

UNITED STATES DEPARTMENT OF LABOR
BULLETIN OF THE WOMEN'S BUREAU, No. 113

**EMPLOYMENT FLUCTUATIONS AND
UNEMPLOYMENT OF WOMEN**

**CERTAIN INDICATIONS FROM VARIOUS
SCURCES, 1928-31**

UNITED STATES DEPARTMENT OF LABOR

FRANCES PERKINS, SECRETARY

WOMEN'S BUREAU

MARY ANDERSON, DIRECTOR

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SOURCES, 1928-31**

BY

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**UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1933**

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LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,

WOMEN'S BUREAU,

Washington, May 22, 1933.

MADAM: I have the honor to submit a report evidencing the fluctuations in employment to which women are subject and indicating the extent of their unemployment.

The frequent uncertainty of employment and the distressing periods of unemployment to which women are subject, particularly in certain industries in which their labor is an important factor, constitute a potent cause of human waste in industry—a subject upon which this Bureau has been carrying on an extensive study over a considerable period of time.

For the country as a whole, the data on employment fluctuations and unemployment as they apply to women represent but fragments that give intimation of the entire situation. In the present report, these partial data have been brought together from various sources in an effort to show something of what the entire picture may be.

The material analyzed has been gathered from four types of sources: Reports on unemployment issued by the United States Bureau of the Census; regular reports on employment in various industries collected monthly by sex in 3 States, and similar data for woman-employing industries in 3 other States that are important in woman employment but that do not collect figures by sex; reports printed or mimeographed by officials in 24 States and giving data by sex as to activities of State-supported employment agencies; 24 special studies of the unemployment of women or of their employment fluctuations, made by the Women's Bureau and by various other authorities.

I acknowledge with especial appreciation the courtesy of the various State labor departments in cooperating with the Bureau in the collection of this material, some of them having gone to considerable trouble to provide unpublished data.

By no means all the individuals and agencies that have given assistance in this report can be enumerated, though I am grateful to all, but particular mention should be made of the careful reading and helpful comment made by officials in 12 States on the parts of the manuscript citing their material, and by the following persons familiar with the difficulties of presenting data from public employment agencies: Annabel M. Stewart, coauthor of a recent study on this subject; Dr. Gladys Palmer, director of Extension Studies of the State Employment Office in Philadelphia; Dr. W. E. Parker, director of research, and Mabel E. Crafts, director of Service and Farm Division, of the Public Employment Center of Rochester, N.Y.

This report is the work of Mary Elizabeth Pidgeon, chief of the research division of the Women's Bureau.

Respectfully submitted.

MARY ANDERSON, *Director.*

HON. FRANCES PERKINS,
Secretary of Labor.

EMPLOYMENT FLUCTUATIONS AND UNEMPLOYMENT OF WOMEN

CERTAIN INDICATIONS FROM VARIOUS SOURCES, 1928-31

Part I.—INTRODUCTION AND SCOPE OF REPORT

Among the many requests that come to the Women's Bureau for material throwing light on a great variety of phases of women's work, a type that has assumed frequent importance is concerned with the extent to which women suffer unemployment, the changing volume of woman employment under the economic conditions prevailing in the past few years, and the relationship such changes bear to the fluctuations in numbers of women seeking employment along various lines.

One of the important sources of human waste in industry lies in the continual, often extreme, fluctuation in the employment of women from month to month and year to year. This report cannot seek to discover the complex causes of the frequent changes observed or of unemployment; it only can find and present certain available indications of the directions of change or the extent of unemployment among women.

There is no complete information as to the relative extent of unemployment among women at comparatively frequent intervals in the whole United States, though the results of a question on this subject included in the decennial census in some years give a modicum of data.

Regular periodic figures showing changes in the volume of woman employment in certain industries can be obtained from a few States but not for the entire country. Naturally, these do not show the full extent of unemployment even in any given time or place, although there is evidence that they do give quite definite indications as to unemployment, especially in relation to certain industries.¹ Neither do they afford a knowledge of what is happening to individual women or to any particular group, though scattered special studies have been made along these lines by both the Women's Bureau and other authorities.

State reports on public employment agencies add other fragmentary information, since they show in some degree the periods in which

¹ See, for example, Dewhurst, J. Frederic. *Employment Fluctuations in Pennsylvania, 1921 to 1927*, pp. 90ff. Also *Journal of American Statistical Association*, June 1931. A. C. C. Hill, Jr., *The Brookings Institution. Employment Statistics as Measures of Unemployment*. This study is an examination of British figures on employment indicating that unemployment increases as the employment reported decreases in certain industries, and vice versa, though in respect to other industries this did not necessarily prove to be the case.

increases or decreases in the applications of women to such agencies occur in some of the States and the extent to which such applications are effective in obtaining jobs.

An examination of the various types of information mentioned in the foregoing offers some suggestion as to the extent to which considerable numbers of women who have been in gainful employment at some time either are without such work at another time or are under the necessity of finding a new job and adjusting to it; the great irregularities of employment to which women are subject, particularly in certain industries; the aggravation of the serious problem of earning a living constituted by this lack of job stability; and the relative difficulty women who have been dislocated have in finding new work at various times or places or in various industries.

The assembling of these data in a single report will serve to identify in a general fashion the characteristic employment situation of women in a given period, to form a valuable background to more intensive studies of the experiences of particular groups of women, and to suggest the rich possibilities that might lie in the extension of such information should other States or localities find themselves able to obtain similar material and to publish it in somewhat more complete form.

SCOPE OF THE REPORT

The present study seeks to bring together in one place, with some analysis of findings, four types of material pertinent to the irregularities of employment of women within a recent period, namely, a brief summary and discussion of the extent of unemployment among women by the censuses of 1930 and January 1931; the extent and direction of fluctuations in the employment of women in certain of the more outstanding woman-employing industries as reported from official sources in certain States during the four years 1928 to 1931, inclusive, with some analysis of the same; brief summaries of the findings as to employment fluctuations and unemployment in certain recent studies made by the Women's Bureau and other authorities; and a statement of the extent to which the various States make available information as to the activities of their public employment agencies as these affect women, and the extent to which any indication of the employment situation touching women can be obtained from such reports.

Since this is not an investigation of a particular group of women, naturally it cannot give original information as to the duration of unemployment, the number of times unemployed, or other matters connected with the personal history of individuals, except in that part of the report that summarizes the findings of other studies, some of which deal with these aspects of the problem. For the most part, only data available in published form have been used, and it has not been possible to survey reports from local employment agencies. No account has been taken of reports applying particularly to relief activities or to any made-work projects; these are for the most part handled by entirely separate agencies, and while in a few cases they may have had some influence in increasing applications for jobs or employment-office placements this effect has not been great in the period of study.

A more detailed list of the types of material included and the sources from which these are obtained is as follows:

1. Reports as to unemployment of women:
 - a. United States Census of Unemployment, 1930 and 1931.
 - b. Special studies by various authorities.
2. Data on fluctuations in the employment of women:
 - a. Data published periodically by sex in three large industrial States:
 - Illinois—18 industries or industrial groups.
 - New York—23 industries or industrial groups.
 - Ohio—26 industries or industrial groups.
 - b. Data from various special studies.
 - c. Fluctuations in employment in certain important woman-employing industries in three States issuing periodic reports on employment not separated by sex: Massachusetts, Pennsylvania, and Wisconsin.
3. Types of data concerning women from State reports of activities of public employment agencies—23 States reporting by sex.

Part II.—GENERAL SUMMARY

Some general statement may be made as to the sources of information and the situations they show in connection with the unemployment of women, the fluctuations in their employment, and the data published by State-supported employment agencies. This study does not attempt to recite individual case histories, however typical certain of these might be considered. It brings together from a variety of available sources information serving to outline the picture of the extent of unemployment, to show something of the personal status of the unemployed, and to indicate the degree in which month-to-month fluctuations in employment affect women, especially in certain industries or occupations.

The findings here presented give abundant evidence of the insecurity of employment among women; the long duration of unemployment in a considerable proportion of cases; the youth of many jobless women; and the especial severity of the situation in certain industries and occupations. Further, they show the fluctuations in employment from month to month—much more extreme in some industries or occupations than in others—and the decline in employment in the early years of the depression, usually from the 1929 peak to the low point of 1930 or 1931. The available data indicate that, relative to the extent of employment of either sex, fluctuations and declines frequently have affected women to a greater extent than they have men; that women to a greater extent than men are employed at the peak periods in certain highly seasonal industries and later laid off; and that the industries and occupations in which the variations are most extreme often are exactly those within which women workers must make their livelihood.

UNEMPLOYMENT OF WOMEN

The sources of the data on the unemployment of women that have been analyzed in this report are census material, chiefly that for 1930 and 1931, and 21 special studies made by the Women's Bureau and by various other agencies and ordinarily covering particular localities or industries. While the causes of the unemployment reported from these sources have been too complex and varied for satisfactory detailed analyses, it may be stated confidently that they can be assigned primarily to economic and business conditions.

The census reports on unemployment for the two years cited classify as A and B, respectively, persons out of work, able to work, and seeking work, and persons laid off. The present discussion of the unemployed comprises these two groups combined, since they are likely to include most of those for whom joblessness caused wholly or mainly by economic or business situations is the primary problem.

These two groups include over three fourths of the total of the unemployed women, eliminating consideration of those unable to work or voluntarily idle. (See p. 16.)

Such reports as are available on the subject indicate that the numbers working only part-time at least approximate and often exceed those totally unemployed (see p. 44), so it may be safely assumed that the problems outlined in the following pages of this summary are doubled or more than doubled in extent and degree of seriousness.

The unemployment census of January 1931 covers 19 large cities in various parts of the United States—a combination that represents practically one fourth (23.6 percent) of the women normally in gainful occupations in the entire country. Consequently, its findings may be considered generally indicative of the situation in the industrial sections of the country as a whole. In respect to the points covered, its accuracy probably is superior to that of the 1930 unemployment census for the United States, since it was concerned solely with unemployment and was not part of a population count. However, the material is presented in the main by city without totals for the whole, which makes it less easy to obtain general information for the entire sample on such matters as, say, the situation in particular industries as against that in other industries.

Information as to the extent and basis of each of the 21 special studies considered will be found elsewhere in the text in connection with discussion of the study in question (p. 31 and following).

Extent of the unemployment of women

The census of 1930 reported 668,661 women unemployed in all classes combined and 501,502 in classes A and B combined. That of January 1931 reported 479,283 women out of work (A and B combined) in 19 cities. Since this represented 18.9 percent of the women normally gainfully occupied in those localities, if this proportion be applied to all employed women in the United States, the total number of women unemployed in January 1931 must have approximated at least 2,000,000. In two of these same cities other agencies made studies of special samples in 1931, affording some information on extent of industrial unemployment among women. In these the proportions of women reported unemployed were fairly similar in the census and in the special sample studied: Buffalo, special sample 21.6 percent, census 18 percent; Philadelphia, special sample 23.7 percent, census 24.3 percent.

Unemployment in various States and cities

The States reporting 50,000 women or more gainfully occupied and having the largest proportions of women unemployed as reported in April 1930 were Rhode Island, Massachusetts, and Florida; the smallest, Alabama and Mississippi. (See p. 21.) In January 1931, in Houston 26 percent of the women were reported unemployed, and there were over 20 percent in Philadelphia, New Orleans, Chicago, Detroit, Birmingham, Cleveland, and St. Louis. The smallest proportion was 9.4 percent in San Francisco, while Denver and Seattle each reported 11.7 percent. (See p. 25. In every case classes A and B alone are included.)

¹ For New York only 3 boroughs were reported, but these may be considered representative of the city as they include 86 percent of the women normally in gainful occupations.

Unemployment in main occupational groups

From whatever available source considered, the manufacturing industries and domestic and personal service—the two largest woman-employing occupational groups—had suffered greater proportional (as well as greater numerical) unemployment than had any other group. In January 1931 the women unemployed (classes A and B) formed nearly one third of those usually in manufacturing, nearly one fourth of those ordinarily in domestic and personal service, practically one fifth of those in trade, and over one tenth of those in clerical occupations and in transportation and communication. In every city the professional group had the smallest proportion unemployed, but it must be remembered that in many cases women so trained are likely to go into other than professional work rather than remain wholly unemployed. (See p. 30.) Special studies in 1931 that give proportions of women unemployed in occupational groups—namely, those made in a New York city—show somewhat smaller proportions unemployed in manufacturing than the census of that year indicated, a distinctly larger proportion than reported by the census in domestic and personal service, somewhat smaller proportions in trade and transportation, but a very much larger proportion unemployed in clerical occupations than the census indicated—32.5 percent against 12.1 percent.

Taking 18 States that normally employed 200,000 or more women, according to the Census of Occupations in April 1930, it is found that the proportions of women unemployed in manufacturing were greatest in Massachusetts and North Carolina, least in Texas and Wisconsin. In domestic and personal service and in trade the range in proportions unemployed was not great; in the first-mentioned occupational group, proportions of women unemployed were greatest in Michigan, least in Wisconsin. In 9 of these 18 States, the manufacturing industries had the greatest proportions of woman employment, in the remaining 9, domestic and personal service. Trade usually came next in proportions unemployed. (See p. 22.)

Unemployment in particular industries

The data for April 1930 afford information as to relative extent of unemployment in various industries for the United States as a whole. These show women unemployed in the greatest proportions in woolen and worsted mills, the manufacture of electrical machinery and apparatus, cigars and tobacco, cotton factories, and certain food industries. In each of these except cigars and cotton—in the latter the proportion was the same—smaller proportions of men than of women were out of work.

Industries showing men unemployed in the greatest proportions were woolens and worsteds, automobiles, cigars and tobacco, and shoes. (See p. 18.)

Duration of unemployment

Naturally, as unsettled economic conditions continue over an extended period, studies made at later dates would be likely to show larger proportions out of work for long periods than would surveys made earlier. Census data for January 1931 showed that in 11 cities and 2 New York boroughs at least one fifth of the unemployed women

had been out of work over 6 months, the proportion running as high as 36.9 percent in Detroit. (See p. 26.) Special studies made in 1931 in 5 cities showed for the women unemployed that from 16.4 percent in Philadelphia to 36.7 percent in Buffalo had been out of work a year or longer.

Ages of the women unemployed

The indications are that unemployment has borne heavily upon the younger groups of women, in some cases their proportion unemployed being greater than their place in the woman population and in normal employment. Data from the census of April 1930 arranged in 5-year groups for those 20 to 60 years of age and over (see p. 19) show that for each sex the largest proportion of those out of work were 20 to 24 years old; of the unemployed women about 56 percent, and of the men about 37 percent, were under 30; of the women about 12 percent, of the men about 23 percent, were 50 or older. In the census of January 1931 the group of women under 20 held the largest proportion of unemployed, ranging from 17.8 percent to 36.6 percent in the various cities and boroughs reported. Of the girls under 20 normally gainfully occupied, more than 30 percent in 7 cities and between 20 and 30 percent in 8 other cities and the 3 New York boroughs were unemployed at that date. (See p. 26.) In five studies—three of them made in 1931—the proportions of the women unemployed who were under 25 were greater than were the proportions of women in the general population and of those normally in gainful occupations who were under 25. (See p. 41.)

Unemployment among foreign-born and Negro women

The census of January 1931 shows that in every city and borough reported very much larger proportions of the Negro women and smaller—usually considerably smaller—proportions of the foreign-born than of the native white women were unemployed. (See p. 27.)

Three of the special studies made—two made in New York cities and one in Philadelphia, two in 1931—indicate that the proportion of foreign-born women in the unemployed group was less than its proportion in the population or that normally in gainful occupations (see p. 43), but the proportion of Negro women unemployed was decidedly greater than their place in the population and in gainful employment.

Responsibility of unemployed women for support of others

The studies of women's unemployment analyzed afford few data for gauging the extent to which women out of jobs have others dependent upon them, though various surveys of the Women's Bureau indicate that many employed women are responsible for a large share in family support. The unemployment census of 1930 shows that 48,648 unemployed women—approximately one tenth of all those out of jobs—were heads of families, which according to the census definition means the dependency of others upon them. If information could be obtained for a later date, almost certainly it would show this proportion enlarged. In some of the special studies, from practically one fifth to well over one half the unemployed women had others dependent upon them, but not all of these were responsible for the complete support of others besides themselves. (See p. 40.)

FLUCTUATIONS IN THE EMPLOYMENT OF WOMEN

The material summarized up to this point has had to do with women out of work at a given time or for certain periods of time. Other material shows the changes in numbers employed from month to month. The data that can be obtained on this subject give overwhelming testimony to the severe extent to which women in comparison with men are affected by fluctuations in employment in every year in industries that are large employers of women, and to the extent to which women, as compared to men, are the sufferers from employment decline.

The basic information available on fluctuations in women's employment in important industrial areas within the period 1928-31 is contained in periodic reports on employment in three large industrial States—New York, Ohio, and Illinois; in a few studies made by the Women's Bureau, mostly relating to particular industries; and in special reports for three Minnesota cities. In the case of three large industrial States—Massachusetts, Pennsylvania, and Wisconsin—whose regular reports on employment are not by sex, certain of the industries shown are known to be large woman employers, and some indication as to fluctuations within these industries is afforded.³

For consideration in this report the more important woman-employing industries or occupation groups were selected. The Illinois, New York, and Ohio data used include the following numbers of industries or occupation groups:

	Total	Manufacturing
Illinois.....	18	14
New York.....	23	23
Ohio.....	26	20

The material available varies considerably in the three States in relative importance of different employment groups, in types of reporting, and consequently in statistical basis. For these reasons, exact and complete comparisons frequently cannot be made. However, a few of the more striking facts can be commented upon, such as the extent to which certain industries showed more or less extreme fluctuation of woman employment than did others, both within each year and within the 4 years, and the relative extent to which women and men were affected.

In each case an index of employment forms the basis of the discussion, the variations reported being measured in points of difference between the high and the low index in the period covered. Incidentally, it should be mentioned that in most cases the highest index of employment came at some time in 1929, the lowest ordinarily in 1930 or 1931 (in a few cases in 1928). The characteristics of the data from each of the States included are given in some detail in the consideration of the States in question (see pp. 50, 51, 70, and 95) and afford a basis for evaluating the index used in each case.

³ A few States that do not rank high in the industrial employment of women, notably Iowa and Kansas, also keep periodic records of employment by sex.

Employment fluctuations within the year

Certain industries that employ large numbers of women are commonly known to be highly seasonal. These and some other industries showed decided variations in the employment of one or of both sexes in practically every year in each State in which they were a factor important enough for inclusion. A marked similarity was shown in the position taken by certain industries or groups in their relation to other industries or groups in extent of these variations, regardless of the locality under consideration.

Great irregularity in the employment of both sexes ordinarily was shown in the manufacture of radios and radio parts, of automobiles, and of electrical machinery and supplies; in some of the clothing groups; in certain of the food industries known to be seasonal, notably canning, meat packing, and in some instances candy or confectionery; and, especially for women, among employees in stores, even if the December peak be left out of account. Variations between high and low employment index within the year sometimes ran well over 100 points. Reports from certain Women's Bureau studies show the following proportions of the women on pay rolls in the maximum week of the year who were not on the rolls in the week of minimum employment or at the time interviewed:

Radios and parts (1929)—53.5 percent to 86.3 percent in various branches of the industry.

South Bend, various industries (1930)—about 21 percent.

Slaughtering and meat packing (1928)—27.9 percent to 45.5 percent in 5 cities.

Industries or occupation groups that ordinarily showed greater regularity of employment were the clerical groups reported; the telephone industry; certain service occupations; paper and printing; and in some cases men's clothing. Printing and certain branches of clothing are likely to be more strongly organized than some other industries.

The points of difference between the high and the low index in employment in all manufacturing in the three States in each of the 4 years were as follows:

State	Women				Men			
	1928	1929	1930	1931	1928	1929	1930	1931
Illinois.....	10	11	22	14	8	8	20	15
New York.....	20	12	14	12	4	7	13	12
Ohio.....	15	15	12	10	13	19	19	13

In the three Minnesota cities combined the proportions of women on the rolls at the maximum of employment but not on the rolls at the minimum were as follows:

1928—10.0 percent
 1929—6.1 percent
 1930—5.6 percent
 1931—5.3 percent

Decline in employment within the 4 years

Variation between high and low index in the 4-year period frequently resolves itself into a showing of the entire decline from the 1929 high to the 1931 low. Such declines were especially great in the employment of women in automobiles and electrical apparatus. Employment variations for women or for the two sexes combined were notable in some cases in certain of the clothing, textile, and metal industries. Relatively small declines in woman employment occurred in printing and publishing, in laundering and cleaning, and among clerical groups and telephone employees. The points of decline in the 4-year period in the indexes of all manufacturing employment combined are as follows:

State	Points of decrease, over 4-year period		Percent decrease November 1929 to November 1931
	Women	Men	Both sexes
Illinois.....	45	43	-----
Ohio.....	42	49	-----
New York.....	33	32	-----
Massachusetts.....			30.8
Pennsylvania.....			24.8
Wisconsin.....			30.8

Irregularity and declines for women and men

The summary for all manufacturing on page 91 indicates that in 1928, 1929, and 1930 the variation between high and low employment in Illinois and New York was greater for women than for men—in New York very much greater—but that by 1931 this condition had changed. In Ohio men's employment fluctuated more than women's in each year but 1928.

Reports for the Minnesota cities show the proportions of persons employed at the maximum who were not on the rolls in the minimum month of the year. For Minneapolis these show the condition just noted for Ohio: Larger proportions of women out of work in 1928, larger proportions of men in each of the other 3 years. In the city of St. Paul larger proportions of women than of men were out of work in every year.

If separate industries be considered, as measured by the variation between high and low index of employment within the year, the irregularity of employment in the important woman-employing industries here considered was greater for women than for men in Ohio in every year in 18 of 26 groups, including 11 of 19 manufacturing industries; in Illinois, in each of the 18 industries or groups included, in nearly every year; in New York, in every year in 6 (and usually in 5 other) of the 23 groups included. The employment fluctuation was the greater for men in Ohio among wage earners in all industries, the service group, and radio manufacture; in none of the 18 Illinois or 23 New York industries or groups was fluctuation the greater for men in every year, though it usually was so in New York in 3 of the clothing and textile groups.

Variations during the 4-year period were greater for women than men in Illinois in practically every industry group; in New York, in 12 of the 23 groups included; in Ohio, in 18 of the 26 groups, including 15 of the 20 manufacturing industries or groups. In all the manufacturing industries taken together, employment decline was slightly greater for women than for men in Illinois and New York, the greater for men in Ohio, and this is based on the manufacturing total as reported by the State, which includes industries outstanding as employers of men as well as the woman employers selected for discussion in the present report.

DATA PUBLISHED BY STATES ON ACTIVITIES OF PUBLIC EMPLOYMENT AGENCIES

State reports as to public employment agencies have been examined for the years 1928 to 1931. Within this period 23 States had issued some data by sex in certain publications dealing with these agencies. One of these reports data for a private agency only. Fourteen of these, nine of them relatively important in woman employment, afford some information in each of the 4 years. (See table XIII in Appendix A.)

The variations among the States in types of reporting make accurate comparison of their material wellnigh impossible. The usual subjects reported upon were applications or registrations, help wanted, referrals, and placements; a few States have computed the ratio of applications to places open.

The reports do not show the number of separate individuals that have sought employment through the agency nor the number of separate places open. Their chief indication is the extent of activity of the offices and the pressure of the work at given intervals. In some instances a State has varied its method of reporting within the 4 years. While they show nothing as to individuals or the rise of new occupational opportunity, nevertheless general indications as to labor market movements can be obtained from these data. Certain of the newer offices established through cooperation of public agencies and private endowment are working toward the development of methods of reporting that will in the future supply data lending themselves more adequately to fruitful analysis than has been the case in the past.

Data on help wanted showed a preponderance of demand at the agencies for domestic and casual workers, though manufacturing workers formed a large proportion of those asked for in Pennsylvania and roughly one tenth in New York and Minnesota in 1929 and 1931. Clerical help wanted usually was small.

Demands for women constituted considerable proportions of all calls for help. While this may have been expected from the numbers of domestic workers wanted, still, in several States where the data enabled such analysis, the proportions of women wanted in domestic, clerical, and manufacturing work also considerably outran their proportions engaged in these respective occupations according to the census of 1930.

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In half the 14 States for which such data could be analyzed,³ there was an increase in the proportion of woman help wanted, continuous either throughout the four years or after 1929. This fact cannot be confidently assigned to any one reason, but rather its causes are varied and complex.

So far as the data for the 4 years in 13 States with complete records afford any indication of the employment situation of women, applications or registrations for jobs had been greater in 1931 than in any other year in 7 of the 13 States, and in 4 of these the rise in applications had been continuous from year to year. In 10 of the 13 States the jobs open to women were fewer in 1931 than in any other of the 4 years, and the decline in help wanted had been continuous after the peak of 1929. In 12 of the 13 States the ratio of help wanted to applications of women was lower in 1931 than in any other year—very much lower in at least 6 States.

Twelve important woman-employing States afford some information by month, though not in all these is the entire 4-year period covered. It is not surprising that in 9 of the 12 States demands for woman help reached a high point in 1929 that never again was reached. More men's than women's applications and greater demands for male than female help ordinarily were reported except in two States. However, demands for women exceeded those for men for the most part in two other States in 1930 and in three more in 1931.

If applications for both sexes among the larger manufacturing woman-employing States in each year be compared month for month with those in the preceding year, it is found that only in three States did those of 1929 ordinarily exceed those in 1928, for men in two States and for women in two, and the irregularity of the data affords little significant information. The use of this method in an analysis of the material on demands for help seems somewhat more fruitful, giving the following rather consistent showing: In most months more places were open in 1929 than in 1928 in five States for both sexes and in two other States for men. Demands for help, as compared month for month with year preceding, ordinarily were fewer in 1930 than in 1929, and still fewer in 1931.

With basic material of such irregularity, little of importance can be shown in regard to various occupations, though some type of occupational classification was included in reports from 12 States for some or all of the 4 years. A large part of the work was in handling casual and domestic and personal labor. Ordinarily, declining demand for help and increasing pressure for jobs characterized most occupational groups, and these movements caused especially great discrepancies between the applications and the help wanted in the clerical and in the manufacturing occupations.

³ Includes Michigan, for which 1928 and 1929 data are not in hand. However, figures for 1930 and 1931 are available, and as Michigan is an important industrial State it has been included in table XIV, though Nevada and Arkansas were omitted. (See table XIII.)

Part III.—WOMEN'S UNEMPLOYMENT

INFORMATION FROM THE FEDERAL CENSUS OF UNEMPLOYMENT AS IT APPLIES TO WOMEN

Information at frequent dates in regard to the extent of unemployment among women in the whole United States is not available. It is obvious that even in any given locality the situation as to employment would be in a constant state of change and would differ from month to month and even from day to day. An accurate and complete picture could be obtained only by regular and frequent collections of data—a task that is not likely to be undertaken in the near future for women in the entire country. Monthly reports as to employment changes in a few of the States give some indications of unemployment so far as various industries are concerned, but cannot be taken as complete measures of unemployment at any given time even in the States that collect them.¹ Some information on this subject has been made available at long intervals in connection with certain of the decennial reports of the United States census.

An effort has been made in five census years to ascertain the extent of unemployment, and such information as has been prepared is by sex. The question regarding months unemployed in the year was asked first at the census of 1880, but tabulations were not made, owing to the expense and to the fact that at least in connection with a part of the data secured there was "grave doubt as to the reliability of the information." The first statistics on this question were published in 1890, warning being given that they "should be regarded as approximate"; tabulations showed that about 15.1 percent of the persons ordinarily having gainful occupations were unemployed during some part of the census year. There had been 510,613 women and 3,013,117 men without jobs, and the proportion of women was 13.7 percent of those normally in gainful occupations, smaller than that of men, which was 15.6 percent. In 1900 the results tabulated showed 22.3 percent unemployed, and these figures are accepted as more accurate than those of 1890, because in the later year the instructions were simpler and more definite, and for other reasons.² There were 1,241,492 women and 5,227,472 men without jobs, though the proportion of women unemployed in relation to those normally in gainful occupations was 23.3 percent—greater than that of men, which was 22 percent. In 1910 the returns were not printed, and in 1920 the question was omitted entirely. In 1930 the schedule differed from those of earlier years, seeking to ascertain number of persons unemployed on the day preceding the enumerator's call rather than, as formerly, number unemployed at some time within the year, though in 1930 a special schedule also inquired as to length of time those not employed

¹ For report of a study indicating the degree in which the extent of unemployment can be gauged from periodic data on employment, see footnote 1, p. 1.

² U.S. Bureau of the Census. Twelfth Census, 1900. Occupations, p. cccx ff. See also p. lvi in regard to corrections in 1890 figures.

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on that day had been without work. The results were not compared with those of previous decades, since the character of the information was so dissimilar.³

UNEMPLOYED WOMEN ACCORDING TO THE CENSUS OF 1900

A brief comparison of men and women as regards unemployment in 1900—the early year for which the fullest data are available—may be given here from the figures shown by industry in the following table:

TABLE 1.—Percent of women and men, 10 years of age and over, reported as unemployed, 1900, by normal occupation *

Occupation	Women		Men	
	Normally gainfully occupied	Percent unemployed	Normally gainfully occupied	Percent unemployed
All occupations	5,319,307	23.3	23,753,836	22.0
Agricultural pursuits.....	977,336	32.1	9,404,429	19.5
Professional service.....	430,307	50.9	827,941	13.5
Domestic and personal service.....	2,095,449	17.1	2,485,208	24.7
Trade and transportation.....	503,347	11.1	4,263,617	10.4
Manufacturing and mechanical pursuits.....	1,312,608	22.4	5,772,641	28.3
Clay, stone, and glass:				
Glass workers.....	2,621	45.5	47,377	59.9
Potters.....	2,940	34.4	13,200	32.8
Food and kindred products:				
Bakers.....	4,328	9.9	74,890	11.3
Confectioners.....	9,214	16.6	21,980	11.2
Leather and its finished products:				
Boot and shoe makers and repairers.....	26,510	42.5	169,393	31.7
Manufacturers and officials.....	2,380	8.1	239,649	6.8
Metal:				
Clock and watch makers and repairers.....	4,815	11.9	19,305	11.3
Gold and silver workers.....	6,380	26.8	19,732	25.3
Paper and printing:				
Bookbinders.....	15,632	16.7	14,646	14.0
Box makers (paper).....	17,302	20.4	3,795	18.8
Paper- and pulp-mill operatives.....	9,424	21.1	26,904	16.9
Printers, lithographers, and pressmen.....	15,981	18.5	139,166	15.0
Textiles:				
Carpet-factory operatives.....	9,001	24.4	10,371	25.0
Cotton-mill operatives.....	120,603	14.9	125,788	13.1
Hosiery- and knitting-mill operatives.....	34,460	20.9	12,630	20.3
Silk-mill operatives.....	32,437	25.8	22,023	29.3
Woolen-mill operatives.....	30,630	21.1	42,566	19.5
Other and not specified textile-mill operatives.....	451,182	18.6	473,830	18.9
Dressmakers.....	344,794	19.8	2,090	20.6
Hat and cap makers.....	7,623	34.9	15,110	41.0
Milliners.....	86,120	26.3	1,739	8.1
Seamstresses.....	146,108	24.2	4,837	32.5
Shirt, collar, and cuff makers.....	30,941	22.1	8,491	23.7
Tailoresses.....	68,935	26.4	160,714	27.0
Other and not specified textile workers.....	20,671	22.1	8,962	23.8
Tobacco and cigar operatives.....	43,497	31.1	87,955	27.3
Miscellaneous industries:				
Glove makers.....	7,768	20.0	4,503	17.1
Photographers.....	3,580	14.9	23,361	9.7
Rubber-factory operatives.....	7,374	30.6	14,492	31.0
Upholsterers.....	2,158	21.3	28,663	20.9

* U.S. Bureau of the Census. Twelfth Census, 1900. Occupations, p. cxviii ff., all industries included that were listed under manufacturing for women.

* Industry titles are those used by the U.S. Bureau of the Census, but group titles have been supplied to facilitate comparisons.

* Total exceeds details as only selected industries are shown separately.

* Other textile operatives includes bleachers and dye works operatives for men.

* Percent computed by Women's Bureau.

For either sex, in all occupations taken together, the proportion unemployed was more than one fifth of those normally in gainful occupations, and it was somewhat greater for women (23.3 percent)

³ Ibid. Fifteenth Census, 1930. Unemployment, vol. I, p. 5.

⁴ The census year in 1900 was from June 1, 1899, to May 31, 1900.

than for men (22 percent). Altogether there were 1,241,492 women and 5,227,472 men out of work. In the three occupational groups employing the fewest women—professional service, trade and transportation, and agriculture—larger proportions of women than of men were unemployed. In the largest—domestic and personal service—about 17 percent of the women were unemployed, and in the group next in size—the manufacturing and mechanical industries—22.4 percent. Both these employed many more men than women, and in both considerably larger proportions of the men were unemployed, respectively 34.7 percent and 28.3 percent. The census figures show that professional service was the only main group in which larger numbers of women than of men were unemployed, 219,019 of the former and 111,547 of the latter being without jobs. The proportions were 50.9 percent and 13.5 percent, respectively.

The data show that in four manufacturing occupations that ordinarily are pursued in factories—paper-box making, bookbinding, cotton manufacture, and glove making—both larger numbers and larger proportions of women than of men were unemployed; and this also was the case with milliners. Larger numbers (though not larger proportions) of women than of men were without jobs in hosiery and silk mills, in shirt, collar, and cuff factories, and as dressmakers and seamstresses, as well as in a "not specified" group of textile workers.

In 18 of the 30 important woman-employing occupations listed as manufacturing and mechanical industries—some of which occupations, such as dressmakers, seamstresses, milliners, were not chiefly of factory character—larger proportions of women than men were unemployed. Three of these—cotton mills, tobacco and cigar, and boot and shoe factories—employed more women than any other of the strictly factory industries, and in these respectively 14.9, 31.1, and 42.5 percent of the women and 13.1, 27.2, and 31.7 percent of the men were out of work. The largest proportions unemployed among the women except for the case of boots and shoes were in industries ordinarily employing relatively few women—45.5 percent of the glass workers, 39.6 percent of the rubber-factory operatives, 34.4 percent of the potters, and 34.9 percent of the hat and cap makers. In the second and third of these four, larger proportions of women than of men were unemployed. But the same four, together with boots and shoes, were among the half dozen industries outranking all others in proportions of men unemployed.

The summary following shows the proportions of the men and women usually engaged in certain occupations who were out of work for specified lengths of time in the census year:

Percent of women and men, 10 years of age and over, reported as unemployed in 1900, by industry and by period of unemployment¹

Occupational group	Percent of unemployed women who were out of work—			Percent of unemployed men who were out of work—		
	1 to 3 months	4 to 6 months	7 to 12 months	1 to 3 months	4 to 6 months	7 to 12 months
All occupations.....	47.1	39.1	13.8	49.6	39.6	10.8
Agricultural pursuits.....	48.8	45.3	8.9	52.3	39.8	7.9
Professional service.....	50.7	32.1	17.2	42.7	36.7	17.6
Domestic and personal service.....	42.2	41.7	16.1	46.5	42.2	11.3
Trade and transportation.....	39.3	34.9	25.8	48.4	35.7	15.9
Manufacturing and mechanical pursuits.....	50.0	35.4	14.6	49.7	38.4	11.9

¹ U.S. Bureau of the Census. Twelfth Census, 1900. Occupations, p. cxxv.

The proportion of unemployed women who had been out of work more than 6 months was greater than that of men out of work for this period, the figures being 13.8 percent for the women and 10.8 percent for the men. In 3 of the 5 main occupational divisions—domestic and personal service, trade and transportation, and manufacturing and mechanical pursuits—considerably larger proportions of the unemployed women than of the unemployed men had suffered such prolonged idleness.

UNEMPLOYED WOMEN ACCORDING TO THE CENSUS OF 1930^{*}

In the census of April 1930 the unemployed were reported in seven classes, as follows:

- Class A.—Persons out of a job, able to work, and looking for a job.
- B.—Persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle.
- C.—Persons out of a job and unable to work.
- D.—Persons having jobs but idle on account of sickness or disability.
- E.—Persons out of a job and not looking for work.
- F.—Persons having jobs but voluntarily idle, without pay.
- G.—Persons having jobs and drawing pay, though not at work (on vacation, etc.).

If class G be excepted, persons in classes A and B combined formed well over four fifths of those unemployed (85.1 percent of the men, and 77.2 percent of the women). These are the main groups that may be considered quite definitely to have been without work from causes largely industrial or economic; and in addition, many of those on lay-off had been out of work so long that the effects of their unemployment were similar to those for persons in class A. Consequently the analysis that follows will be confined chiefly to these two classes. While persons in classes C and D combined—unable to work—formed over one tenth of the total number unemployed (G excepted), 14.9 percent of the women and 11.1 percent of the men, and while the social problem created in their case was serious, it did not arise solely from lack of job. Those voluntarily idle formed only 3.7 percent of the unemployed women and 1.9 percent of the unemployed men (still excepting G). Those in class E cannot be placed in a specific category, since undoubtedly many were discouraged from seeking work by the hopelessness of the industrial situation, while others may not have desired work; women in this class formed only about one fifth (20.5 percent) as many as in class B alone; men about one tenth (9.7 percent.)

Some analysis of the findings of the Census of 1930 will set forth this material relating to classes A and B in its application to women.

Unemployment in main occupational groups

The unemployed women in the seven classes A to G combined, 668,661 in number, formed 6.2 percent of all those reported as ordinarily having gainful occupations; unemployed men, 8.5 percent. If those idle but receiving pay (class G) are excepted, 6 percent of the women and 8.3 percent of the men were jobless. The women in classes A and B combined formed 4.7 percent of those ordinarily gainfully occupied, the men 7.1 percent. The extent to which those in the more important woman-employing occupational groups were re-

^{*} The figures for women gainfully employed in vol. I of the unemployment census, which are the basis for this section of the report, differ somewhat from those later issued as final by the Bureau of the Census. As the differences are so slight, only some 20,000 in a total of about 104 million, it is not thought necessary to revise this section to conform to the correct figures later made available. For the final figures see section on the unemployment census of January 1931, p. 23ff.

ported affected by unemployment in classes A and B combined is shown in the summary following. Through the subsequent discussion, where the term "unemployed" is used, it will refer specifically only to those in classes A and B combined.

Industry group	Percent of normally gainfully occupied unemployed in classes A and B combined ¹	
	Women	Men
All industries ²	4.7	7.1
Domestic and personal service.....	4.6	6.0
Manufacturing and mechanical industries.....	7.7	11.3
Textile industries.....	10.7	12.0
Automobile factories and repair shops.....	7.4	11.9
Building industry.....	5.5	19.2
Iron and steel industries.....	4.8	9.6
Professional service.....	2.4	3.1
Trade.....	3.9	3.9
Agriculture.....	1.2	1.4
Transportation and communication.....	2.3	6.8

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, tables 9 and 10, pp. 15 and 16. Percents computed by Women's Bureau. Throughout vol. I clerical workers are included in the totals of each occupation group in which they worked. Vol. II, which reports clerical occupations as a separate group, had not yet appeared when this summary was prepared.

² Figures not given for the three smallest woman-employing groups—forestry and fishing, extraction of minerals, and public service—nor for those "not otherwise specified." These census reports did not separate clerical workers from their respective industries.

The foregoing summary shows that the women ordinarily engaged in the two largest woman-employing occupational divisions—domestic and personal service and the manufacturing and mechanical industries, figures for the clerical group being not obtainable—had suffered from unemployment in larger proportions than had those in any other such division. Among the main manufacturing combinations, textiles and automobile factories and repair shops showed the largest proportions of women unemployed. In every main occupational group (except trade, where the proportions were the same) larger proportions of men than of women had suffered unemployment. With the exception of domestic and personal service, considerably larger numbers of men than of women were out of work in each of the main occupational groups.

Unemployment in chief manufacturing industries employing women.—To give somewhat more detailed consideration to unemployment in manufacturing, table 2 shows the numbers and proportions of both sexes that were unemployed (in classes A and B combined) in the 16 largest woman-employing manufacturing industries or groups—all those in which more than 45,000 women were engaged in the country as a whole. In the order of numbers of women unemployed, the industries or manufacturing groups in which more than 5,000 women were without work were as follows:

- Clothing industries.
- Cotton mills.
- Woolen and worsted mills.
- Food and allied industries other than bakeries and slaughtering and meat packing.
- Electrical machinery and supply factories.
- Cigar and tobacco factories.
- Knitting mills.
- Shoe factories.
- Textile mills other than cotton, knitting, silk, and woolen and worsted.
- Silk mills.
- Iron and steel industries other than blast furnaces and automobile factories.

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TABLE 2.—Number and percent of women and men reported as unemployed in classes A and B combined, by selected manufacturing industries or industry groups, April 1930¹

Industry or industry group	Women			Men		
	Normally gainfully occupied	Unemployed in classes A and B		Normally gainfully occupied	Unemployed in classes A and B	
		Num-ber	Per-cent		Num-ber	Per-cent
Clothing industries.....	413, 925	31, 413	7.6	375, 346	40, 160	10.7
Cotton mills.....	160, 487	17, 456	10.9	261, 914	28, 584	10.9
Printing, publishing, and engraving.....	114, 574	6, 013	4.4	427, 187	21, 707	5.1
Other iron and steel industries ¹	109, 430	5, 225	4.8	1, 648, 523	156, 158	9.5
Other food and allied industries ¹	107, 619	10, 902	10.1	352, 797	23, 383	6.6
Knitting mills.....	101, 552	9, 291	9.1	72, 476	7, 750	10.7
Shoe factories.....	99, 246	8, 367	8.4	172, 083	20, 203	11.7
Other textile mills ¹	98, 592	8, 243	8.4	176, 602	18, 612	10.5
Chemical and allied industries.....	86, 378	3, 125	3.6	534, 672	27, 135	5.1
Silk mills.....	85, 344	7, 038	8.2	90, 545	9, 036	10.0
Electrical machinery and supply factories.....	82, 680	9, 860	11.9	295, 834	28, 436	9.6
Cigar and tobacco factories.....	78, 628	9, 310	11.8	71, 024	9, 306	13.2
Metal industries, except iron and steel.....	55, 259	4, 304	7.8	276, 531	27, 057	9.8
Paper and allied industries.....	51, 478	2, 788	5.4	191, 843	10, 709	5.6
Woolen and worsted mills.....	50, 110	11, 002	22.0	89, 809	18, 935	21.1
Automobile factories.....	45, 272	3, 461	7.6	594, 889	80, 909	13.6

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, tables 21 and 22, pp. 53-55. Percents computed by Women's Bureau. All industries or industry groups were included that employed 45,000 or more women, omitting independent hand trades and "other" manufacturing. The next in order, not included, was bakeries, employing 40,450 women. At the time of preparation of this table the final census report on unemployment (vol. II, general report), which segregates clerical workers had not appeared. Thus clerical workers in the factories are included in this table in the industry totals both of employed and unemployed.

² Other than blast furnaces and automobile factories.

³ Other than bakeries and slaughtering and meat packing.

⁴ Other than cotton, knitting, silk, and woolen and worsted.

It is not surprising that the two largest woman-employing industries—clothing and cotton—had the largest numbers of jobless women, though other industries had larger proportions unemployed. In electrical machinery and supply factories, cigar and tobacco plants, the food industries group given, cotton mills, and especially woolen and worsted textiles more than one tenth of the women were unemployed; in the last named more than one fifth of the women were without jobs.

While more men than women were unemployed in all the industries or manufacturing groups listed except knitting mills, in three of these—woolen and worsted mills, electrical machinery and supply factories, and the food group specified—larger proportions of the women than of the men normally so engaged were unemployed. The following list shows the proportions of women and of men unemployed in the industries in which more than 5 percent of the women were without jobs:

Industry or industry group	Percent unem-ployed in classes A and B	
	Women	Men
Woolen and worsted mills.....	22.0	21.1
Electrical machinery and supply factories.....	11.9	9.6
Cigar and tobacco factories.....	11.8	13.2
Cotton mills.....	10.9	10.9
Food and allied industries, other than bakeries and slaughtering and meat packing.....	10.1	6.6
Knitting mills.....	9.1	10.7
Shoe factories.....	8.4	11.7
Textile mills, other than cotton, knitting, silk, and woolen mills.....	8.4	10.5
Silk mills.....	8.2	10.0
Metal industries, other than iron and steel.....	7.8	9.8
Clothing industries.....	7.6	10.7
Automobile factories.....	7.6	13.6
Paper and allied industries.....	5.4	5.6

Duration of unemployment

The summary following gives some indication of the length of unemployment periods.

