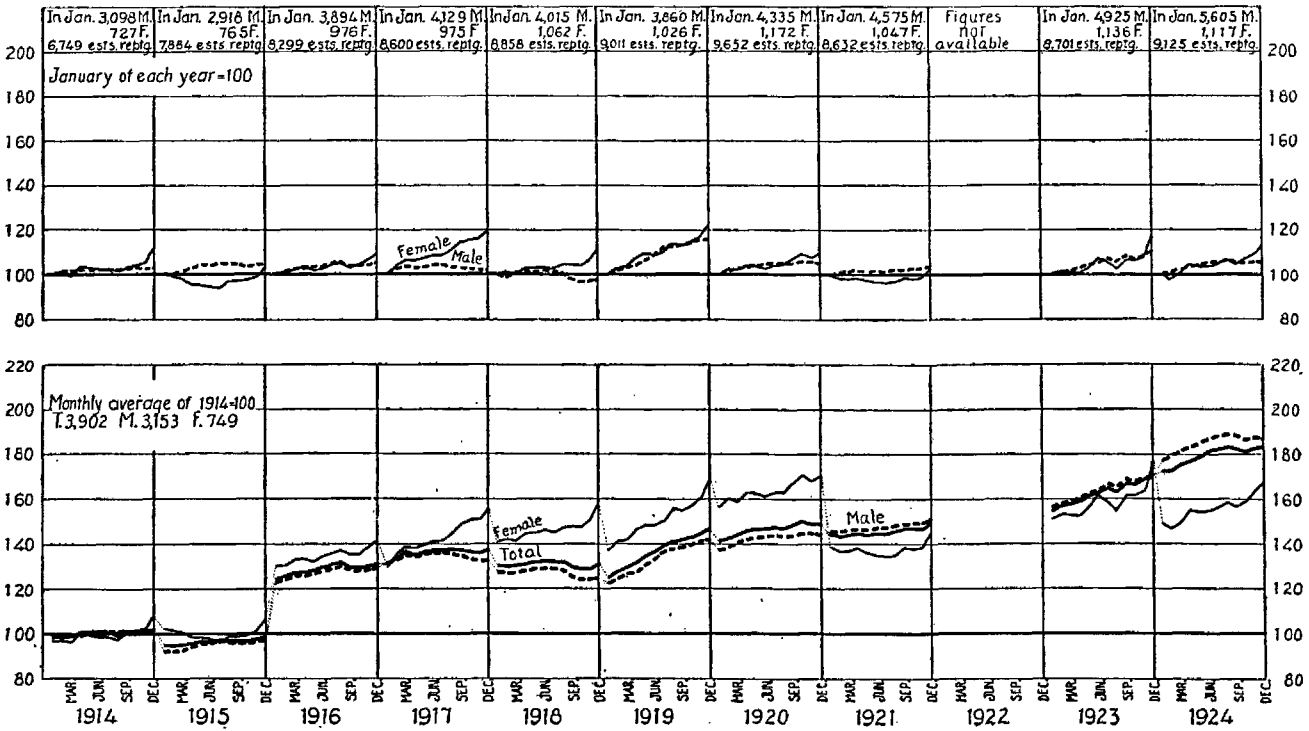

CHART 53.—SALESPEOPLE (NOT TRAVELING): TREND OF EMPLOYMENT IN **TRADE, RETAIL AND WHOLESALE,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics

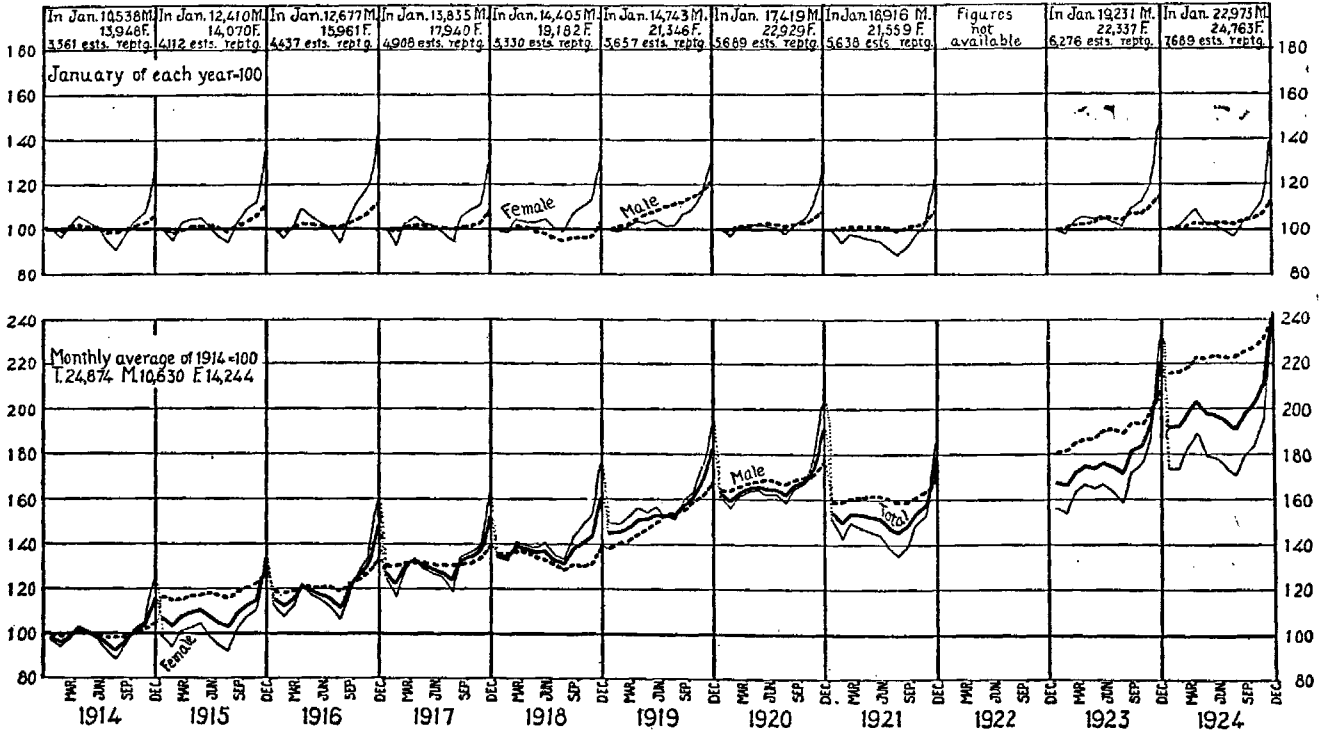

CHART 54.—SALESPEOPLE (NOT TRAVELING): TREND OF EMPLOYMENT IN **TRADE—STORES, RETAIL AND WHOLESALE,** OHIO, 1914 TO 1924, BY SEX

U. S. Department of Labor
Women's Bureau

Source: Ohio Department of Industrial Relations
Division of Labor Statistics