Period of unemployment	Percent of those in classes A and B ¹	
	Women	Men
2 weeks or less.....	29.1	23.3
27 weeks or more.....	9.7	11.3
More than 52 weeks ²	2.3	2.7

¹ U. S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, table 4, p. 10. Percents computed by Women's Bureau.

² Included in preceding group.

The foregoing shows that in April 1930 about one tenth of the women and an even larger proportion of the men unemployed had been out of work 27 weeks—approximately 6 months—or longer, and more than 2 percent of each sex for over a year.

Women heads of families unemployed

Reports as to family relationship showed that one half (50.4 percent) of the unemployed men were heads of families. This does not appear strange, but it may be more surprising to learn that practically one tenth (9.7 percent) of the unemployed women in the same groups were heads of families.⁶ A total of 48,648 women who were heads of families were out of work, and by the census definition a head of family was so classified only if someone was dependent upon her for support.

Ages of unemployed women

The proportions of unemployed in the various age groups may be seen from the following:

Age	Age distribution • of—			
	Women		Men	
	Unemploy- ed (classes A and B)	Normally gainfully occupied	Unemploy- ed (classes A and B)	Normally gainfully occupied
All ages.....	100.0	100.0	100.0	100.0
10 to 19 years.....	20.6	15.5	9.1	7.9
20 to 24 years.....	22.1	21.8	15.8	12.6
25 to 29 years.....	13.5	14.3	12.0	12.4
30 to 34 years.....	9.6	10.4	10.2	11.7
35 to 39 years.....	9.2	9.7	10.6	12.0
40 to 44 years.....	7.2	7.9	9.8	10.6
45 to 49 years.....	6.1	6.6	9.2	9.4
50 to 59 years.....	7.9	8.8	14.0	12.8
60 years and over.....	2.7	4.9	9.2	8.5

• U. S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, table 6, p. 12; Ibid. Occupation Statistics: U. S. Summary, table 19, p. 42. Percents computed by Women's Bureau.

⁶ U. S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, table 7, p. 14. Percents computed by Women's Bureau.

The foregoing summary shows that for both sexes the greatest proportions of the unemployed were 20 to 24 years of age, the largest age group among all employed women and the second largest among all employed men. Of the women, 22.1 percent of the unemployed and 21.8 percent of those normally employed were of these ages. Of the men, the respective proportions were 15.8 and 12.6 percent.

In the age groups under 25, the proportions unemployed were greater than the proportions at work for both sexes.

Larger proportions of the women than of the men unemployed were under 30 years of age; this difference was especially great in the case of those under 20, over one fifth of the women unemployed against less than 10 percent of the men without work being in this age group. Smaller proportions of the women than of the men unemployed were 30 or older; this difference was especially great for the older workers—7.9 percent of the unemployed women were 50 to 59, 3.7 percent were 60 and over, while the respective proportions for men were 14 and 9.2 percent.

Reasons for unemployment of women

In the enumeration an attempt was made to discover the reasons for unemployment, but many of the reasons necessarily were of so general a character that the more fundamental causes scarcely could be ascertained. About one fourth of the women and three tenths of the men in class A and nearly two fifths of each sex in class B reported being out of work from causes grouped as economic, and between one third and two fifths of each sex in each class for reasons classified as "immediate or superficial", though such general replies as "no work" or "cannot find work" were tabulated in this category. About 12 and 15 percent of the women in each class and somewhat larger proportions of the men had been left jobless by the seasonal character of their industries. In class A, 10 percent of the women and 4.9 percent of the men suffered from personal disability, a cause eliminated by definition from class B. In class A, 6.4 percent of the women and 3.6 percent of the men were jobless because of dissatisfaction, a cause almost negligible in class B; however, only 3.4 percent of the women and 1.5 percent of the men in class A were out of work from avowed choice to be so, a reason that was not applicable to those on lay-off (class B). Family reasons had thrown out of work relatively small proportions except for women in class B, in which group 8,709 women—6.6 percent of all unemployed—had no jobs for causes so classified. Labor disputes or breakdown of plant and equipment had caused loss of job to only an extremely small proportion of either sex in either class.

Unemployment of women in selected States

The extent to which women were unemployed in the various States may be seen from table 3, which lists the 37 States in which 50,000 or more women were engaged in gainful occupations.

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, table 5, p. 12.

TABLE 3.—Number and percent of women unemployed in classes A and B combined, by selected States, April 1930 ¹

State	Normally gainfully occupied	Unemployed in classes A and B	
		Number	Percent
New York.....	1,418,716	70,139	4.9
Pennsylvania.....	806,755	40,226	5.0
Illinois.....	717,231	38,436	5.4
California.....	558,814	30,480	5.5
Ohio.....	541,058	26,250	4.9
Massachusetts.....	529,968	35,468	6.7
Texas.....	423,018	15,632	3.7
New Jersey.....	417,706	23,051	5.5
Michigan.....	360,701	21,943	6.1
Georgia.....	312,322	12,027	3.9
Missouri.....	299,994	13,920	4.6
North Carolina.....	273,322	12,803	4.6
Alabama.....	254,402	5,658	2.2
Indiana.....	236,014	10,642	4.5
Mississippi.....	231,940	3,687	1.6
Wisconsin.....	215,693	7,384	3.4
South Carolina.....	206,878	6,732	3.3
Minnesota.....	201,294	7,704	3.8
Tennessee.....	195,886	7,193	3.7
Louisiana.....	191,938	7,751	4.0
Virginia.....	182,721	7,348	4.0
Connecticut.....	178,368	6,917	5.0
Iowa.....	163,824	4,273	2.6
Maryland.....	158,295	5,258	3.3
Florida.....	150,404	9,785	6.5
Kentucky.....	147,200	6,331	4.3
Oklahoma.....	129,811	4,970	3.8
Washington.....	127,097	6,865	5.4
Arkansas.....	119,497	2,993	2.5
Kansas.....	119,453	3,549	3.0
Nebraska.....	89,899	3,084	3.4
Rhode Island.....	87,952	9,901	11.3
West Virginia.....	82,754	2,903	3.5
Colorado.....	81,176	3,842	4.7
Oregon.....	81,321	5,238	6.4
Maine.....	68,623	3,841	5.6
New Hampshire.....	50,045	3,038	6.1

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, table 12, p. 16. Percents computed by Women's Bureau. All States are included that employed 50,000 women or more. The next in order, not included, was South Dakota with 37,363 women gainfully occupied. For relation to census figures reported in vol. II, see footnote 5, p. 16.

As might be expected, the three States with the largest numbers of women gainfully occupied—New York, Pennsylvania, Illinois—had also the largest numbers of unemployed women, but some other States had larger proportions without jobs. In Rhode Island, while the number unemployed was less than 10,000, this represented more than 10 percent (11.3) of those ordinarily in gainful occupations, a much larger proportion than in any other State. As regards proportions unemployed (where these were 5 percent or more) the order of the States employing 50,000 or more women was as follows:

State	Percent unem- ployed in classes A and B		State	Percent unem- ployed in classes A and B	
	Women	Men		Women	Men
Rhode Island.....	11.3	12.5	California.....	5.5	8.2
Massachusetts.....	6.7	9.8	New Jersey.....	5.5	9.1
Florida.....	6.5	6.5	Illinois.....	5.4	9.9
Oregon.....	6.4	8.0	Washington.....	5.4	7.4
Michigan.....	6.1	11.2	Pennsylvania.....	5.0	9.8
New Hampshire.....	6.1	7.4	Connecticut.....	5.0	8.4
Maine.....	5.6	7.2			

In all of the 13 States listed in the foregoing except Florida, both larger numbers and larger proportions of men than of women were unemployed.

Unemployment of women in main occupational groups in certain States.—In each of 18 States more than 200,000 women ordinarily were in gainful occupations, and these numbers are sufficiently large to justify some consideration of the extent of the unemployment in various main occupational divisions. Table I in appendix A lists these States and gives a basis for such an analysis. In the census report from which this table was prepared clerical workers were not reported as a separate group but were included in other occupational groups. In 13 of these States more than 10,000 women (3.7 to 6.7 percent of those normally employed) were unemployed in classes A and B combined; in 11, the unemployed were 4.5 percent or more of the total. In only 8 States⁸ employing fewer than 200,000 women were such large proportions unemployed.

In half of these 18 States the manufacturing group had the largest numbers of unemployed women, but in the other half⁹ there were more out of work in domestic and personal service than in any other classification. In California, Minnesota, and Texas more women were unemployed in both domestic and personal service and trade than in manufacturing. Where it was not first in numbers, domestic and personal service took the second high place in the unemployment of women. Next in order came trade, except that in five Southern States professional service or agriculture or both exceeded trade in numbers of women unemployed.¹⁰ Ordinarily, relatively few of the unemployed women were in agriculture, public service, or transportation and communication. As might be expected, in all but 5 States¹¹ the smallest numbers of women unemployed were in public service; and in these public service was next to agriculture. Transportation and communication—in the case of women, mainly telephone operating—was third lowest in 12 States.

Naturally the largest numbers of unemployed in the various groups were likely to be in the States in which the most women were in gainful occupations. In 5 of the 7 groups, New York had more jobless women than any other State, the exceptions being agriculture, in which many States outranked New York, and public service with 3 States having larger numbers. In agriculture, the greatest number of unemployed was in South Carolina, followed by Georgia and then by Texas. In manufacturing, Massachusetts came next to New York, and in domestic and personal service, transportation and communication, and trade, Illinois held second place, though in the last named California was a close third. California came second in number of women unemployed in professional service and first in number unemployed in public service.

The proportion unemployed, more significant than number, ran highest where manufacturing was concerned in Massachusetts, and lowest in Texas. In domestic and personal service the highest was in Michigan, the lowest in Alabama. In the other chief occupational

⁸ Rhode Island, Florida, Oregon, New Hampshire, Maine, Washington, Connecticut, and Colorado; in each of these 3,500 but less than 10,000 women were unemployed.

⁹ California, Michigan, Texas, Missouri, Georgia, Alabama, Minnesota, South Carolina, and Mississippi.

¹⁰ Georgia, North Carolina, Alabama, Mississippi, and South Carolina.

¹¹ These 5 were New York, Pennsylvania, Illinois, Ohio, and Indiana.

groups, highest and lowest proportions of women unemployed were as follows:

	Highest	Lowest
Trade.....	Michigan.....	Wisconsin.....
Agriculture.....	Massachusetts.....	Mississippi.....
Professional service.....	California.....	Wisconsin.....
Transportation and communication.....	Michigan.....	Do.....
Public service.....	Indiana.....	Georgia and Wisconsin.....

The census publication from which material for this section of the present report has been abstracted and computed gives detailed information in regard to cities of 50,000 and over, full consideration of which cannot be undertaken at this time. The summary shown in the subsequent discussion (p. 25) shows the extent of unemployment reported in the cities with more than 20,000 women in gainful occupations in Illinois, New York, and Ohio, the three States for which periodic employment data are presented in part IV of this report. Eleven cities are included, and in the case of New York the three boroughs having over 20,000 women workers are shown separately.

UNEMPLOYED WOMEN ACCORDING TO THE CENSUS OF JANUARY 1931¹²

In January 1931 the Bureau of the Census followed its study of the extent of unemployment by a survey made in 19 selected cities¹³ that were industrially important and that were scattered in all sections of the United States. The numbers and proportions of those who were found to be without jobs at this time may be seen from table 4. As this was a single project within areas and was not complicated by the collection of the mass of additional information necessary at the time of taking the usual decennial census, the results may be assumed to be especially accurate, except for the personal equation that necessarily enters into all projects executed by diverse human beings. On this point the census report makes the following statement:

* * * the attention of the enumerator in April 1930 was primarily directed to the enumeration of the population, with the unemployment census as a secondary consideration, while in January 1931 the enumeration of the unemployed was the one and only object of the census. In the second place the two censuses were taken at different seasons of the year. In certain industries and occupations employment is seasonal, and January is likely to be the month of minimum employment. In the northern States this is particularly true of such occupations as the building trades, laborers on roads and streets, and operatives in fruit and vegetable canneries.¹⁴

On the whole the January 1931 reports showed considerably more unemployment than did those of April 1930, both for men and for women, but because of the differences inherent in the two counts it scarcely could be said that there was an increase in unemployment in the last 9 months of 1930 fully equal to the difference shown in the two counts.

¹² The figures for women gainfully employed in vol. II of the unemployment census which are the basis for this section of the report are those issued as final by the Bureau of the Census. For this reason they differ, to an unimportant extent, from those in the section on the unemployment count of April 1, 1930 (pp. 16 to 23). See U. S. Bureau of the Census, Fifteenth Census, 1930. Unemployment, vol. II, p. 9.

¹³ In the case of New York, only the boroughs of Bronx, Brooklyn, and Manhattan are included, but these had 85 percent of all women with gainful occupations.

¹⁴ U. S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. II, p. 365.

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These cities employed 23.6 percent of the women normally in gainful occupations in the United States, and their situation may be considered fairly typical of that in the industrial sections of the country as a whole.

The women unemployed formed 18.9 percent of those normally in gainful occupations in all these localities combined. If this proportion be applied to all employed women in the United States, it would give an estimate of well over 2,000,000 women out of work in January 1931.

In 10 of the 18 cities and in each of the 3 New York boroughs reported,¹⁶ more than 10,000 women were reported unemployed in January 1931, running over 96,000 in the highest. The order of the cities was as follows: New York (3 boroughs only), Chicago, Philadelphia, Detroit, Los Angeles, St. Louis, Cleveland, Boston, New Orleans, Pittsburgh, and Buffalo. (See table 4.)

TABLE 4.—*Number and percent of women and men unemployed in classes A and B combined in 19 selected cities, January 1931¹*

City	Women			Men		
	Normally gainfully occupied	Unemployed		Normally gainfully occupied	Unemployed	
		Number	Percent		Number	Percent
19 cities ²	2, 533, 762	479, 283	18. 9	6, 932, 225	1, 818, 968	26. 2
New York (3 boroughs only) ²	737, 996	117, 408	15. 9	1, 916, 233	414, 059	21. 6
Manhattan.....	319, 899	45, 836	14. 3	675, 135	135, 467	20. 1
Brooklyn.....	280, 773	48, 557	17. 3	828, 526	191, 999	23. 2
Bronx.....	137, 324	23, 015	16. 8	412, 672	86, 594	21. 0
Chicago.....	406, 750	96, 264	23. 7	1, 152, 108	353, 980	30. 7
Philadelphia.....	246, 136	59, 865	24. 3	643, 714	186, 672	29. 0
Los Angeles.....	163, 385	23, 135	14. 2	417, 348	82, 085	19. 7
Detroit.....	140, 879	33, 282	23. 7	548, 610	180, 107	34. 7
Boston.....	108, 416	19, 561	18. 0	246, 950	69, 229	28. 0
St. Louis.....	106, 583	21, 735	20. 4	279, 500	70, 831	25. 3
Cleveland.....	98, 968	21, 159	21. 4	295, 874	103, 665	35. 0
San Francisco.....	84, 352	7, 935	9. 4	249, 221	38, 076	15. 3
Pittsburgh.....	69, 925	13, 542	19. 4	208, 666	65, 894	31. 6
Minneapolis.....	64, 437	7, 830	12. 2	147, 491	31, 032	21. 0
New Orleans.....	61, 108	14, 561	23. 8	143, 250	34, 151	23. 8
Buffalo.....	58, 249	10, 461	18. 0	180, 961	63, 276	35. 0
Seattle.....	45, 365	5, 312	11. 7	130, 194	29, 792	22. 9
Denver.....	37, 704	4, 423	11. 7	92, 681	17, 989	19. 4
Houston.....	37, 689	9, 786	26. 0	99, 709	22, 302	22. 4
Birmingham.....	32, 199	7, 615	23. 6	81, 046	20, 230	25. 0
Dayton.....	22, 862	3, 859	16. 9	66, 441	17, 607	26. 5
Duluth.....	10, 759	1, 450	13. 5	32, 218	8, 001	24. 8

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. II, p. 370ff.

² In the case of New York, 3 boroughs only, but they had 85.5 percent of the entire city's working women.

In each of the 18 cities and the 3 New York boroughs reported from about one tenth to about one fourth of the women were unemployed, the smallest proportion being 9.4 percent in San Francisco. In 9 of them, from about one fifth to slightly over one fourth of the women were without jobs. These 9 cities are as follows:

¹⁶ In the case of New York, only the boroughs of Bronx, Brooklyn, and Manhattan are included but these had 85 percent of all women with gainful occupations.

City	Percent unemployed in classes A and B		City	Percent unemployed in classes A and B	
	Women	Men		Women	Men
Houston ¹	26.0	22.4	Birmingham ¹	23.6	25.0
Philadelphia.....	24.2	29.0	Cleveland.....	21.4	35.0
New Orleans ¹	23.8	23.8	St. Louis.....	20.4	25.3
Chicago.....	23.7	30.7	Pittsburgh.....	19.4	31.6
Detroit.....	23.7	34.7			

¹ In 3 cities unemployment was reported separately for whites and Negroes in the 1930 Census of Unemployment and was correlated with numbers gainfully employed. In each of the 3, more whites than Negroes were unemployed in both sexes, except that for women more of the Negroes than of the whites were out of work in Birmingham. In each city the least proportion of unemployment was among white women, next Negro women, next white men, and the greatest degree of joblessness was among Negro men. The proportions unemployed were as follows:

	Women		Men	
	White	Negro	White	Negro
Birmingham.....	3.5	4.4	6.1	7.7
Houston.....	4.1	5.4	6.0	8.4
New Orleans.....	5.3	8.0	10.2	13.4

Although considerably larger numbers, as well as somewhat larger proportions, of men¹⁶ than of women were reported as being unemployed, still the foregoing discussion shows that the numbers and proportions of women without jobs were very large; where from one tenth to more than one fourth of the women in gainful occupations were without work, severe social and economic dislocation entailing an immeasurable amount of suffering is indicated.

The summary following shows the extent of unemployment as reported in April 1930 and in January 1931 in cities employing over 20,000 women in the three States discussed in part IV of this report.

Locality	Unemployed in classes A and B			
	Census of April 1930*		Census of January 1931	
	Number	Percent	Number	Percent
WOMEN				
New York:				
New York (3 boroughs only) ^b	42,578	5.8	117,408	15.9
Manhattan.....	18,385	5.7	45,836	14.3
Brooklyn.....	15,227	5.4	48,557	17.3
Bronx.....	8,966	6.5	23,015	16.8
Buffalo.....	2,946	5.0	10,461	18.0
Illinois—Chicago.....	26,869	6.6	96,264	23.7
Ohio:				
Cleveland.....	6,575	6.6	21,159	21.4
Dayton.....	1,315	5.7	3,859	16.9
MEN				
New York:				
New York (3 boroughs only) ^b	191,065	10.0	414,059	21.6
Manhattan.....	71,222	10.6	135,467	20.1
Brooklyn.....	79,306	9.6	191,998	23.2
Bronx.....	40,537	9.8	86,594	21.0
Buffalo.....	19,945	11.0	63,276	35.0
Illinois—Chicago.....	141,065	12.2	353,980	30.7
Ohio:				
Cleveland.....	43,660	14.8	103,665	35.0
Dayton.....	6,457	9.7	17,607	26.5

* For purposes of comparison between the two censuses of unemployment, the base (number of normally gainfully occupied women) is in each case the revised figure from vol. II.

^b In the case of New York, 3 boroughs only, but they had 85 percent and 82.4 percent, respectively, of the entire city's working women and men.

^c Except in Houston, in which the proportion of women unemployed was larger.

Unemployment in main occupational groups

The summary following shows the extent of unemployment in the various occupational groups in these cities:

Industry	Normally gainfully occupied	Percent unemployed
All industries.....	1 2, 533, 762	18. 9
Domestic and personal service.....	721, 568	24. 2
Clerical occupations.....	686, 661	13. 0
Manufacturing and mechanical.....	467, 003	30. 3
Professional service.....	310, 867	4. 8
Trade.....	258, 923	19. 4
Transportation and communication.....	83, 811	10. 1

¹ Total exceeds details because several less important groups are omitted.

This summary shows as unemployed well on to one third of the women normally in manufacturing in these cities, about one fourth of those in domestic and personal service, practically one fifth of those in trade, and over one tenth of those in clerical occupations and in transportation and communication. The smallest proportion of unemployed was in the professional group, but such figures are not wholly representative of displacements in these occupations, since many normally so employed accept other types of work in times of stress.

Table II in appendix A shows by city the proportion of unemployment in the various occupational groups. The largest proportions unemployed in any occupational group were in manufacturing in 8 cities and the 3 New York boroughs, in domestic and personal service in 8 cities, and in trade in the 2 Minnesota cities.

In every city over 10 percent were unemployed in domestic and personal service, in manufacturing, and in trade. From 30 to 40 percent were unemployed in domestic and personal service in 8 cities, from 30 to 37.9 percent in manufacturing in 5 cities. The proportions unemployed formed over 10 percent of those in clerical occupations in 15 cities and in transportation and communication in 7 cities. In every case the smallest proportion unemployed was in professional service.

Duration of unemployment

Table 5 shows the women unemployed 27 weeks or longer and those out of work for a year or more. In 11 cities and 2 boroughs of New York at least one fifth of the women reported as unemployed had been out of work more than 6 months, this proportion running as high in one city (Detroit) as 36.9 percent. In 5 cities from 5 to 8 percent of the unemployed women had been out of work over a year.

Ages of unemployed women

The youth of the unemployed woman is shown strikingly in table III in appendix A, which reports the proportions unemployed among normally gainfully occupied women of certain ages. In every city, those under 20 had the largest proportions unemployed. The range in the various age groups was from 17.8 percent to 36.6 percent, with more than 30 percent of the girl workers in 7 cities out of a job, and

TABLE 5.—*Period of idleness of women unemployed in classes A and B combined, by city, January 1931*¹

City	Unemployed for—			
	27 weeks or longer		53 weeks or longer	
	Number	Percent	Number	Percent
Birmingham.....	1,643	21.6	256	3.4
Boston.....	4,186	21.4	975	5.0
Buffalo.....	2,342	22.4	428	4.1
Chicago.....	28,017	29.1	5,696	6.9
Cleveland.....	6,797	27.4	1,148	5.4
Dayton.....	887	23.0	117	3.0
Denver.....	585	13.2	74	1.7
Detroit.....	12,307	36.9	2,673	8.0
Duluth.....	285	19.7	42	2.9
Houston.....	1,201	12.3	141	1.4
Los Angeles.....	4,034	17.4	663	2.9
Minneapolis.....	1,475	18.6	306	3.9
New Orleans.....	3,594	24.7	597	4.1
New York (3 boroughs only).....	24,389	20.8	4,505	3.6
Bronx.....	5,129	22.3	880	3.8
Brooklyn.....	10,765	22.2	2,013	4.1
Manhattan.....	8,495	18.5	1,612	3.5
Philadelphia.....	11,974	20.0	2,158	3.6
Pittsburgh.....	3,119	23.0	697	5.1
San Francisco.....	1,432	18.0	242	3.0
Seattle.....	894	16.8	209	3.9
St. Louis.....	5,180	23.8	770	3.5

¹ U. S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. II, table 5, p. 111ff and table 4, p. 374ff. Percents computed by the Women's Bureau.

between 20 and 30 percent in 8 cities and the 3 boroughs of New York. Of the women 20 and under 24, over 20 percent were out of work in 8 cities. Ordinarily women 50 and over had the smallest proportions of unemployed.

Nativity and color of unemployed women

Table IV in appendix A shows the proportions of the employed native white, foreign-born, and Negro women who were out of jobs in the various cities. In every case, regardless of numbers involved, the proportion out of work was very much greater among Negro, and was less—usually considerably less—among foreign-born than among native white women. In the group of cities, 16.9 percent of the native white women were unemployed, over 15 percent in 10 cities, the highest being 22.2. Of foreign-born white, 12.4 percent were out of work, over 10 percent in 5 cities and 2 boroughs, and as high as 16.4. Of Negro women, 42 percent were jobless and as high as 58.5 percent.

Reference to the census figures on gainful occupations shows that in each of the 19 cities the place of the foreign-born women in unemployment was less than their place among women normally gainfully employed, and that of native white women usually was so (except in Boston, Buffalo, Duluth, San Francisco, and Seattle, and the Bronx and Brooklyn boroughs). For Negro women the opposite was the case—in every city they formed a larger proportion in the unemployed group than they did of the women normally in gainful work—except in Birmingham and New Orleans, which have large populations of Negro women at work.

28 EMPLOYMENT FLUCTUATIONS AND UNEMPLOYMENT OF WOMEN

Women unemployed in 1900 and in 1931

The unemployment counts of 1900 and January 1931 differ in method, extent, and occupation classification and probably in other matters affecting their accuracy. Nevertheless, certain rough comparisons seem significant. The following summary indicates that while the unemployment of women had increased greatly from the earlier to the later period, the extent of their gainful occupation had increased still more.

Employment status	Women 10 years of age and over		
	1900	1931	Percent increase
Normally gainfully occupied.....	5,319,397	¹ 10,752,116	102.1
Unemployed.....	1,241,492	² 2,032,150	63.7

¹ Total number gainfully employed in 1930.

² Estimated from proportion of women reported unemployed in January 1931 in 18 cities and 3 boroughs of New York.

The extent of unemployment in certain occupational groups can be considered in the two years. With the exception of agriculture in 1900 and clerical occupations in 1930 (not separately available in 1900, but included within certain of the other groups used here), these were the three largest woman employers. The proportions of women unemployed in these groups were as follows:

Occupation group ¹	Percent of women unemployed in—	
	1900	1931
All occupations ¹	23.3	18.9
Domestic and personal service.....	17.1	24.2
Manufacturing and mechanical industries.....	22.4	30.3
Trade and transportation ²	11.1	³ 17.1

¹ U.S. Bureau of the Census. Twelfth census, 1900. Occupations; and Ibid. Fifteenth Census, 1930. Unemployment, vol. II. Omitting agriculture in 1900 and clerical occupations in 1930, the three largest woman-employing groups remaining in each year have been reported here.

² Total exceeds details.

³ In 1931, trade was combined with transportation and communication.

The foregoing shows that in each of these important woman employers considerably larger proportions were jobless in 1931 than in 1900, the difference being far greater than any that might possibly be accounted for by the relatively slight differences in the occupation classification used in the two periods. In each year, those in manufacturing industries had suffered by far the greatest proportion of unemployment, and the increase in proportions unemployed had been greater than in either of the other occupation groups. Domestic and personal service came second in proportions out of work.

**SUMMARY—UNEMPLOYMENT OF WOMEN, CENSUS OF
1930 AND OF 1931**

The census of April 1930 showed 668,661 women unemployed on the day before the enumerator's call—6.2 percent of all those normally in gainful occupations. These were reported in seven classes, of which the first two (A, those out of work, able to work, and looking for a job, and B, those laid off) are most clearly representative of the economic dislocation that had taken place. While data for these two classes by no means cover all the classes of unemployment, including the ill, disabled, and other groups, they do include well over three fourths of the jobless women.

Of the women without work at the taking of the census (classes A and B combined), about one tenth (over 48,500, or 9.7 percent) had been unemployed for 27 weeks—approximately 6 months—or longer, and more than 11,500 (2.3 percent) had been out of a job for over a year. The heavy economic responsibilities of these women are indicated by the fact that about one tenth of those who were reported jobless in classes A and B (9.7 percent) were heads of families; this applies to more than 48,600. Large proportions of the women in these two classes were comparatively young, over one fifth of them (22.1 percent) being 20 and under 25; altogether over 214,000 were less than 25. Larger proportions of the women than of the men unemployed were under 30 years of age.

Those in the two largest woman-employing groups—manufacturing and domestic and personal service—had suffered from unemployment not only in the largest numbers but in the greatest proportions.

Among the manufacturing industries, as was to be expected, those in which the largest numbers of women were engaged had the greatest numbers of unemployed. From clothing manufacture 31,413 were without jobs, from cotton mills 17,455, from woolen and worsted mills and from "other food and allied industries" ¹⁷ over 10,000 each. Of those ordinarily in woolen and worsted mills, 22 percent were jobless, as were roughly 11 percent of those in electrical supplies, in cigar and tobacco factories, and in cotton factories.

Naturally the three States in which the largest numbers of women were gainfully occupied had also the largest numbers of unemployed women, but four other States had larger proportions out of work. In New York over 70,000 had no work; in Pennsylvania over 40,000 and nearly as many in Illinois; over 35,000 in Massachusetts; over 30,000 in California; and in Ohio over 25,000. The largest proportion of gainfully occupied women out of work was in Rhode Island, followed by Massachusetts and Florida.

Ordinarily larger numbers and larger proportions of the men than of the women were unemployed, but there were notable exceptions to this in some industries. Where from one twentieth to more than one fifth of the women ordinarily engaged in industries usually large employers of women were without work, where many of these had been unemployed for long periods, and where considerable numbers were heads of families, severe social and economic dislocation entailing an immeasurable amount of suffering is indicated.

¹⁷ Except bakeries and slaughtering and meat packing, which were reported separately

In January 1931 the Bureau of the Census followed its study of the extent of unemployment by a survey of 19 selected cities that were industrially important and that were scattered in all sections of the United States.¹² These cities normally employed 23.6 percent of the women in gainful occupations in the United States, and their situation may be considered typical of that in the industrial sections of the country as a whole. Since this was a single project within defined areas and not complicated by the collection of the mass of additional information necessary at the time of taking the usual decennial census, the results may be assumed to be especially accurate.

On the whole, the January 1931 reports showed for both men and women considerably more unemployment than those of April 1930 had shown, but it cannot be said that the entire amount of this increase represented increase in unemployment in the 9-month period involved. The reports for January 1931 showed 18.9 percent of the women normally in gainful occupations in these localities to have been out of work. If this be applied to the women through the whole country, well over 2,000,000 women must have been unemployed in January 1931 (classes A and B alone).

For the city of New York only 3 boroughs were surveyed, but these covered 85.5 percent of all the working women of the city. In these boroughs more than 117,000 women were out of work. More than 96,000 were out of work in Chicago, over 59,000 in Philadelphia, over 30,000 in Detroit, and between 10,000 and 25,000 in each of seven other cities. For the 18 cities and the 3 New York boroughs the proportions of women unemployed ranged from 9.4 percent in San Francisco to 26 percent in Houston. In 8 of these cities more than one fifth of the women were without work.

In all these cities combined (normally employing practically one fourth of the gainfully occupied women in the country) the women unemployed formed nearly one third of those usually in manufacturing, nearly one fourth of those in domestic and personal service, practically one fifth of those in trade, and over one tenth of those in clerical occupations and in transportation and communication. In every city the professional group had the smallest proportion of unemployed women, but it must be remembered that in many cases women so trained are likely to go into other than professional work rather than remain unemployed.

In 11 cities and 2 boroughs of New York at least one fifth of the women reported as unemployed in January 1931 had been out of work more than 6 months, many for more than a year.

As for age, the unemployed woman in many cases is very young. The normally gainfully occupied who were under 20 had the largest proportions unemployed, ranging from 17.8 to 36.6 percent in the various cities.

Regardless of size of city and number of its employed foreign-born and Negro women, the proportion of unemployment was very much greater among Negro, considerably less among foreign-born, than it was among native white women. (See p. 27.)

Such comparisons as could be made of the census of unemployment in 1900 and that taken in January 1931 indicate that, while the proportion of all women unemployed in 1931 was somewhat less than in

¹² Really 18 cities and 3 boroughs of New York City.

1900, it was considerably greater at the later than at the earlier date in three of the most important woman-employing groups. In each year the manufacturing industries had by far the largest proportions unemployed; domestic and personal service came second.

It must be remembered that in the whole of the foregoing discussion the data cited represent by no means the full extent of unemployment, but they show approximately four fifths of the amount. The reader is reminded that they apply only to the classes designated as A and B and defined by the Bureau of the Census as persons out of a job, able to work, and looking for a job, and persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle.

SPECIAL STUDIES OF THE UNEMPLOYMENT OF WOMEN

While data on the unemployment of women are fragmentary, it is of interest to review the more outstanding of certain scattered studies that show some information on this subject. These ordinarily seek to gauge the extent of unemployment and to analyze the data in regard to those who are without jobs, sometimes dealing with their occupational distribution, age, duration of unemployment, job history, racial character, or family responsibility. Scarcely ever does a study include material on all these subjects. A few give some information as to part-time work as well as unemployment.

Facts in regard to unemployed women will be reviewed here from 21 studies that appear to be the most complete and reliable in the information they make available in the respective fields they seek to cover. It is not claimed that this exhausts the entire number of such studies. Some have been omitted purposely because their information was too fragmentary or uncertain, or because they focused more especially on the extent of relief supplied rather than on analysis of factors connected with the jobless themselves; still others may not have come to the attention of the Women's Bureau. The studies analyzed here are the following:

THE 21 STUDIES INCLUDED ¹⁹

	Unemployed women
1. Data from surveys made by the agents of the Women's Bureau:	
South Bend, Ind., 1930 and 1931.....	694
Women in the cigar industry, 1929 and 1930.....	667
2. Intensive studies of selected city areas: ¹⁹	
Buffalo, 1929, 1930, 1931.....	168 to 649
New Haven, 1931.....	133
Philadelphia, 1929, 1930, 1931.....	1,045 to 4,019
Syracuse, 1931.....	311
Rochester, 1931.....	3,800
3. Studies of employment history of unemployed women:	
Detroit, 1925-30.....	432
New York, American Woman's Association, 1931.....	107
Philadelphia, 1929 (a study of applicants for work).....	151
Women in four summer schools, 1925-30.....	514
4. Surveys of unemployment in the entire working population: ¹⁹	
Baltimore, 1928, 1929, 1930.....	1,933 to 2,104
Bloomington, Ind., 1930.....	70
Bridgeport, Conn., 1931.....	557
Waukesha, Wis., 1931.....	123

¹⁹ Other towns have made some type of unemployment survey. Many of these are not available, some have not analyzed data by sex nor put them in printed form. It has not been possible to include a complete record of such surveys.

The foregoing indicates that information as to unemployed women is very meager.²⁰ The list shows that all these studies taken together give some type of information for approximately 14,000 unemployed women, well over half of whom were in Philadelphia or one of the four New York cities surveyed. The total includes only 3 percent as many women as were reported out of work, able to work, and looking for a job in the survey of 19 cities made by the Bureau of the Census in January 1931. Table 6 shows that in each of the 12 separate cities from which some reports were available over 21 percent of the woman population normally was gainfully employed, in 6 of them as high as 28 percent.

TABLE 6.—*Women and men normally in gainful occupations in 11 cities, 1930*¹

City	Total population 10 years of age and over		Number and percent of total population normally in gainful occupations			
	Women	Men	Women		Men	
			Number	Percent	Number	Percent
New York, N.Y.	2,908,826	2,908,736	862,890	29.7	2,324,999	79.9
Philadelphia, Pa.	825,817	808,075	246,136	29.8	643,714	79.7
Detroit, Mich.	601,554	672,325	140,879	23.4	548,610	81.6
Baltimore, Md.	340,601	328,608	101,136	29.7	260,936	79.9
Buffalo, N.Y.	238,895	234,564	58,249	24.4	180,961	77.1
Rochester, N.Y.	143,044	135,069	41,992	29.4	102,863	78.2
Syracuse, N.Y.	88,799	86,654	23,878	26.9	67,181	77.8
New Haven, Conn.	69,180	65,261	20,046	29.0	49,192	75.4
Bridgeport, Conn.	60,971	60,026	17,363	28.5	46,702	77.8
South Bend, Ind.	41,984	42,680	10,978	26.1	33,465	78.4
Bloomington, Ind.	7,537	7,096	1,611	21.4	5,437	76.6
Waukesha, Wis.	6,860	7,340	1,609	23.5	5,292	72.1

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Population: Occupation Statistics, p. 23.

The following summary of the occupational distribution of most of the women employed in 10²¹ of these cities shows that while there was great variation among the cities, with two exceptions, the largest proportions were in manufacturing or domestic and personal service, with clerical occupations running a relatively close second in some cases, taking third place in others, and in one city being as high as domestic and personal service.

City*	Number of women gainfully employed, 1930	Percent of employed women who were in—				
		Manufacturing and mechanical industries	Domestic and personal service	Clerical occupations	Professional service	Trade
New York, N.Y.	862,890	20.5	25.5	30.1	11.9	8.1
Philadelphia, Pa.	246,136	27.0	28.1	22.7	10.5	9.2
Detroit, Mich.	140,879	14.9	31.0	26.7	12.3	11.6
Baltimore, Md.	101,136	23.1	35.3	19.0	10.5	9.8
Buffalo, N.Y.	58,249	16.8	25.6	26.9	14.7	11.8
Rochester, N.Y.	41,992	28.8	19.8	25.5	13.9	9.3
Syracuse, N.Y.	23,878	16.3	26.9	26.9	16.0	11.3
New Haven, Conn.	20,046	27.2	22.6	24.8	15.0	7.9
Bridgeport, Conn.	17,363	37.6	16.5	23.4	12.1	8.2
South Bend, Ind.	10,978	28.5	23.2	25.0	11.3	10.3

* See footnote 21.

²⁰ While not all such surveys are included here, no large or otherwise outstanding one that reports information concerning women is omitted intentionally if it came within this period.

²¹ Bloomington and Waukesha omitted. For cities under 25,000 the Bureau of the Census does not report occupational divisions.

In Philadelphia well over 50 percent and in Baltimore and New Haven over 40 percent of the women in manufacturing were in the textile or clothing industries, which also employed the largest group of those in factory occupations in Bridgeport and South Bend. Nearly 40 percent of the relatively small number reported in Detroit as in manufacturing were in iron and steel plants.

CHARACTER OF THE 21 STUDIES INCLUDED

A brief outline of the character of each of the studies is given below.

Surveys by Women's Bureau agents

South Bend.—In August and September of 1930 the Women's Bureau made a survey of 3,245 women in South Bend and Mishawaka, Ind.²² All these women, who were visited in their homes by Bureau agents, had been employed at some time within 12 months, but at the time of interview 21.4 percent of them were out of work.

Women in the cigar industry.—In a study of women in the cigar industry²³ made from the spring of 1929 to the summer of 1930, the Women's Bureau agents interviewed 1,150 women in various towns and cities, persons who had been deprived of their jobs in 1925 or at some time within the next 4 years.

Intensive studies of selected city areas

Three cities in New York.—A study of unemployment in Buffalo in the first week of November 1929, made by the New York State Department of Labor, proved of such value that, with the cooperation of the Buffalo Foundation, it was continued at the same period of the year in 1930 and in 1931. In 1931, studies of the same sort were made in Syracuse and Rochester.²⁴ In the first two cities college or university students in the social sciences served as the enumerators, using a simple and comparable schedule that included data on employment status, sex, age, weeks idle, and whether head of family.

The data taken from all applicants to the Rochester Public Employment Center between June and October 1931 were analyzed by the research division of the office. These included 7,600 unemployed, about 38 percent of the total number estimated to be unemployed in the city on November 1, 1931. About half of these were women.

Philadelphia.—In Philadelphia, unemployment surveys of selected areas were made in April 1929, 1930, and 1931, through the cooperation of the Department of Industrial Research of the Wharton School of Finance of the University of Pennsylvania and the Bureau of Compulsory Education in the city, experienced attendance officers serving as enumerators and the statistical analysis of the material being made by the university.²⁵ In 1929, the survey included 31,551 families; in 1930, 36,665 families; and in 1931, 36,410 families.

²² U. S. Department of Labor. Women's Bureau. *Wage-Earning Women and the Industrial Conditions of 1930. A survey of South Bend, Ind.* Bul. 92, 1932.

²³ *Ibid.* The Effects on Women of Changing Conditions in the Cigar and Cigarette Industries. Bul. 100, 1932.

²⁴ New York State Department of Labor. Unemployment in Buffalo. Special Bul. 163, November 1929; Special Bul. 167, November 1930; Special Bul. 172, November 1931. Unemployment in Syracuse, November 1931, Special Bul. 173. Rochester Progress Report, Public Employment Center of Rochester December 31, 1931.

²⁵ U. S. Bureau of Labor Statistics. Social and Economic Character of Unemployment in Philadelphia, Bul. 530, April 1929. *Ibid.* Bul. 555, 1930. University of Pennsylvania, Wharton School of Finance and Commerce. Industrial Research Department. Special Reports, 1931. The 1929 study included 166 school census blocks, which often are larger than a city block, that in 1930 included 171, and that in 1931 included 150. The 1929 sample represented between 6 and 7 percent of the total population and families of the city, those of 1930 and 1931, about 8 percent each.

Women formed about one fourth of those reported as unable to find work—23.4 percent in 1929, a larger proportion, 25.5 percent, in 1930, and 23 percent in 1931.²⁵

These studies give relatively little information as to the unemployed woman, although, of course, unemployment in a family imposes great hardships upon its women. Data as to age and duration of unemployment are reported by sex, although the totals upon which percents are based are not always available from the publications. Occupational data are classified as manual, clerical, executive, and unspecified, and data in regard to them are not given by sex.

New Haven.—This survey, which was made in May and June of 1931, became available some time after the abstracts had been made from the other studies reported in this section.²⁷ Consequently, certain data afforded by it are inserted here after completion of the organization of this part of the report. It was published by the department of statistics of the Russell Sage Foundation, and is based upon a random sample of over 2,400 New Haven families normally having 3,661 wage earners, and of 6,221 individual wage earners, over half of whom were women. Of these women, approximately 3 percent were employers or were working on their own account, and the figures used here are those given in the section of the report that deals with the wage earners alone.

The bulk of the report is taken up with discussions of representativeness of the sample, tests of the material by census data, and detail of definition and method. Thus it will form an invaluable aid in method of undertaking future studies where comparable results are desired.

Of 917 women reported who normally were members of the full-time employment market (including new recruits), 14½ percent were unemployed though able and wanting work. The report includes tabulations for each sex by age, reason idle, duration of unemployment, extent of full pay received in week prior to visit, and usual occupation and industry. Women's occupations given (in addition to employers and those working on own account) are professional, clerical, skilled, semiskilled, unskilled (largely domestic workers), and a grouping of clerical, executive and professional, and of skilled, semiskilled, and unskilled.

Employment histories of women

In four studies attempts were made to ascertain something of the employment history or general employment status of groups of women.

Detroit.—Case studies of 560 unemployed women in Detroit were made through interviews by students of the University of Michigan and tabulated by the Women's Bureau in Washington.²⁸ All these were women who had applied to employment agencies in the city, and their histories were taken for a period of 5 years or more from January 1925 to date of interview in the first 5 months of 1930. The findings indicated that women's jobs are particularly unstable and their rate of turnover unusually large.

New York.—A study made in 1931 by the American Woman's Association of New York has been directed especially toward ascer-

²⁵ This did not include those who were sick, superannuated, or indifferent. See p. 35 of the survey of 1930.

²⁷ Hogg, Margaret H. *The Incidence of Work Shortage*. Russell Sage Foundation, New York, 1932.

²⁸ U.S. Department of Labor. Women's Bureau. *Unemployed Women in Detroit*. In preparation.

taining the general employment status of its membership, which is chiefly among business and professional women in that city.²⁹ Out of the total of 1,914 reporting, 1,690 were salaried. The remainder, not included here, were working on their own account. For the purposes of the present report some information is afforded as to status of employment by occupation grouping, age, responsibility for support of dependents, and reasons for job separations. The study also gives much material of interest on such subjects as educational status by occupation and earnings by age, occupation, and education.

Philadelphia.—In a study of the occupational experience over a 3-year period of 1,132 applicants for employment in Philadelphia, 172 women were included.³⁰ These were selected carefully as a sample of nearly 4,000 who had applied for work in 39 establishments, mostly of a manufacturing character, and to 6 placement agencies, in each case during the first week in March 1929. All the data in regard to women were classified according to marital status; there being 125 single, 30 married, 15 widowed, and 2 divorced women.

Women in four summer schools.—A study was made of the employment history of 609 students who had attended the industrial schools at Bryn Mawr, Barnard, Wisconsin, or in the South, in the summer of 1928, 1929, or 1930.³¹

Surveys of entire working population

Since the recent economic situation has focused attention so directly on the need of solving the problem of unemployment, many communities have attempted some method of gaging the full extent of the existence of this problem within their territory. Some of these had taken such action at a fairly early date; others made it possible to compare findings at various dates by undertaking surveys at a period later than the Federal census of unemployment of April 1930, or by following an earlier survey of their own with others; many began such work only after the need for relief measures became very pressing, and the information they furnish ordinarily bears more strongly on the relief than on the employment angle of the situation. It has not been possible to make a general survey of what individual communities have done along this line, but the studies of four towns or cities may be summarized here.

Baltimore.—In February, or February and March, 1928, 1929, and 1930, the Commissioner of Labor and Statistics of Maryland undertook a survey of unemployment in the city of Baltimore, assisted by the metropolitan police, who engaged to make a house-to-house canvass.³² Effort was made to confine the study to those able to work and seeking jobs. No reports were made as to those on part-time work.

Bloomington, Ind.—In the small city of Bloomington, Ind., with a population 10 years of age and over of less than 15,000, every home in the city was visited in February 1930 by students in a survey of unemployment in which the State University and the City Free Employment Bureau were cooperating.³³ There were found unemployed 542

²⁹ American Woman's Association. *The Trained Woman and the Economic Crisis*, New York, 1931.

³⁰ Occupational Experience of Applicants for Work in Philadelphia, by Burton R. Morley, University of Pennsylvania, 1930, p. 23.

³¹ U. S. Department of Labor. *Women's Bureau. The Industrial Experience of Women Workers at the Summer Schools, 1928 to 1930.* Bul. 89.

³² Monthly Labor Review, May 1929, p. 59, and April 1930, p. 24.

³³ *Ibid.*, July 1930, p. 37.

men and 70 women. In addition, 608 were on part time, but these latter data are not given by sex in the report.

Bridgeport, Conn.—On the basis of the records of the registered unemployed, the citizens' emergency committee on unemployment and relief in Bridgeport, Conn., ascertained that of the 3,463 persons that were registered for jobs on January 15, 1931, 557 were women and 2,906 were men.³⁴

Waukesha, Wis.—In an employment census taken in the town of Waukesha, Wis., in June 1931, the data were reported by sex and analyzed according to age, 579 women and 3,094 men being reported.³⁵ There were 924 men and 123 women reported idle.

FINDINGS OF THE 21 STUDIES AS TO UNEMPLOYED WOMEN

Extent of unemployment

Some of the surveys reviewed include unemployed persons only and give no data as to extent of unemployment. However, in seven of the cities and in the American Woman's Association and summer-school groups extent is indicated. These data are shown in table 7. It will be remembered that the United States Bureau of the Census found that of the women normally employed in 19 cities nearly 20 percent were out of work in January 1931.³⁶

TABLE 7.—Extent of unemployment, as indicated in 13 studies in 7 cities and in 2 specialized studies

City or group of women and year	Women		Men		Women and men		Families	
	Number reporting employment status	Percent unemployed	Number reporting employment status	Percent unemployed	Number reporting employment status	Percent unemployed	Number reporting employment status	Percent having one or more members unemployed
Baltimore: ¹								
1928.....	• 2,005	2.0	• 13,408	5.2	• 15,473	-----	• 12,739	7.3
1929.....	• 1,933	1.9	• 11,244	4.3	• 13,177	-----	• 11,315	6.5
1930.....	• 2,104	2.1	• 11,680	4.1	• 13,784	-----	• 11,789	6.7
Buffalo:								
1929.....	2,833	5.9	12,331	10.9	15,164	9.9	9,006	• 10.1
1930.....	2,715	15.9	11,287	20.8	14,002	19.9	8,477	• 16.5
1931.....	3,010	21.6	12,614	27.7	15,624	26.5	9,557	• 21.9
New Haven, 1931.....	917	• 14.5	2,074	19.5	2,991	(•)	-----	-----
New York, American Woman's Association, 1931.....	1,653	6.5	-----	-----	-----	-----	-----	-----
Philadelphia:								
1929.....	(•)	-----	(•)	-----	58,866	10.4	31,551	15.6
1930.....	(•)	-----	(•)	-----	69,884	15.0	36,665	21.2
1931.....	16,944	23.7	48,641	26.4	67,150	25.5	35,592	• 47.3
South Bend, 1929-30.....	3,245	21.4	• 2,031	12.6	-----	-----	2,700	4.0
Syracuse, 1931.....	1,663	18.7	5,638	23.2	7,301	22.1	4,582	• 19.3
Waukesha, 1931.....	892	13.8	4,315	21.4	5,207	20.1	-----	-----
Women in 4 summer schools, 1928-30.....	543	• 82.5	-----	-----	-----	-----	-----	-----

• Data are unemployed persons. Percentages based on comparison with census of occupations, 101,136 women and 260,936 men normally gainfully occupied.

• Families having persons unemployed. Percentages based on estimate made in study that approximately 175,000 families were in the city.

• Proportions of heads of families unemployed.

• Unemployed on day of visit, though 16 percent had earned no pay in the previous week.

• Data not reported.

¹ From report, 1931, p. 4 and table 7. This includes those on part time. Also, 12 percent of the families reported all employable members unemployed (4,259 families). From report 1, 1931, p. 5 and tables 11 and 12.

• Data for husbands and fathers only.

• Some weeks of unemployment in the year.

³⁴ Ibid., May 1931, p. 17.

³⁵ Industrial Commission of Wisconsin. Wisconsin Labor Market. September 1931, pp. 25, 26, and 27.

³⁶ See p. 24, where this census of unemployment is discussed.

In 1930 the Buffalo study shows 15.9 percent of the women included to have been unemployed, and that for South Bend shows 21.4 percent of the women out of work at the time of interview though employed earlier in the year. Of the women in summer schools, 82.5 percent had had some full weeks of unemployment in the year preceding their reports. In 1931 the smallest proportion of women unemployed was 6.5 percent of the specialized group of women in the American Woman's Association study. In all other cases the proportion was above 13 percent, running as high as 23 percent in Philadelphia. For men the range in this year was from about 19 percent to about 28 percent.

Unemployment in various occupations

Reports from 11 studies in 9 of the cities reviewed give data on occupations of those surveyed, but only 7 of these—5 in New York, and the New Haven and South Bend studies—are in the form of reports on proportions unemployed within a total group surveyed in the same occupation. Consequently, in most cases the data do not indicate the relative extent to which unemployment strikes those in varying types of employment; they merely show the extent to which certain occupations were represented in the sample studied, and in this connection even a comparison with the distribution in the census of occupations would serve only to test this sample. The proportions unemployed of those studied in various occupations in the New York cities, in New Haven, and in South Bend were as follows:

City or group of women and year	Percent of women unemployed in the sample taken of those in—				
	Manufacturing	Domestic and personal service	Trade, transportation, and communication	Clerical service	Professional service
Buffalo:					
1929.....	7.7	9.3	8.5	11.0	5.0
1930.....	20.3	24.9	10.8	(¹)	7.6
1931.....	25.5	29.5	17.8	32.5	7.8
New Haven, 1931 ²	17.5	15.0		8.0	6.0
New York, American Woman's Association, 1931.....	12.2		(³)	(⁴)	3.1
South Bend, 1929-30.....	20.6 to 54.6	19.3	24.0	10.6	
Syracuse, 1931.....	23.1	22.9	14.6	21.2	10.3

¹ Figures too small for the computation of a percentage.

² From section of report dealing with wage earners only and omitting employers and those working on own account.

³ Idle from lack of work.

⁴ The classification used is semiskilled workers.

⁵ The classification used is unskilled, but chiefly domestic workers for women.

⁶ A large group of women, 400, were classed as in commercial pursuits, but these were not all clerical; 11.5 percent of them were unemployed. The group in transportation and communication was too small to justify reporting percent unemployed.

⁷ Nearly 21 percent of those reported in manufacturing wearing apparel and automobiles and parts were unemployed, as were 54.6 percent of those making machinery and electrical supplies.

⁸ This percentage is for stores only.

The foregoing summary shows that the occupations whose employees had suffered in the greatest proportions were in the manufacturing, clerical, and domestic and personal groups (which are also the largest woman employers). In Buffalo the domestic and personal employments showed the largest proportion out of work in 1930, while the clerical group had the largest proportions unemployed in both 1929 and 1931.

38 EMPLOYMENT FLUCTUATIONS AND UNEMPLOYMENT OF WOMEN

The next summary is intended to give a rough picture of the occupational distribution of the unemployed in four studies that did not report proportion unemployed within each occupation included.

City and year ¹	Number of unemployed women with occupations reported	Proportions of the unemployed women surveyed who were in—				
		Manufacturing and mechanical occupations	Domestic and personal service	Trade	Clerical occupations	Professional service
Baltimore, 1930	2,194	28.8	37.8	13.3	13.9	1.4
Bridgport, 1931	557	27.5	47.9	4.8	8.4	
Detroit, 1925-30	3,444	23.6	43.6	9.9	20.0	
Philadelphia, 1930	3,448	84.7			9.4	

¹ Only the latest date surveyed reported. Surveys reported in the summary just preceding are omitted here.

² 12 of the 444 women were not unemployed.

³ All unemployed persons. Occupations were not reported by sex in this Philadelphia survey. In 1931 the study gives a detailed classification of occupational distribution by sex but not in relation to unemployment.

⁴ Called manual, and probably includes part-time unemployment.

The foregoing shows the largest groups of the unemployed studied to have been in domestic and personal service in three cases (with manufacturing second) and in manufacturing in the other case. Reference to the occupational-distribution table on page 32 shows that for the most part the proportions of unemployed women who were in the manufacturing and domestic and personal groups were considerably greater than the proportions of all women workers that were in these occupations, while in the clerical and professional groups the degree of unemployment suffered was less than the proportion of workers so employed.

Duration of unemployment

Some report was made as to duration of unemployment in 13 studies. In 10 of these, from 8.6 to nearly 25 percent had been without work 6 months but less than 1 year. In four of the reports for 1931, from 28.7 to 36.7 percent of the women included had been out of work a year or longer, while in the other study only 1.5 percent had been unemployed so long; all but one of those reporting for 1931 showed that over one tenth of the unemployed women had been jobless as long as this. The following summary gives an approximate showing as to the duration of unemployment in the studies cited:

City or group of women and year	Number of unemployed women with extent of unemployment reported	Percent of women who had been out of work approximately —				
		3 months or longer	4 months or longer	5 months or longer	6 but less than 12 months	1 year or longer
Bridgport, 1931	190	72.1			24.2	21.6
Buffalo:						
1929	186				2.2	22.4
1930	382				11.3	15.8
1931	630				11.6	36.7
Detroit, 1925-30	3,432	78.2			24.3	30.8
New Haven, 1931	864	6.5			2.5	1.5
New York, American Woman's Association, 1931	168		72.3		24.7	35.7
Philadelphia, 1929 ²	151	21.2	16.6	16.6	8.6	4.6
Philadelphia, 1931	3,508	67.0	54.6	47.9	23.8	16.4
South Bend, 1928-30	467	37.6	27.3		14.2	
Syracuse, 1931	261					28.9
Women in cigar industry, 1928-30	467	41.7			14.8	5.2
Women in 4 summer schools, 1926-30	446	26.8	19.4	12.5	10.5	

¹ Term "approximately" used to avoid a number of footnotes explanatory of slight differences.

² Total unemployed at some time from January 1925 to May 1934.

³ Study of applicants for work.

⁴ Reporting time unemployed for industrial reasons between separation and first subsequent job.

In addition to the foregoing information on duration of unemployment, three of the studies report on number of jobs held by women over a period of time. In Detroit, of 437 women reporting for the years 1925-30, nearly one tenth had held six or more jobs and another one tenth had held five. In the cigar study, of 1,006 women reporting on this subject, 52.5 percent had held more than one job since their first unemployment (1925 or later), and 22.2 percent had had to change jobs at least three times. In the study of applicants for work in Philadelphia, 37 percent of the 172 women reported had held three or more jobs over a 3-year period, 13 of them having held four or more. In the New Haven study, time since one day worked and time since any job held for one month were reported. Of 884 women reporting these items, 4 percent had not worked for 6 months or more and 6 percent had not held a month's job for 6 months or longer.

Reasons for unemployment

While the causes of unemployment are too complex for analysis to be attempted from the reports under consideration, 11 of these studies show reasons for loss of job or for being out of work as given by the unemployed persons or by the investigators. In one of these, 31 percent of the women were jobless from lack of work; in three of these, from 74 to over 93 percent of the women were unemployed because laid off or unable to find work; and in the seven others, from 32.6 to 100 percent of the reasons given were from causes purely industrial in character and in no sense owing to the workers themselves. In none of the studies—except that made in New York by the American Woman's Association—was a larger proportion than approximately one third out of work because of illness, indifference, or for other reasons that could be classified as purely personal in character, and in most cases the proportion due to such causes was very much lower. The following summary shows the extent to which causes due to the industry or place or type of employment were reported to be the basis of unemployment:

City or group of women and year ¹	Number of unemployed women with cause of unemployment reported	Percent unemployed or having lost jobs for reasons classified as—	
		Due to the industry or business, ²	Entirely personal ³
Bloomington, 1930.....	58	74.1	25.9
Buffalo, 1931.....	649	97.5	2.5
Detroit, 1925-30.....	4 892	58.5	35.1
New Haven, 1931.....	917	31.0	2.0
New York, American Woman's Association, 1931.....	7 088	32.6	67.4
Philadelphia, 1931.....	3, 665	89.7	10.3
South Bend, 1928-30.....	681	70.6	29.4
Syracuse, 1931.....	311	83.9	6.1
Waukesha, 1931.....	116	85.3	14.7
Women in cigar industry, 1929-30.....	1, 150	100.0	—
Women in four summer schools, 1928-30.....	428	57.2	15.0

¹ Only the latest date surveyed reported.

² Includes laid off, unable to find work, shut down, slack work, low wages, unhealthful working conditions, reduction of force, business dissolved, technological changes, and company reorganization.

³ Includes ill, unable to work, or removal of family or worker.

⁴ Reasons of unemployment of 416 women reporting in five years.

⁵ Also 5.9 percent of the total lost jobs for reasons partly industrial.

⁶ For 66.5 percent of the women the reasons were inapplicable and for five tenths percent unknown.

⁷ Number of job separations of salaried women in the years 1925-30.

⁸ Laid off at time of change to machinery; 96 percent because of close of factory, the remainder on account of slack work.

⁹ Also 17.8 percent of the total were on vacation without pay.

Responsibility of unemployed women for support of others

Some report as to the responsibility of unemployed women for the support of others was given in eight of the studies. In four of these, this took the form of showing how many had others dependent upon them. In the selected New York group about one fifth of the women had dependents as had over one half of those in two of the other studies. In South Bend of 368 women who were the sole support of their families about 40 percent had four or more dependents. Data for these four cities are shown in the following summary:

City or group of women and year	Number of unemployed women reporting on dependents	Percent having dependents					
		Some dependents		Children		Dependents other than children	
		Total	4 or more	Total	3 or more	Total	3 or more
Bridgeport, 1931.....	557			56.6	25.7	7.9	(¹)
Detroit, 1925-30.....	315	52.1					
New York, American Woman's Association, 1931.....	102	21.6					
South Bend, 1929-30.....	368		40.5				

¹ Too small for computation. Base less than 50. 19 of the 44 women reporting had 3 or more dependents.

² Women who were sole support of family, though not necessarily unemployed.

In the Buffalo and Syracuse studies in 1931 about one fifth of the women reported were heads of households, and the following summary shows that in each case at least 22 percent of these heads of households were unemployed or working less than half time:

City and date of survey	Women heads of households		Percent of women heads of households that were—	
	Number	Percent of all reported	Unemployed	Working less than half time
Buffalo, 1931.....	590	19.7	15.8	7.1
Syracuse, 1931.....	347	20.9	20.5	7.8

Of the women in summer schools, 459 reported on contributions to the family, nearly nine tenths of them making such contributions. Just over half gave 50 percent or more of their earnings to the family, about one fifth giving their entire wage.

The remaining one of the eight studies that gives some indication of the responsibility unemployed women have for the support of others is that of Rochester, in which their average number of dependents ranged from 1.7 and 1.1 for domestic workers to 0.9 for factory workers and 0.75 for clerical workers.

Age

It is of especial significance to make a comparison of the proportions unemployed at various ages with the proportions in the population and with those ordinarily gainfully occupied according to the

census of 1930. The data afford this to some extent for 10 cities, and are as follows:

City or group of women and year ¹	Percent of women under 20 years of age in the—			Percent of women under 25 years of age in the—			Percent of women 60 years of age and over in the—		
	Total population 10 years and older	Normally gainfully occupied ²	Unemployed group reported	Total population 10 years and older	Normally gainfully occupied ²	Unemployed group reported	Total population 10 years and older	Normally gainfully occupied ²	Unemployed group reported
Bridgeport, 1931.....	23.9	21.7	23.3	34.4	43.7	34.7	10.6	4.0	1.6
Buffalo:									
1930.....						51.6			2.1
1931.....	21.5	16.9	21.6	32.6	40.8	51.6	10.3	2.8	1.8
Detroit, 1925-30.....	21.7	15.0	25.7	34.4	39.8	48.0	6.2	2.0	3.6
New Haven, 1931.....	23.4	20.1	18.0	24.3	43.6	42.0	11.7	4.6	13.7
New York, American Woman's Association, 1931.....	20.3	17.1		32.7	42.7	55.9	8.3	2.8	3.9
Philadelphia, 1931.....	20.7	16.9		32.2	39.5	57.9	10.6	4.2	3.4
Rochester, 1931.....	20.3	13.4	21.0	30.6	35.1		12.1	4.9	1.0
South Bend, 1929-30.....	22.7	17.5	15.7	35.3	42.7	48.4	8.4	2.5	
Syracuse, 1931.....	19.7	12.4	13.3	30.5	34.3	36.4	12.1	5.6	2.2
Waukesha, 1931.....	20.7	(³)	21.9	32.8	(³)	40.4	16.6		7.9

¹ Only reports of date nearest 1930 included.

² U. S. Bureau of the Census. Fifteenth Census, 1930. Population: Age distribution, p. 724ff.

³ U. S. Bureau of the Census. Fifteenth Census, 1930. Occupation Statistics, p. 136ff.

⁴ 50 and over.

⁵ 45 and over.

⁶ 25 and under.

⁷ Over 60.

⁸ Over 55.

⁹ Occupation figures not given for cities under 25,000.

¹⁰ 20 and under.

¹¹ 55 years and over—not possible to get by 5-year groupings for cities under 25,000.

The foregoing, giving complete data for women under 20 in seven cities, shows their proportions somewhat less in four cities in the unemployed group than in the general population. Though the proportions of the unemployed who are so young are large, still they are, in two of the cities, less than the proportions among girls under 20 normally employed.

If the entire group of women under 25 be considered, however, a different situation appears. With a few exceptions, the unemployed are found to outstrip—in most cases to a large extent—the proportions of persons of those ages, both in the general population and in the group of normally employed.

In 7 of the 10 studies the proportions unemployed who were 60 or more were notably less than the proportions of the gainfully employed who were of such ages; and with the exception of New Haven, they were very much smaller than the proportions of the women in the entire population who were 60 or over.

The following summary shows the proportions of the unemployed women and men who were especially youthful and those who were far advanced in years. The report on the four summer schools is not included, since the schools had a general age range for admission; in this case the median for the group of 586 women reporting was about 24 years.

City or group of women and year ¹	Number of unemployed reporting age	Percent who were—			
		Under 20 years	Under 21 years	Under 25 years	60 years and over
WOMEN					
Bridgeport, 1931.....	510	23.3		34.7	1.6
Buffalo, 1931.....	649	21.6		51.6	1.8
Detroit, 1925-30 ²	444	25.7		48.0	3.6
New Haven, 1931.....	869	18.0		42.0	13.7
New York, American Woman's Association, 1931 ³	102			5.9	73.9
Philadelphia, 1931.....	3,694			57.9	3.4
Rochester, 1931.....	3,778		21.0		1.0
South Bend, 1929-30 ⁴	690	15.7		48.4	
Syracuse, 1931.....	308	13.3		36.4	2.2
Waukesha, 1931.....	114	21.9		40.4	17.9

MEN					
Bridgeport, 1931.....	2,746	8.4		19.8	4.5
Buffalo, 1931.....	3,497	6.1		21.3	19.4
New Haven, 1931.....	2,019	7.9		21.4	13.2
Philadelphia, 1931.....	12,002			31.6	11.0
Rochester, 1931.....	3,896		9.0		2.0
Syracuse, 1931.....	1,302	4.0		15.7	19.2
Waukesha, 1931.....	896	4.8		18.3	15.8

¹ Only the latest date surveyed reported.² 25 and under.³ Men not reported.⁷ Over 60.⁴ 12 of the 444 were not unemployed.⁸ Over 55.⁵ 50 and over.⁹ 20 and under.⁶ 45 and over.¹⁰ 55 and over.

From the foregoing summary it is apparent that a large proportion of the unemployed women were young. In four of the studies more than one fifth were under 20; in two studies over one half were under 25 years of age; and in six other cases from 34.7 to 48 percent were under 25. In every study in which the other sex was reported, a much smaller percentage of the men were so young. However, in practically every case more unemployed men than women were 60 or older, the proportions ranging from 2 to 19.4 percent for the former, and from 1 to 13.7 percent for the latter. The New Haven report gave different top age ranges for the two sexes, roughly 13 percent of the women being 45 and over and of the men 55 and over.

Evidence from a special report of the Massachusetts Department of Labor and Industries¹¹ as to those registered in the four public employment offices in the State in the first 10 months of 1930 gives a similar showing as to the large proportions of unemployed women who were at the younger ages. The figures follow:

Sex	Registrants at 4 employment offices	Percent who were—	
		Under 25 years	60 years and over
Women.....	7,756	49.5	0.1
Men.....	12,669	29.6	1.4

¹¹ Massachusetts. Department of Labor and Industries. Special Report, January 1931. Report of an investigation as to the causes of existing unemployment and remedies therefor, p. 24.

Nativity and color

Nine of the studies under consideration, applying to five cities, made some report as to the nativity or color or both of the unemployed women.²⁸ Naturally, more foreign-born women would be unemployed in communities where many such women resided than in those in which only small numbers of them were represented. In the cases that afford such information in respect to women—with the exception of Bridgeport—the proportion of foreign-born women was less in the unemployed group than it was in the total woman population of 10 years and over, or among the gainfully employed, but the proportion of Negro women unemployed ordinarily was greater than their share in the total woman population or among those in gainful employment. The following summary shows these data for five cities in the census year where available, or in the latest year if no survey was made in 1930.

City and year ¹	Women 10 years and over			Women normally in gainful occupations			Unemployed women		
	Total	Per-cent foreign born	Per-cent Negro	Total	Per-cent foreign born	Per-cent Negro	Total	Per-cent foreign born	Per-cent Negro
Baltimore, 1930.....	340,601	10.4	17.3	101,136	6.0	29.6	2,104		37.5
Bridgeport, 1931.....	60,971	31.9	2.1	17,363	21.7	2.6	557	57.8	
Buffalo, 1930.....	238,895	23.2	2.2	58,249	16.6	2.8	430	12.3	10.0
Syracuse, 1931.....	88,799	18.4	.8	23,878	12.8	1.1	289	12.1	8.3
Philadelphia, 1931.....	825,817	21.8	11.1	246,136	13.8	17.4	2,821	6.1	29.6

¹ 1931 given only when 1930 was not available.

Part-time employment

Seven of the studies under consideration included data by sex on part-time work as well as unemployment. The most specific of these were the Buffalo, Philadelphia, Syracuse, and Waukesha studies, which showed the degree of part time engaged in—for example, whether those reported worked less than one half time—and the New Haven study, which showed whether these visited had received three fourths, half, or less than half pay in the week preceding the interview. These data are as follows:

City and year	Women				Men			
	Total	Percent that were—			Total	Percent that were—		
		On part time		Unem- ployed		On part time		Unem- ployed
		Total	Less than half time			Total	Less than half time	
Buffalo:								
1929.....	2,833	5.2	1.1	5.9	12,331	6.7	0.9	10.9
1930.....	2,715	12.0	2.6	15.9	11,287	17.8	3.3	20.8
1931.....	3,010	16.1	5.0	21.6	12,614	22.1	6.3	27.7
New Haven, 1931.....	917	17.0	3.0	14.5	2,074	23.5	5.5	19.5
Philadelphia, 1931.....	16,944	15.1	4.1	23.7	48,641	13.5	2.7	26.4
Syracuse, 1931.....	1,663	16.7	6.8	18.7	5,638	19.9	6.3	23.1
Waukesha, 1931.....	892	8.1	6.8	13.8	4,315	20.7	10.9	21.4

^a Reports are of those receiving less than full pay the week before the visit.

^b Unemployed on day of visit. During past week 16 percent of the women and 20 percent of the men were unemployed.

^c Total employable.

^d Includes those on half time.

^e The New Haven study also reported on nativity but analyzed such data for men only.

The foregoing shows that the numbers working on part time for some part of their work approached or exceeded the total of those actually unemployed. In New Haven those receiving only part pay the week before the visit exceeded the unemployed, though it may have been that not all these were on part time. In the five studies in 1931, if those unemployed and those working half time or less be taken together, the proportions were from somewhat less than one fifth to more than one fourth of all the women surveyed, and from one fourth to over one third of the men. In one city the proportion at work only part of the time had increased in the same time and to almost as great an extent as had unemployment.

The Bloomington study shows that nearly as many persons were on part time as were unemployed, but the data were not reported by sex. In South Bend, of 3,245 women studied, 62.8 percent had been out of work for some weeks in the year and 60.2 percent had had some part-time weeks. Of 1,826 women who reported number of weeks they had worked only part time, 12 percent had had short time in every week of the year and an additional 23 percent in weeks totaling 6 but less than 12 months.

The 1931 Philadelphia study gives part time by age, and the showing is as follows:

	All ages	16 to 25 years	26 to 45 years	Over 45 years
Women:				
Total employable.....	¹ 16,944	7,228	5,807	1,600
Percent on part time.....	15.1	15.3	16.1	16.1
Men:				
Total employable.....	¹ 48,641	9,860	22,089	11,958
Percent on part time.....	13.5	12.5	14.6	14.0

¹ Total exceeds details, as not all reported on age.

The foregoing indicates that the proportions on part time vary less in the different age ranges than do the proportions unemployed. The most youthful group of each sex has the smallest proportion on part time, though the younger women were those that suffered unemployment in the greatest proportion.

Summary of data from 21 special unemployment studies

Extent of the unemployment of women.—The census survey of 19 cities in January 1931 reported nearly 20 percent of the normally employed women in these localities as out of work. Fifteen special surveys made in seven cities and two additional special studies afford reports as to extent of unemployment. For those applying to 1931 the proportions of women unemployed range from 6.5 percent in a special study applying largely to "white collar" workers to 23.7 percent in Philadelphia.

Usual occupations of the women unemployed.—Eleven studies made in nine cities afford some occupational data. In seven studies in five cities the proportions of those normally employed in each occupation group who were out of employment at the time of the survey were given. Those in manufacturing, clerical, and domestic and personal

service had suffered most, while trade also had a large proportion unemployed in one city; in Buffalo those in domestic and personal service were the greatest sufferers in 1930, those in clerical occupations in 1929 and 1931. In four other studies the proportions of those reported unemployed who were in the various occupations were reported. In three of these, women in domestic and personal service had suffered most (with manufacturing second), those in manufacturing in the other case. For the most part the proportions of unemployed women who were in manufacturing and domestic and personal service were greater than were the proportions of those normally employed in these occupations as reported by the census; in the clerical and professional group the opposite was the case, though in several instances more than one tenth of those reported in these occupations were without work.

Duration of women's unemployment.—Duration of the unemployment of the women out of work was reported in nine cities and two industrial studies. In those made in 1931, from 2.5 percent to 24.7 percent had been out of work 6 months but less than a year; and from 1.5 percent to 36.7 percent, for a year or longer.

Reasons for unemployment of women.—In reports available for nine cities and from two other special studies, as high as 97.5 percent of the unemployed women in one city were out of work for reasons classifiable as due to the industry or business in which they had been engaged, no study—except that of the American Woman's Association—showing less than 32 percent unemployed for these reasons. In most cases relatively small proportions were out of a job because of reasons entirely personal, though this was the case for as high as 67.4 percent of those in the study of a specialized group made by the American Woman's Association in New York City.

Responsibility of unemployed women for support of others.—Surveys in four cities showed that from about 21 percent to about 64 percent of the unemployed women had dependents, and in one city over 40 percent of the women reported had four or more dependents. Reports for two additional cities showed in each case about one fifth of all the women included to be heads of families, and respectively 15.8 and 20.5 percent of the women heads of families to be unemployed.

Age of unemployed women.—Reports from 10 cities showed that in every case except in the selected group surveyed by the American Woman's Association in New York from about one third to nearly three fifths of the unemployed women were under 25. In eight studies from 13.3 percent to 25.7 percent of the unemployed women were under 20. Quite small proportions were as old as 60, though in one case over 13 percent and in another nearly 8 percent of the women without work were 60 or over.

Nativity and color in relation to women's unemployment.—Data for four cities show that the proportions of the unemployed who were of foreign birth were less than the proportions of foreign born in the total population or among the gainfully employed. Although in 3 of the 5 cities reporting Negro women, these formed only a small proportion of the unemployed women, yet when compared with their numbers in the population they bore more than their share of the unemployment.

46 EMPLOYMENT FLUCTUATIONS AND UNEMPLOYMENT OF WOMEN

Part-time employment of women.—Data for four cities showed the proportions of those studied who were working part time, as well as those unemployed, and those for one city showed the extent of full pay received by those reported at work. The numbers having some part time approached or exceeded the total of the unemployed, and in one city where data were available for more than one year the proportion working part time increased over the same period and almost to the same extent as did unemployment. In five studies in 1931, if the unemployed and those working half time or less be taken together, the proportions range from somewhat less than one fifth to more than one fourth of all the women surveyed, and from one fourth to over one third of all the men.

Part IV.—DATA IN REGARD TO FLUCTUATIONS IN THE EMPLOYMENT OF WOMEN

GENERAL SOURCES OF EMPLOYMENT DATA

From an analysis of figures on the employment of women and men over an 11-year period in an important industrial State the Women's Bureau found separate figures by sex necessary, especially in periods of economic disturbance, if significant variations at such times are to be understood for the two sexes.¹ Persons familiar with employment data are well aware that figures based on a combination of various branches of an industry—for example, a total for food and allied industries or for metal industries—may be very misleading if used in an attempt to interpret the situation within one of the industries constituting the group. In the same way a composite picture of the two sexes in any industry may be misleading in determining what is happening to either sex or to the two in relation to each other.

Despite this fact, it is not possible at the present time to secure complete and adequate material as to the employment changes that affect women. Three Federal agencies are important sources of employment statistics, but not one of these publishes such data by sex. The Bureau of Labor Statistics collects monthly figures representing large samples of various industries and industry groups, but these never have included a sex classification. (New forms for reporting to the Bureau of Labor Statistics are being worked out in 1933, and these are to include a sex classification.) In recent years the Federal Reserve Board has published periodical employment figures based largely on those of the Bureau of Labor Statistics with the inclusion of other sources, weighted according to value of the source and importance of the industry, and corrected mathematically by employment reports of the biennial census of manufactures.² The census of manufactures formerly reported by sex the number of wage earners in various manufacturing industries, but the custom of including a sex classification was discontinued with the biennial reports, which began in 1921. However, for the decennial census of manufactures data on the average number of wage earners still were collected by sex in 1929, but this was not the case with the monthly figures indicative of employment fluctuations, though these had been given by sex in preceding decennial reports. A careful analysis of these census data from 1904 to 1925, inclusive, has been made, though of course it could contain no information by sex since this was not reported in those years.³

¹ U.S. Department of Labor. Women's Bureau. *Variations in Employment Trends of Women and Men*. Bul. 73, 1930, pp. 19 and 46.

² See Federal Reserve Bulletin, December 1923, May 1925, p. 324, and November 1929, p. 706, and article in the New York Times Analyst, February 21, 1930, p. 452. Other figures included in the index prepared by the board have been taken from the Interstate Commerce Commission, the U.S. Employment Service, the New York, Wisconsin, Illinois, Massachusetts, and Iowa departments of labor, and the Federal Reserve Bank of Philadelphia. The correction by census data was intended to obviate any mathematical bias that tended to appear in some industries because of the method of combining the links into a chain of relatives in cases where reporting gave only the percent change from preceding month in identical firms. See Federal Reserve Bulletin, May 1926, pp. 325-326.

³ Bursk, J. Parker. *Seasonal Variations in Employment in Manufacturing Industries*. University of Pennsylvania Press. 1931.

SPECIAL ANALYSES OF EMPLOYMENT DATA

The consideration of employment statistics has been of interest to a variety of groups and for a variety of reasons. Their movements affect business plans, demands upon employment agencies, the reporting of unemployment, and the relief programs of social agencies. Consequently they have been a subject of considerable study, no small part of it arising from an interest in measuring unemployment. Their collection by certain national agencies has been referred to, as has an analysis of data from one of these sources, and the reports in some of the States that secure such figures by sex will be discussed later. At this time a few special studies along this line should be mentioned, although not all of these include data by sex or consideration of this important phase of the subject.

In 1922 the American Statistical Association created a Committee on Governmental Labor Statistics. As a result of its experiences this committee, many of whose members were responsible for the collection of employment figures in State or Federal bureaus, prepared a plan for the collection of employment data and a statement of methods recommended for their use. This was published by the Russell Sage Foundation in 1926.⁴

Since the Ohio employment figures are especially complete and well classified and have been available in practically comparable form over a considerable period, they have been the subject of a number of researches. The analysis of these data made by the Women's Bureau for the period 1914-24 already has been referred to. Other studies have been made by the bureau of business research of Ohio State University⁵ and the department of economics of Oberlin College,⁶ for the most part stressing industries not large woman-employers and covering years earlier than those in the present study, though sometimes overlapping. Reports by the Information Bureau on Women's Work, Toledo, giving particular attention to the sex classifications, will be mentioned in connection with the discussion of special studies on the subject.⁷

Employment changes from month to month reported by the Pennsylvania Department of Labor and Industry have been analyzed for the years 1921-27.⁸ These data are not collected by sex, and this period is prior to that under consideration in the present report, but the statements as to methods employed are especially lucid.

STATE MATERIAL AVAILABLE BY SEX

In connection with recommendations made in June 1930, the Committee on Governmental Labor Statistics listed 13 State bureaus as collecting current monthly employment statistics. However, of these only Illinois, Iowa, and New York have published such data

⁴ Hurlin, Ralph G., and William A. Berridge (editors). *Employment Statistics for the United States*. 1926.

⁵ Bell, Spurgeon, and Ralph J. Watkins. *Industrial and Commercial Ohio*. 1928. A summary by industry and locality; and Watkins, Ralph J. *Ohio Employment Studies*. 1927. Deals chiefly with construction and the heavy metal industries.

⁶ Wooster, Harvey A., and Theodore E. Whiting. *Fluctuation in Employment in Cleveland and Cuyahoga County, 1923-1928*.

⁷ See p. 122.

⁸ Pennsylvania. Department of Labor and Industry. *Special Bul. No. 24*, 1928. Dewhurst, J. Frederic. *Employment Fluctuations in Pennsylvania, 1921 to 1927*.

in any form in a continuous series by sex.⁹ The Ohio figures are collected by sex and are available in a very complete form, but they have not been published by the State through the entire period of collection. The Iowa data are much less in volume than those of the other States under consideration, since this is not one of the larger manufacturing States: The 1929 Census of Manufactures reports only about one seventh as many manufacturing wage earners in Iowa as in Massachusetts, the State next preceding it among the five listed in table 8.¹⁰

The foregoing paragraphs show that the only available basis for ascertaining changes in women's employment at frequent intervals in any consecutive way lies in the employment reports obtainable from but four States, one of which cannot be considered chiefly industrial in character of occupations pursued by its people.¹¹

In addition, mention must be made here of the recent studies of the Employment Stabilization Institute of the University of Minnesota, which, though they do not constitute regular official State labor department publications, give valuable data by sex that are considered in a later part of the present report. (See p. 124.)

The differences in methods used and in systems of classification frequently bar comparison even among these few States, although it is possible to obtain certain indications of general lines of movement in particular industries or employment groups.

Table 8 shows the average number of wage earners reported in the preliminary releases of the decennial Census of Manufactures (1929), and compares these with the average number of wage earners (men and women combined) employed by manufacturing firms reporting to the State in 1929, showing that in three States from 37 percent to 52 percent of such wage earners were reported to the State, and in another, Ohio, the figure was approximately 97 percent.¹² In Massachusetts only about 16 percent of the wage earners (men and women combined) were reported to the State, and, as already mentioned, Iowa is not a large industrial State. In view of the facts stated in

⁹ While the monthly mimeographed information as to employment issued by the Massachusetts Department of Labor and Industries is not given by sex, average weekly earnings for the month were given for the period considered in this report for the women and men in all establishments that report such data by sex—roughly, some 80 percent of the entire number of firms reporting to the State. An examination of the data for a representative month showed the number of employees of both sexes combined to be only about one sixth of the number reported in the census of manufactures of 1929. This seems too small a proportion to justify any analysis of employment fluctuations by sex, in view of the fact that some were from firms not giving data by sex, that the establishments reporting were not identical from month to month, and that certain of the large woman-employing industries in the State were not well represented.

¹⁰ The Iowa Employment Survey reports monthly on the numbers of men and women employed on the pay day nearest the 15th of the month. In addition, the percent change in employment from the preceding month is given for all employees (men and women together) in identical firms. (See the biennial report of the Iowa Bureau of Labor for the period ending June 30, 1928, p. 17.) These data are reported by industry with a total of all industries (including in the total workers in trade, public service, and laundries, as well as manufacturing groups).

The number of establishments in Iowa shown by the census of manufactures for 1929 was 3,317. An average of 302 reported to the State, and this included those in trade, public service, etc., classified as "various industries." However, those establishments reporting, constituting so small a percent of the total, were among the larger employers (as was also the case in Illinois), since the number of wage earners, omitting the "various industries" group, showed a monthly average of 42,823, over half the 81,678 reported by the census as the average of the wage earners. It may be added that the Iowa reports also include statements as to the number of firms on full time, part time, and shutdown, with employers' estimates as to general business outlook.

¹¹ Besides, some data by sex have been collected in Kansas, though not so published. The census of manufactures release of Feb. 11, 1932, shows the average number of manufacturing wage earners in that State to be less than 60 percent of the number in Iowa.

¹² Collection of material for this report was begun in the latter part of 1931. It was necessary to decide on limitations of the data to be used considerably before the time when material was available either from the Census of Manufactures (1929) or the Census of Occupations (1930). See note 1, p. 50. In connection with the discussion in each State, tables from the 1930 Census of Occupations were added before publication of the report, but these could not be used as the original basis of selecting industries to be discussed and no attempt has been made to reconcile the census classification of industries with those used by each State for reporting.

the foregoing and since lack of time and space prevents a fuller consideration, this section of the report will be confined chiefly to an analysis of the material offered by the three States of Illinois, New York, and Ohio, with a summary of the Minnesota data.

TABLE 8.—Comparison of number of employees reported in Census of Manufactures, 1929, with numbers in manufacturing reported to State labor agencies¹

State	Data from U. S. Census of Manufactures, 1929			Data from reports of manufacturing industries to State labor agencies 1929 ²		Ratio of average number of wage earners reported to the State to average number reported by the census
	Date of census release, 1932	Number of establishments	Average number of wage earners	Number of establishments reporting	Average number of wage earners for the year	
Illinois.....	Jan. 18	15,333	691,555	³ 1,057	256,213	37.0
New York.....	Jan. 19	39,395	1,105,996	over 1,500	⁴ 484,170	⁴ 43.2
Massachusetts ⁵	Dec. 31 ⁶	9,872	557,494	³ 838	³ 107,364	19.3
Iowa.....	Jan. 22	3,317	81,678	⁷ 392	⁷ 42,823	52.4
Ohio.....	Jan. 20	11,856	741,143	10,035	718,108	95.9

¹ Includes both men and women, since the census figures were not available by sex from the releases received at the time of preparation.

² In the case of Massachusetts the data are for 1930; 1929 figures not at hand.

³ Average number of establishments.

⁴ New York includes office employees in the total manufacturing figures, though they are omitted in the figures for women on which the index of employment for women is based. Figures on office employees are taken only in October of each year, and numbered 48,645 in October 1929. If this be subtracted from the New York total of 484,170, the remainder forms 39.4 percent of that reported in the census of manufactures. The list was enlarged somewhat in January 1930.

⁵ Employment data not reported by sex, but in the period of study wages were reported by sex for firms that furnished data by sex to the State.

⁶ 1931.

⁷ Number of establishments is total number; number of employees omits those in "various industries," most of whose employees are not in manufacturing (includes, for example, stores and laundries).

It goes without saying that considerable differences appear in the industrial classifications and in the methods of reporting of the three States. The characteristics of the data from each of the States discussed in detail will be given more fully just before the consideration of the State in question. However, a general statement should be made at this time in regard to the basis of reporting in each. In New York it is a fixed list of reporting firms that represents roughly one third of the manufacturing employees in the State; an index based on June 1923 is given by sex, constructed after adjustment by importance of the industry in the State and importance of men and of women in the industry. (See appendix B, p. 216.) Ohio tabulates the total figures reported, as the law requires all firms employing three or more employees to report, and examination of the figures has shown that this gives the results of a practically complete record; simple unadjusted indexes have been prepared from these figures by the Women's Bureau, based on the monthly average of 1928, the year preceding the 1929 peak. In Illinois the percent change from the preceding month is reported for identical establishments. A method similar to that used by the Federal Bureau of Labor Statistics, though in the case of Illinois such figures are given separately for each sex; indexes of employment have been constructed from these changes, with June 1928 used as 100.¹³

¹³ In constructing such an index from link relatives a single month had to be used as a base, June being selected as the most nearly normal month available in the period of study. Since the period of study here covers only 4 years, the errors incident to the link-chain method, as elaborated in connection with Federal Reserve figures, cannot be considered serious. See footnote 2, p. 47.

The question may arise as to the relative merits of these various methods of reporting. Very little material exists on the subject under consideration, and if the situations in the present and more recent past are to be understood even partially, the tools at hand, imperfect as these may prove at times, must be employed. While due allowance must be made for faults of data, and while it is encouraging to know that efforts are proceeding toward instituting systems of reporting more nearly approaching perfection than most of those upon which the information now available is based, still the securing of such perfection will require long growth, and analyses incident to the present situation cannot in all cases wait upon its ultimate assurance. Some error is likely to be present in practically all statistical data, especially when they endeavor to picture the results of such complex economic and social forces as those relating to employment changes and unemployment. The Women's Bureau takes the reports of each State on their own basis, calls attention to the character of the data, and attempts to give some picture of what, in the form given, they appear to indicate in regard to the fluctuations in women's employment. The fact that the period of study here is a short one minimizes the danger of certain types of error incident to the systems in use in some States.

Obviously it is not possible to discuss in detail all the industries reported in each of the three States, so they have been selected on the basis of the numbers of women reported by the State where possible, though the proportions of the gainfully employed women reported by the census of occupations in the industries selected for discussion also are shown. In the case of New York, where the numbers are not reported by sex, the selection of industries is made primarily on the basis of their relative importance as woman employers as indicated by the census of occupations.

Naturally a consideration of the figures available for women does not give a picture of the entire employment situation in an industry or locality. However, it does indicate the extent of fluctuation to which women are subject, and the figures for men's employment included in charts and appendix tables make it possible to compare the changes occurring to women with those occurring to men.

ILLINOIS EMPLOYMENT DATA

CHARACTER OF THE DATA

Employment indexes reported (not by sex)

The employment figures collected in Illinois afford the basis for an employment index reported monthly in the Labor Bulletin and running back to 1922, both for all industries and for all manufacturing.¹⁴ This is compiled with the average of 1922 equaling 100, changing with the issue of June 1929 to the monthly average for 1925-27 as 100.¹⁵ None of the indexes are by sex. Beginning with the issue of July 1928 the total numbers reported¹⁶ are given without separation by sex; figures for Illinois from the census of manufactures, shown in a parallel column, indicate that the reports to the State in the various

¹⁴ Beginning with the August 1928 issue, pay roll index also has been published, covering the same period, with the last 6 months of 1922 equaling 100, but not by sex.

¹⁵ Indexes were reconstructed back on the new base.

¹⁶ Numbers employed are reported as of the 15th day of the month. See issue of February 1930.

52 EMPLOYMENT FLUCTUATIONS AND UNEMPLOYMENT OF WOMEN

months of 1930 represent 40 percent or more of all its manufacturing employment. These data are not by sex, and, as those familiar with the census of manufactures are well aware, the biennial figures reported by the census are not collected by sex. While the monthly employment figures published in the decennial years usually have been reported by sex, they were not so separated for 1929.

TABLE 9.—*Relative importance of various industries and industrial groups in the employment of women wage earners in Illinois, August 1930*

Industry	Percent women formed of total in nearest obtainable group in 1930 census	Percent that all women were earners reported in the industry or occupation formed of—		
		Total employees	Manufacturing total	Specific group total
All industries.....	22.8	100.0		
Manufacturing industries.....	22.6	57.3	¹ 100.0	
Metals, machinery, and conveyances ²	13.3		38.3	¹ 100.0
Electrical apparatus.....	34.8			52.5
Watches and jewelry.....	47.6			18.1
Sheet-metal work and hardware.....	26.8			10.5
Food, beverages, and tobacco ³	29.1		17.3	¹ 100.0
Slaughtering and meat packing.....	16.0			36.3
Confectionery.....	60.0			32.6
Clothing and millinery ⁴	73.4		15.9	¹ 100.0
Men's clothing.....				48.2
Women's clothing.....				30.1
Printing and paper goods ⁵	36.1		10.6	¹ 100.0
Job printing.....	37.6			59.6
Paper boxes, bags, and tubes.....	51.7			24.1
Furs and leather goods ⁶			7.8	¹ 100.0
Boots and shoes.....	46.3			94.4
Chemicals, oils, and paints.....	14.7		3.9	
Textiles.....	60.6		3.0	
Wood products ⁷	7.8		1.5	
Stone, clay, and glass ⁸	5.7		1.5	
Miscellaneous manufacturing ⁹			.2	
Public utilities ²	94.4	29.7		¹ 100.0
Telephone.....				99.1
Trade, wholesale and retail ²		7.8		¹ 100.0
Department stores.....	26.5			27.9
Service.....		5.2		100.0
Hotels and restaurants.....	56.6			64.2
Laundering, cleaning, and dyeing.....	63.9			35.8

¹ Total exceeds details, as not all details are reported in full. For more complete table, with explanation of use of August for this analysis, see appendix A, p. 171.

² Not considered separately. Contains relatively few women outside the groups reported.

³ Not considered separately, because of notable differences and seasonal tendencies of industries.

⁴ This main group considered as well as certain of its details as it contains considerable numbers of women outside the groups shown.

⁵ Not considered separately. Fewer than 1,000 women in the total.

The data available represent a sample for the State. The size of this sample is indicated by a comparison of the figures with those reported in the United States Census of Manufactures. From this

source are found reported 15,333 establishments in 1929; in the same year about 7 percent of that number—an average of 1,057 manufacturing establishments—are included in the monthly State reports on employment. The employees of these establishments are a considerably larger sample of the average of 691,555 wage earners reported by the 1929 Census of Manufactures—the monthly average reported by the State in 1929 being 256,213, nearly two fifths (37 percent) of the census figure. Of course this does not necessarily give the proportional representation to each industry nor to the two sexes. For basis on which analysis by sex is made, see page 50.

Industries selected for inclusion

Naturally it was not possible to include in the present report the entire range of these industrial and occupational groups in considering the employment of women. Table V in appendix A shows the relative importance of the various industries as reported both by the State and by the census. On the general basis of significance in woman employment, in addition to the manufacturing total, 17 groups were selected for consideration. These include 3 main manufacturing groups and 14 separate industries; 10 of the latter were in manufacturing, 4 in nonmanufacturing. The accompanying table 9, selected partly from appendix table V, indicates the classes considered and their relative importance and shows the proportions women formed in the industries analyzed.

THE GENERAL MOVEMENT IN MANUFACTURING EMPLOYMENT IN THE 4 YEARS ¹⁷

All manufacturing in each year

The general seasonal contour of women's manufacturing employment is illustrated in chart 1.¹⁷ Each of the 4 years showed a low point in April, and a low point in July followed by a rise, although in 1929 the July low was so slight as to be almost negligible. July normally was followed by a rise; in 1928 and 1929 this rise reached the high point of the year in September and some decline was shown thereafter; in 1930 and 1931 the rise following July proceeded only as far as August, after which a decline began and continued steadily to approximately the end of the year. In 1928 and 1929 the year closed well above its beginning, but there was an almost continuous decline throughout the 2 succeeding years. On the whole, the curves for men presented the same general movement, but their contour was far more regular, indicating the more frequent and extreme ups and downs in employment to which women are subject. At the close of 1928, factory forces—men and women combined—were 7.1 percent greater than at the close of 1927. Manufacturing employment in December 1929 was about equal to that in December 1928.

At the close of 1930 the Labor Bulletin reports a decrease in employment from December 1929 in all industries—manufacturing and nonmanufacturing combined, men and women—of 17.6 percent; at this time the employment level was reported "considerably lower than in any previous year covered by the indexes of the Department of Labor", and the average index figure for all industries (manufacturing and nonmanufacturing) for the year was 11.6 percent below

¹⁷ Based on indexes shown in table VI in appendix A, p. 174.

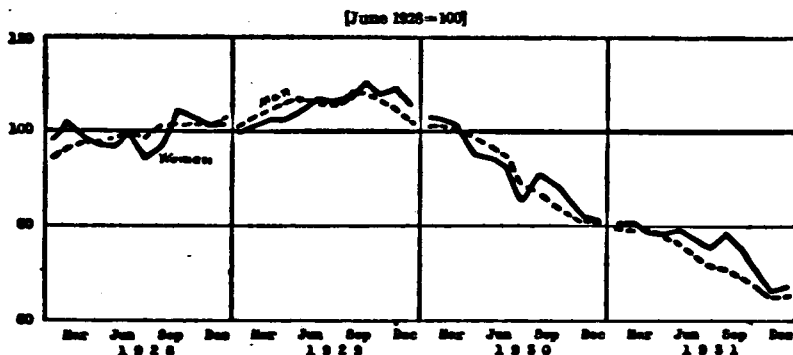
the average for 1929, and 6.4 percent below the figure for 1928, "the lowest annual figure hitherto recorded." The decline in 1931 was almost as sharp as that in 1930; the December figure was 16 percent below that of December 1930, and the average index figure for the year was 16 percent below the average for 1930, which before that was the lowest on record.

Much of the downward movement was due to the manufacturing industries, which formed 57.3 percent of the whole and declined more than the total.

Low employment level in 1930 and 1931 in various manufacturing industries

A later consideration of particular manufacturing industries will show which ones contributed especially to certain directions of movement in the year. The decline in 1930 was reported to be "almost universal", and in 1931 "employment in all reporting Illinois industries declined steadily throughout the year until December." The general low level in 1930 and 1931 was decidedly noticeable in boots

CHART 1.—INDEX OF EMPLOYMENT IN ALL MANUFACTURING, ILLINOIS, 1928-31, BY SEX



and shoes,¹⁸ electrical apparatus, and watches and jewelry, in all of which the downward trend was very marked for both sexes; in men's clothing; in women's clothing in the last part of 1930 and throughout 1931 for men, with, however, a strong upward movement for women in the first half of 1931; in sheet-metal work and hardware for both sexes after July of 1930; in job printing at the close of 1930 and throughout 1931, with especially sharp fluctuations for women; in the chemical, oil, and paint group; in slaughtering and meat packing for men but not for women; in confectionery in the last part of 1930 and the first half of 1931 for men, but the level for women in these 2 years, while somewhat below that of 1929 in nearly every month, was not below the June 1928 base until the end of 1931.

For both sexes the lowest point of employment in the period of study was in 1931 in about one half of the separate manufacturing industries and in the group total, as well as in laundering and telephone.

¹⁸ These data show this to have been true for the firms reporting by sex. Maintenance of a better employment level in certain firms not reporting by sex kept up the industry as a whole better than some other industries.

The highest point of employment was in 1929 for both sexes in the majority of cases, in 6 manufacturing groups, the group total, and in telephone and laundries.

The entire decline in the index of employment in all manufacturing from highest to lowest point in the 4-year period was 43 points for men, 45 for women.

EMPLOYMENT MOVEMENT IN SPECIAL MANUFACTURING GROUPS OR INDUSTRIES

Metals, machinery, and conveyances

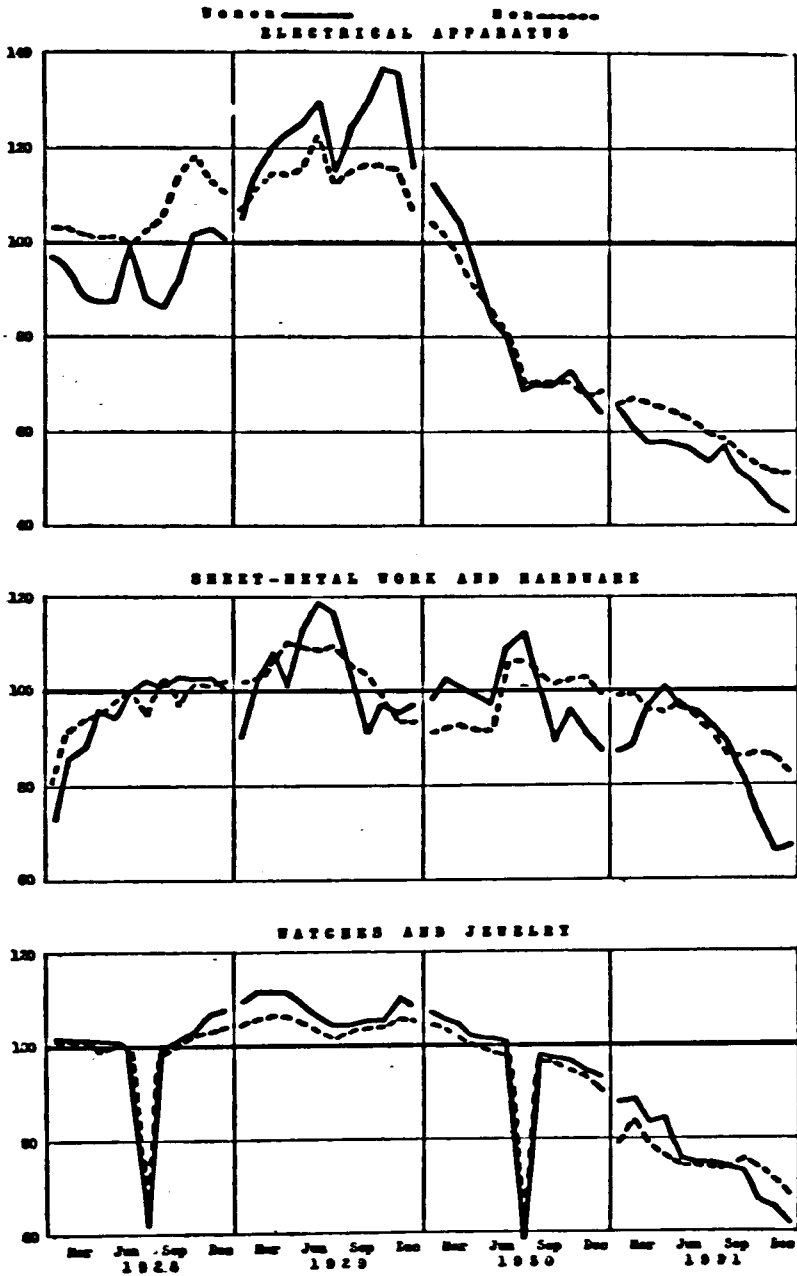
This group employed nearly 40 percent of the women reported in manufacturing, and from it the data for three industries were examined—electrical apparatus, watches and jewelry, and sheet-metal work and hardware, employing respectively over one half, nearly one fifth, and over one tenth of the women in the entire group.

Electrical apparatus.—In the making of electrical apparatus, the general movement of women's employment was quite similar to that of men, though in some cases—notably in the latter part of 1929, or in the comparison of 1929 with 1928—changes were more extreme for women. (See chart 2.) July always presented a low point, though not necessarily the lowest of the year, and judging from 1928 and 1929 the late fall was a normal high point. It was evident that untoward business conditions, technological changes, or other factors had a very adverse effect on employment in this industry, for the decline from September and October 1929 for men and women was almost continuous to the end of the 4-year period and was very rapid during a considerable part of the time. The index of women's employment ran much closer to that of men's in nearly every month of 1930 and 1931 than in the corresponding month of 1928 or 1929. After February 1930 the employment of neither sex ever regained its June 1928 level; from this time on, men's employment fell below any previous point in the 4-year period, and the same was true for women after April 1930. The entire decline from highest to lowest employment index in the 4-year period—these being in 1929 and in 1931, respectively—was 72 points for men and was considerably greater for women, 94 points. Whether for men or for women, this was a greater decline than in any other industry analyzed.

Watches and jewelry.—Usually there was some downward tendency early in the year in this industry. (See chart 2.) July always was a low month, since certain large plants shut down for a week or two for inventory at that time; the apparently more regular showing in 1929 and 1931 is explained by the report period not coinciding exactly with the time of the inventory. Ordinarily some rise came after July—apparently more extreme in 1928 and 1930 than in the other years—because of the preceding inventory just explained. Most remaining months of the year showed an upward trend in 1928 and 1929, a downward trend in 1930 and also in 1931, in which the general employment tendency of the year was downward. Ordinarily the employment of women tended to change in the same direction as did that of men. The difference from highest to lowest index of employment in the 4 years was 45 points for men, somewhat more for women—54 points—and these differences are nearly as great if the July inventories be disregarded.

CHART 2.—INDEX OF EMPLOYMENT IN ELECTRICAL APPARATUS, IN SHEET-METAL WORK AND HARDWARE, AND IN WATCHES AND JEWELRY, ILLINOIS, 1928-31, BY SEX

(June 1928=100)



Sheet-metal work and hardware—Women's employment in this industry was considerably more irregular than that of men. (See chart 2.) There was a marked decline in 1931, though 1928 had opened with employment very low, so that even as late as October 1931 the index was above that of January 1928. The high point of employment for women in June of 1929 and July 1930 was followed, in each case, by a sharp decline. After August 1929 the index in no month (except January 1930 and the 1931 peak in April) rose above that of the corresponding month of the year preceding, and after May 1931 indexes were even below those for the corresponding months of 1928. For men there was some general similarity of employment movement to that of women, but the month-to-month fluctuations ordinarily were far less extreme for men, and their high and low points in the year always differed considerably less than did those of women. The entire decline in the index from highest to lowest point in the 4-year period was 30 points for men, but for women it was much greater—53 points.

Food, beverages, and tobacco

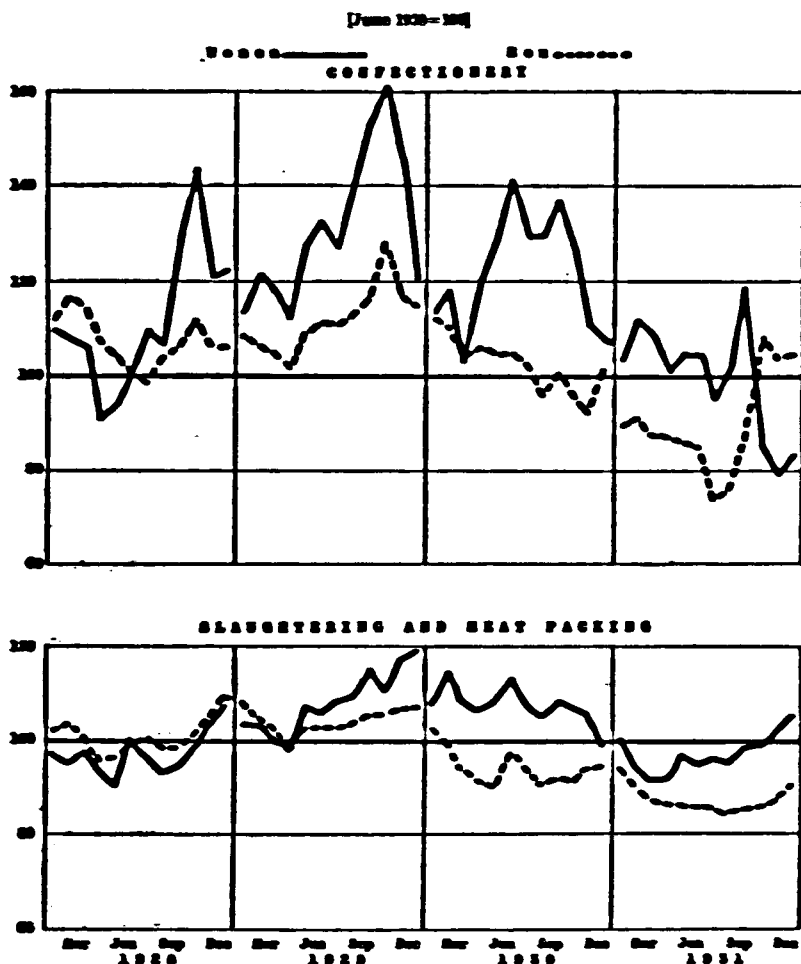
From this group, employing 17.3 percent of the women reported in manufacturing, slaughtering and meat packing, and confectionery were analyzed, each containing about one third of the women in the entire group.

Slaughtering and meat packing.—While a very definite seasonal movement was apparent in this industry, the fluctuations were considerably less extreme than were those, especially for women, in confectionery. (See chart 3.) There was usually a slump in employment in March or April, with a rise to a high point in June or as early as May when the slump was in March. August represented another low point in every year but 1929, and thereafter the general trend was upward to the close of the year, with the exception of that for women in 1930. A comparison of the separate curves for men and women with that for the industry as a whole, as given in the Labor Bulletin, January-February 1929 issue, shows the men's employment for 1928 more nearly following the line of total curve, in which the sharper changes for the women become somewhat smoothed. In this comparison the year used as a base (100) was 1922. Employment for men ran below the June 1928 level in practically all of 1930 and 1931. For women it was above June 1928 from November of that year through November of 1930, with only one exception. The difference between the highest and the lowest employment index in the 4 years was 26 points for men, 29 for women. For both sexes this was a smaller variation than that existing in any other industry but telephone, and for men, textiles in addition.

Confectionery.—In this industry, for the most part, the changes in employment followed the same direction for the two sexes. (See chart 3.) After the early spring season, ostensibly due to preparation for the Easter trade, there was always a drop to a low point in April or March, a summer rise likely to be due to other branches of the confectionery trade, and followed by a later rise to a high point of the year in September or October, when Christmas candy is being made. The fluctuations were much more extreme for women than men in this highly seasonal industry. For women, employment subsequent to June 1928 always was above that month except for July

1931 and the closing months of the same year; for men, employment fell below the June 1928 level in July of the same year, in August, October, and November 1930, and was below throughout 1931 until October, when its rise was accompanied by a sharp decline in women's employment. The entire decline from highest to lowest index in the 4-year period was 55 points for men, and for women it was con-

CHART 3.—INDEX OF EMPLOYMENT IN CONFECTIONERY, AND IN SLAUGHTERING AND MEAT PACKING, ILLINOIS, 1928-31, BY SEX



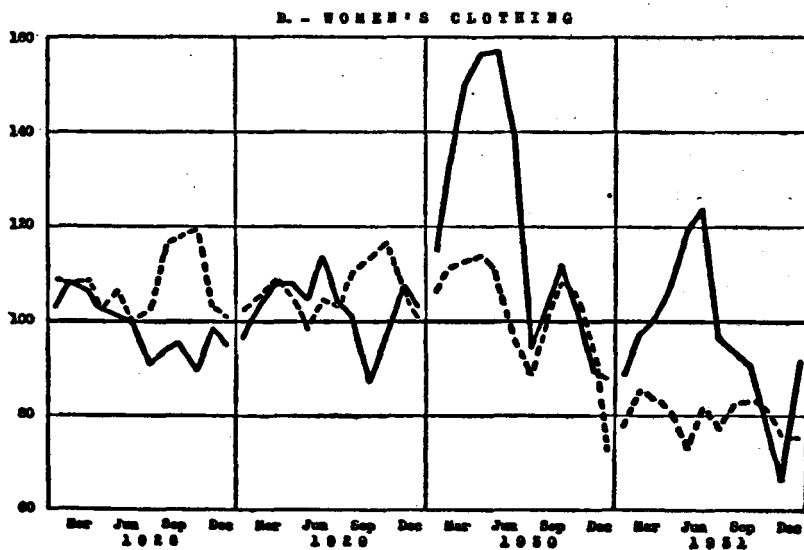
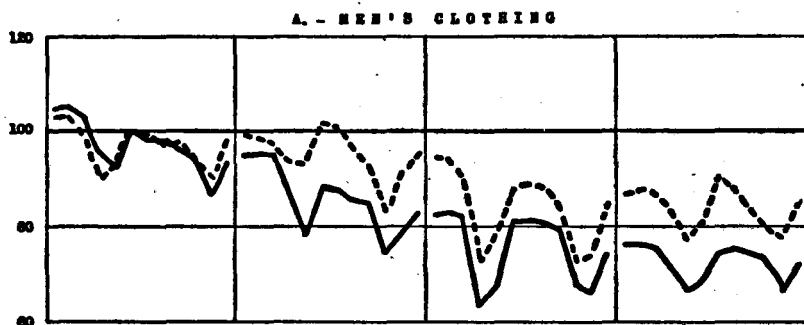
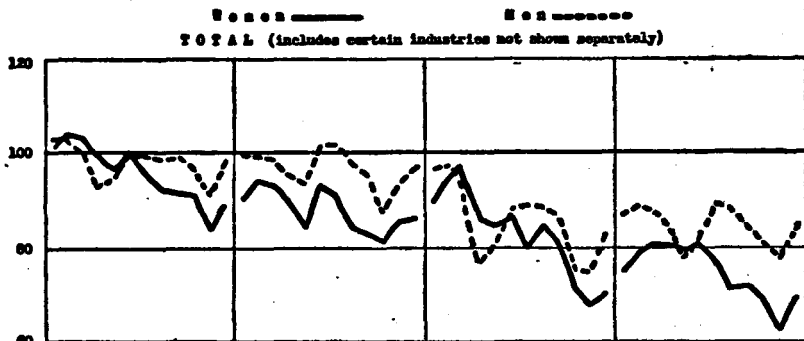
siderably greater—82 points—a degree exceeded by only two other industries.

Clothing and millinery

As is likely to be the case with any composite group, this group as a whole reflects the ups and downs of the various constituent industries in such a way as to give a very irregular picture. As a whole,

CHART 4.—INDEX OF EMPLOYMENT IN CLOTHING AND MILLINERY, ILLINOIS, 1928-31, BY SEX

[June 1928=100]



it employed over one seventh of the women reported to the State as in manufacturing. For women there was an upward movement at the beginning of each year until the highest point of the year was reached; a decline followed, with a minor rise in June, and from then on a more or less steady fall to a low point in October or November. (See chart 4.) Except for the first 3 months in 1928, the employment of women is below the June 1928 level in every month throughout the 4-year period; after August 1930 and in every month of 1931 employment was consistently below the lowest months of 1928 and 1929. At the close of 1930 it was reported that this group as a whole—on the 1925-27 base—had reported a smaller volume of employment for each succeeding year of the index series (men and women combined), and during 1931 there was an additional decline.

For men the fluctuation in the index for the 4-year period was 28 points. For women, the decline was much greater than for men, being 41 points. For both sexes declines in most other groups were considerably greater than in clothing. However, this was due partly to the composite character of the group, the variations in the total being less than those in the constituent industries analyzed.

Men's clothing.—In each of the 4 years, employment in men's clothing, which employed nearly half the women reported in the clothing and millinery group, showed the customary seasonal movement—relatively high in the beginning of the year, and again in June or July when manufacture for the autumn trade is at its peak; very low in April or May, and again in October or November. (See chart 4.) This movement was very similar for the two sexes. In 1928 it was reported in the Labor Bulletin that fewer workers were employed than was the case in any of the preceding 7 years; although men's employment in the 4-year period under discussion kept on the whole a closer approach to its June 1928 level than did women's, neither attained that level in any month except in early 1928 and, for men, in addition, in June and July 1929. The 1930 and 1931 levels, both for men and for women, were always below the corresponding month in 1928 and 1929. The decrease in employment for the year 1930—men and women combined, as shown by the average index figure based on 1925-27—was reported as 16 percent. The difference from the highest index to the lowest in the 4-year period was 31 points for men, and considerably greater—being 41 points—for women.

Women's clothing.—This industry, employing 30 percent of the women in the clothing group, presented extreme irregularities in employment, and showed increases at times when the group as a whole declined. For example, the index in women's clothing in 1930—as given by the State, based on 1925-27—had increased 13.7 percent from that of 1929, while that for clothing and millinery as a whole had declined 9.6 percent. Referring to another such instance, the Labor Bulletin states: "Against this increase (that is, in women's clothing) * * * must be placed the increasing unemployment among dressmakers doing work on an individual basis." Though the seasonal movements were marked, they were much less consistent from year to year and much less similar for men and women than was the case in men's clothing. (See chart 4.) Employment ordinarily rose in the early months of the year, and was low or declining in July, a month usually high in employment in men's clothing; a low point also was reached in November, or somewhat earlier in the fall. The

level of men's employment was extremely low throughout 1931. In about one third of the months reported in the 4-year period the movement of women's employment in this industry was the opposite of that for men. Of course it must be remembered in this connection that in the months for which numbers of each sex could be ascertained—January 1930 and thereafter—these changes came within a total number employed of well over 1,000—often over 2,000—women, while ordinarily less than 300 men were reported. These employment changes, where they were opposite for the two sexes, were as follows:

Year and month	Percent change from employment in preceding month in—			
	Clothing and millinery	Women's clothing		
		Both sexes	Men	Women
1928: February.....	+1.9	+3.7	-0.6	+5.2
March.....	-1.8	-1.1	+6	-1.6
May.....	-9	+2	+3.8	-8
July.....	-1.6	-7.7	+2.5	-9.2
October.....	-8	-4.5	+1.5	-6.0
November.....	-6.7	+5.0	-13.9	+9.9
1929: August.....	-6.1	-1.6	+7.3	-3.6
September.....	-1.1	-10.5	+2.6	-13.0
November.....	+6.1	+8.4	-9.6	+11.8
1930: May.....	+5	-1	-2.7	+3
1931: March.....	+1	+2.9	-2.4	+3.7
April.....	-2.7	+4.6	-4.1	+6.4
May.....	-3.0	+8.2	-9.3	+10.6
August.....	-4.5	-2.5	+7.1	-3.6
September.....	-1.1	-2.4	+1.0	-2.8

¹ Includes data from factories not reporting by sex.

The entire difference from highest to lowest index in the 4-year period was 47 points for men, nearly twice as much for women—90 points. For either sex this was very much greater than the clothing total or other industry analyzed in the group. In the 4 years only one industry among all those included showed employment fluctuation for women greater than this.

Printing and paper goods

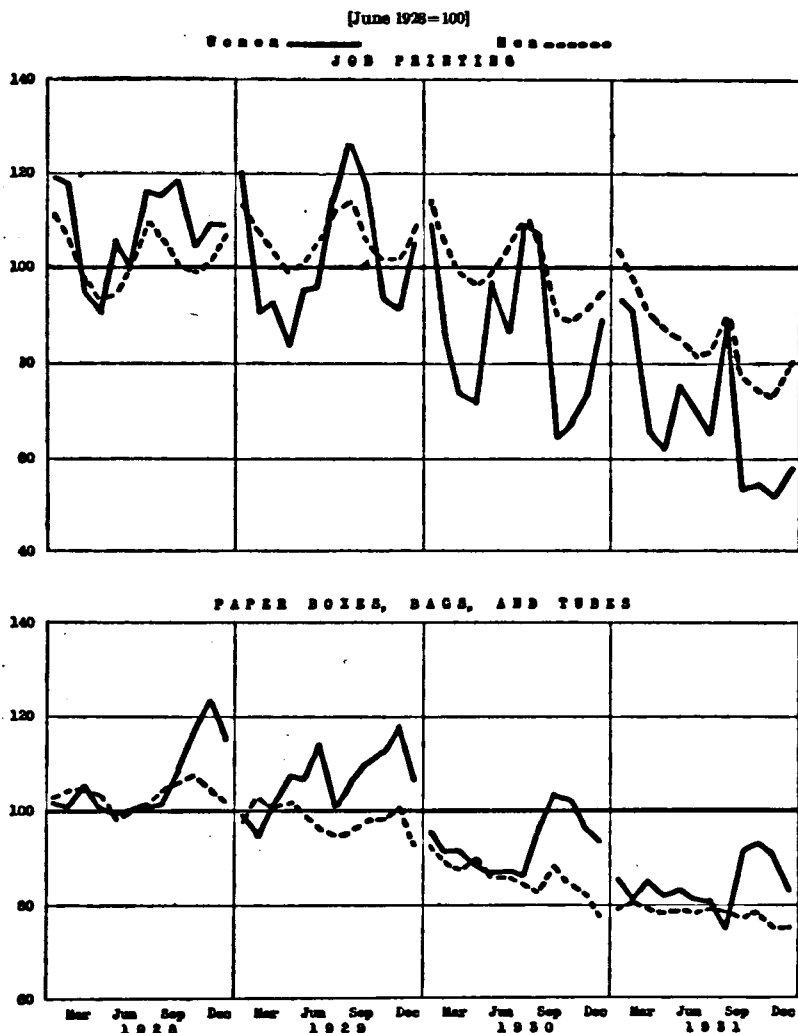
This class employed slightly over one tenth of the women reported in manufacturing, and job printing and paper boxes, bags, and tubes, containing respectively about 60 percent and about 24 percent of the women in the group, have been examined.

Job printing.—In this industry, as in some of the others discussed, employment changes of women were very much more irregular and extreme than were those of men, although the high and low months for the two sexes corresponded in each year but 1930. (See chart 5.) There was a very marked seasonal movement for both sexes, with January the highest or second highest month of the year in each case, and another high point in July or August; heavy losses of employment occurred from January to a low point in April in each year, and again in the fall after the late summer high period. The decline from the highest to the lowest indexes of employment in the 4 years was 42 points for men, considerably greater for women—76 points. Only

three industries showed a greater decline in women's employment, only five in men's.

Paper boxes, bags, and tubes.—Employment here was considerably more irregular for women than for men, though the long-time trend presented similarities and the employment level—on the June 1928

CHART 5.—INDEX OF EMPLOYMENT IN JOB PRINTING, AND IN PAPER BOXES, BAGS, AND TUBES, ILLINOIS, 1928-31, BY SEX



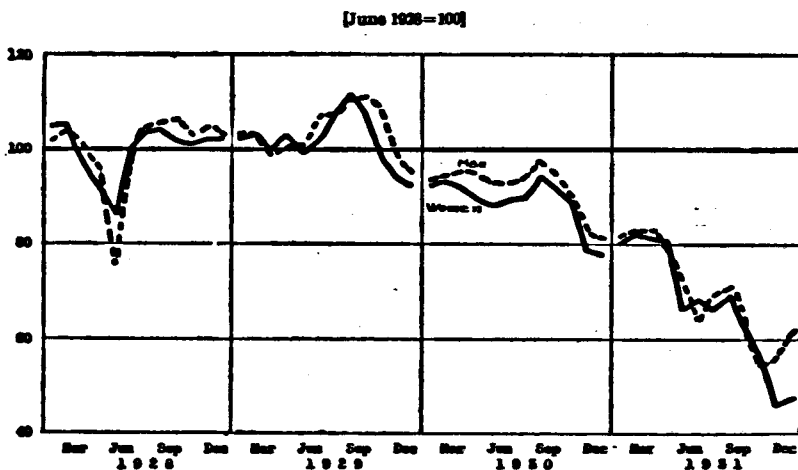
level still was low, and that of men continued to decline except for a slight October rise. The decline from the highest employment index in 1928 to the lowest in 1931 was 32 points for men, but it was 49 points for women.

Furs and leather goods

This group employed nearly 8 percent of the women reported in manufacturing, and about 94 percent of the women in this group were working in boots and shoes.

Boots and shoes.—In this industry the seasonal movement of employment is apparent in every year, with a low point in May, a high point in August, and a more or less steady decline in the latter part of the year. (See chart 6.) The course of employment is similar for the two sexes, though at certain points one is affected more extremely than the other; for example, in the sharp decline to May

CHART 6.—INDEX OF EMPLOYMENT IN BOOTS AND SHOES, ILLINOIS, 1928-31.
BY SEX



1928, when men's employment dropped noticeably lower. At no time after September 1929 did employment for women, nor after October of the same year for men, again recover its June 1928 level, and the decline after August 1930 was almost continuous for both men and women.¹⁹ The difference in the index of employment from the highest to the lowest in the 4 years—and these were in 1929 and 1931, respectively—was 57 points for men, 65 points for women.

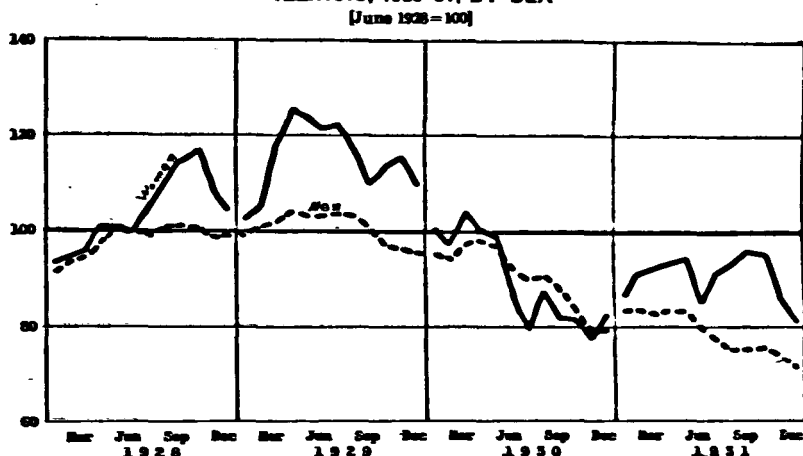
Chemicals, oils, and paints

No consistent seasonal movement applying to every year is apparent in the employment curves for this group of industries. (See chart 7.) It is immediately noticeable that the employment of women was subject to much more extreme month-to-month fluctuations than that of men. However, it must be remembered that this is not a major woman-employing group, containing fewer than 4 percent of the women reported in manufacturing. For men, the

¹⁹ See also footnote on p. 54.

employment level in relation to June 1928 was low throughout the 4-year period, going well above the base only in part of 1929, and declining rapidly and almost steadily in 1930 and 1931. For women, employment was well above the June 1928 level at the end of 1928 and 1929, but it was below in every month after April 1930. The

CHART 7.—INDEX OF EMPLOYMENT IN CHEMICALS, OILS, AND PAINTS, ILLINOIS, 1928-31, BY SEX

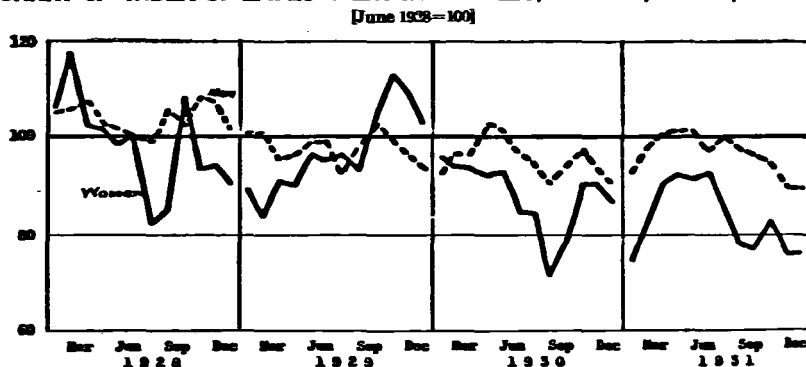


average employment in 1931 (men and women combined) was 20.5 percent below 1929 as reported by the State with the use of the 1925-27 average as 100. The employment index at the highest and lowest points in the 4-year period differed by 32 points for men, but very much more for women—47 points.

Textiles

This industrial group employed a very small proportion of the women reported in manufacturing—3 percent—and its employment

CHART 8.—INDEX OF EMPLOYMENT IN TEXTILES, ILLINOIS, 1928-31, BY SEX



fluctuations were considerably more extreme for women than for men. Except for a summer low point and a period of increased activity in the autumn, seasonality was less consistently marked than in certain other classes. (See chart 8.) January was a comparatively

high month of the year for women in 1928 and 1930, a low month in 1929 and 1931. With the exception of several months of 1928 and the fall of 1929, employment for either sex rose little above the June 1928 level throughout the 4-year period. Employment in 1929 being comparatively low, where it declined further in 1930 and 1931 the difference was less marked than was the case in several other industries. For men and women combined the 1930 yearly index was the lowest on record, and on the average 2.9 percent fewer wage earners were employed in 1931 than in 1930. The entire decline from the highest to the lowest index of employment in the 4 years was 19 points for men, very much more for women—46 points.

NONMANUFACTURING INDUSTRIES

The four nonmanufacturing industries examined were all large woman employers: The telephone industry, which employed 99 percent of the women in public utilities; department stores from the wholesale and retail trade group, of which it formed nearly three tenths; and two classes representing respectively over three fifths and over one third of the women in the service group—hotels and restaurants and laundries (sometimes including cleaning and dyeing).

Telephone industry

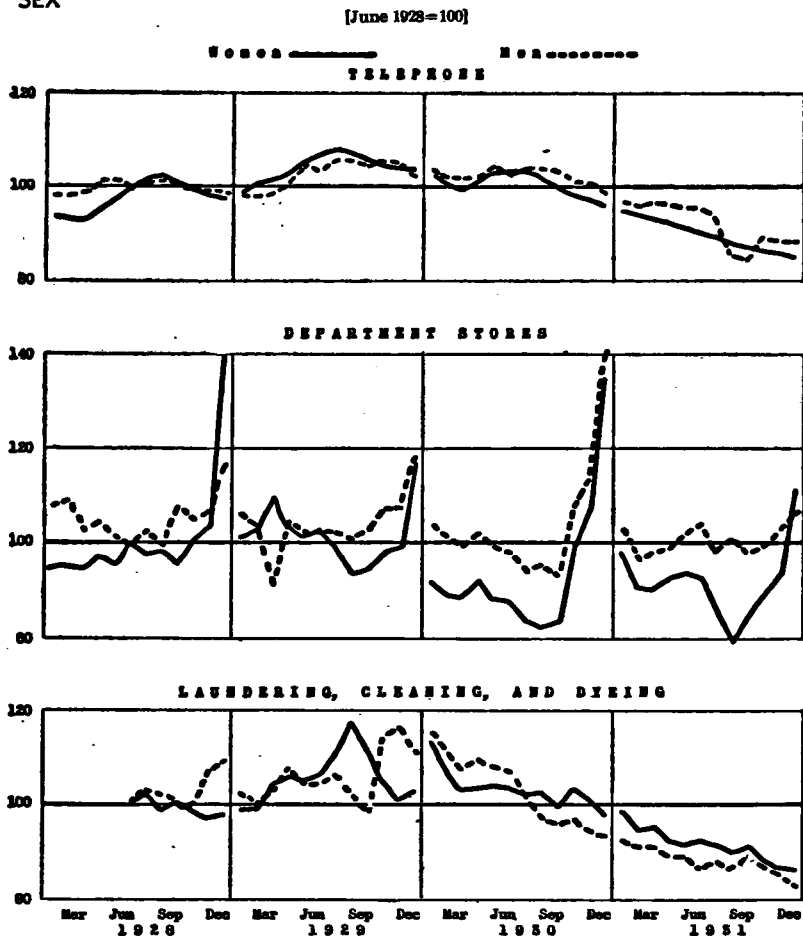
Telephone employment showed a rather consistent movement for both sexes during most of the period, rising to its highest point in the summer of 1929 and falling almost continuously after the summer of 1930. (See chart 9.) Whether for men or for women, January, February, or March was the low point of the year in 1928 and 1929, but January was the highest point in 1931. In 1928, 1929, and 1930 the range from low to high employment was greater for women than for men, but in 1931 the opposite was the case, there being small difference between the sexes in this respect. In the 4-year period there was less variation from highest to lowest employment index in the telephone than in almost any other industry, and the decline was practically the same for the two sexes—22 points for men, 23 for women.

Department stores

The data show the seasonal movement common in this branch of employment, with its relatively low level in the first part of the year, and its rapid late autumn and early winter increase to handle the Christmas trade. In 2 of the 4 years the December increases were greater for women than for men. (See chart 9.) Except for the seasonal movement before Christmas, the employment of women was below June 1928 during most of 1928, and this was also the case in 1930, 1931, and the latter half of 1929 (excepting only December, or November and December, in each case). Men's employment kept above its June 1928 level in almost all of 1928 and 1929 and in 6 months each of 1930 and 1931; consequently, it did not appear to reflect the slump of the last 2 years so definitely as did the employment of women. As early as 1928 the adoption of efficiency methods in department stores was reported to have reduced the demand for labor; and the employment decline from 1930 to 1931 averaged 6.4 percent. The difference between the highest and the lowest index of employment in the 4 years was 40 points for men, considerably

greater for women—60 points. But if the usual December peak in this highly seasonal employment be disregarded, the respective declines were only 22 and 30 points, less than in almost any other industry.

CHART 9.—INDEX OF EMPLOYMENT IN TELEPHONE, IN DEPARTMENT STORES, AND IN LAUNDRERING, CLEANING, AND DYEING, ILLINOIS, 1928-31, BY SEX



Hotels and restaurants

The reporting of employment in hotels and restaurants was begun in June 1928,²⁰ hence the decrease for June from the month preceding is not available for both sexes; and as this was the base month taken, analysis throughout the period must be omitted and only that based on January of each year given.²¹ On this basis women's employment was higher than men's throughout 1929 and 1931 but not in 1930;

²⁰ See statement in the Labor Bulletin, July 1928, p. 2.

²¹ Since all charts are based on June 1928, no chart will be shown for this industry.

it was also somewhat more irregular than men's in 1929, and especially in 1931, although the extreme irregularities presented in some industries were absent. In each case the latter half of the year showed better employment for women than the earlier part, but in 1931 men's employment never again rose as high as it was in January, while that of women went 13 points higher; their respective midyear highs were much lower for men than for women, and the drop for women was less than that for men, so that the year closed with women in a very much better position in relation to their January level than were men.

Laundries

Laundering formerly was classified with clothing, but in June 1928 a new service group was formed which included laundering.²² As it had been reported before, however, an index based on June 1928 is available from that time on for both sexes. On this basis, men's employment had been better than that of women in all but 1 month of 1928, in 6 months of 1929, and in the first half of 1930, but thereafter women's employment was the better. The general downward movement in 1930 and 1931 was very marked and was quite similar for the two sexes. (See chart 9.) The decline from the highest index of employment, which was in 1929, to the lowest, which was in 1931 for each sex, was 34 points for men but less for women—31 points. For women only two industries showed a decline of fewer points. This is the only industry in which the decline was greater for men than for women.

SUMMARY OF EMPLOYMENT MOVEMENT OF WOMEN IN ILLINOIS, 1928, 1929, 1930, 1931

Certain important features of the foregoing discussion may be summarized to advantage. As would be expected, employment was shown to have a markedly seasonal character in certain of the industries; for example, confectionery, job printing, watchmaking and jewelry, men's clothing, and department stores.

General employment level

The general employment level, as based on June 1928, showed very many irregularities from the viewpoint of whether it was higher for men or for women²³—an industry in which one or the other held a level consistently the higher was very hard to find. In general, the level was higher for men in men's clothing and boots and shoes as a usual thing; in the clothing and millinery group in 1929 and 1931, being irregular in the other years; in textiles after January 1930, being irregular prior to that time; and for the most part in department stores except in the December peak. It ordinarily was the higher for women in confectionery except early in 1928 and late in 1931; in chemical factories except for 6 months toward the end of 1930; in hotels and restaurants after reporting began, except in 1930; and usually in paper-box factories, though with some irregularities. In some industries there were notable differences in the various years

²² A class later termed laundering, cleaning, and dyeing.

²³ Much greater irregularities than in New York, for example. The fixed-list system and the weighting of the index according to relative proportions of men and women in the industry, as in New York, might have made the showing more clear-cut, as might the choice of a different base.

as to which sex held up better in employment; for example, a higher level in meat packing was shown for men in 1928, but for women after March 1929; in electrical-supply factories, for men in 1928 and 1931, for women in 1929 with 1930 irregular; in women's clothing, for men in 1928 and in 6 months of 1929, for women in most of 1930 and of 1931; in job printing, for women usually in 1928, for men in 1930 and 1931.

Irregularities within the year

The table on page 69 shows the points of difference between the high and the low indexes in any one year and in the entire period, both for men and for women. An examination of this indicates that in every industry and in almost every year women suffered a much greater employment variation from high to low point of the year than did men. The difference between the two sexes in this respect was especially great in the textile and chemical groups, in job printing, and in sheet-metal work and hardware in every year, and in the following in most years: Confectionery, women's clothing, paper boxes, and department stores. Great differences from the high to the low employment index for both sexes were found in electrical apparatus, confectionery, stores, job printing, boots and shoes, and women's clothing. The least differences were found in the telephone industry, and for men in textiles.

Declines in employment in the 4-year period

Whichever sex be considered, the decline in employment in 1930 and 1931 was extreme in the manufacturing group as a whole, as it was in the making of boots and shoes and in electrical apparatus and supplies. In certain industries employment held up fairly well until the latter part of 1930 or until 1931, after which the decline was extreme for both sexes; this was true in watches and jewelry and in sheet-metal work and hardware. The decline in 1931 was decided—though less extreme than in some industries—for either sex in laundry and dry-cleaning establishments and in the telephone industry, and for men in slaughtering and meat packing. In men's clothing, paper-box making, and the chemical industries the level of employment for either sex in 1930 and 1931 was, on the whole, decidedly lower than was that in 1929, and the same was true in 1931 of job printing and confectionery.

The entire decline from high to low index within the period was greater for women than for men in practically every industry—in some cases considerably greater. For both men and women the greatest decline was in electrical-apparatus factories, 72 points for men and 94 for women, and over 50 points of decline in the indexes occurred for both men and women in boots and shoes and confectionery. For women there was a decline of 90 points in women's clothing and 50 points or over in job printing, sheet-metal work and hardware, watch and jewelry factories, and department stores. For men the smallest decline in manufacturing was 19 points in the textile group, not a large employer in this State. For women the least decline in manufacturing was 29 points in slaughtering and meat packing, although employment had declined somewhat less in telephone, not a manufacturing industry.

Evidences as to replacement

The general direction of change appeared similar for the two sexes, though fluctuations often were much more extreme for one than for the other. For example, in watch and jewelry plants and in electrical-apparatus factories, the employment of both sexes declined in 1931, but for women more extremely than for men. The data give no evidence that can be taken as indication of general or widespread replacements of men by women in any industry at the time declines were notable. There were some cases in which the employment of one sex might increase somewhat for several months while that of the other sex was declining, but such a period invariably would be followed by movements in the same direction for both sexes, and these

TABLE 10.—*Difference between highest and lowest index numbers of employment within the year, and during 4-year period, Illinois, 1928-31*

Industry	Number of points of difference between high and low index in the year for—								Number of points of difference between the highest and the lowest index in the 4-year period for—	
	Women				Men				Women	Men
	1928	1929	1930	1931	1928	1929	1930	1931		
Manufacturing industries.....	10	11	22	14	8	8	20	15	45	43
Metals, machinery, and conveyances:										
Electrical apparatus.....	17	32	49	24	18	16	37	16	94	72
Watches and jewelry.....	47	8	49	27	37	5	42	16	54	45
Sheet-metal work and hardware.....	30	29	25	34	22	17	15	17	53	30
Food, beverages, and tobacco:										
Slaughtering and meat packing.....	17	20	15	14	14	10	12	11	29	26
Confectionery.....	52	49	38	39	18	27	20	35	82	55
Clothing and millinery.....	19	13	30	18	11	14	22	12	41	28
Men's clothing.....	24	21	20	10	13	18	22	13	42	31
Women's clothing.....	19	27	69	57	20	18	41	13	90	47
Printing and paper goods:										
Job printing.....	29	44	45	42	18	15	26	31	76	42
Paper boxes, bags, and tubes.....	24	24	18	19	9	9	15	5	49	32
Furs and leather goods—Boots and shoes.....	20	19	16	36	30	16	17	28	65	57
Chemicals, oils, and paints.....	23	23	26	16	10	9	20	12	47	32
Textiles.....	35	29	24	19	9	9	12	12	46	19
Public utilities—Telephone.....	9	9	8	10	3	8	6	12	23	22
Trade—Department stores ¹	45	23	53	32	17	26	47	10	60	40
Services:										
Hotels and restaurants.....	(²)	(²)	(²)	(²)	(²)	5	8	10	(²)	(²)
Laundering, cleaning, and dyeing....	(²)	19	16	13	(²)	18	22	10	31	34

¹ The high point of the year was in 1929 in the majority of cases. The exceptions are: For both sexes, in clothing and millinery, textiles, paper boxes, bags, and tubes, and men's clothing in 1928; for men, in job printing and department stores in 1930, in women's clothing and in slaughtering and meat packing in 1928; for women, in women's clothing in 1930 and in department stores in 1928. The low point of the year was in 1931 in nearly all cases. The exceptions are: For both sexes, in men's clothing and in watches and jewelry in 1930; for men, in clothing and millinery in 1930, in sheet-metal work and hardware in 1928, and in department stores in 1929; for women, in chemicals, oils, and paints and in textiles in 1930, and in slaughtering and meat packing in 1928.

² If July be omitted in the 2 years when inventories were taken, 39 and 50.

³ If December be omitted:

	1928	1929	1930	1931	4 years
Men.....	10	16	20	7	22
Women.....	9	16	24	18	30

⁴ Not reported until in August 1928 issue.

⁵ Not reported until in July 1928 issue.

⁶ Included under clothing until July 1928 issue.

cases find explanation other than that of replacement of men by women. Some consideration of women's clothing and two of the food industries, in which this question might appear, will serve as illustrations. In women's clothing, for example, where activity for women showed an upward peak early in 1931 while that for men was declining, the slump in the later months of the year was much greater for women than for men; the entire decline in the year was 57 points for women but only 13 for men. The movement served chiefly to illustrate the fact that fluctuations for women were very much more extreme than for men, which also was the case in 1929 and 1930. In meat packing, while for women the general employment level, on the June 1928 base, was well above that of men, after the spring of 1929 the movement for the two sexes took a similar direction and gave no evidence of women replacing men. Except in 1931, the employment fluctuation in each year was greater for women than for men. In confectionery there was a great increase in women's employment in 1930, after declines had set in for men, but at the end of 1931 women's employment declined sharply while that of men rose, and in each of the 4 years the fluctuation of employment was greater—usually very much greater—for women than for men.

In all the groups, with but one exception, the employment of women had declined more from its highest to its lowest index in the 4 years than had that of men.

NEW YORK EMPLOYMENT DATA

CHARACTER OF THE DATA

The New York Industrial Bulletin publishes, as of the 15th day of each month, figures on factory employment based on a fixed list of reporting concerns that give, so far as possible, reports for a similar proportion of each industry included. An index based on these totals—men and women combined—includes the office as well as the shop workers in the establishments covered, and is based on the monthly average of employment, 1925-27. In ascertaining the proportion of manufacturing employment reported by comparison with the total given in the Census of Manufactures of 1929, it is necessary to eliminate the clerical forces from the New York totals. The numbers of these are reported to the State only in October of each year, and if those for October 1929 be subtracted from the monthly average of the New York employees reported in that year, it is found that 39.4 percent of the manufacturing employees in the State are included in the New York reports.²⁴

Table VII in appendix A shows, for a selected month, the industrial distribution of the employees reported to the State (men and women combined, including both office and shop force); it also shows the industrial distribution of women in manufacturing in the State according to the Census of Occupations of 1930.

As is the usual case where reporting by sex is requested, not all reporting firms are able to separate their figures by sex. Consequently, data for women generally are less complete than are the totals. Furthermore, certain industries that are large woman employers, such as clothing, are likely to be scattered in smaller estab-

²⁴ See table 8, p. 50.

lishments than are some of the industries employing chiefly men—for example, certain of those in the metal and machinery group—and it always proves more difficult to get full representation in reporting from many small concerns than from a smaller number of large establishments. To correct, so far as possible, the unequal representation of the industries in the list reported by sex, the New York State Department of Labor weighted the employment figures by sex both according to the importance of the industry in the total volume of manufacturing employment and according to the estimated numbers of men and women it employed.²⁵ The absolute figures on women's employment obtained after this weighting—average for 1929—have been furnished to the Women's Bureau by the New York State Department of Labor, and they are shown in a statistical work sheet in appendix B, with the proportion each industry forms of the total woman employment. The indexes constructed for the two sexes from the weighted figures are based on June 1923. In preparing these indexes office employees were omitted, and the employment indicated is that of shop workers only, as is specified in each monthly issue of the Industrial Bulletin. As stated above, this is not the case with the indexes for the two sexes combined. The establishments reporting by sex employ roughly one third of all factory workers in the State;²⁶ throughout the period studied it was stated that the list of concerns reporting by sex employed "33 percent of the men and 27 percent of the women factory workers of the State." This is the only one of the four States reporting on employment changes by sex that uses a fixed list of establishments,²⁷ although the Ohio data are so inclusive as to present the even basis of a fixed list. For basis on which analysis is made here, see page 50.

Special Bulletin 143 of the New York State Department of Labor analyzes in detail for each industry included the fluctuations in the employment and earnings of both men and women from June 1923 to June 1925. Such an analysis has not been made for a later period, although a bulletin issued in 1931 covers the employment data for the two sexes combined from 1921 to 1930.²⁸

Groups included in the present consideration

It is not possible to discuss in the text every industry reported. The main groups selected are those sufficiently important as to engage as many as 5 percent of the total number of women given in the weighted absolutes shown on the statistical work sheet in appendix B; two of these that are especially far from homogeneous in character have been excepted from consideration—food products, and furs, leather, and rubber—although certain of their component industries have been included. The separate industries discussed are those forming considerable proportions of their main groups, as shown by the weighted absolutes referred to. The accompanying table indicates the relative standing of the industries discussed here according to the weighted absolutes for women prepared by the State. For a complete list of these, see the statistical work sheet in appendix B.

²⁵ The details of the method employed in constructing this index are set forth in Special Bulletin No. 143 of the New York State Department of Labor. Extracts from pp. 85f. and 151ff. of this bulletin will be found on p. 216 of appendix B, together with copy of sheet showing in greater detail the statistical method used by the State in preparing weighted absolutes.

²⁶ Industrial Bulletin, January 1930, p. 97.

²⁷ The "fixed list" means that the firms were identical. However, the number of firms reported does change from time to time, as substitutions become unavoidable or corrections are made according to changes in numbers employed in various industries.

²⁸ New York State Department of Labor, Special Bulletin 171, 1931.

TABLE 11.—*Relative importance of various industries and industry groups in the employment of women wage earners in New York, average for 1929¹*

Industry	Percent women formed of total in nearest obtainable group in 1930 census	Percent that the weighted absolutes of all wage earners reported in the industry or industry group formed of—	
		Total employees in manufacturing	Specific group total
All manufacturing.....	32.0	100.00	100.00
Clothing and millinery.....	56.7	43.75	100.00
Women's clothing.....		13.31	29.43
Men's clothing.....		8.31	20.24
Laundering and cleaning.....	56.0	6.04	13.75
Men's furnishings.....		1.58	13.43
Women's headwear.....		2.39	8.22
Women's underwear.....		2.62	8.79
Textiles.....	50.9	14.80	100.00
Knit goods (except silk).....	61.3	1.92	26.51
Woolens, carpets, felts.....	41.0	1.67	26.14
Silk and silk goods.....	58.8	2.55	17.21
Food and tobacco ²	29.2	10.21	100.00
Candy.....	52.0	2.33	22.78
Bakery products.....	41.7	1.97	19.30
Canning and preserving.....	39.7	1.84	18.05
Tobacco.....	27.4	1.84	18.01
Furs, leather, and rubber goods ²		9.22	100.00
Shoes.....	29.4	5.64	61.11
Gloves, bags, and canvas goods.....		1.71	18.54
Printing and paper goods.....	28.9	9.67	100.00
Printing and bookmaking.....	32.4	5.51	60.81
Paper boxes and tubes.....	52.0	1.86	20.46
Metals and machinery.....	10.3	7.36	100.00
Machinery and electrical apparatus.....		2.71	36.80

¹ Weighted absolutes for women, monthly averages of 1929, as furnished by the Division of Statistics and Information, New York State Department of Labor. All main groups included where the absolute figure is as great as 5 percent of all manufacturing; all specific industries where it is as great as 1.7 percent.

² Far from homogeneous in character, therefore not discussed.

THE GENERAL MOVEMENT IN MANUFACTURING EMPLOYMENT IN THE 4 YEARS

Charts 10 and 11 illustrate the manufacturing index for men and women combined, based on the average employment in the 3 years 1925-27, and the separate indexes for the two sexes, for which June 1923 is the base. (See table VIII in appendix A.) In each case the years 1928, 1929, 1930, and 1931 are covered.

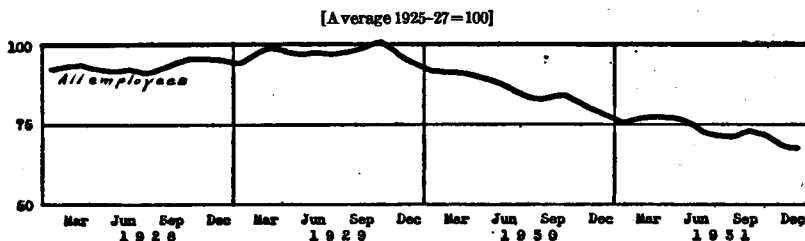
The combined curve shows considerably greater regularity than does the separate curve for women. It is practically the same as the curve for men and reflects the extent to which men predominate in manufacturing. The 1925-27 average is below the June 1923 figure, and consequently the curve based on the former assumes a generally higher position. Throughout the 4-year period, employment for either sex always was considerably below June 1923, though in 1929 the 1925-27 employment level for men and women combined was approximated in several months and was somewhat overreached in October.²⁹ It must be remembered that the figures for the two sexes

²⁹ Employment also was low prior to 1928. For example, the Industrial Bulletin for April 1928, discussing men and women combined, states: "For the past two years manufacturing concerns in this State have added fewer workers to their forces in the busy season and have laid off more than the usual number in the dull season." This is attributed not only to labor-saving machinery but to the constant improvement in organization, a factor "not so often mentioned."

combined include the office forces, presumably largely women and ordinarily much more regular in employment than the manufacturing occupations.

The manufacturing employment of women is shown to have been considerably more irregular than that of men; it was always low in July and was high in March and in either September or October. High and low points came at practically the same time in the year for men as for women; but the extremes reached in either direction ordinarily were not so great for men as for women.

CHART 10.—INDEX OF EMPLOYMENT IN ALL MANUFACTURING, NEW YORK STATE, 1928-31, ALL EMPLOYEES

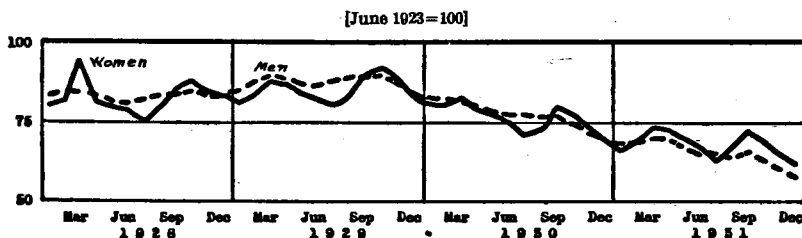


In regard to 1928, the Industrial Bulletin (discussing men and women combined, office employees included) comments as follows:

In 1928, factory employment in New York State stood at the lowest level ever recorded. It was even below 1921, when the prosperity boom after the war was badly punctured * * *. However, factory labor was in one sense better off than previously, since it was not subject to sudden changes, the results of which are sometimes more disastrous than a generally low level of employment.³⁰

So far as women in shop occupations were concerned, this dictum appears not to have applied entirely, since the index would indicate that in 1928 they were subject to rather extreme changes from month

CHART 11.—INDEX OF EMPLOYMENT IN ALL MANUFACTURING, NEW YORK STATE, 1928-31, BY SEX



to month at some seasons of the year. The July low in 1928 was especially severe for women industrial workers.

The year 1929 was better than 1928; the Industrial Bulletin states that as a whole it "marked an advance of four points over 1928 and of half a point over 1927," and that "Except for the decline after the fall peak, factory labor did not undergo any severe fluctuations from month to month."³¹ For July it was stated that the midsummer

³⁰ Industrial Bulletin, January 1929, p. 503. Throughout the entire discussion in New York, direct quotations from the Industrial Bulletin, unless otherwise specified, refer to the index for men and women combined, which includes office as well as shop workers.

³¹ Ibid., January 1930, p. 97.

dullness was much less than usual.³² This was more true for men than for women industrial workers, for while the latter suffered a less extreme drop from March to July than was the case in 1928, nevertheless the drop to the July low was considerable in the employment of women though it was almost nonexistent in that of men. Toward the end of the year (November) there were "widespread seasonal losses", which were greater than for the same time in any other year except 1920.³³ Among the industries in which declines at the end of the year (for men and women combined, office forces included) were particularly noted in the analysis in the Industrial Bulletin, were the following:³⁴

About half of the industries reported larger declines at this season than in the past 6 years * * *. All of the metals showed general loss of forces, with half of them decidedly below a year ago. Many of them were gaining in the previous December * * *. Seasonal slackening continued in all the clothing industries, with reductions on a larger scale than in 1928 or 1927 * * *. Larger losses than usual in all of the textiles contrasted with general gains last year. Greater drops in pay roll than in employment indicated loss of activity in December. Both employment and pay rolls fell below a year ago in all industries except knit goods where total pay rolls were about even with last December. Silk and wool usually begin to pick up at this time. Cotton-mill forces were noticeably lower than in several years as a result of monthly curtailment all through 1929 * * *. General cuts among all the foods made December a duller month than usual. All of the food industries stood way below last year except candy * * *. Employment fell rapidly in piano and other musical instrument firms, due to general as well as a few large cuts * * *.

For women industrial workers considered separately in this year, a notable decline began as early as October in canning (which would be expected) and in the shoe industry (but, in the last mentioned, with some rise in employment in December); after October the decline was marked in several of the main industrial groups, including clothing and metals; the same was true of candy, tobacco, and bakery products in the food group, and of gloves, etc., in the fur and leather group. After November the textile and printing and paper goods industries reduced the employment of women.

As was to be expected, employment during most of 1930 and 1931 was low compared with the 2 earlier years, after the heavy drop beginning in October 1929. In January 1930 the lowest figure ever recorded for that month was reported (for men and women combined, including office forces), and it was estimated that over 100,000 persons had been laid off since the preceding October.³⁵ The only month in the year that showed any net gain was September, and this amounted only to about 2 percent.³⁶ The index for November was reported to be the lowest figure since the index began, in June 1914,³⁷ and the December index was still lower. The total decline in employment from October 1929 to December 1930 was 23 percent³⁸ and the decline from October 1929 to December 1931 was 33 percent.³⁹

So far as women in industrial occupations were concerned, after April 1930 employment never again rose to the level of any month in 1928 or 1929, with two exceptions—May and the early fall months

³² Industrial Bulletin, August 1929, p. 695.

³³ Ibid., December 1929, p. 67.

³⁴ Ibid., January 1930, p. 99.

³⁵ Ibid., February 1930, p. 127.

³⁶ Ibid., October 1930, p. 9.

³⁷ Ibid., December 1930, p. 83.

³⁸ Ibid., January 1931, p. 111.

³⁹ Ibid., January 1932, p. 108.

of 1930 were above the summer low in 1928, and September 1930 climbed to the level of the July low of 1929. The fluctuation from high to low employment within the year in the manufacturing total for women shop workers was the same in 1931 as in 1929, but it must be remembered that the level of employment was much lower in 1931 than in 1929. Both for men and for women, employment in manufacturing as a whole was lower in each month of 1931 than in the corresponding month of 1930. That certain of the important woman-employing industrial groups contributed markedly to the general low employment level in 1930 and 1931 is indicated from table 12.

Table 12 shows that the 1931 low fell more than 10 points below that of 1929 for women industrial workers in all manufacturing, in most of the major groups, and in all the separate industries considered except women's clothing, women's headwear, laundering and cleaning, silk manufacture, and candy making; the greatest differences found were in certain of the metal, leather, textile, and printing and paper goods industries, as well as in the total group metals and machinery, there being a difference of 30 or more points in woolens, carpets, and felts, shoes, machinery and electrical apparatus, printing and bookmaking, and the metals and machinery group. Even the highest indexes in 1931 were below the lowest in 1929 for women shop workers in all manufacturing, in certain major groups—textiles (and two of its three details), metals and machinery (and in its one group), in printing and paper goods (and both of its details), and in men's furnishings and bakery products.

With a few exceptions, the lowest index for women industrial workers in the 4-year period was in a month of 1931 in every industry and group discussed, and the highest was in 1929 in more than half the cases. The entire range of points of difference from 1929 high to 1931 low was 30 points in all manufacturing and was greatest in the following: Canning, 174; machinery and electrical apparatus, 97; shoes, 63; and over 50 points in the total of metals and machinery and in gloves, bags, and canvas goods; woolens, carpets, and felts; and women's clothing.

In over half the industries and groups included, the fluctuation in the employment of women shop workers within the year—as measured by the difference between the high and the low index—was greater in 1930 than in any other year. However, it was greatest in 1928 in knit wear, silk goods, and machinery and electrical apparatus, as well as in the manufacturing group as a whole; greatest in 1929 in bakery products, and laundering and dry cleaning; greatest in 1931 in candy, tobacco, shoe, and paper box and tube factories. In knit wear and in women's headwear the difference in 1930 was the same as in 1928; in laundries and dry cleaning the difference in 1929 was the same as in 1928; and in candy the difference in 1930 was the same as in 1929.

TABLE 12.—Difference in woman employment from high to low point in the year, 1929 and 1931

Industry	1929					1931					Drop from 1929 to 1931 at—	
	High		Low		Points of difference high to low	High		Low		Points of difference high to low	High points	Low points
	Month	Index	Month	Index		Month	Index	Month	Index			
All manufacturing.....	October.....	92	July.....	80	12	March.....	74	December.....	62	12	18	18
Clothing and millinery.....	March.....	91	July.....	72	19	March, April.....	80	July.....	61	19	11	11
Women's clothing.....	March.....	109	July.....	62	47	April.....	101	July.....	66	43	8	6
Men's clothing.....	August.....	92	May.....	76	16	March, April.....	80	November.....	68	17	12	13
Laundering and cleaning..	June.....	184	March.....	124	10	June.....	128	February, Decem- ber.....	121	7	6	8
Men's furnishings.....	February, March...	71	June, August, De- cember.....	62	9	September, October.	48	December.....	41	7	28	21
Women's headwear.....	April.....	98	July.....	82	16	March, April.....	89	July.....	80	9	9	2
Women's underwear.....	October, November.	67	January.....	66	11	March.....	88	July.....	43	15	9	13
Textiles.....	November.....	80	July.....	70	10	April.....	1 89	January, December.	80	9	21	20
Knit goods (except silk)...	April.....	64	January.....	68	4	June, September, October, Novem- ber.....	1 48	January.....	38	10	16	17
Woolens, carpets, and felts..	November.....	108	January, February..	80	16	April, August.....	1 80	December.....	80	20	28	30
Silk and silk goods.....	March, November..	68	July.....	67	1	November, Decem- ber.....	62	June, July, August..	68	9	4	4
Food and tobacco:												
Candy.....	October.....	106	April.....	74	32	December.....	1 180	July.....	68	62	(¹)	6
Bakery products.....	February, March...	83	August.....	69	14	September.....	1 61	November, Decem- ber.....	64	7	22	16
Canning and preserving...	September.....	204	December.....	48	161	September.....	196	January.....	80	116	8	13
Tobacco.....	May, October.....	608	December.....	40	18	November.....	43	January.....	18	26	18	22
Furs, leather, and rubber goods:												
Shoes.....	September.....	141	April.....	110	31	January.....	128	December.....	74	48	18	32
Gloves, bags, and canvas goods.....	October.....	121	June.....	86	35	March.....	100	December.....	69	37	21	23
Printing and paper goods.....	October, November.	94	January, May, June	90	4	January, February, March.....	1 78	July, August.....	68	10	21	27
Printing and bookmaking.	October.....	104	February.....	97	7	January.....	1 80	September, October	67	13	24	30
Paper boxes and tubes.....	November.....	80	August.....	68	12	October, November.	1 66	July.....	61	18	14	17
Metals and machinery.....	June, July.....	110	December.....	98	12	January, April.....	1 65	August, December..	84	11	46	41
Machinery and electrical apparatus.....	July.....	145	December.....	107	38	January.....	1 64	December.....	48	16	81	69

¹ The highest index for 1931 was below the lowest index for 1929.² In this case the highest index for 1931 was above the highest for 1929.

EMPLOYMENT IN SPECIAL MANUFACTURING GROUPS OR INDUSTRIES

Clothing

The clothing and millinery group employed over 40 percent of the women shop workers in manufacturing.⁴⁰ Naturally, the index for employment of women followed the marked seasonal movement usual in these industries, with a spring and fall high and a summer low. (See chart 12.) The differences between the extreme low and the extreme high points in employment were quite similar for the two sexes in each year, and for women they were the same in 1931 as in 1929. In each of the 4 years the summer low point for women was a month or 2 months later than that for men, and the high point came in the same month (March) for women as for men. The level of employment in clothing was not high within the period of study, the highest index for women being 91, for men slightly lower, both in March 1929. Employment in 1930 and 1931 moved downward; after January, the index for each month of 1930 was below that of the corresponding month in 1929 for each sex, and with a few exceptions those for 1931 fell still lower. Despite this fact, the decline was less marked in the clothing industry than in many others.⁴¹ The 1931 high for women as well as for men was 11 points below that of 1929; in no other industrial group included, and only in four of the separate industries (including women's clothing), was this difference so small for women. The difference from the highest to the lowest index over the entire 4-year period was 30 points for women, 31 for men. The following industrial groups, women's clothing, men's clothing, laundering and cleaning, men's furnishings, women's underwear, and women's headwear form from about 13 to about 3 percent of the manufacturing total in the weighted absolute numbers. These industries will next be considered in order of size.

Women's clothing.—The making of women's dresses and other outer clothing, which employed about three tenths of the women workers in clothing and millinery, had variations in employment from the busy to the dull and from the dull to the busy seasons much more extreme than in other clothing groups and similar for the two sexes. (See chart 12.) The index of women's employment fell 53 points from the high month in 1929 to the low month in 1931, while the clothing group as a whole showed a difference of only 30 points. For the most part, the index in each month of 1929 was above that of the corresponding month of 1928; a strike accentuated the slack season in July 1929,⁴² followed by large gains in August,⁴³ but the indexes show that these movements had a much more marked effect upon the employment of men than of women. The employment of women in 1930 was not below that of 1929 in every month, as was the case in some other industries, but it fell below that of 1929 in the spring season of high activity and also in the summer slack period, and again at the end of the year. Some plants were closed entirely in the month of July.⁴⁴ Except for May and June, men's employment maintained a higher level throughout the year than did women's.

⁴⁰ Proportions quoted throughout based on the weighted absolute numbers of women shop workers, monthly average 1929. See text table 11, p. 72.

⁴¹ The lowest index for women in 1931 fell 19 points below the highest for 1931, which difference is less than that for 9 of the 24 other industries or industrial groups.

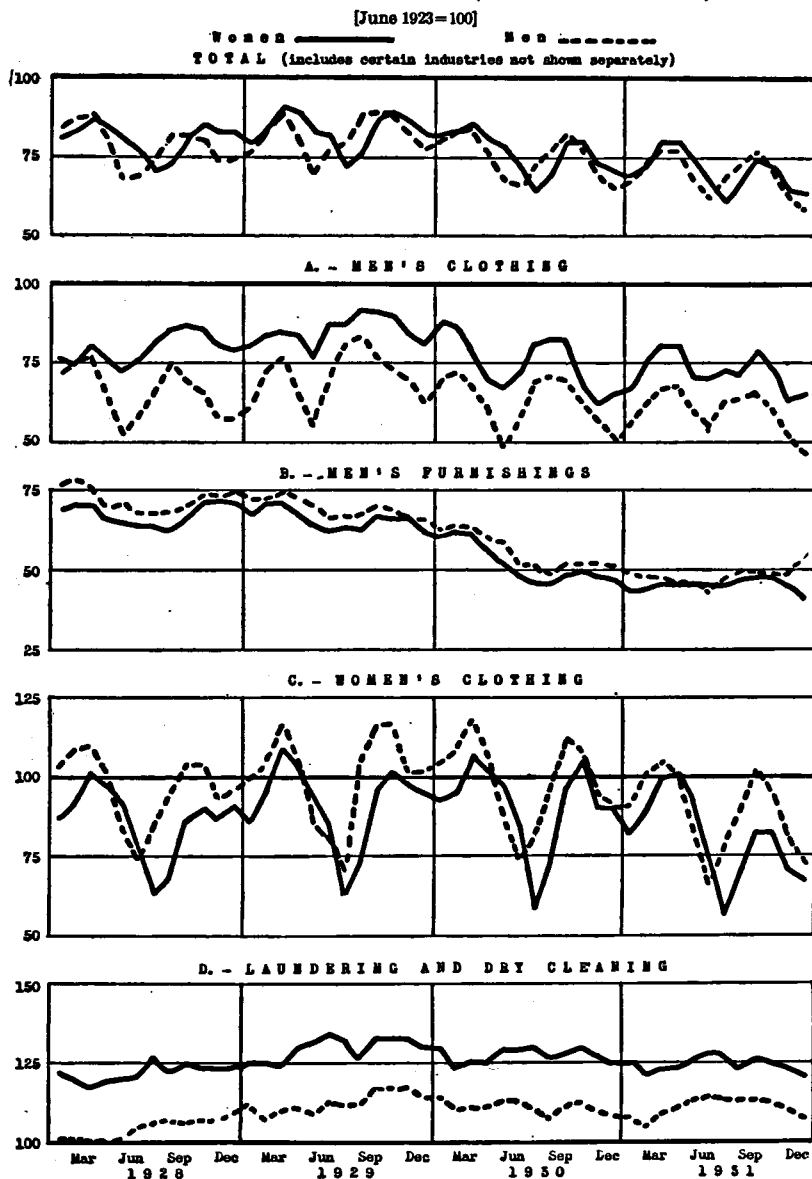
⁴² Industrial Bulletin, August 1929, p. 696.

⁴³ Ibid., September 1929, p. 727.

⁴⁴ Ibid., August 1930, p. 315.

At the close of the year, the employment for the two sexes combined (including office forces) was reported holding up better than in some other branches of the industry.⁴⁶ In 9 of the 12 months of 1931 the

CHART 12.—INDEX OF EMPLOYMENT IN CLOTHING AND MILLINERY, NEW YORK STATE, 1928-31, BY SEX. (SEE ALSO CHART 13)



employment level for men was better than that for women; but in every month of 1931 the indexes, whether for men or for women, were

⁴⁶ Industrial Bulletin, January 1931, p. 114.

lower than they had been in the corresponding month in either 1929 or 1930,⁴⁸ and the same was the case in comparing 1931 even with 1928, in most months for either sex. In December 1931 the employment of women was 23 points below that of 1930; that of men, 17 points below 1930.

Men's clothing.—This industry employed about one fifth of the women industrial workers included in clothing. The employment level⁴⁷ was notably higher for women than for men throughout the 4-year period, and the May and November lows were much the more marked for men. (See chart 12.) The industry had been reported tending downward after the spring of 1926.⁴⁸ The index of women's employment in this industry in every month in 1929 was above that of the corresponding month in 1928, though the employment drop for the two sexes combined (office forces included) was reported at the end of the spring season to be greater than that for any other industry at the time,⁴⁹ the fall season was short,⁵⁰ and the December reductions greater than in 1927 or 1928.⁵¹ Beginning in March the 1930 index in each month was below that of 1929; it was reported that heavy losses in one of the larger shops accentuated the decline in March,⁵² and that there was more than a seasonal loss in employment in the industry as a whole in October.⁵³ Some recovery in women's employment was shown in 1931; in the busy season from March to May and again at the end of the year the indexes were above those of 1930. Over the 4-year period the lowest index of employment was below the highest by 30 points for women, 37 for men.

Laundering and cleaning.—The laundering and cleaning of clothing and other textile products is classified under clothing and millinery in this State. Throughout the period under discussion, employment for both sexes was considerably above that of June 1923, more so for women than for men. (See chart 12.) For either sex, employment in every month of 1929 was above that in the corresponding month of 1928. In 1930 the employment of men held up somewhat better than that of women, July being the first month in which men's employment fell below that of the corresponding month of the preceding year. In 1931 the employment of women in every month was below that in the corresponding month of the year preceding, but for men this was true only through March and again in December. The highest index of employment in 1931 was below the highest in 1929 by only 6 points for women and only 3 for men. The difference between the highest and the lowest index in the 4-year period was 17 points for men as well as for women—the least difference in any industry or industry group. In most of the earlier months of 1931, through May, the employment level for either sex was above the 1928 low.

Men's furnishings.—In this industry, employment for both sexes was lower throughout the 4-year period than in June 1923, though less markedly so than in several other industrial groups. (See chart 12.) The highest index for women was 72, in November 1928; for

⁴⁸ Except in July for men, a month in which a strike in 1929 had made employment exceptionally low. See Industrial Bulletin, August 1929, p. 606.

⁴⁹ In every case where mention is made of the employment level, it naturally will be understood that, for whichever sex is referred to, this level is that measured by the base used for that sex, in most cases June 1923.

⁵⁰ Bulletin 171 cit. p. 87.

⁵¹ Industrial Bulletin, May 1929, p. 615.

⁵² Bulletin 171 cit. p. 87.

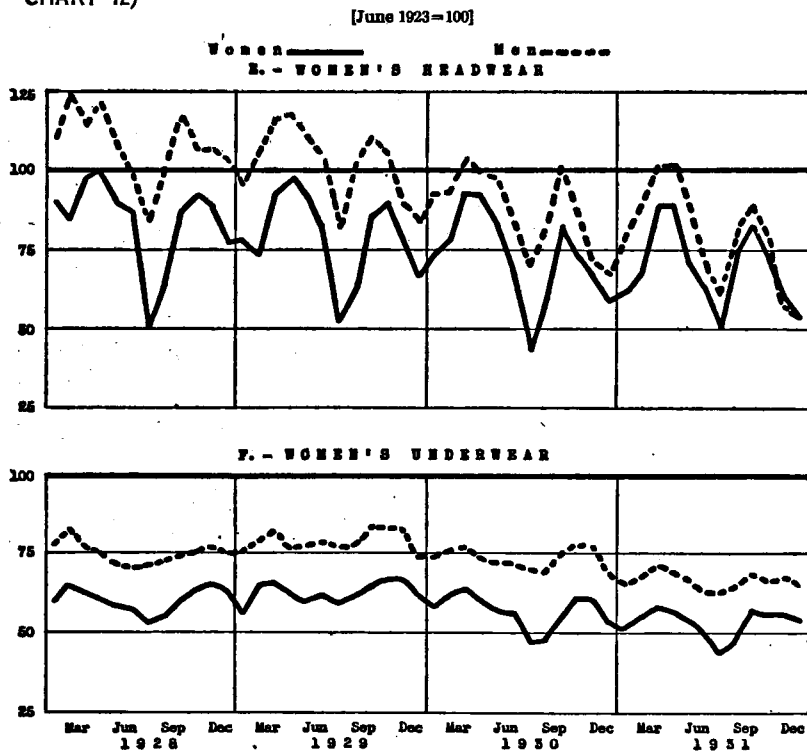
⁵³ Industrial Bulletin, January 1930, p. 99.

⁵⁴ Ibid., April 1930, p. 193.

⁵⁵ Ibid., November 1930, p. 30.

men it was 78, in February 1928. Except in a very few months, men's employment somewhat more nearly approached the June 1923 level than did women's. If the situation of women factory workers be considered, this industry differed from most others discussed in the fact that only in 2 months of 1929 was employment better than it had been in the corresponding month of 1928; 1930 showed a decline from 1929 in each month and 1931 a still further decline (except in 1 month which was very low in 1930). For women the 1929 high and the 1931 low differed by 30 points. In December 1931 there was a distinct rise in men's employment, though that of women was still falling. Over

CHART 13.—INDEX OF EMPLOYMENT IN WOMEN'S HEADWEAR AND IN WOMEN'S UNDERWEAR, NEW YORK STATE, 1928-31, BY SEX. (SEE ALSO CHART 12)



the 4-year period the lowest index of employment was below the highest by 31 points for women, 35 for men.

Women's headwear.—In the making of women's headwear the employment of men, as measured on the 1923 base, was very much better than was that of women, throughout the 4-year period. (See chart 13.) The seasonal character of employment was marked, high activity coming always in March or April for women, and at varying points in the spring season for men. Low points always were in July for women, and their employment at this time was cut practically in half, except in 1931 when its spring peak was not so high as in the other years; declines were less in proportion for men than for women

with the exception of 1931, where the proportion was slightly higher for men. Activity never again reached that of the spring season of 1928, and for the most part (with a few exceptions) the months of each succeeding year showed employment for both sexes below that of the corresponding month in the year preceding. Even 1929 employment was below that of 1928, except in May and July for women and in four scattered months from March to August for men. Since the women's employment index never reached the heights attained by that of men in 1928, the entire decline in the 4-year period was greater for men than for women, 70 and 57 points for the respective sexes.

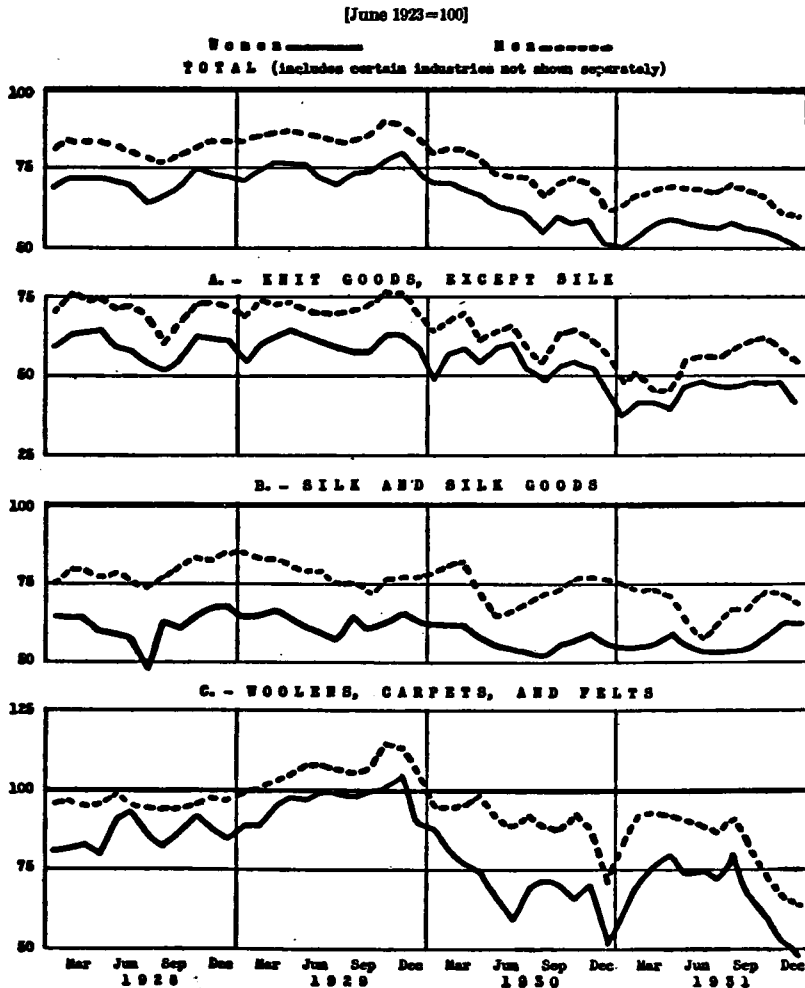
Women's underwear.—In this industry the index of employment for men was well above that for women throughout the 4-year period (in each case on the June 1923 base). (See chart 13.) Of course many more women than men were in this industry, but it will be remembered that the absolute figures were weighted on the basis of sex representation before the indexes were constructed. The seasonal character of employment was marked, as would be expected in this industry, low points coming in midsummer or midwinter, high points in the spring (sometimes as early as February) or the fall. In some cases in both the increases and the decreases in employment, men were affected somewhat earlier in the season than were women. Except in the winter seasons (January, February, and December) the employment of both sexes in the months of 1929 was above that in the corresponding months of 1928, in several cases in a degree greater for men than for women. The 1929 season of fall activity never was reached again; and with the exception of January for women, employment in each month of 1930 was below 1929, that in 1931 still lower. This was true for both sexes, except that women's employment in September 1931 seemed to give promise of better activity than subsequent months proved to be the case, and December also showed higher employment than in 1930. The difference from high to low index was greater for women than men in each year but 1928. The entire decline in the 4-year period—that from the fall season of 1929 to the summer slump of 1931—was somewhat greater for women than for men, 24 and 21 points for the respective sexes.

Textiles

Approximately one seventh of the women workers in manufacturing were in textile factories of one sort or another. The general level of employment in the textile industries taken together was very low compared with that of June 1923, the index during the entire 4 years never rising above 80 for women, 90 for men. The level for men was distinctly the better throughout the whole period; while the curves for the two sexes were very similar, the extremes from high to low points in employment in the year ordinarily were somewhat less for men than for women. (See chart 14.) For both sexes employment in 1929 was good compared to that in 1928, but a decided drop came in December, with a slight drop for men as early as November. In January 1930 there was a general employment loss for the two sexes combined. For both sexes the ensuing course was downward, with the index for every month of 1930 below the corresponding month of 1929, and the months of 1931—except August—falling still lower. After April 1930 women's employment never was so high as the lowest point of the preceding 2 years, and by December that for the

two sexes combined was below January 1921.⁴⁴ Since the general employment level was so low in this group, the decline from the highest to the lowest index in the 4-year period was less than in a number of other industries—30 points for either sex. Each of the separate industries that follow represent very roughly 3 percent of the women in the manufacturing total.

CHART 14.—INDEX OF EMPLOYMENT IN TEXTILES, NEW YORK STATE, 1928-31,
BY SEX



Knit goods (except silk).—The general line of employment in knit goods was quite similar to that in the textile group as a whole, being low throughout the 4 years, better for men than for women, fairly good in 1928 and 1929 as compared to the years following, and especially low in 1931. (See chart 14.) The highest index in the period was 77 for men; it was only 65 for women, a high point that was

⁴⁴ Bulletin 171 cit., p. 75.

lower than in any other branch of the textile industry. In the spring and summer of 1928, several mills were closed for 3 or 4 months, and toward the end of the year the larger mills were laying off.⁵⁵ The rise in 1929 was very slight compared to many other industries, and the 1931 decline, while important, was somewhat less extreme than in some other industries. The decline from the highest to the lowest index in the entire 4-year period was 27 points for women, 32 for men.

Woolen, carpet, and felt factories.—The level of employment in this group was considerably above that in some of the other textile industries analyzed; as in all the others considered, except cotton, the level for men was well above that for women. (See chart 14.) For either sex, the high employment index ran above that in any other of the textile industries considered, and the decline to the lowest point was greater than in any other but cotton and greater for women than for men. For women, the employment level was decidedly better in every month of 1929 than in the corresponding month of 1928, but after the close of 1929 it never resumed so high a level as the lowest in 1929; every month of 1930 was below the corresponding month in 1929; except in certain spring and summer months, the 1931 level was still lower than that of 1930, and even in most of these months it was below 1928; the decline from high to low in 1931 was exceeded in only 6 of the 25 industries and industrial groups analyzed. In general, the employment movement for men was similar to that for women. The decline from highest index to lowest in the entire 4-year period was greater for women than for men—55 points for the former, 51 for the latter.

Silk factories.—Men's employment in silk factories maintained a better level throughout than did women's; the high index for women fell 17 points below that for men—more than was the case in any other industry in the group. In 1928 and 1929, the summer slack period was especially notable for women, but in 1930 and 1931 it was less extreme for them than for men. (See chart 14.) For both sexes in 1930 and 1931, employment rose from the summer low to October or November. For men, the best employment period in the 4 years was from August 1928 through March 1929; April showed a decline, and after July the index for each month was lower than in 1928; in each month of 1930 (except September and October) the index was below that of 1929, and those of 1931 were still lower, the decline in this year being much more rapid for men than for women, even though the low point of the year was not so low as was that of women. For women, the situation differed somewhat from that of men, since their employment level was low at all times. Their summer slack period in 1928 was especially marked, and this situation seems to have been produced chiefly by factories up State rather than in New York City.⁵⁶ In August of 1928, it was reported that recovery

⁵⁵ Bulletin 171 cit., p. 82.

⁵⁶ Indexes for June and July 1928 were as follows:

	Men			Women		
	June	July	Points of difference	June	July	Points of difference
New York City.....	68	69	+1	66	64	-2
Remainder of State.....	91	85	-6	46	27	-19

* Industrial Bulletin, July, August 1928, pp. 316, 340.

from the summer dullness was greater in the silk factories than in any of the other textiles.⁵⁷ The women's indexes in the months of 1929 began to fall below those of 1928 in October, whereas for men this was the case as early as August; for women the indexes for every month of 1930 fell below those of 1929, and for men for every month through August, but for women those of 1931 fell still lower in only 5 of the 12 months—not in every month, as for men—and the year closed with an index somewhat above that for nearly every month of 1930. For women the difference between the highest and the lowest index in the 4 years was less than in any other industry or industrial group considered, except laundering and cleaning, being only 20 points; for men it was 28 points.

Food and tobacco

Of the women shop workers in manufacturing, about 10 percent were in this class. The seasonal character of certain of the industries in this group is so marked and the other differences are so notable that the group total has not been considered, but the following have been analyzed separately, as in the absolute numbers they represent roughly 2 to 1 percent of the manufacturing total: Candy, bakery products, canning and preserving, and tobacco.

Candy.—In candy making, the employment of men showed considerably less extreme changes within the year than did that of women; in each of the first 3 years of the period it held a higher level for the first part of the year than did women's employment, but during the fall peak relatively more women than men always were taken on. (See chart 15.) It had been reported that the trend of employment, for the industry in general, had been chiefly downward after 1926.⁵⁸ Even though the rise in woman employment from July to October was almost as great in 1929 as in 1928, in each month of 1929, except January and August, the index of employment for women was lower than in the corresponding month of 1928; and in 1930, from May through November, the indexes were still lower than those of 1929. At this time nearly every firm had fewer employees than before; 2 closed down entirely, 1 in July, 1 in August.⁵⁹ The 1931 figures testify to some recovery, for the July low in women's employment was followed by a sharp and almost continuous rise to an index 14 points above the previous high within the 4-year period—that of October 1928—and the usual seasons of high activity showed a marked improvement over those of each of the 3 previous years; similarly for men, the indexes for May to December of 1931 were the same or were above the figures for the corresponding months of 1930. This was the only industry in which the highest index of women's employment for 1931 was above the 1929 high, the difference being as great as 24 points. The entire range of employment fluctuation within the 4-year period was much greater for women than for men, the lowest indexes being respectively 64 and 41 points below the highest.

Bakery products.—In nearly every month of the 4 years discussed, employment in bakery products showed a steady decline from that in the corresponding month of the preceding year. (See chart 15.) Women were more seriously affected than men in this respect; in

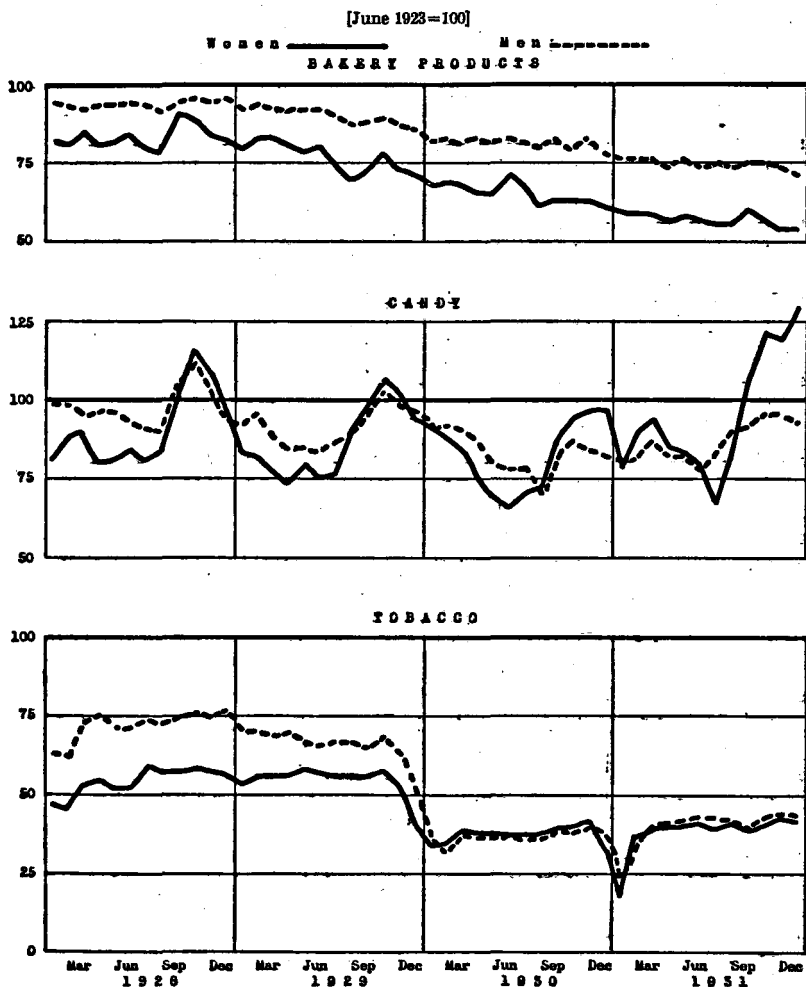
⁵⁷ Industrial Bulletin, September 1928, p. 208.

⁵⁸ Bulletin 171 cit. p. 106.

⁵⁹ Idem.

every month of 1931 the index for men was 16 points or more below that for 1928, reaching 20 or more in June and from September on; for women it was 22 points or more below 1928 in every month, reaching 30 or more in the 3 fall months. The high woman employment in September 1931 was 30 points below that of the same high month of 1928. In the entire 4-year period women suffered a greater

CHART 15.—INDEX OF EMPLOYMENT IN BAKERY PRODUCTS, IN CANDY, AND IN TOBACCO, NEW YORK STATE, 1928-31, BY SEX

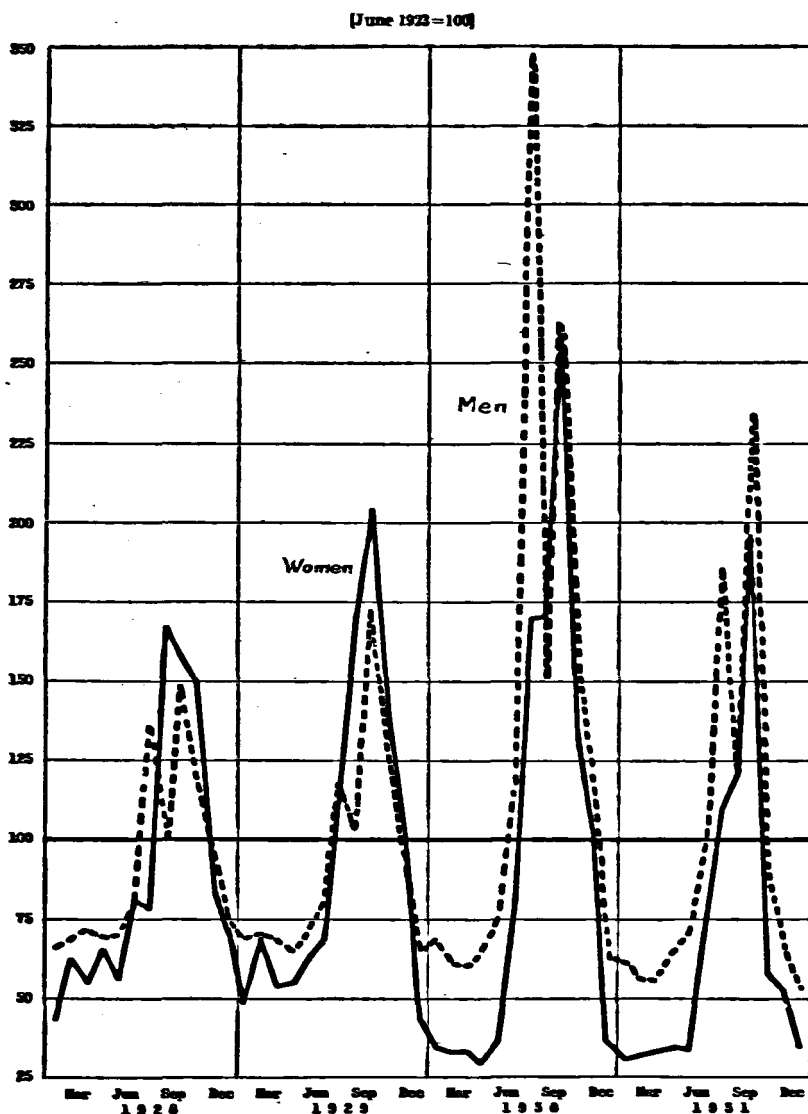


employment drop than did men, the lowest indexes being respectively 37 and 24 points below the highest.

Canning and preserving.—The highly seasonal character of the canning and preserving industry is well known. In September—usually the month of greatest employment—the index for women in 1929 exceeded that of 1928, and that of 1930 was still higher. How-

ever, in 1931 the September index fell 63 points below that of 1930. A similar analysis could be made for men's employment in September of the successive years, but with less of a drop in 1931 than for women, and somewhat more irregularity of employment in the latter half of

CHART 16.—INDEX OF EMPLOYMENT IN CANNING AND PRESERVING, NEW YORK STATE, 1928-31, BY SEX



1929. (See chart 16.) The range from high to low indexes in the 4-year period was more extreme in this than in any other industry, and more extreme for men than women, the lowest index falling 229 and 295 points below the highest, for women and men respectively.

Tobacco industry.—The year 1928 began shortly after the closing of several large tobacco factories, and employment in this industry consequently had been reduced.⁶⁰ For men and women combined (including office forces), it declined by 0.5 percent in November 1927, 7.5 percent in December, and 5.5 percent in January 1928.⁶¹ During the 4-year period of study, the industry showed much greater regularity of employment than did a number of others—less divergence between high and low points of the year, and considerable similarity in the fluctuations for the separate sexes. (See chart 15.) However, the drop in 1930 and 1931 below employment in 1928 and 1929 is especially marked, and this affected men more severely than women, since in the 2 earlier years the employment of men was on a distinctly higher level than was that of women. The index of women's employment in 1929 was higher than that in 1928 in the first 6 months of the year, and was on the whole fairly regular until October, after which the drop was marked. In the industry as a whole, a loss of 10 percent in employment occurred from December 1929 to January 1930,⁶² and a sharp employment drop was recorded in December, due to cessation of production in a few firms.⁶³ The separate indexes for women and men showed that this affected the former considerably more than it did the latter. In every month of 1930 the index for women was below the corresponding month in 1928. During most months of 1931 woman employment was above that in 1930. The highest index in 1931 was 15 points below the 1929 high, a difference greater than that in 10, but less than that in 14, other industries or groups of industries. In the 4-year period the entire decline from the highest to the lowest employment index was 41 points for women, 53 for men.

Furs, leather, and rubber goods

The industries comprising this group (which contained nearly one tenth of the women shop workers reported in manufacturing) appear to be of such a composite character that the group total has not been considered, but shoes and gloves, bags, and canvas goods have been analyzed. These employed respectively more than 5 and nearly 2 percent of the workers in the manufacturing total.

Shoes.—The manufacture of shoes engaged over three fifths of the women shop workers in the fur, leather, and rubber group. In comparison with other industries it presented exceptionally good activity during most of the second half of 1929 and the first 8 months of 1930. In September 1929, employment for men and women combined (office force included) was reported greater than at any time since 1925.⁶⁴ As compared with the June 1923 level, the employment of women was considerably better throughout the 4-year period than was that of men. The employment of women was consistently better throughout 1929 and 1930 than at any time in 1928, except that it was the same at the April low in 1929 as at the September high in 1928. Beginning after August 1930, a drop occurred that was almost continuous to the close of 1931. (See chart 17.) After May 1931, fewer women were employed than at any time within the 2 years

⁶⁰ Bulletin 171 cit. p. 108.

⁶¹ Industrial Bulletin, December 1927, p. 86, January 1928, p. 121, and February 1928, p. 145.

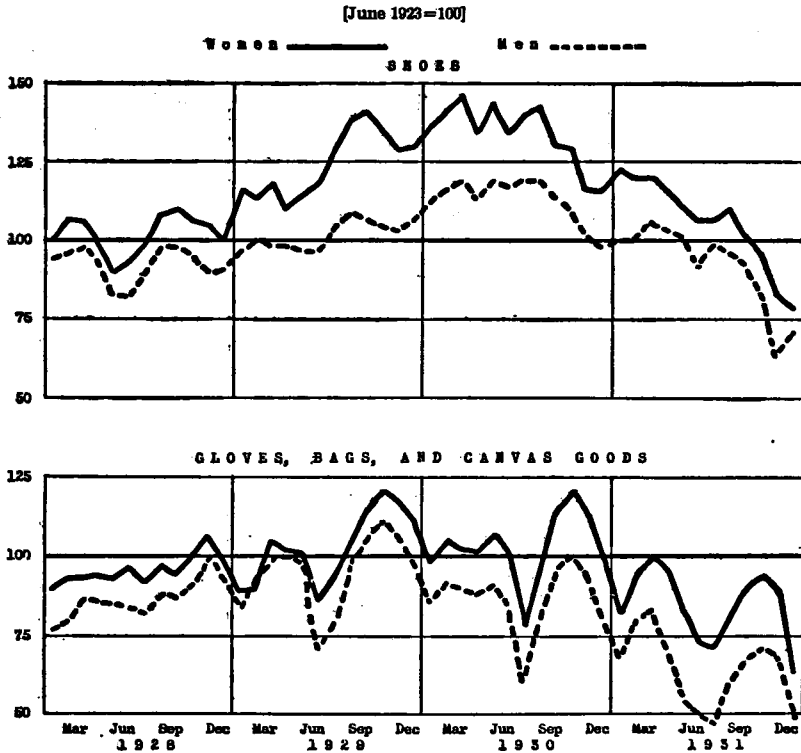
⁶² Ibid., February 1930, pp. 127, 128.

⁶³ Ibid., January 1931, p. 115.

⁶⁴ Bulletin 171 cit. p. 53.

preceding, and after October employment was even lower than at any time in 1928. The general curve of employment for men was similar to that for women, but, since the level never rose so high for men, the drop from the highest to the lowest point in the 4 years was less severe for them than for women—56 points for the former and 68 for the latter. For women, the decline in the index from the 1929 high to the 1931 low was 63 points; the only industries that exceeded this fall in the employment of women during this 3-year period were machinery and electrical supplies, automobiles and airplanes, and one of a highly seasonal character in the food group.

CHART 17.—INDEX OF EMPLOYMENT IN SHOES, AND IN GLOVES, BAGS, AND CANVAS GOODS, NEW YORK STATE, 1928-31, BY SEX



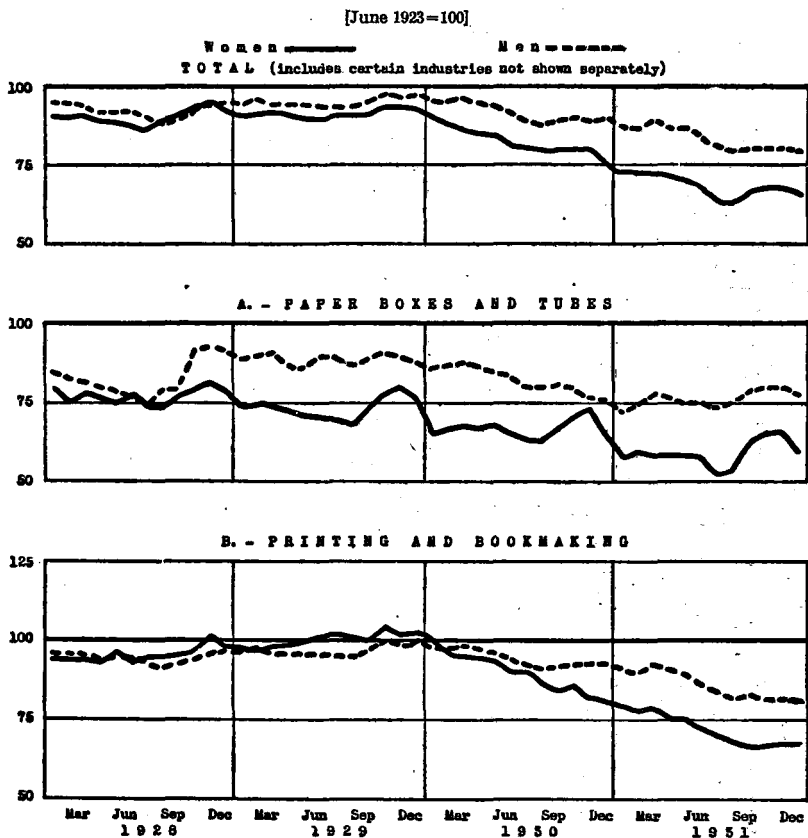
Gloves, bags, and canvas goods.—In plants manufacturing these products, the employment of women was maintained at a higher level than that of men in relation to the situation for both as of June 1923. (See chart 17.) The employment of women in 1929 was, on the whole, considerably better than in 1928. In 1930, as compared with 1929, it was high in 2 of the 4 months of the spring and early summer season of activity, but the summer low period fell below that of 1929, and the autumn peak did not rise to the 1929 level except in October. In 1931, the employment of women was lower in every month than in 1930, and except at the spring peak when it exceeded 1928, and in February when it exceeded both 1928 and 1929, it was

lower throughout than in any of the 3 years preceding. The index for the 1931 high was 21 points below and that of the 1931 low was 58 points below that of the 1929 high. In the 4-year period, the highest index was above the lowest by 58 points for women, 64 for men.

Printing and paper goods

This group of industries contained nearly one tenth of the women shop workers in manufacturing. While employment in the group taken together did not reach the level of June 1923 at any time

CHART 18.—INDEX OF EMPLOYMENT IN PRINTING AND PAPER GOODS, NEW YORK STATE, 1928-31, BY SEX



during the 4 years—whether for men or for women—the 1931 low index for women did not fall nearly so low as did that in most other industries. (See chart 18.) However, with the exception of a few months in 1928, the level of employment for men was better than that for women through the entire period. For women, employment in nearly every month of 1929 was above that of the corresponding month of 1928. December 1929 showed a decline from November, and thereafter the levels of 1929 never were resumed, employment in the months of 1931 falling still lower than in those of 1930. From

the highest point in the 4 years to the lowest, the index of women's employment declined 32 points; only 10 of the 25 industries or industrial groups under consideration showed less variation. The decline for men had been very much less—only 18 points. The following industries in this group have been analyzed: Printing and bookmaking and paper boxes and tubes, forming respectively about 5 and nearly 2 percent of the women included in the manufacturing total.

Printing and bookmaking.—Of the women workers in printing and paper goods, three fifths were in printing and bookmaking. Employment in this industry was considerably better for women and somewhat better for men than was that in plants making paper boxes and tubes. (See chart 18.) A general upward trend had been reported from 1924 to 1929.⁶⁵ In 1928 it was noticeable that while there was some decline for women in June, that for men in July was slightly more marked, followed by somewhat less rise, so that women's employment was on a higher level than men's in the last half of the year. This situation continued through most of 1929, but in 1930 (except January) and throughout 1931 the decline was considerably more marked for women than for men. January 1930 "could not hold the December gains",⁶⁶ and after January women's employment never rose so high as it was in 1929 (for men this was true after June), while after May it was below the lowest of 1928 (for men this was not true until after April 1931). It was reported that even in 1930—despite the general decline—many firms retained their usual forces and some few even increased notably.⁶⁷ That the employment decline affected women considerably more than it did men is shown by the fact that the indexes from the highest to the lowest in the 4-year period declined only 19 points for men, but fell 37 points for women. Even though this was the case, the decline in women's employment was greater than this in one half of the other industries or industrial groups considered.

Paper boxes and tubes.—Factories producing these products appear to have been largely responsible in maintaining a level of employment for men better than that for women in the printing and paper group as a whole, throughout the 4 years. The trend of employment in the industry (for men and women combined and including office forces) had been reported as tending downward from November 1926 to July 1928, and this was attributed rather to improved machinery and consolidations than to reduced output.⁶⁸ At the close of 1928, consolidations had been completed and employment began to rise, but this affected men somewhat more than women. Employment for men was comparatively good in 1929, falling somewhat in 1930, but with less marked irregularities from month to month than was the case for women. (See chart 18.) In several months in 1929 workers were reported laid off;⁶⁹ this may have affected women more than men, since men's employment ordinarily was above 1928, though the employment of women was at a low level, in no month being above the corresponding month of 1928; during 5 spring and summer months, women's employment was below that of any month in 1928. From

⁶⁵ Bulletin 171 cit., p. 108.

⁶⁶ Industrial Bulletin, February 1930.

⁶⁷ Bulletin 171 cit. p. 73.

⁶⁸ Ibid., p. 70.

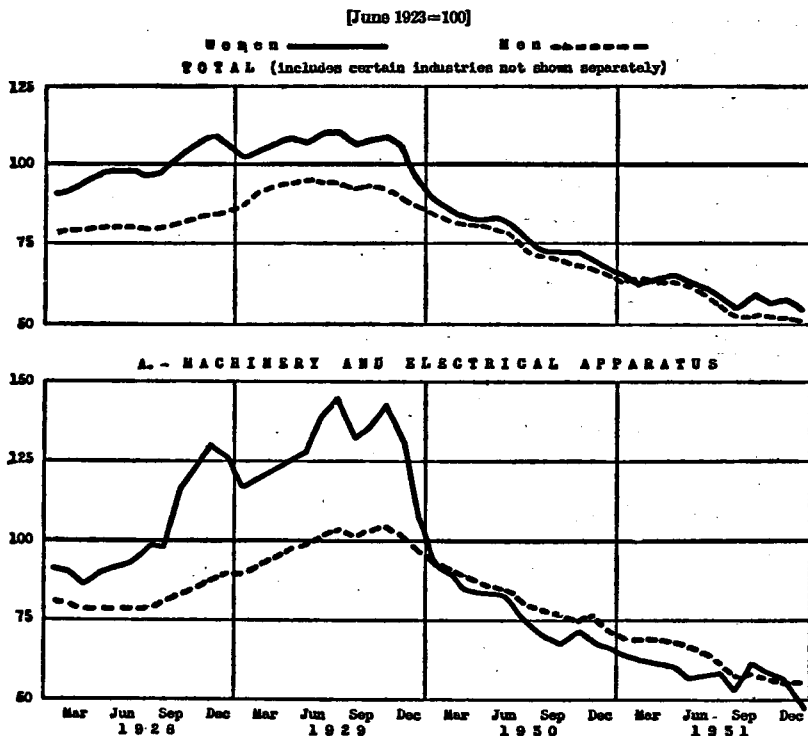
⁶⁹ Industrial Bulletin, 1929, May, p. 615, June, p. 648, and September, p. 727.

January 1930 on, employment for the most part continued lower even than the August low of 1929, this being the situation that obtained in all but 5 of the 24 months of 1930 and 1931. Declines or lay-offs were reported in a number of months in 1930.⁷⁰ The decline from the highest index of employment to the lowest in the 4 years was 31 points for women, 21 for men.

Metals and machinery

The metal and machinery group, a large employer of men, employed only about 7 percent of all the women shop workers in manufacturing. As compared with June 1923, the level of employment in these in-

CHART 19.—INDEX OF EMPLOYMENT IN METALS AND MACHINERY, NEW YORK STATE, 1928-31, BY SEX



dustries in 1928 and in 1929 was very good for women, maintaining an index of from 90 to 110, and was much better for men than was that of subsequent years, although their index ran only from 78 to 95. (See chart 19.) In August 1929, although there had been no upward tendency since May,⁷¹ this group was reported as the important factor in having kept up employment in the State during the spring.⁷² Throughout 1930 and 1931 there was an almost steady downward movement for both sexes, and even as early as December 1930 employment was reported lower than at any time since 1921.⁷³ Women

⁷⁰ Industrial Bulletin, 1930, February, p. 120, May, p. 220, June, p. 260, August, p. 317.

⁷¹ Ibid., January 1931, p. 111.

⁷² Ibid., August 1929, p. 605.

⁷³ Bulletin 171 cit., p. 23.

suffered a relatively much heavier loss of jobs than did men. The entire drop in the 4-year period was that from the 1929 high to the 1931 low and was 44 points for men and 56 points for women.

Machinery and electrical apparatus.—In plants that make these products, which employ well over one third of the workers in metals and machinery, the story told is one of great expansion in 1929 affecting women relatively more than men; of a drop at the end of 1929, especially severe in December for women; and of a level of employment for women that after February 1930 never again rose to the height of even the lowest month in the two previous years. (See chart 19.) The employment increases in these plants in 1929 helped to maintain the level of the entire industrial group to some extent after other industries in the group were beginning to lose, and for July 1929 it was reported that there had been a monthly increase since May 1928, except for a small January loss.⁷⁴ After the decline began, its entire extent as measured in the index of women's employment from the highest month of 1929 to the lowest of 1931 was 97 points, greater than that in any other industry considered except the manufacture of automobiles and airplanes and one seasonal food industry (canning). For men the drop was 48 points. Even in the highest month of employment for women in 1931, the index fell 43 points below the lowest of 1929.

SUMMARY OF EMPLOYMENT MOVEMENT OF WOMEN IN NEW YORK, 1928, 1929, 1930, AND 1931

In summarizing what the employment figures considered in the foregoing show for women, and the relationship of the movement in this connection to that of men, certain features are salient. As would be expected, the seasonal character of various industries produces marked employment fluctuations—for example, those in the clothing group and some of the food industries.

General employment level

The general employment level—as considered on the June 1923 basis—was consistently (or at least in almost every month) higher for men than for women in 12 of the industries or industrial groups considered,⁷⁵ while it was consistently higher for women in only 5.⁷⁶ It was irregular in the clothing group and certain of the food industries (candy and canning), being sometimes higher for one sex, sometimes for the other, and in three industries the following strikingly consistent variations in the position of the two sexes were notable: In the manufacture of tobacco, men's employment level was the better on the whole in 1928 and 1929, women's in 1930 and in 1931; in printing and bookmaking and in machinery and electrical supplies, women's employment usually was at a better level than men's in 1928 and 1929, while men's was the better in 1930 and 1931.⁷⁷

⁷⁴ Industrial Bulletin, August 1929, p. 695.

⁷⁵ Men's furnishings; women's clothing; women's underwear; and women's headwear; the total textile group; the woolen, knit, and silk-goods industries; bakeries; canneries (except at the peak season, so that this is also in the irregular group); the printing and paper group; and paper boxes and tubes.

⁷⁶ Men's clothing; the metal and machinery group; shoes and gloves, bags, and canvas goods; and laundering and cleaning.

⁷⁷ At the risk of saying the obvious, it may be pointed out that this tells nothing as to whether a total of more men or more women were employed in any industry, but merely measures the employment of each sex on its own basis for June 1923, as is done through the discussion for New York.

Irregularities within the year

Men's and women's employment may be compared from the viewpoint of whether or not the differences from high to low points within each year varied greatly as between the two sexes. The table on page 94 shows that women rather than men were the sufferers of the greatest variation from high to low in any 1 year in a considerable number of the industries in which this relation of the two sexes was consistent throughout the 4 years. For example, in each of the 4 years the decline from high to low employment was greater for women than for men in the manufacture of woollens, shoes, machinery and electrical apparatus, in two of the food industries—candy and bakeries—and in printing and bookmaking.

There was no industry in which the variation within the year always was greater for men than for women, though in most years it was so in men's clothing, knit wear, and silk, as it was ordinarily, though not always, greater for women in women's clothing, women's underwear, and women's headwear, in the textile group, and in metals and machinery. In canning and preserving, women's employment varied more than men's in the first 2 years but men's varied the more in 1930 and 1931. In tobacco and glove factories, men's employment varied more from the high to the low point than did women's in the first 2 years, less in 1930 and 1931. In the remaining industries, the differences between men and women in this respect bore no consistent relation.

It is not surprising to find that for both sexes the greatest variations in employment within the year were in canning and preserving; the least were in laundering and cleaning.

Declines in employment in the 4-year period

Extreme declines in the employment in 1930 and 1931 are apparent in tobacco, the metal and machinery group, and printing and bookmaking; declines were less extreme but decidedly noticeable in the manufacture of silk and knit goods, shoes, and paper boxes, and in the textile group as a whole.

It is important to consider the total decline from the highest to the lowest point in the 4-year period, and in this connection it should be mentioned again that in the majority of cases the highest month of employment was in 1929, the lowest in 1931.⁷⁸ In the 4 years, the total decline from highest to lowest employment, except for the highly seasonal canning industry, was greatest for women in machinery and electrical apparatus, for men in glove, bag, and canvas factories. Besides, for both sexes there was a decline of more than 50 points in women's clothing, women's headwear, woollen goods, and shoes; for men in tobacco; and for women in candy, gloves, and the metal and machinery total. The least decline for men was in laundering and cleaning, and the next was in the printing and paper goods total; for women, the least was in laundering and cleaning, the next in the silk industry, in which employment was low throughout the entire period. The decline was the greater for men in 9 industries or industrial groups and the greater for women in 12 (including the group total for manufacturing), while it was the same in 2. (See table 13.)

⁷⁸ For exceptions, see footnote to table 13.

Evidences as to replacement

The employment indexes analyzed in this section of the report do not present evidence that there had been general large scale replacements of men by women during the decline that occurred in most industries in 1930 and 1931, but rather show the great extent to which both sexes had suffered both loss and irregularities of employment.

Although there were instances in which employment had declined less extremely for women than for men, there were more cases in which declines had been the greater for women. The variation from highest to lowest index in each of the 4 years was greater for women than for men in 6 of the groups included, but in no group was it greater for men in every year; this variation was the greater in 3 of the 4 years for women in 5 groups, for men in 3.

TABLE 13.—Difference between highest and lowest index numbers of employment within the year, and during 4-year period, New York, 1928–31

Industry	Number of points of difference between high and low index in the year for—								Number of points of difference between the highest and the lowest index in the 4-year period for—	
	Women				Men				Women	Men
	1928	1929	1930	1931	1928	1929	1930	1931		
All manufacturing.....	20	12	14	12	4	7	13	12	33	32
Clothing and millinery.....	17	19	22	19	20	19	19	20	30	31
Women's clothing.....	38	47	49	45	36	47	44	39	53	52
Men's clothing.....	15	16	26	17	25	28	23	22	30	37
Laundering and cleaning.....	10	10	6	7	9	10	7	9	17	17
Men's furnishings.....	10	9	16	7	10	9	15	12	31	35
Women's headwear.....	50	46	50	39	40	36	37	48	57	70
Women's underwear.....	12	11	17	15	12	9	9	9	24	21
Textiles.....	11	10	20	9	8	7	19	10	30	30
Knit goods (except silk).....	14	9	14	10	17	8	16	17	27	32
Woolens, carpets, and felts.....	14	16	37	30	5	15	28	29	55	51
Silk and silk goods.....	20	9	10	9	10	13	17	18	20	28
Food and tobacco:										
Candy.....	36	32	32	62	22	19	21	18	64	41
Bakery products.....	13	14	10	7	5	8	6	4	37	24
Canning and preserving.....	124	161	229	166	83	108	288	182	229	295
Tobacco.....	13	18	10	25	15	19	8	20	41	53
Furs, leather, and rubber goods:										
Shoes.....	20	31	30	45	16	12	21	43	68	56
Gloves, bags, and canvas goods.....	17	35	43	37	23	40	40	36	58	64
Printing and paper goods.....	9	4	14	10	7	4	8	10	32	18
Printing and bookmaking.....	8	7	19	13	6	5	8	12	37	19
Paper boxes and tubes.....	8	12	11	15	18	5	12	8	31	21
Metals and machinery.....	19	15	21	11	7	9	19	13	56	44
Machinery and electrical apparatus.....	44	38	26	16	11	14	22	13	97	48

¹ The highest index for women was in 1929 in 13 of the 23 industries or groups taken, but in the following it was in another year: In 1928, in men's furnishings, knit goods (except silk), silk and silk goods, bakery products, tobacco, printing and paper goods, and paper boxes and tubes; in 1930, in canning and preserving and shoes; in 1931, in candy. In glove, bag, and canvas factories, the 1930 high equaled that of 1929. For men, the highest index was in 1929 in 15 industries or groups taken, but in the following it was in another year: In 1928, in men's furnishings, candy, bakery products, tobacco, and paper boxes and tubes. In 1930, in women's clothing, canning and preserving, and shoes. The lowest index was in 1931, with the following exceptions: For men, in 1928, laundering and cleaning; in 1930, candy. For women, in 1928, laundering and cleaning, and silk and silk goods; in 1930, men's clothing and candy. The low point in women's employment in canning and preserving fell as low in 1930 as did that of 1931.

In a few industries employment of one sex showed some rise over a short period while that of the other was declining, but this employment movement ordinarily was of a very temporary character and the

position of the two sexes would be reversed again within the next few months, leaving their relative standing much as before. In one industry—tobacco—employing a small proportion of the women in manufacturing, the employment level of women, lower than men's in 1928 and 1929, was higher than men's in 1930 and 1931; but in two groups employing together a considerably larger proportion of the women in manufacturing, women's employment level, better than men's in 1928 and 1929, was below that of men in 1930 and 1931.⁷⁹

The general direction of employment movement through the 4 years was decidedly similar for the two sexes, though there were many cases in which the short-time fluctuations and the total decline occurring were more extreme for one sex than for the other—usually more extreme for women. In September 1930, in the manufacturing total, women's employment rose in a greater degree than did men's, so that, although in the remainder of the year employment declined in about the same degree, women's level was higher than that of men. A somewhat similar situation occurred in 1931, since women's employment rose in both August and September, men's only in September, but the decline from September to the close of the year was greater for women than for men.

While the decline in manufacturing employment from January to December of 1931 was considerably greater for men than for women, the entire decline from highest to lowest index in the 4-year period discussed was very similar for the two sexes, being slightly the greater for women. It was the greater for women in 11 of the separate groups taken (employing altogether well over one tenth of the women reported in manufacturing, according to the census), the same for both sexes in 2, the greater for men in 9.

OHIO EMPLOYMENT DATA

CHARACTER OF THE DATA

For a period running back to January 1914, the State of Ohio has collected annually figures showing the numbers of men and women employed in Ohio establishments, as wage earners, clerical forces, and salespeople (not traveling), on the 15th or nearest representative day of each month. The total of the wages paid each of these three groups in the week of greatest employment in the year also has been ascertained. These data have been tabulated by the State except for 1922; they have been published for 1914, 1915, 1923, 1928, and 1929. Figures for 1930 and 1931 were furnished by the Ohio Division of Labor Statistics to the Women's Bureau for the present study.

This series of employment figures is of especial importance, not only because of the type of classification used—showing both industry and occupation—and the separation by sex, but because the figures are much more complete than in the usual case where reports include only such firms as can be induced to report in a certain way, or even where samples representative of the industries of a State are selected. Since 1923 the law has required all establishments regularly employing three or more persons (before that, five or more), except those engaged in interstate transportation and the various governmental departments and agencies, to make reports. While this omits a considerable number of those employing on a very small scale, especially in agriculture and household employment, the Women's Bureau, after

⁷⁹ Printing and bookmaking, and machinery and electrical apparatus.

reducing the manufacturing classification to a basis comparable to that of the United States Census of Manufactures, found the numbers of wage earners reported by the State in 1919, 1921, and 1923 to constitute some 97 or 98 percent of the numbers reported by the census of manufactures for those years. There seems no reason to believe that in more recent years these proportions have changed to such an extent as to prevent treating the data as approximately complete. The table on page 50 indicates that the average number of men and women wage earners in manufacturing reported to the State in 1929 formed 97 percent of the total reported by the census of manufactures for the same year.

With the fullest cooperation from the Ohio Department of Industrial Relations, Division of Labor Statistics, the Women's Bureau made a detailed analysis of the extent to which these figures showed variations in the employment of women and men in Ohio industries for the 11-year period 1914-24.⁵⁰ This gave conclusive proof that only where separate figures by sex are available can significant variations in employment for the two sexes be understood, especially in times of economic disturbance. See page 50 for basis of the present analysis.

Groups included in the present consideration

Naturally it was not possible for the present study to use the details of all the various occupations reported, but a total of 26 groups have been included.

The totals for two main occupational classes (wage earners and bookkeepers, stenographers, and office clerks) were considered, the total for salespeople not traveling, in which case those in wholesale and retail stores formed such a large proportion of the whole that these were taken instead of the total. Two of the four large groups under wage earners—those in manufactures and service—were taken, as were the important industries forming the bulk of the employees in each of the other two large groups. The following gives a list of chief large occupational groups used, with the proportions they formed of all the women reported to the State in September 1928:⁵¹

Occupational classes and industries considered	Percent women formed of total in nearest obtainable group in 1930 census	Percent of all women reported September 1928 employed in—	
		All occupations	Specified occupational group
Wage earners in all industries			
Manufactures	17.9	61.3	• 100.0
Services			64.9
Transportation and public utilities			21.2
Telegraph and telephone, including messenger service (85.8 percent of this group)	59.9		7.5
Trade, retail and wholesale			5.9
Stores, retail and wholesale (93.8 percent of this group)			
Bookkeepers, stenographers, and office clerks in all industries	52.5	27.3	
Salespeople not traveling, in all industries		11.3	
Stores, retail and wholesale (91.3 percent of this group)	29.8		

* Details aggregate less than total because too few for inclusion were reported in agriculture and construction.

⁵⁰ U. S. Department of Labor. Women's Bureau. Variations in Employment Trends of Women and Men. Bul. 73. 1930. Since that time the series has been carried through 1929 in studies by Fred C. Croxton and Frederick E. Croxton, published in the Monthly Labor Review of the Bureau of Labor Statistics of the U. S. Department of Labor, April and December 1930. The figures for 1928 and 1929 also have been published by the State. Figures for 1930 and 1931 were furnished to the Women's Bureau, as stated. Other analyses of Ohio figures are referred to on pp. 48 and 122.

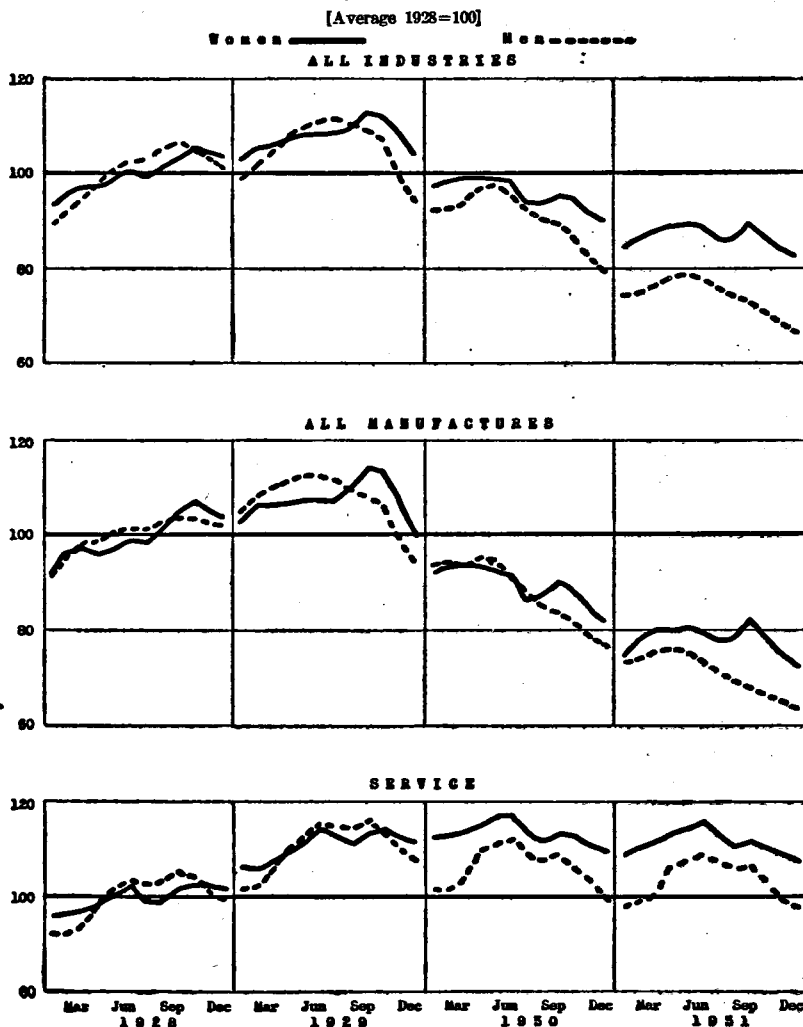
⁵¹ For more complete list, and for explanation of date used for computation, see appendix table IX.

THE GENERAL MOVEMENT OF EMPLOYMENT IN MAIN OCCUPATIONAL GROUPS

Wage earners in all industries

As may be expected, employment moved almost steadily upward through 1928 and early 1929 until September of the latter year, following which a drop began that continued throughout 1930 and 1931,

CHART 20.—INDEX OF EMPLOYMENT OF WAGE EARNERS, OHIO, 1928-31, BY SEX. (SEE ALSO CHART 21)



with some rise in the spring of each year; 1930 closed well below the lowest previous month, January 1928, and every month of 1931 was still lower. The movement was similar for the two sexes, with changing directions up or down somewhat the more frequent for women, but with somewhat the greater divergence between high and low points in the year for men. (See chart 20.) Each year began with employ-

ment rather low, followed by some rise; in 1928 and 1929 the high points of the year were in the summer or fall; the subsequent decline tended to begin earlier for men than for women and in 1929 it was noticeable for men as early as August. In 1930, after some rise from January to April or May—greater for men than for women—employment declined almost steadily. The general decline both in 1930 and 1931 was almost twice as great for men as for women. (See table X in appendix A.)

Wage earners in manufacturing

In the manufacturing industries, women represented roughly one sixth of the wage earners.⁸² Further detail as to employment in selected manufacturing groups will be given later.

The influence of manufacturing upon the employment total is evident when the great similarity is noted between the movement of the employment of wage earners in manufacturing and that in all industries. (See chart 20.) Especially for women, the general direction of change in some months was somewhat more accentuated in manufacturing than in all industries. From the highest point in 1929 to the lowest in 1931, for both sexes the decline in the employment of wage earners was much more extreme in manufacturing than in all industries, and the difference was much more extreme for women than for men. In other words, manufacturing wage earners were the most seriously affected at that time, those in the other occupational groups experiencing a relatively small decline. In 1930 and 1931 the decline from the highest to the lowest employment of women in manufacturing was greater than that in all industries. This was not the case with men, their declines in manufacturing and all industries being the same. Men's total decline in these years was very much greater than that of women.

Wage earners in service

The more important woman-employing groups in the service classification are hospitals, hotels, laundries, office buildings (as cleaners), restaurants, schools and colleges, and theaters. Women form roughly two fifths of the group.⁸³ The high points of the years in employment for both sexes were in May or June and again in September or October, with the comparatively low points at the beginning and close of the year and in August; in both 1930 and 1931, the September rise for women still left employment below the spring and early summer months of the same year. (See chart 20.) In this group the employment of both men and women was on a higher level in each month of 1929 than in the corresponding month in 1928. For women the continuing rise was maintained well into 1930, the index for each month through August being above that of the corresponding months in either of the 2 preceding years; but for men this was not the case, for while employment in each month except December was above that in corresponding months of 1928, it was below that in 1929. In 1928 and in 1929 women's employment had been distinctly below the level of men's throughout the summer and early

⁸² In 1928, in September, the highest month for men, women formed 16.3 percent; in January, the lowest month for women, they formed the same proportion; also in October, the highest month for women, the proportion was nearly the same. In 1929 and 1930 practically the same percents prevailed.

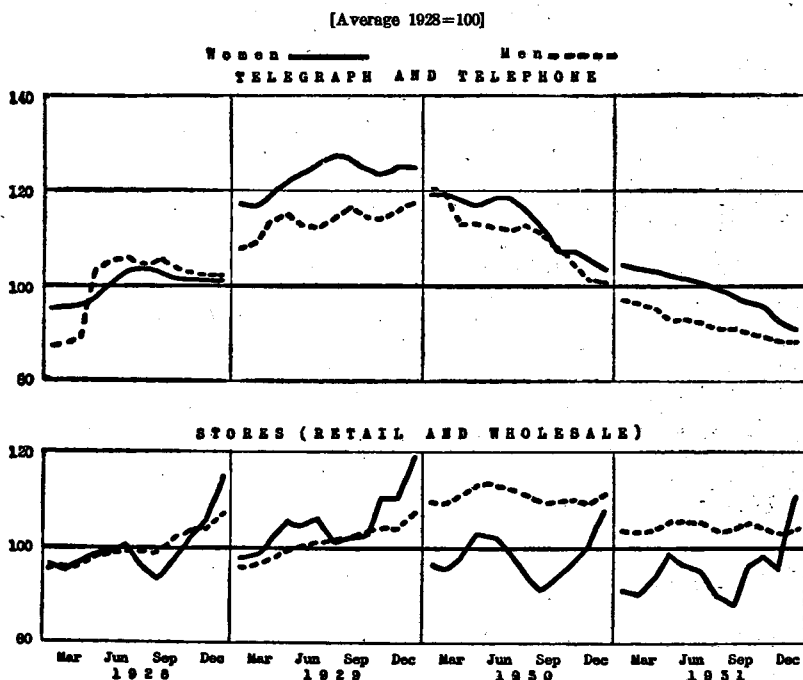
⁸³ In 1928, in September, highest month for men, women formed 39.2 percent; in January, lowest month for women, they formed 40.9 percent; in October, the highest month for women, they formed 39.6 percent. In 1929 and 1930 similar percents obtained.

fall months, but in 1930 the divergence in the levels for the two sexes was, for the most part, greater than before, and the curve for women was the higher, a situation that continued through 1931.

Wage earners in transportation and public utilities

In this main group of wage earners, so far as women were concerned, those in the telegraph and telephone industries formed over 85 percent; consequently this will be considered here rather than the group total. Employment of wage earners of both sexes in the telegraph or telephone industries (as measured by their own 1928 level) kept up much better than was the case with manufacturing, though for women the highest point was in 1929, and for both sexes no month after February

CHART 21.—INDEX OF EMPLOYMENT OF WAGE EARNERS IN TELEGRAPH AND TELEPHONE, AND IN STORES, OHIO, 1928-31, BY SEX. (SEE ALSO CHART 20)



1930 was so high as the corresponding month in the year preceding. The fluctuation from high to low point within the year ordinarily was greater for men than women, though in 1931 it was women who had suffered most, and in the entire 4 years the decline was the greater for women. The decline in 1930 was marked for both sexes, but despite this fact and although the 1929 high was considerable, employment never went so low in 1930 as it had gone in 1928. (See chart 21.) In 1931 the break was decided, and employment fell below that of 1928 after May for women and after March for men. However, the entire difference from point of greatest to point of least employment in the 4 years was not so great as was the case in many other industries and industry groups.

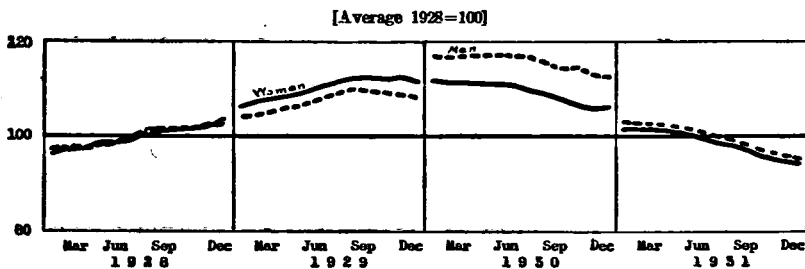
Wage earners in trade

The trade group includes wholesale and retail stores; lumber, coal, and scrap yards; and retail delivery of ice, milk, and water. Since the women wage earners in stores form 93.8 percent of the total (see summary, p. 96), these will be considered instead of trade as a whole. It is immediately noticeable that the employment of wage earners in stores was considerably more regular for men than for women, and ordinarily it was higher for men in 1930 and 1931 than in 1928 and 1929. (See chart 21.) For either sex, employment was low in the early months of 1928 and 1929, rising to the highest point at the end of the year; but in 1930, though for men not so low in January as in the 2 preceding years and for women but little lower than in 1929, it was in December considerably lower for women than in either preceding December. In 1931 the low point for women was in February and July; for men, in November; December employment was lower for men than in any previous year included, but for women it exceeded that of 1930. In each year, the employment of women rose in April and reached a low point in July and August, before the rise at the close of the year. In 1930 and in 1931 the general employment level was considerably lower for women than for men through nearly all the year, but this was not true in 1929 and was true for only a few months in 1928. The entire decline in employment from highest to lowest month in the 4 years was 31 points for women and only 18 for men.

Bookkeepers, stenographers, and office clerks in all industries

Women formed about half the employees in this occupational group in each month in the 4 years. For neither sex did employment show very sharp changes, and it appeared much more regular than in any of the other groups. (Chart 22.) Analysis of earlier data (see p. 122) shows rise from 1914, and indicates this continued for both sexes well into 1929, until August for men, September for women, and after this the drop was slight for either sex. In 1930, employment

CHART 22.—INDEX OF EMPLOYMENT OF BOOKKEEPERS, STENOGRAPHERS, AND OFFICE CLERKS, OHIO, 1928-31, BY SEX—ALL INDUSTRIES



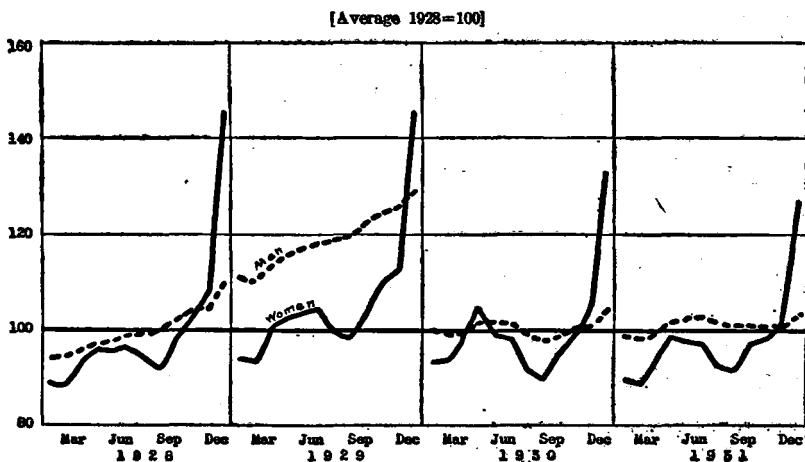
was very much better maintained for men than for women; that for women showed very slight changes from month to month prior to July, and every month during the first half of the year was above the corresponding period in 1929; after May the drop was almost continuous to the end of the year, which was below all of 1929 but still well above all of 1928. The level of employment for men in 1930 and 1931 was considerably above that for women, though the opposite was the case in 1929, and employment for the two sexes was very similar

in 1928. The difference in employment between the high point and the low over the 4-year period was 18 points for women and 22 for men.

Salespeople not traveling

Of the women employed in this occupation, over 90 percent were in wholesale and retail stores, and consequently these will be discussed instead of the total. The seasonal character of work in stores is well known, and due to the December peak the fluctuation from high to low point in women's employment as salespeople in stores was very much greater in each year than was the case with most other occupations reported. (See chart 23.) Roughly, half the workers in this occupation were men, and their employment was considerably more regular than was that of women; in general, this is true even if the December peak, which affected women chiefly, be omitted. While

CHART 23.—INDEX OF EMPLOYMENT OF SALESPeOPLE (NOT TRAVELING), OHIO, 1928-31, BY SEX—STORES (RETAIL AND WHOLESALE)



the employment of women was lower in 1930 than in 1929, and was still lower in most months of 1931, the lowest of all was at the beginning of 1928. Except for the December peak, the employment of men in 1929 proceeded on a very much higher level—as measured by its 1928 average—than did that of women; in 1930, however, men's employment fell farther below its 1929 level than did that of women, in most months very much farther below; and in the first 4 and last 2 months of 1931 it equaled or fell below 1930. In the entire 4-year period, the lowest points for both sexes were early in 1928, the highest at the end of 1929, the difference between the high and the low being very much greater for women than for men, due primarily to the December peak.

THE GENERAL MOVEMENT IN THE EMPLOYMENT OF WAGE EARNERS IN MANUFACTURING INDUSTRIES

In addition to the foregoing main classifications, more detail has been considered for the wage earners in manufactures. This includes four chief industrial groups and all industries reporting 2,000 or more women. Five chief groups were not included because they contained

relatively small numbers in addition to the workers in the particular subgroups included. Four of the chief industrial groups—lumber and its products, chemicals and allied products, liquors and beverages, and stone, clay, and glass products—were not considered because they contained only small numbers of women. The first three of these contained less than 2 percent of the manufacturing wage earners; stone, clay, and glass contained less than 6 percent, but one subgroup from this class has been discussed—pottery, terra cotta, and fire-clay products—since it employed over 2,000 women. In addition, the miscellaneous group was not analyzed, but two of its industries have been included. In using the material, simple unadjusted indexes were constructed from the figures, with the use of the monthly average of 1928—a year before the peak of 1929 and the subsequent depression—as 100. The details relative to the foregoing discussion, and the proportions the various groups employed of all the women in manufactures or in the industrial group in question in September 1928, are as follows: ⁸⁴

TABLE 14.—*Relative importance of various industries and industry groups in the employment of women wage earners in Ohio, September 1928* ¹

Industrial group and industry	Percent women formed of total in nearest obtainable group in 1930 census	Percent of all women wage earners in manufacturing	Percent of all women in chief industrial groups specified
All wage earners in manufactures.....	17.1	100.0	
Textiles.....	73.9	24.7	100.0
Men's clothing (including shirts and coat pads).....			38.9
Women's clothing (including corsets).....			14.8
Hosiery and knit goods.....	82.0		12.1
Rubber products ²	17.7	10.3	100.0
Tires and tubes.....		7.8	83.4
Food and kindred products.....	23.5	7.8	100.0
Bakery products ³	44.5		24.9
Paper and printing.....	34.4	7.2	100.0
Printing and publishing.....	41.0		38.5
Tobacco ⁴	73.7	6.9	100.0
Cigars and cigarettes.....	73.7		79.0
Iron and steel and their products.....	3.9	6.9	100.0
Foundry and machine-shop products.....			42.3
Leather and leather products ⁵		6.0	100.0
Boots, shoes, cut stock, and findings.....	43.7		89.7
Stone, clay, and glass products ⁶	16.4	5.8	100.0
Pottery, terra cotta, and fire-clay products.....	15.6		60.8
Metals and metal products (other than iron and steel) ⁷	24.2	5.7	100.0
Copper, tin, and sheet-iron products.....	23.3		35.5
Gas and electric fixtures, lamps, and reflectors.....			43.6
Vehicles ⁸		3.7	100.0
Automobiles and parts, including assembling plants.....	12.5		91.8
Lumber and its products ⁹	11.1	1.7	
Chemicals and allied products ¹⁰	12.4	1.4	
Liquors and beverages ¹¹		(¹²)	
Miscellaneous manufactures.....		11.9	100.0
Electrical machinery, apparatus, and supplies.....	39.2	{	35.4
Radios and parts.....			17.3

¹ September was selected as a representative month, showing neither a supreme peak nor a depression.

² Not considered separately, as group contains relatively few women besides those specified.

³ The only industry except canneries reporting 2,000 or more women in this month, but canneries not high enough to include in other months.

⁴ Not discussed, because group relatively so small in spite of the fact that about 40 percent of the group represents other industries.

⁵ Not discussed, because fewer than 2,000 women in total.

⁶ Less than one tenth of 1 percent.

As has been outlined, 19 manufacturing industries or groups were selected for analysis. This includes all industries that employed 2,000

⁸⁴ For complete list see appendix table IX.

or more women in September 1928,⁸⁵ and those industrial groups in which considerable numbers of women were in several smaller industries not separately analyzed.

Textiles

Textiles and clothing, classed together in Ohio reports, employ about one fourth of the women wage earners in manufacturing. The largest industries included are men's clothing (including shirts and coat pads), women's clothing (including corsets), and hosiery and knit goods, which together employ over 65 percent of the women in the whole group.

The movement of employment in the group as a whole, composed of such different industries, appears more regular than usually in these industries taken separately. (See chart 24.) Except for some instances in men's clothing, the variation from high to low point of employment within a year was less, for either sex, than the variation in any of the separate industries. Nevertheless, the decline in 1930 was marked, employment generally being below that at any time in 1928 or 1929, with most of 1931 lower still. Maher (op. cit., p. 122) shows some increase in woman employment, 1927. In 1930 employment in the entire group, for either sex, had declined more than in men's clothing but less than in women's clothing or hosiery and knit wear; in the entire 4-year period the difference between the high and low points in the employment of women had been greater than in men's clothing, but less than in women's clothing, in hosiery and knit goods, and in 17 of the 22 other industries or industry groups, including wage earners in all industries and in all manufacturing.

Men's clothing.—Employment in men's clothing was considerably better in 1929 than in 1928 and kept up better in 1930 than was the case with many other industries (see chart 24); for women the indexes of 1930 were below those of 1929 in every month, but for men they were above 1929 in the first 6 months of 1930. The men's level of employment in 1928 ordinarily was higher than the women's, except that the latter rose higher in the spring and winter seasons of the industry; after January in 1929, women's level was the higher; in each month in 1930, the men's. Employment in 1931 was lower in every case than in 1930, and was always lower for women than for men. The variation from high to low employment was greater for women than for men in every year but 1931, when it was the same for the two sexes. The decline from the highest to the lowest index in the 4 years was the greater for women—32 points for them in contrast to 21 points for men.

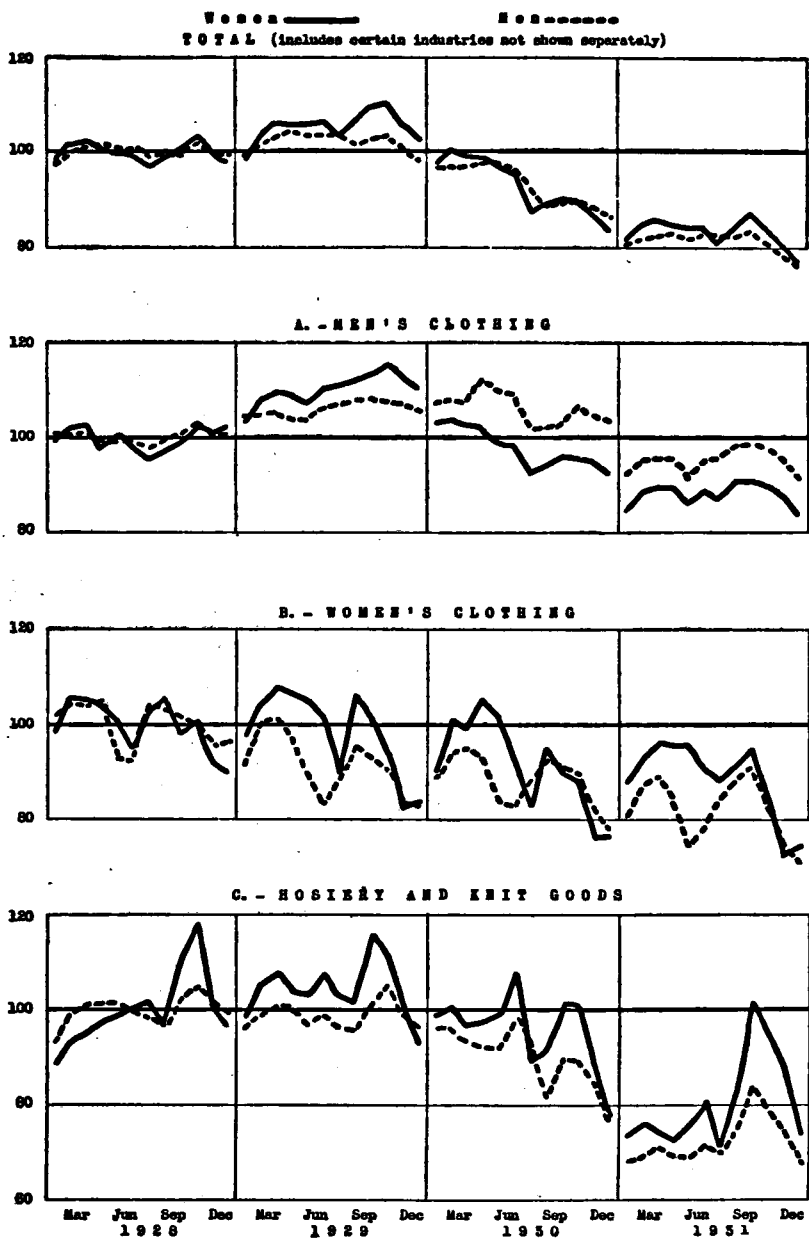
Women's clothing.—This industry is likely to be very irregular from month to month, with definite seasonal periods, and the Ohio figures in the time of study were no exception. (Chart 24.) Maher (op. cit., p. 122) shows employment below 1921 usually, 1923–27, but rising in 1927. Women's employment in 1929 rose above that in 1928 in the spring, again in August and September; that in 1930 was below 1929 in every month, usually below 1928. On the whole, it held up less in 1930 than in men's clothing. Further declines occurred in most months of 1931, for both sexes, apparently affecting men somewhat the more. The level of women's employment usually was

⁸⁵ With the exception of canneries in the food group, while more than 2,000 women were employed in this highly seasonal industry in September, considerably less were so employed in other months.

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CHART 24.—INDEX OF EMPLOYMENT IN TEXTILES, OHIO, 1928-31, BY SEX

[Average 1928=100]



above men in 1929 and in the first half of 1930; but in 1929 the decline from August to the end of the fall season was the heavier for women, and their employment level in the fall season of 1930 did not rise so high as did men's. Fluctuations from high to low employment within each year, and also the decline from highest to lowest in the 4 years, were greater for women than for men.

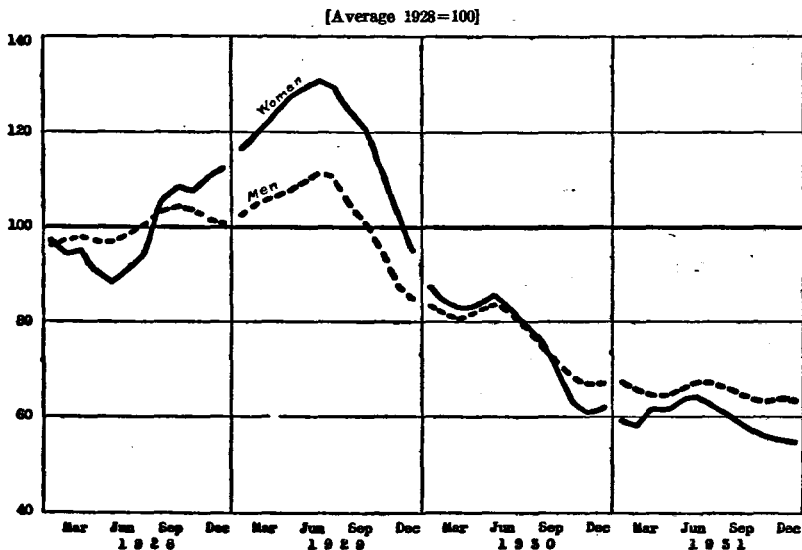
Hosiery and knit goods.—In this industry Maher (op. cit., p. 122) shows a decline almost continuous, 1923–27, in the employment of women usually was better in 1929 than in 1928, with few exceptional months at the end of the year; in 1930 it was above that of 1928 in the first 6 months of the year but ordinarily was below 1929. (See chart 24.) For men, employment in 1929 was higher than in 1928 only in 3 months; in 1930, except for January, it was below 1928 and 1929, and in 1931 it fell still lower. The level of women's employment was above that of men's in the summer and fall of 1928, throughout 1929 except for December, throughout 1930 except for the July low, and in every month of 1931. However, the variations from high to low within each year and the decline from highest to lowest employment in the 4 years were considerably greater for women than for men.

Rubber products

These plants employed one tenth of the women wage earners in manufacturing—larger than in any other industrial group but textiles. Maher shows employment rising, 1923–28, especially for women.

Tires and tubes.—It is not surprising that over 80 percent of the women in the rubber industry were in tire and tube factories. In

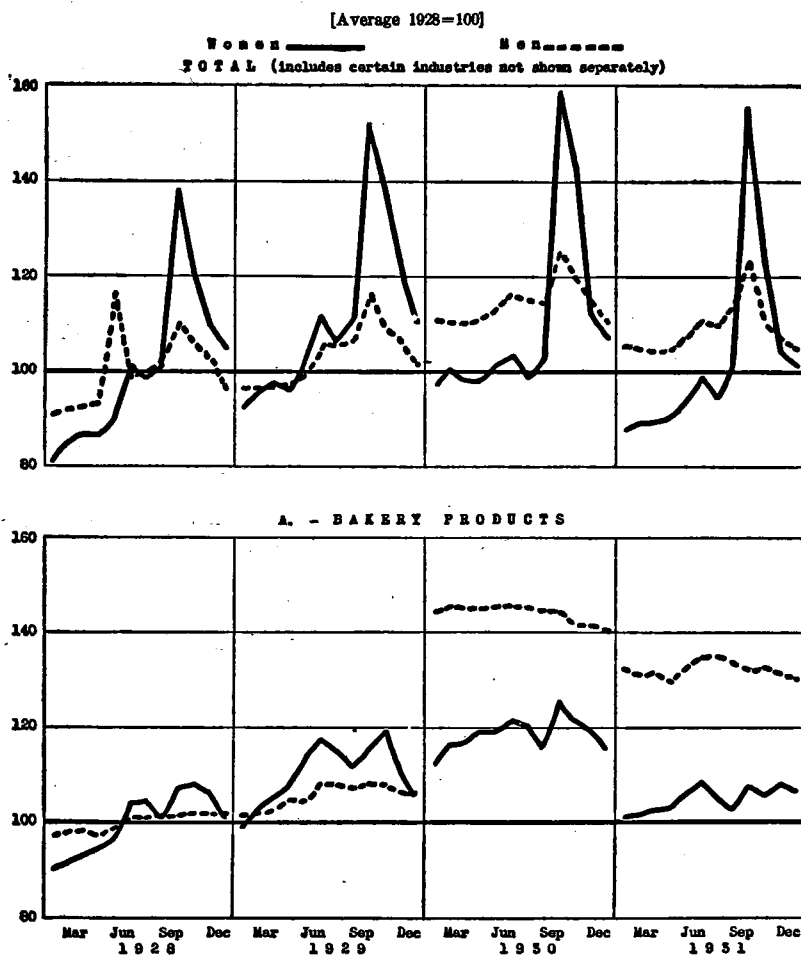
CHART 25.—INDEX OF EMPLOYMENT IN TIRES AND TUBES, OHIO, 1928–31.
BY SEX



1928 employment in such plants was good, and for women it rose almost steadily from May to the end of the year (for men from January, but with some recession after September). In 1929 employment was higher than in 1928 until toward the end of the year. For women it rose considerably more than for men and remained above 1928

until November, although for both sexes decline began as early as July 1929, and was continuous from that time till the end of 1930, except for a slight recovery in the spring. (See chart 25.) The employment of either sex in 1931 was very much below that in any of the 3 years preceding. With one exception, the employment level for men was above that for women in the first half of 1928, and again after July 1930 and throughout 1931, but in the intervening period

CHART 26.—INDEX OF EMPLOYMENT IN FOOD AND KINDRED PRODUCTS, OHIO, 1928-31, BY SEX



that of women was the higher—in some months considerably so. Employment changes within any 1 year were considerably greater for women than for men, as was also the decline from highest to lowest point in the entire period.

Food and kindred products

The food industries employed nearly 8 percent of the women wage earners reported in manufacturing. (See table 14, p. 102.) Taking

this group as a whole, regardless of separate industries, women's employment in 1929 was generally high as compared to 1928; the early months of 1930 started well in comparison with the beginning of the 2 preceding years, but in the summer and again at the close of the year employment was below corresponding periods of 1929, and the indexes throughout 1931 fell still lower than corresponding months of 1930. For men, 1929 was better than 1928 (except in 1 month) and employment rose still higher in 1930. While 1931 showed some decline from corresponding months of 1930, employment still was above 1928 and 1929. With the exception of the last 2 months of 1930 and of 1931, the employment level of women in each year was considerably higher than that of men from September to December. (See chart 26.) In the fall months this may be largely explained by the seasonal activity in the canneries, large woman employers, and later the candy industry was at its height. The difference between the high and low point during the 4-year period was 78 points for women and 35 for men.

Bakery products.—The seasonal character of this industry, which employed about one fourth of the women in the food group, was especially marked for women and also was distinct for men. (See chart 26.) In each year (except for men in 1931) there was a rise in employment until June or July, and after a recession a rise to September or October, with a decline coming in December or earlier. In every month and for either sex, employment was better in 1929 than in 1928 and improved still further in 1930. A decline was shown in 1931, the more marked for women, since men's employment still was above all corresponding months of 1928 and 1929. That the extremity of fluctuation to which women were subject in every year was greater than that for men is indicated by the fact that the rise from the early months to the high point of the year was greater for women than for men—as high as 20 points for the former in 1929—while the decline from the fall high to the end of the year was decidedly the greater for women (except in 1931). The general employment level was higher for women than for men in 5 summer and autumn months in 1928, and throughout 1929 except for January and December, but it was very much the higher for men in every month of 1930 and 1931. In the 4-year period the difference between the high and the low employment was 36 points for women but 49 for men.

Paper and printing

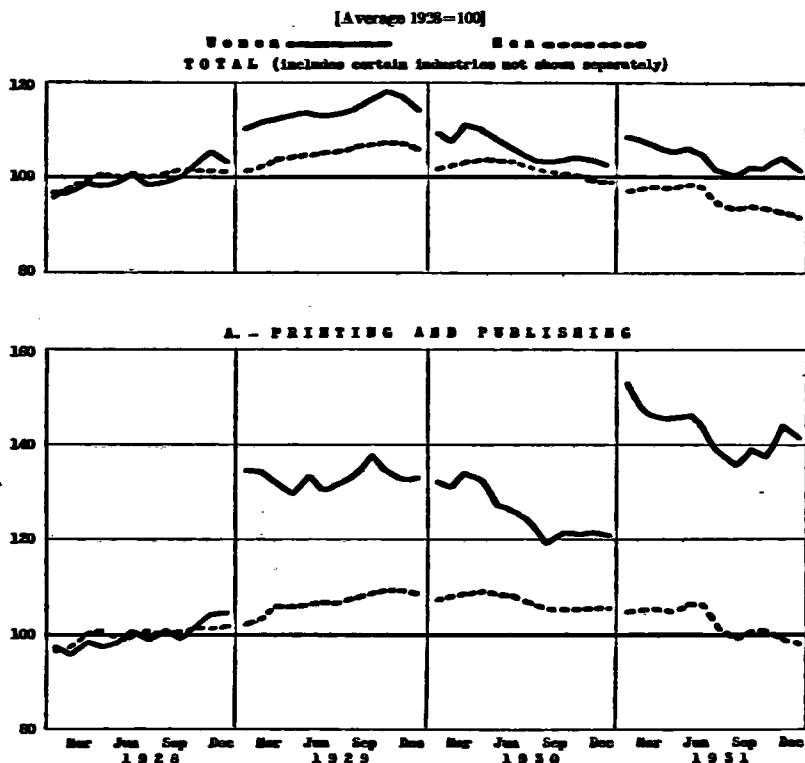
About 7 percent of the women wage earners in manufacturing were in the paper and printing industries, nearly two fifths of these being in printing and publishing. In the group as a whole, the employment of both sexes was good in 1928 and very much better in 1929, particularly for women; in 1930, while the level ordinarily was not quite so high as in 1929, and later in the year never again reached the height of spring activity, still it usually was better than in 1928 until the latter part of the year. (See chart 27.) In 1931, the women's employment level was below that of 1930 in each month, except November, though it was above 1928 until October; for men employment was well below 1930 in every month and was below 1928 except in January and February. In this group, as in other industries, women suffered more extreme employment change in the 4-year period than did men; the difference between the highest and lowest

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index in the 4 years was 16 points for men but it was 22 points for women.

Printing and publishing.—The employment level in this industry was good in 1928, being quite similar for the two sexes; it was very much better in 1929, and was especially high for women. (See chart 27.) In 1930 employment was, on the whole, maintained better than that in the entire paper and printing group, and still was on a much higher level for women than for men; however, in this year the fall season did not show such great increases as had been the case in 1928 and 1929. In 1931 employment was much better for women than at any previous time in the 4 years, but the indexes for men, while

CHART 27.—INDEX OF EMPLOYMENT IN PAPER AND PRINTING, OHIO, 1928-31, BY SEX



never below 98, were lower than in 1930, and in most months lower than in 1929. Again, women were shown to be more subject to change within the year than men, the difference between high and low points in a year always being the greater for women. The difference between the high and low index in the 4-year period was 13 points for men, but it was 42 points for women, even if their high indexes in 1931 be disregarded.

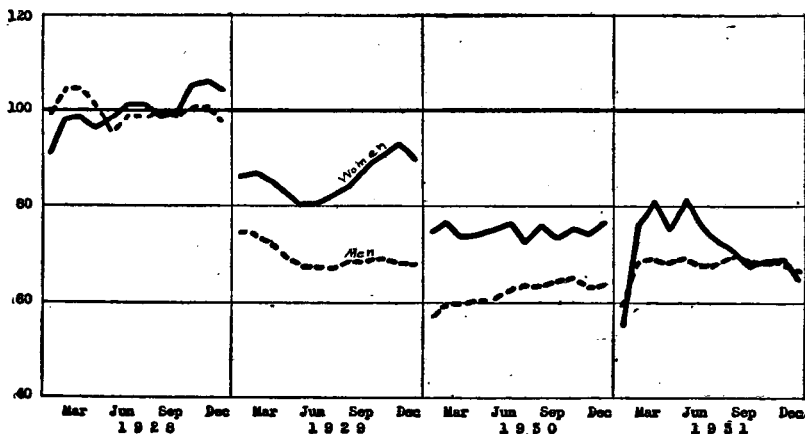
Tobacco

Cigars and cigarettes.—About 7 percent of the women wage earners reported in manufacturing were in tobacco factories, nearly four fifths

of these making cigars and cigarettes. In this industry employment decline was evident earlier than in most others, and men seem to have suffered from this decline even more severely than women. (See chart 28.) After November 1928 a decline was apparent, and for both sexes in every month of 1929 employment was below the corresponding month of 1928, in 1930 still lower; in fact, for men the highest employment index in 1929 and in 1930 was below the lowest in 1928, and for both sexes the 1930 high was below the lowest in both 1928 and 1929. In 1931, for women most months showed still further declines from earlier levels, but the employment of men showed improvement over that of 1930. During all of 1929 and 1930, in more than half the months of 1928, and in most months of 1931, the employment level of women was above that of men. The entire decline from the highest to the lowest index in the 4 years was somewhat similar for the two sexes; for men it was 48 points for women 51 points.

CHART 28.—INDEX OF EMPLOYMENT IN CIGARS AND CIGARETTES, OHIO.
1928-31, BY SEX

[Average 1928=100]



Iron and steel

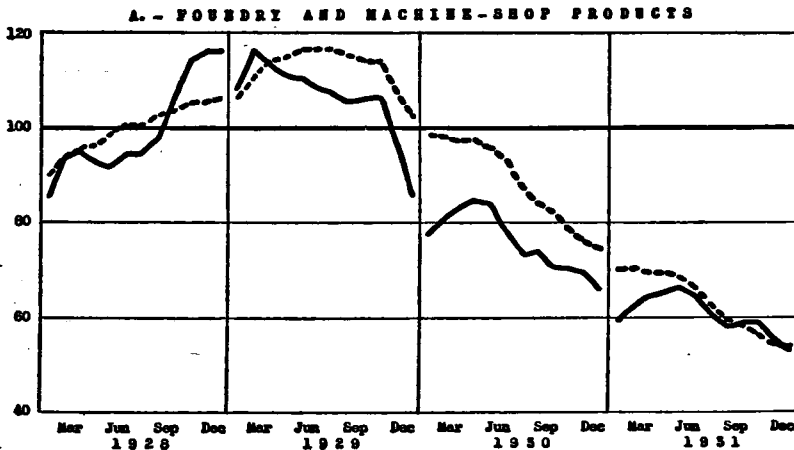
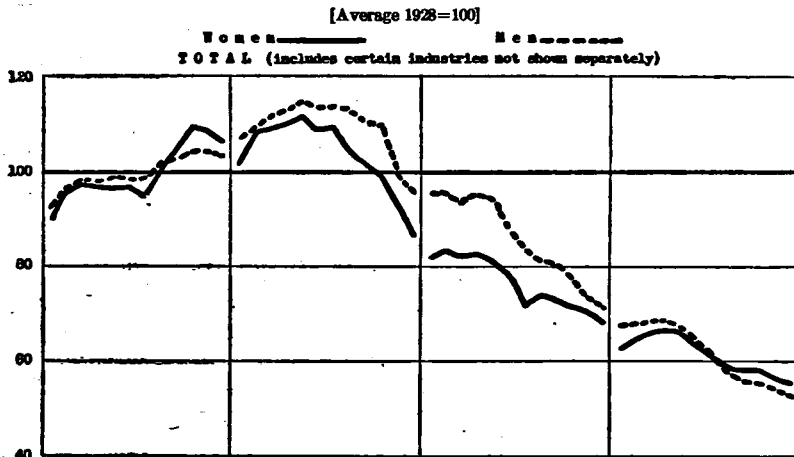
Only about 7 percent of the women wage earners in manufacturing were employed in the iron and steel group, although this is a dominant group in manufacturing employment as a whole. In these industries, employment, which started low in 1928, attained a high level in the spring of 1929—the highest index being 111.6 for women, 114.9 for men—but a rapid and almost steady decline set in after July 1929; in December 1930 employment for both sexes was lower than at any time in the 3 years preceding, and each month of 1931 was below any corresponding month in the 4 years. Except for a few months at the end of 1928 and the last 5 months of 1931, the employment level of men was better than that of women. (See chart 29.) On the whole, the movement of employment was similar for the two sexes, and the decline was in about the same degree for each.

Foundry and machine-shop products.—This industry employed more than two fifths of the women in the iron and steel group. In general the movement of employment followed that of the whole group, but

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the sharp decline in 1929 began later than was the case for the total. (See chart 29.) For women the difference in the indexes from high to low point in any year was greater in foundries and machine shops than in iron and steel as a whole. For women the difference from highest to lowest point in the 4 years was much greater in foundries and machine shops than in the iron and steel group, but for men the figures were the same.

CHART 29.—INDEX OF EMPLOYMENT IN IRON AND STEEL AND THEIR PRODUCTS, OHIO, 1928-31, BY SEX

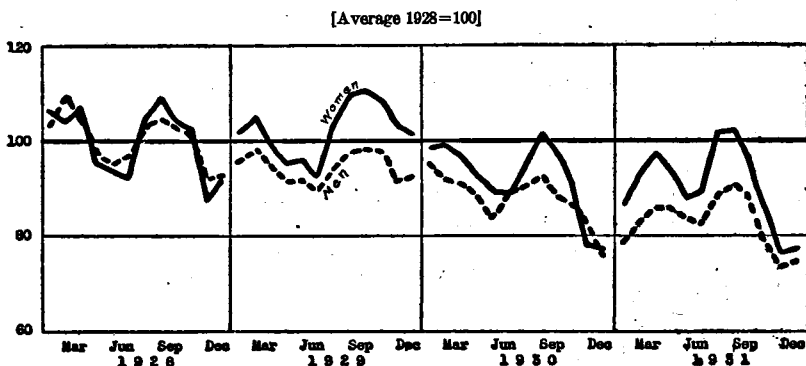


Leather and leather products

Boots, shoes, cut stock, and findings.—Six percent of the women wage earners in manufacturing were employed in leather and leather-products factories, and of these about nine tenths were in the boot and shoe group. In this industry women's employment in 1929 was better than that in 1928 in May and June and again in the second half of the year; in 1930, however, it was considerably below 1929 in

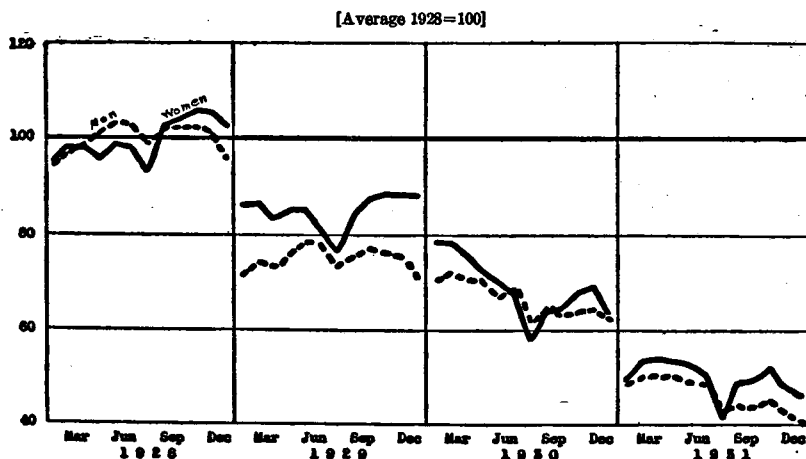
every month and in December was 33 points below the highest in 1929. In half the months of 1931 it was below 1930. The general level of employment was higher for women than for men in half the months of 1928, throughout 1929 and most of 1930, and in every month of 1931. This is another industry in which fluctuations from

CHART 30.—INDEX OF EMPLOYMENT IN BOOTS, SHOES, CUT STOCK, AND FINDINGS, OHIO, 1928-31, BY SEX



month to month are more marked for women than for men (see chart 30); in every year the points of difference from the highest to the lowest index within the year were considerably greater for women than men. However, the entire decline from the highest to the lowest point in the 4 years was somewhat greater for men than women—36.8 points for the former, 34.1 for the latter.

CHART 31.—INDEX OF EMPLOYMENT IN POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS, OHIO, 1928-31, BY SEX



Stone, clay, and glass products

Pottery, terra-cotta, and fire-clay products.—The stone, clay, and glass industries employed fewer than 6 percent of the women in manufacturing, but some 60 percent of these were in the group

selected. The employment movement in the entire group is essentially similar to the movement in this one industry, though employment in the 4 years, especially for women, held up considerably better for the total than for pottery and related industries, in which a decline appeared especially early. The employment level for both men and women was somewhat higher in 1928 than at any other time in 4 years; ordinarily it was better for women than men, except for parts of 1928. (See chart 31.) The difference from high to low point within any 1 year was greater for women than for men, and the decline from the highest to the lowest index in the 4 years also was the greater for women.

Metals and metal products other than iron and steel

This group also contains fewer than 6 percent of all women wage earners in manufacturing. Nearly four fifths of these were in factories making copper, tin, and sheet-iron products or gas and electric fixtures, lamps, and reflectors.

Copper, tin, and sheet-iron products.—In plants turning out these products, employment of both sexes was good in 1928 and still better in 1929. For men in the last 6 months of 1930 employment was not so good as in the corresponding months in the year preceding; for women in 1930 and for both sexes in 1931 employment was lower in every month than in the corresponding month of the year preceding. Both in 1930 and 1931 employment of women was below the level for men throughout the entire year. (See chart 32.) In this industry the difference between the high and low indexes of the year was markedly greater for women than for men in 1928 and 1929, but was greater for men in 1930 and 1931. The difference from the high point of employment to the low in the 4-year period was greater for women than for men—41 points for the former and 36 for the latter.

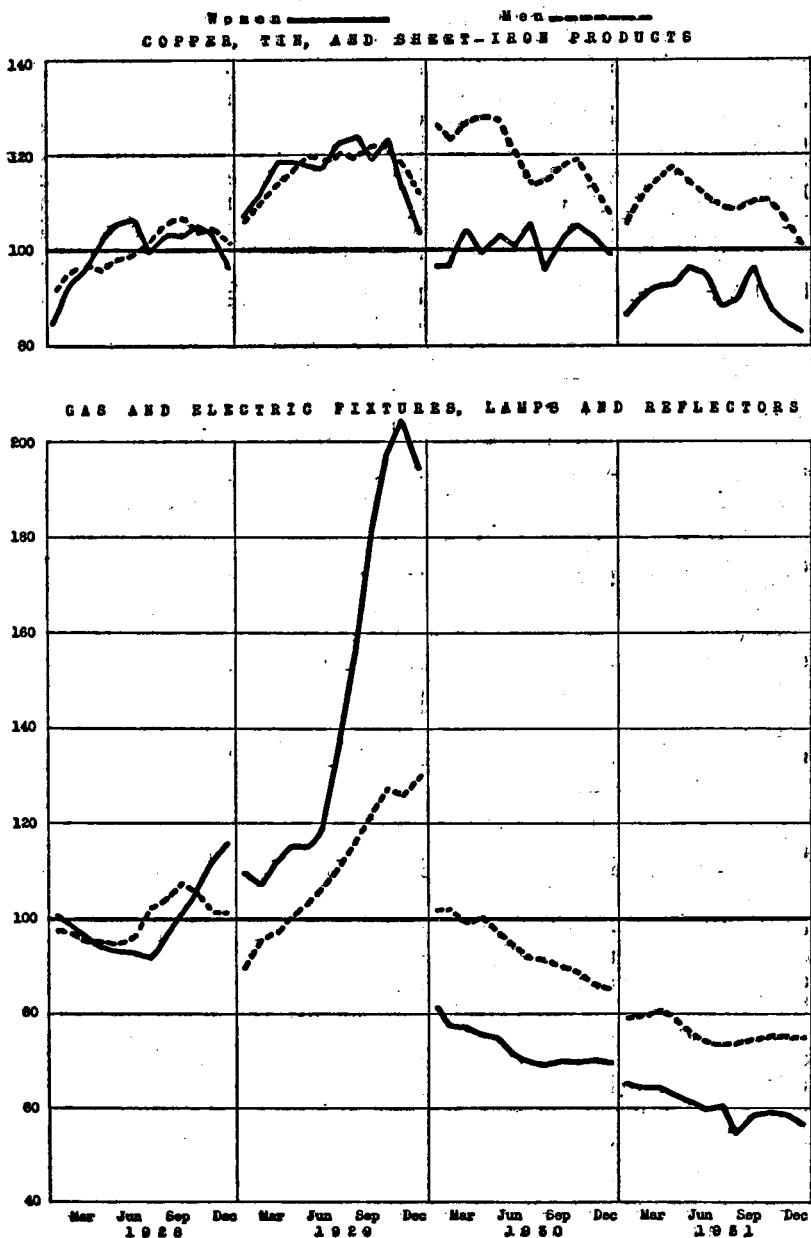
Gas and electric fixtures, lamps, and reflectors.—As in a number of other industries, the employment of women in the making of these products showed much more extreme changes than did that of men. (See chart 32.) For both sexes it was at a fairly good level in 1928, rising continuously for men after May, for women after July. While in early 1929 the level was below the later months of 1928, it was high through most of the year, and from February on, with one slight exception, there was a steady rise to November for women and to December for men; for women this was much more extreme than for men, rising to an index of 204.8, while the high for men was only 130.1. Employment in 1930—relatively very low for both sexes—was very much better for men than for women, and the same was the case in 1931, though for both sexes employment in 1931 was below that of each corresponding month in 1930. The decline from the 1929 high to the lowest point in 1931—the highest and lowest points in the 4 years—was 56 points for men, but it was as much as 150 points for women.

Vehicles

While less than 4 percent of the women wage earners in manufacturing were in this class, over 90 percent of the women in the vehicle industry were in the plants making automobiles and their parts, employing an appreciable number of women.

CHART 32.—INDEX OF EMPLOYMENT IN COPPER, TIN, AND SHEET-IRON PRODUCTS, AND IN GAS AND ELECTRIC FIXTURES, LAMPS, AND REFLECTORS, OHIO, 1928-31, BY SEX

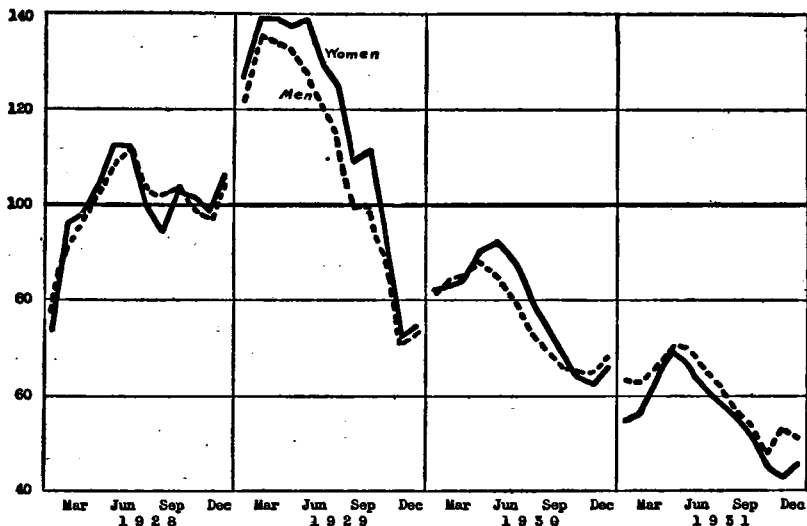
[Average 1928=100]



Automobiles and parts.—In this industry employment in 1928 was at a good level for women in the spring and fall seasons, some being laid off in July and especially in August, and for men it was well maintained from April through September. In 1929, when employment for both sexes was quite high early in the year, although some falling off was noticeable as early as March, it was above corresponding months in 1928 until August for men, and until October for women, after which the general decline was marked for each sex. The general level in 1930 was well below both of the 2 preceding years, and the decline was continuous for men after April and for women after May, with some upward movement for each sex in December. (See chart 33.) For both sexes, employment in 1931 was very much below that of 1930. Women's employment level (as measured by its 1928 average) was above men's in something over

CHART 33.—INDEX OF EMPLOYMENT IN AUTOMOBILES AND PARTS, OHIO, 1928-31, BY SEX

[Average 1928=100]



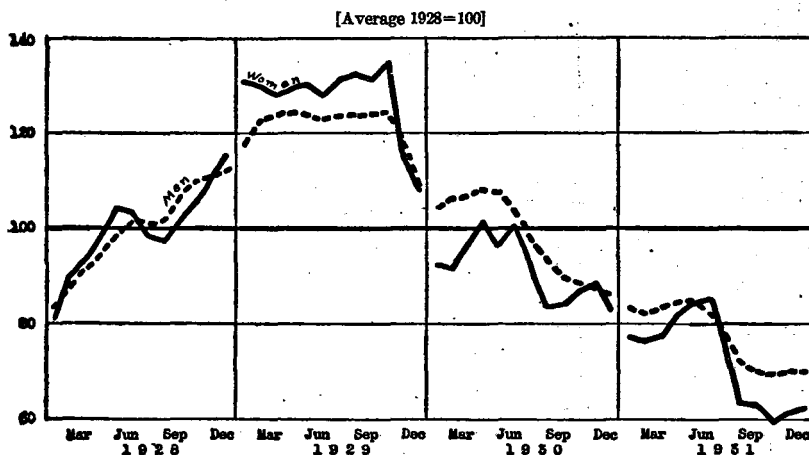
half the 48 months, including the entire year of 1929, but it was below that of men throughout all of 1931. The changes from high to low employment in each year were greater for women than for men. This was true also of the decline from the highest to the lowest point in the 4 years, which was 88 points for men, 97 for women; the extreme peak of 1929 and the heavy decline of 1931 caused this employment fluctuation to be greater than in any other industry except radio manufacturing for each sex and in addition for women in gas and electric fixtures.

Miscellaneous manufacturing

Among the miscellaneous industries, two deserve analysis as considerable employers of women: Electrical machinery, apparatus, and supplies, and radios and their parts.

Electrical machinery, apparatus, and supplies.—This industry presents an employment picture characteristic of several others—high indexes through 1929, lower indexes through 1930 (those of 1930 were also below those of 1928 after April for women and after June for men), and still lower employment in 1931. (See chart 34.) For both sexes, the starting point of receding employment seems to have come after October 1929. In 5 early months of 1928, and throughout 1929 until November, the employment level of women was above

CHART 34.—INDEX OF EMPLOYMENT IN ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES, OHIO, 1928-31, BY SEX

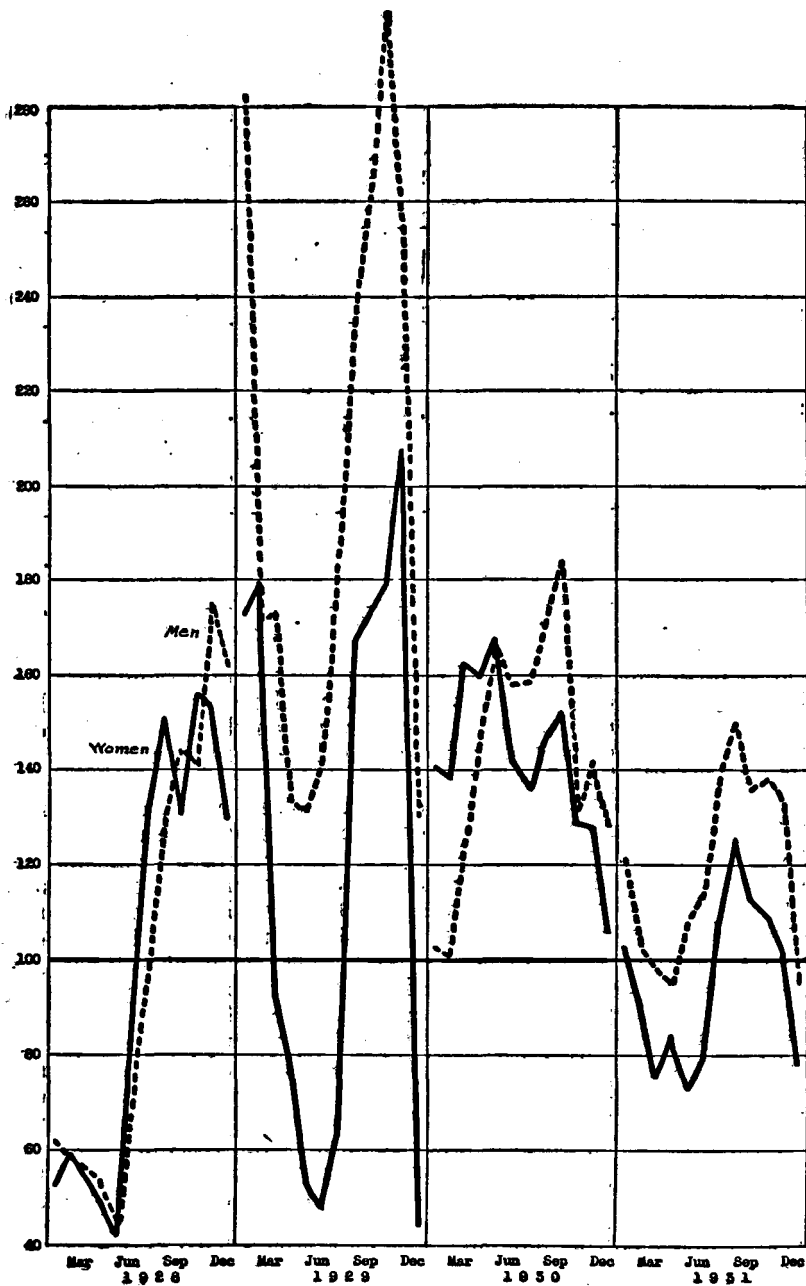


that of men, but throughout 1930 (except November) and 1931 (except June) the men's level was the higher. The variation from high to low index in the year was greater for women than for men, except in 1930, and the decline from highest to lowest index in the 4 years also was the greater for women.

Radios and radio parts.—In the manufacture of radios and their parts, the employment change from high to low within each year was greater than in any other industry, whichever sex be considered—except 1931 when it was exceeded in food and kindred products for women. This change was greater in 1929 than in any of the other years under consideration. (See chart 35.) Fluctuations from month to month were extreme for both sexes. There were marked seasonal tendencies in the industry, and little stability of employment was evident. In early 1928 employment was low for both sexes; by October the index had practically tripled for women—which was the case for men a month later—and this was followed by a sharp drop for women in the 2 months at the end of the year. In 1929 women's employment was above that of 1928 in every month, except for an early summer slump and an extreme decline in December. In the spring and early summer of 1930 employment was better than at this season in either of the preceding years, and the decline in December was considerably less sharp than in 1929. In all but 11 months of the 4-year period men's employment was on a higher level than women's (each as measured by its own 1928 average). The difference between the highest and the lowest index was as great as 166 points for women and 254 for men, a degree equaled in no other industry for either sex.

CHART 35.—INDEX OF EMPLOYMENT IN RADIOS AND PARTS, OHIO, 1928-31,
BY SEX

[Average 1928=100]



SUMMARY OF EMPLOYMENT MOVEMENT OF WOMEN IN OHIO,
1928, 1929, 1930, AND 1931

The Ohio figures are not given out monthly as are those of Illinois and New York, and 1929 is the last year for which they had been published in full at the time this report was prepared. However, the Ohio Department of Industrial Relations very kindly furnished the Women's Bureau with the complete data for 1930 and 1931.

Seasonal movements

As usually is the case in industrial employment, marked seasonal movements are shown among wage earners in manufacturing, and these applied to both sexes. They appeared particularly great in the plants producing radios and radio parts,⁸⁸ and only somewhat less so among those in the food and kindred industries. Distinct though less extreme seasonal movements in employment also are noticeable from the Ohio figures in hosiery and knit wear, men's and women's clothing, and (especially for women) the making of pottery. The group of salespeople (not traveling) in wholesale and retail stores also showed seasonal trends.

General employment level

On the base used—the monthly average of 1928—the general level of employment ordinarily (that is, in most months in each of the 4 years and in practically all months in 1 or more of these years) was notably higher for women than for men wage earners in factories producing women's clothing, hosiery and knit wear, shoes, and cigars and cigarettes, in printing and publishing, and in the telegraph and telephone industry.

This level ordinarily was higher for men than for women wage earners in foundries and machine shops, iron and steel, and radio manufacture; and for sales people (not traveling) in wholesale and retail stores except at the peak season.

On the whole the employment level was the higher for women in 1929 but for men thereafter (in each case on their own 1928 basis) among bookkeepers, stenographers, and clerks, and as wage earners in the following groups: Stores, food and kindred products (except at the peak season), bakery products, gas and electric fixtures, electrical machinery and supplies, men's clothing, tires and tubes, and automobiles and parts; in the last two cases the change from a higher index for women to a higher for men came after the middle of 1930.

Beginning in the last months of 1929 and proceeding almost continuously through 1930 and 1931, data for both sexes showed a marked decline in the employment of wage earners in manufacturing, somewhat greater for men than for women, and a decline for women bookkeepers, stenographers, and office clerks.

In several of the manufacturing industries the declines in wage earners were especially extreme. Among these, that in cigars and cigarettes and that in pottery were beginning to be marked as early as 1928, that in automobiles and parts early in 1929. In mid 1929 the decline became noticeable in foundries and machine shops and tire and tube factories, and somewhat later in the year in textiles, in the iron and steel group as a whole, and in electrical machinery plants.

⁸⁸ That there is extreme fluctuation in employment in such plants as these is corroborated in the Women's Bureau study of this industry summarized on p. 123.

In 1930 it was marked in factories making gas and electric fixtures and, especially for women, in copper, tin, and sheet-iron plants. In 1931 the declines were greater for men in radio and automobile manufacture, for women in food and radio manufacture.

In several manufacturing industries that kept up well through most of 1929 a decline that was notable, even though less extreme than in some other industries, occurred in 1930; this was true in hosiery and knit wear, shoes, women's clothing, paper and printing, and (especially for women) in men's clothing and among wage earners in stores; it was true also among telegraph and telephone workers.

Evidences as to replacement

The indexes give no definite evidence indicating replacement of men by women on any appreciable scale in any industry or occupational group. They do show great irregularity of employment for both sexes in certain occupations, the variation in the 4-year period being greater for women than for men in 18 of the 26 groups included in this discussion. (See table 15.)

The general direction of employment change from month to month usually was similar for the two sexes, though it sometimes was much more extreme for one than the other. Sometimes for 2 or 3 months at a stretch employment would increase for one sex at the same time that decreases were shown for the opposite sex, but ordinarily this would be counteracted to a large extent by the movement in the months following. In 11 industries or occupation groups—one of them men's clothing, which employed about one tenth of all women wage earners in manufacturing—the employment level for women was higher than that for men in 1929 but fell below men's thereafter (in each case on their own 1928 base).

The data give further evidence of a fact frequently observed—that the employment of women often is more irregular than that of men, women being used for extra help in peak periods and then laid off. For example, women wage earners in all manufacturing industries combined were taken on at the opening of the season of fall activity in each year, while employment for men remained at the same level as before (1928), or declined (1929, 1930, and 1931), but thereafter the decline occurring to the end of the year was greater for women than for men. In 13 of the groups included, the employment of women fluctuated more extremely within each of the 4 years than did that of men, and in 8 other groups it was the greater for women in 2 or 3 of the years.

Irregularities within the year

Table 15 shows for both sexes the differences from high to low points in each year and the extent of the entire decline from the highest to the lowest point within the 4 years. For both sexes the greatest differences in every year were in the making of radios and radio parts, except for women in the food group in 1930 and 1931. For men the industries in which differences were next greatest were automobiles in 1928, 1929, and 1931, and the iron and steel group in 1930. For women fluctuations always were great among wage earners in the combined food group, in the automobile industry, and among salespersons in stores, where changes were considerable even without the December peaks.

TABLE 15.—*Difference between highest and lowest index numbers of employment within the year, and during 4-year period, Ohio, 1928-31*

Industry	Number of points of difference between high and low index in the year for—								Number of points of difference between the highest and the lowest index in the 4-year period for—	
	Women				Men				Women	Men
	1928	1929	1930	1931	1928	1929	1930	1931		
Wage earners in—										
All industries.....	12	10	10	7	17	17	19	13	31	46
All manufacturing industries.....	15	15	12	10	13	19	19	13	42	49
Service.....	7	9	8	9	13	15	13	11	22	24
Transportation and public utilities:										
Telegraph and telephone, including messenger service.....	8	10	16	14	19	10	20	8	36	33
Trade:										
Stores, retail and wholesale.....	22	22	16	22	12	11	4	3	31	18
Bookkeepers, stenographers, and office clerks (all industries).....	6	6	6	7	5	6	4	7	18	22
Salespeople not traveling:										
Stores, retail and wholesale.....	57	52	43	38	16	18	5	5	58	35
Wage earners in manufacturing, by industry:										
Textiles.....	7	12	16	11	4	6	12	8	33	28
Men's clothing (including shirts and coat pads).....	7	13	12	8	6	5	11	8	32	21
Women's clothing (including corsets).....	16	25	29	24	12	18	17	20	35	34
Hosiery and knit goods.....	29	23	30	31	12	9	21	17	47	38
Rubber products:										
Tires and tubes.....	24	34	27	9	8	27	17	4	75	48
Food and kindred products.....	57	30	62	67	26	20	15	19	78	35
Bakery products.....	18	20	13	8	5	7	6	6	36	49
Paper and printing.....	9	8	9	8	6	6	5	7	22	16
Printing and publishing.....	9	9	14	17	5	7	4	8	57	13
Tobacco:										
Cigars and cigarettes.....	15	13	4	26	10	7	8	10	51	48
Iron and steel and their products.....	19	25	15	11	12	20	24	16	56	62
Foundry and machine-shop products.....	30	31	19	13	16	14	24	16	63	62
Leather and leather products:										
Boots, shoes, cut stock and findings.....	22	17	25	26	18	9	19	18	34	37
Stone, clay, and glass products:										
Pottery, terra cotta, and fire-clay products.....	12	12	20	13	9	7	11	11	65	63
Metals and metal products (other than iron and steel):										
Copper, tin, and sheet-iron products.....	21	21	10	14	14	16	20	17	41	36
Gas and electric fixtures, lamps, and reflectors.....	24	98	12	11	13	40	16	7	150	56
Vehicles:										
Automobiles and parts (including assembly plants).....	39	66	30	27	34	65	23	23	97	88
Miscellaneous manufactures:										
Electrical machinery, apparatus, and supplies.....	35	28	19	25	29	17	22	16	76	56
Radios and parts.....	114	164	62	51	131	168	64	55	166	254

¹ The highest index for women was in 1929 in 20 of the 26 industries or groups taken, for men in 15 groups, but in the following it was in another year: For both men and women, in 1928 in cigars and cigarettes and in pottery, terra cotta, and fire-clay products, in 1930 in food and kindred products and in bakery products; for women in 1928 in hosiery and knit goods, in 1930 in service; for men, in 1928 in boots, shoes, cut stock, and findings, and women's clothing; in 1930 in men's clothing, copper, tin, and sheet-iron products, and wage earners in telegraph and telephones, and in stores, and bookkeepers, stenographers, and office clerks. The following it was in 1931 for men in 16, for women in 19 of the 26 industries or industry groups. In the following it was in 1928: For both men and women, in food and kindred products, bakery products, printing and publishing, radios and parts, in service, and salespeople in stores; for men, in copper, tin, and sheet-iron products, in telegraph and telephone, and wage earners in stores; for women in paper and printing; in 1930 for men in cigars and cigarettes.

Variations from high to low employment within each year were least for women and were extremely low for men among bookkeepers, stenographers, and office clerks; they tended to be low among wage earners in the paper and printing industry, and were relatively low

for women among wage earners in the service group, and for both sexes among wage earners in men's clothing and in cigars and cigarettes in 1930, when this industry was at such a low ebb.

Women had suffered greater changes in employment within each year than had men—in stores, both as wage earners and as salespeople, and as wage earners in 11 of the 19 separate manufacturing industries or industry groups, most of which are those known to be important woman employers.

The fluctuation within each year was greater among men than women as wage earners in the radio industry, and also was somewhat the greater for men as wage earners in all industries, in manufacturing as a whole (except in 1928), and in service. In iron and steel and in copper, tin, and sheet-iron products—the former the most important employer of men—the fluctuations in the employment of wage earners were greater for women than for men in each of the first 2 years but were the greater for men in 1930 and 1931. In the following industries fluctuations were greater for men than for women in 1930, but were the greater for women both before and after 1930 and also in the 4 years taken as a whole: Cigars and cigarettes, gas and electric fixtures, and electrical apparatus and supplies.

Ordinarily where declines were the greater for men, though they previously had been the greater for women, this appeared to be due to an arresting of the decline in women's employment rather than to a notable increase in the decline for men.

Declines in employment in the 4-year period

When the total decline in employment from highest to lowest index in the 4 years is considered, it is found that among bookkeepers, stenographers, and clerks, and among wage earners reported in all industries as well as those in all manufacturing, men had suffered somewhat more than women had; the respective points of decline were as follows:

	Men	Women
Bookkeepers, stenographers, and clerks.....	22	18
All wage earners.....	46	31
All manufacturing wage earners.....	49	42

Despite the foregoing, in 18 of the remaining groups—those selected as the important woman employers—the decline had been greater for women than for men, while in only 5 had it been greater for men. The greatest decline in employment for both sexes was in the manufacture of radios and radio parts. In only 7 industries or industry groups for men and 3 for women had employment declined less than 30 points; a decline of over 75 points occurred in the employment of both sexes in radio and automobile manufacture, and of women in gas and electric fixtures, in electrical machinery and supplies, and in food products.

The points of difference in the employment index for the period 1928 to 1931 in industries in which such differences ranged from 13 points to 254 points—the greatest drop in employment—was as follows:

100 and over:		
Men:		
Radios and parts.....	254	
Women:		
Radios and parts.....	166	
Gas and electric fixtures, lamps, and reflectors.....	150	
70 but less than 100:		
Men:		
Automobiles and parts.....	88	
Women:		
Automobiles and parts.....	97	
Food and kindred products.....	78	
Electrical machinery, apparatus, and supplies.....	76	
Tires and tubes.....	75	
50 but less than 70:		
Men:		
Pottery, terra-cotta, and fire-clay products.....	63	
Iron and steel and their products.....	62	
Foundry and machine-shop products.....	62	
Gas and electrical fixtures, lamps, and reflectors.....	56	
Electrical machinery, apparatus, and supplies.....	56	
Women:		
Pottery, terra-cotta, and fire-clay products.....	65	
Foundry and machine-shop products.....	63	
Saleswomen in stores.....	58	
Printing and publishing.....	57	
Iron and steel and their products.....	56	
Cigars and cigarettes.....	51	
40 but less than 50:		
Men:		
Wage earners in all manufactures.....	49	
Bakery products.....	49	
Cigars and cigarettes.....	48	
Tires and tubes.....	48	
Wage earners in all industries.....	46	
Women:		
Hosiery and knit goods.....	47	
Wage earners in all manufactures.....	42	
Copper, tin, and sheet-iron products.....	41	
30 but less than 40:		
Men:		
Hosiery and knit goods.....	38	
Boots, shoes, cut stock, and findings.....	37	
Copper, tin, and sheet-iron products.....	36	
Food and kindred products.....	35	
Salespeople in stores.....	35	
Women's clothing.....	34	
Telegraph and telephone (including messenger service).....	33	
Women:		
Bakery products.....	36	
Telegraph and telephone (including messenger service).....	36	
Women's clothing.....	35	
Boots, shoes, cut stock, and findings.....	34	
Textiles.....	33	
Men's clothing.....	32	
Wage earners in all industries.....	31	
Wage earners in stores, wholesale and retail.....	31	
20 but less than 30:		
Men:		
Textiles.....	28	
Wage earners in service.....	24	
Bookkeepers, stenographers, and office clerks.....	22	
Men's clothing.....	21	
Women:		
Paper and printing.....	22	
Wage earners in service.....	22	

Less than 20:

Men:

Wage earners in stores, retail and wholesale.....	18
Paper and printing.....	16
Printing and publishing.....	13

Women:

Bookkeepers, stenographers, and office clerks.....	18
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STUDIES OF EMPLOYMENT FLUCTUATIONS AFFECTING WOMEN

The following studies of employment fluctuations give attention to such situations as they affect women: Certain studies made by the Women's Bureau; some of those based on the Ohio figures; a report made in New York State; and recent Minnesota studies. Only the first and the last named deal especially with a period as late as 1931.

A report of the New York State Department of Labor analyzed data from June 1923 to June 1925 in so thorough a manner that its method and content may be said to point the way for later work.⁸⁷ Unfortunately, no later New York material has been presented in complete form by sex.

From Ohio, a summary analysis of the figures as they become available has been made for several years by Fred C. Croxton and Frederick E. Croxton, reporting the data by sex, and sometimes published in the Monthly Labor Review. In addition to the studies referred to on page 48, a special study of data for Cleveland and Cuyahoga County covered the years 1923-28.⁸⁸ In the last named, while the basic tables published were not by sex, the situation as to women's employment was mentioned at a number of points in the discussion.

Especial attention has been given to the Ohio figures for industries employing many women, by Amy G. Maher of the Information Bureau on Women's Work (Toledo), who has made studies of employment in textile and rubber plants, the latter covering 1914 to 1928, and of clerical workers from 1914 to 1929. The last named was published by the Women's Bureau, and showed this type of employment to have risen continuously, in an especially great degree in offices. After October 1929 the number of clerical employees in factories showed a decline to the end of the year for each sex, greater for women than for men. During 1930 there was an almost continuous decline through the year.

STUDIES BY THE WOMEN'S BUREAU

Women in slaughtering and meat packing

In a survey of women in slaughtering and meat packing made in 1928 Women's Bureau agents took from the pay rolls of plants in five cities records of employment in each week throughout a year's time. These applied to over 2,600 women, and showed that in the plants visited in these cities the minimum employment in the year ranged in the various cities from about 72 percent to less than 55

⁸⁷ New York Department of Labor. Employment and Earnings of Men and Women in New York State Factories, 1923-25. Special Bul. 143. 1926.

⁸⁸ Wooster, Harvey H. and Theodore E. Whiting. Fluctuation in Employment in Cleveland and Cuyahoga County 1923-28. Earlier basic studies of these data, not reaching the period under discussion here, were: Watkins, Ralph J. Ohio Employment Studies, 1927, dealing primarily with the construction industry, not a large woman employer, and Bell, Spurgeon, and Ralph J. Watkins, Industrial and Commercial Ohio, vols. I and II, Manufacturing Industries. Ohio State University Press. 1928.

percent of the maximum. To put it another way, from about 28 percent to more than 45 percent as many women as were on the pay rolls in the week of highest employment were not on the rolls at the period of lowest employment.⁸⁹ The data on which the foregoing statements are based are as follows:

City ¹	Number of women reported on pay rolls in—		Percent minimum forms of maximum	Women not on rolls in week of minimum employment		Average number of women employed
	Maximum week in the year	Minimum week in the year		Number	Percent of number employed at maximum	
Sioux City.....	374	204	54.5	170	45.5	283
St. Paul.....	517	351	67.9	166	32.1	421
Ottumwa.....	135	91	67.4	44	32.6	111
East St. Louis.....	129	93	72.1	36	27.9	111
Omaha.....	238	164	68.9	74	31.1	203

¹ All plants in Sioux City, St. Paul, and Ottumwa; some plants in East St. Louis and Omaha.

In certain of the important woman-employing departments the variations were even greater than they were in the industry as a whole.

Women in the radio industry

In 1929 the Women's Bureau made a survey of fluctuation in employment in representative plants of the radio industry. These plants were classed in three groups, according to whether making sets, tubes, or parts and accessories. In this industry employment goes up during the year, the decline occurring between fall and spring. In each of the three groups over 50 percent of the women on the pay rolls in the peak month had not been on the rolls at the minimum, these proportions being about 54 percent in tubes, 65 percent in sets, and 86 percent in parts and accessories. At the same time Ohio employment figures for this industry were examined, and here 80 percent of the women were off the rolls at the minimum in 1929, the drop coming at the end of the year. The data from the pay rolls for the three branches of the industry and from the Ohio sources, each for 1929, are as follows:

Source of data	Number of women reported on pay rolls in—		Percent minimum forms of maximum	Women not on pay rolls in month of minimum employment		Average number of women employed
	Maximum month in the year	Minimum month in the year		Number	Percent of number employed at maximum	
16 plants making receiving sets.....	14,935	5,169	34.6	9,766	65.4	9,800
15 plants making tubes.....	11,495	5,340	46.5	6,155	53.5	7,906
4 plants making parts and accessories.....	1,406	193	13.7	1,213	86.3	771
15 plants reported by Ohio Department of Industrial Relations.....	3,666	743	20.3	2,923	79.7	2,196

⁸⁹ Some of those employed at the minimum may have been other than the actual persons employed at the maximum, but at least the specified proportion of those employed at the maximum were not on the books at the minimum, and still others also may have been replaced.

That 1929 was no exception, but in a number of cases the employment of women had shown even greater fluctuation in the 2 years preceding, is indicated by the following:

Source of data	Percent employment of women in minimum month was of that in maximum in—		
	1927	1928	1929
8 plants making receiving sets	21.3	25.0	28.4
10 plants making tubes	52.4	46.2	51.0
Plants reported in Ohio	12.8	28.8	20.3

¹ Numbers of establishments reported differed somewhat in the various years, though always employing a very large proportion of the total in this industry in the State.

Firms reported in South Bend, Ind.

In the survey of South Bend, Ind., figures for a year's period—September 1929 to September 1930—were furnished by three important establishments that employed 2,759 women in September 1929. If the numbers on the pay roll in September 1929 be taken as 100, and relatives be computed on these, the employment index in each successive third month shows the great fluctuation in the year and the great differences among the firms. The figures follow:

Month	Establishment		
	No. 1	No. 2	No. 3
September 1929	100.0	100.0	100.0
December 1929	69.3	102.5	62.6
March 1930	81.7	103.0	121.5
June 1930	77.3	87.1	131.8
September 1930	72.4	82.0	116.9

THE MINNESOTA STUDIES

Practically the only recent analysis giving information on employment fluctuations of women—with the exception of those of the Women's Bureau—is that made in the report "Employment Trends", issued in November 1931 and later brought up to date, by the Employment Stabilization Research Institute of the University of Minnesota, as a part of the background for a project of employment stabilization to be undertaken by the institute and the Tri-City Employment Stabilization Committee.

This report analyzes employment data collected in 122 St. Paul establishments over a 6-year period, in 106 in Minneapolis for 5 years, and in 183 in Duluth for 4 years—ending with December 1930 for Minneapolis and St. Paul, and with June 1930 for Duluth.⁹⁰ Some interpretation is made on the basis of seasonal fluctuations, trend through the period, and effects of depression. The employment figures are given by sex for the total, retail and mail-order houses, wholesale firms, manufacturing, public utilities, construction and building materials, and miscellaneous. In all cases, except in the occupational analysis mentioned later, clerical workers in the indus-

⁹⁰ In the later supplement, 1931 figures for each city were made available.

tries are included with the others. Each main industry group is then broken down into smaller groups, the data for some of which—those important as woman employers—are given by sex. Next, employment in the following main occupational groups, and in subdivisions of each of these, is given: Skilled, semiskilled, unskilled, sales, clerical, miscellaneous. These occupational figures are not reported by sex except for Minneapolis, for which data on women are given for the main groups (excepting skilled workers) and for certain separate occupations, presumably those important in woman employment.

Table XI in appendix A shows for manufacturing, trade, and two chief woman-employing manufacturing industries, the proportions of the persons employed in the maximum month in the year who were not on the rolls in the month of lowest employment.⁹¹ For all occupations taken together these percentages were as follows:

	Three cities		St. Paul		Minneapolis		Duluth	
	Women	Men	Women	Men	Women	Men	Women	Men
1928.....	10.0	9.1	13.9	5.7	14.8	13.7	15.0	15.5
1929.....	6.1	8.3	14.8	7.5	5.6	14.2	12.7	8.6
1930.....	5.6	8.5	7.9	7.2	8.8	11.5	8.6	8.8
1931.....	5.3	11.7	12.0	8.1	4.1	15.6	9.2	10.0

In the case of women, and for the three cities combined, the proportion on the rolls at the maximum who were not on the rolls in the month of lowest employment was highest in 1928, and higher than that of men in that year. In each other year this proportion was larger for men than for women, the highest being in 1931. This gives color to the theory that women sometimes hold their jobs better than do men. However, when the different cities or different industries are considered, another situation sometimes appears. In St. Paul the differences between high and low employment always were larger—usually considerably larger—for women than for men. These differences for men were lower in St. Paul than in either of the other cities. In Minneapolis the proportion usually was much the larger for men, and in 3 of the 4 years the figure for men was considerably larger than in either of the other cities.

The summary next presented shows of the three cities the proportions of men and women employed at the maximum who were not on the rolls in the month of minimum employment, in manufacturing, stores, and two chief woman-employing manufacturing groups—clothing and food. In the case of stores, December is omitted, as it is too abnormal a peak month for fair comparison.

In spite of the omission of the December peak, stores ordinarily showed great differences between maximum and minimum employment of women, and St. Paul stores showed great differences for men. Larger proportions of women than men were off the books in the minimum month of employment in every year in each of the cities but St. Paul, where this was the case only in 1931. The smallest proportion out of work in stores usually was in Minneapolis, whether for women or men; the largest usually was in Duluth among the women, in St. Paul among the men.

⁹¹ See footnote, p. 123.

Sex and year	Percentages on the rolls at maximum employment who were not on the rolls at minimum employment											
	St. Paul				Minneapolis				Duluth			
	Manu- factur- ing	Cloth- ing	Food	Stores ¹	Manu- factur- ing	Cloth- ing	Food	Stores	Manu- factur- ing	Cloth- ing	Food	Stores ¹
Women:												
1928.....	21.1	19.8	32.6	23.3	10.9	8.1	18.4	21.0	22.9	28.1	46.1	27.5
1929.....	18.2	17.8	18.3	24.3	9.2	2.7	19.0	20.3	24.1	39.1	29.8	28.7
1930.....	8.4	18.4	18.0	22.4	9.3	8.4	19.4	35.5	14.1	26.8	17.7	27.7
1931.....	12.1	19.5	14.3	19.4	8.2	16.5	25.7	11.4	21.5	16.3	14.7	36.8
Men:												
1928.....	7.6	10.4	15.5	30.3	12.4	4.0	9.5	11.2	17.7	11.0	26.0	17.3
1929.....	12.6	22.0	15.7	25.8	16.2	3.8	9.7	18.8	8.6	5.7	15.1	16.7
1930.....	11.8	18.4	14.3	26.7	13.3	24.5	11.2	15.1	17.1	10.5	13.8	15.9
1931.....	8.5	23.1	10.5	14.1	15.8	5.8	7.1	13.9	15.9	8.5	9.3	27.1

¹ December omitted from comparison.

The manufacturing total in St. Paul and Duluth had greater differences from high to low employment for women than for men (except in 1930), and these cities had much greater differences for women than appear for Minneapolis, in which a larger proportion of men than of women were off the books in each year. The smallest proportion of women off the books at the minimum usually was in Minneapolis, of men usually in St. Paul; the largest proportion of either sex off the books usually was in Duluth.

The figures for clothing and for food differ strikingly, by sex and by city. In clothing, in Duluth a larger proportion of women than men were out of work in the minimum month in every year, but in Minneapolis and St. Paul—where many more clothing workers were employed than in Duluth—in 3 of the 4 years a larger proportion of men than of women were out of work in the month of minimum employment.

In the food industries in every city in every year a larger proportion of women than men were out of work in the month of minimum employment. This is all the more interesting since the food industries vary considerably in the three cities. For Minneapolis approximately 900 women were employed in the maximum month (in 1929), only the total for the food industries being given. In St. Paul about 500 women were in the food group at the maximum, two fifths of them being in meat packing. In Duluth the numbers of women are smaller and the characteristic food industries considered worth giving separately in the reports are flour and grain and "dairy and other food products." In each city considerably more men than women were employed in the food industries.

Table 16 following shows for the entire 4-year period 1928-31 the variation in employment in the manufacturing and sales groups just discussed for each year. The proportions employed at the maximum but not employed at the minimum in the 4 years ranged, for women, from 21.8 percent in Duluth to 25.8 percent in St. Paul and Minneapolis, and for men from 23.4 percent in St. Paul to 38.7 percent in Minneapolis. These proportions off the books were greater for men than for women both in the totals and in all manufacturing except in St. Paul and in stores except in Duluth. However, in the two

TABLE 16.—Percent variation in numbers employed between month of maximum and month of minimum employment in 4-year period, 1928-31¹

Industry	St. Paul				Minneapolis				Duluth			
	Number employed in month of maximum	Year in which maximum occurred	Number employed in month of minimum ²	Percent minimum employment was below maximum	Number employed in month of maximum	Year in which maximum occurred	Number employed in month of minimum ²	Percent minimum employment was below maximum	Number employed in month of maximum	Year in which maximum occurred	Number employed in month of minimum ²	Percent minimum employment was below maximum
WOMEN												
Total.....	6,966	1929	5,171	25.8	10,210	1928	7,573	25.8	2,840	1929	2,220	21.8
Manufacturing.....	1,601	1928	³ 1,228	23.3	4,625	1928	3,063	33.8	806	1929	⁴ 543	32.6
Clothing.....	590	1928	297	49.7	2,772	1928	1,747	37.0	317	1928	⁵ 181	42.9
Food.....	515	1928	⁶ 347	32.6	903	1929	577	36.1	237	1930	⁶ 128	48.1
Department stores and mail-order houses ⁷	2,084	1929	1,089	47.7	2,110	1930	1,343	36.4	587	1931	371	36.8
MEN												
Total.....	28,577	1928	21,889	23.4	84,585	1928	21,192	38.7	9,493	1928	6,616	30.3
Manufacturing.....	8,586	1929	7,028	18.1	8,667	1929	5,595	35.4	2,351	1928	2,062	38.5
Clothing.....	518	1928	267	48.5	771	1931	⁶ 444	42.4	174	1929	130	25.3
Food.....	8,978	1929	⁸ 3,221	19.0	2,952	1928	2,141	27.5	1,413	1928	970	31.4
Department stores and mail-order houses ⁷	1,259	1928	554	56.0	2,188	1928	1,107	49.4	156	1928, 1929	102	34.6
TOTAL, THREE CITIES												
					Number employed in month of maximum	Year in which maximum occurred	Number employed in month of minimum ²	Number and percent minimum employment was below maximum				
Women.....					19,689	1928	15,066	4,623	23.5			
Men.....					71,777	1928	49,697	22,080	30.8			

¹ Employment trends in St. Paul, Minneapolis, and Duluth, University of Minnesota, Employment Stabilization Research Institute.² In 1931 unless otherwise noted. ³ In 1929. ⁴ In 1928. ⁵ December excluded from comparison. ⁶ In 1930.

manufacturing groups most important as woman employers—the clothing and the food industries—the proportions off the books were greater for women than for men in all cases except for clothing in Minneapolis. This is quite striking in view of the variations between the different localities in the types of industries included in the groups, especially food.

The actual numbers employed in Ohio and the three Minnesota cities so nearly approximate the whole that the decline in these numbers from 1928 to 1931 can be examined. This is shown in the table following for groups of wage earners that can be found as nearly as possible comparable in Ohio and in the Minnesota cities:

TABLE 17.—*Variation in employment between month of highest and month of lowest employment in 4-year period, 1928–31, Ohio and three Minnesota cities*

Industry	Percent difference (from maximum to minimum) in actual numbers employed in—			
	St. Paul	Minneapolis	Duluth	Ohio ¹
WOMEN				
Total.....	25.8	25.8	21.8	27.0
Manufacturing.....	23.3	33.8	32.6	36.8
Clothing.....	49.7	37.0	42.9	—
Men's.....	—	—	—	27.8
Women's.....	—	—	—	32.6
Food.....	32.6	36.1	48.1	49.1
Department stores and mail-order houses ²	47.7	36.4	36.8	21.8
MEN				
Total.....	23.4	38.7	30.3	40.7
Manufacturing.....	18.1	35.4	39.5	43.6
Clothing.....	48.5	42.4	25.3	—
Men's.....	—	—	—	18.8
Women's.....	—	—	—	32.2
Food.....	19.0	27.5	31.4	27.7
Department stores and mail-order houses ²	56.0	49.4	34.6	24.8

¹ In manufacturing, wage earners; in stores and mail-order houses, salespersons not traveling (wholesale and retail).

² Month of highest employment excludes December, too abnormal a peak for comparison.

The difference between maximum and minimum in women's employment in 1928–31 was greater in stores (December peak omitted) than in manufacturing in each of the Minnesota cities, but the opposite was true in Ohio. The manufacturing groups that could be shown were those of the clothing and food industries. Differences in the clothing industries were the greater in St. Paul and Minneapolis, in the food industries in Duluth and in Ohio.

As regards distinction by sex, the differences between high and low were greatest for women in St. Paul, for men in the other Minnesota cities and in Ohio. In the separate manufacturing groups, except for clothing in Minneapolis, women's employment showed more fluctuation than did men's. In stores (December peak omitted) women's employment fluctuated more than men's in Duluth, differences being the greater for men in the other cases.

In addition to the industrial classification of the Minnesota data, an occupational classification is given which yields some information by sex. The following summary shows for the 4-year period 1928-31 the proportions of men and women off the books in the minimum month of employment in the various occupational groups in Minneapolis, and the same type of information from Ohio, the only other one of the States under consideration that reported by occupational groupings that could be made somewhat comparable with the Minnesota figures.

Occupational group	Employment at—			Persons out of work at minimum	
	Maximum		Minimum ¹	Number	Percent of number employed at maximum
	Number	Year			
MINNEAPOLIS					
Women:					
Semiskilled.....	2,380	1928	1,778	602	25.3
Sales ²	647	1929	339	308	47.6
Clerical.....	8,317	1928	* 2,183	1,134	34.2
Men:					
Semiskilled.....	2,664	1928	1,723	941	35.3
Sales ²	2,279	1928	1,748	531	23.3
Clerical.....	2,742	1928	2,087	655	23.9
OHIO					
Women:					
Bookkeepers, stenographers, and office clerks.....	86,511	1929	72,739	13,772	15.9
Salespersons not traveling, in trade ²	34,512	1929	* 27,003	7,509	21.8
Wage earners in manufacturing.....	123,780	1929	78,175	45,605	36.8
Men:					
Bookkeepers, stenographers, and office clerks.....	90,649	1930	73,973	16,676	18.4
Salespersons not traveling, in trade ²	36,251	1929	* 27,260	8,991	24.8
Wage earners in manufacturing.....	631,767	1929	356,434	275,333	43.6

¹ The low point was in 1931 in Minneapolis, and in Ohio except where specified.

² December omitted from comparison.

* 1928.

The foregoing shows that in the sales group more men than women were employed, both in Minneapolis and in Ohio. The proportions not on the rolls at the minimum were larger for women than for men in Minneapolis, but in Ohio the opposite was the case.

Among the clerical workers in Minneapolis, more women than men were employed, and both the number and the proportion not on the rolls in the month of minimum employment were greater among women than men. In Ohio, more men than women were in the group of bookkeepers, stenographers, and office clerks, and both a larger number and a larger proportion of men than of women were not on the rolls in the month of minimum employment. Of course, the content of the groups is likely to have differed considerably in the two localities.

Among the semiskilled workers in Minneapolis, the numbers of women and of men were similar, but larger numbers and proportions of men than of women were not on the rolls in the month of minimum employment. Among the wage earners in manufacturing in Ohio—

the workers who most nearly correspond to the Minneapolis semi-skilled—many more men than women were employed at the maximum, and many more of the former than of the latter were not employed at the minimum, but the proportion not on the rolls was only about 7 points greater for men than for women.

SUMMARY OF STUDIES OF EMPLOYMENT FLUCTUATIONS AFFECTING WOMEN

Few analyses have been made of data on the employment fluctuations of women applying to the period under consideration in this report. Three studies of the Women's Bureau and a presentation of recent Minnesota figures afford some data.

In the slaughtering and meat-packing industry in 1928 the proportions of the women who were at work at the maximum but not on the pay rolls in the minimum month of employment ranged from 27.9 percent to 45.5 percent in five cities surveyed. In radio manufacturing in 1929 such proportions ranged from 53.5 percent to 86.3 percent in the various branches of the industry.

In three plants in South Bend, taking September 1929 to represent employment at 100 and computing relatives at 3-month intervals to September 1930, the index for women had a range of 21 points in one plant, about 31 in another, and 69 in the third.

In three cities reported in Minnesota, for all occupations taken together, the proportions on the rolls in the month of maximum employment who were not on the rolls in the month of minimum employment varied in the 4 years from 5.3 percent to 10 percent for women, and from 8.3 percent to 11.7 percent for men. While these differences were greater for men than for women, the proportion of women off the books at the minimum was larger than that of men in every year in St. Paul, but (excepting 1928) the proportion was the higher for men in Minneapolis. Even though the December employment peak in stores be omitted from consideration, larger proportions of the women in stores than of those in manufacturing were off the books in the month of minimum employment in every city in every year, and the same was true of men in every year in St. Paul, and in 2 years each in Minneapolis and Duluth.

In the entire 4-year period in each city the difference between the maximum and minimum employment of women was greater in stores (December peak omitted) than in manufacturing. Women's employment showed greater fluctuation than men's in the food industries in each of the three cities, and in clothing except in Minneapolis.

Occupational figures for the sales group in stores and for a clerical group were given by sex for Minneapolis and for Ohio, in each case for 1928-31. Omitting December in the sales group, in Minneapolis the differences between maximum and minimum employment were greater for women than for men in the series of years taken, though the opposite is true for Ohio. In the clerical group taken there were larger differences for women than for men between maximum and minimum employment in Minneapolis, but in Ohio the differences were larger for men. Of course the content of the two groups is likely to have differed considerably in the two localities.

DATA FROM THREE STATES IN REGARD TO WOMAN-EMPLOYING INDUSTRIES NOT REPORTED BY SEX

Some consideration should be given here to the showing of employment indexes for the chief woman-employing industries in three important industrial States that have reported such figures, although these data are not as yet reported by sex. It is to be hoped that these indexes eventually will be made available separately for women and men. The States in question are Massachusetts, Pennsylvania, and Wisconsin.²² Table XII in appendix A shows certain of the basic material used from these States and census data indicating the relative importance as woman employers in the State of the industries discussed. Table 18 in the text gives the percent decline from November 1929 to November 1931 in the employment indexes for selected industries in each of the three States. November was chosen as a workable month, since it was the last month given in the Massachusetts special report, in which the data were so arranged as to be handled conveniently. The same month was taken for the other States to afford a practical basis of comparison. November ordinarily is a month fairly representative of autumn industrial activity, and in 1929 it came before the depression had had a severe effect upon employment.

Naturally the comparison based on a single month does not give the entire picture of employment fluctuation in the 4 years, but it is of value in indicating differences in the same month of different years, especially since other indexes have given evidence of the general employment decline over this period. Furthermore, it is a striking fact that the percent of decline from the index of November 1929 to that of November 1931 is similar in the three States—about 30 percent in each, somewhat less than the others in Pennsylvania.

The decline in every comparable industrial group had been greatest in Massachusetts—sometimes considerably greater than in the other States—except that in hosiery and knit wear and in the metal groups employment had declined more in Wisconsin than in either of the other States, and in confectionery employment had increased considerably in Massachusetts while it had declined in Pennsylvania. This was the single instance of increased employment in an industry in the three States.

Employment had declined over 10 percent in every industry in each of the three States, with the exception of the one increase noted above and of four Pennsylvania industries, the range of the declines being from 11 percent to 45.7 percent in Massachusetts, from 2.5 percent to 32 percent in Pennsylvania, and from 10.2 percent to 44.7 percent in Wisconsin. The smallest decline was in Pennsylvania in

²² Sources of data: Massachusetts Department of Labor and Industries. Monthly mimeographed reports on employment and a special report entitled "An Investigation of the Causes of Existing Unemployment, January 1931." Pennsylvania Department of Labor and Industry. Labor and Industry. Issued monthly. Wisconsin Industrial Commission. Wisconsin Labor Market. Issued monthly. Three other important industrial States—California, Michigan, and New Jersey—issued monthly reports on employment changes, but not by sex. These are in a form similar to that used by Illinois—percent employment changes from month to month rather than indexes such as those of Massachusetts, Pennsylvania, and Wisconsin—and since this form is so much more difficult to handle accurately it was not undertaken where figures were not available by sex. For a full analysis of the Pennsylvania figures, showing in detail the construction of the index used and comparing employment fluctuations with other economic and business indicators, see Dewhurst, J. Frederic, *Employment Fluctuations in Pennsylvania, 1921 to 1927*. In Michigan an employment index is prepared by the Bureau of Business Research of the State University. Maryland, Oklahoma, and Rhode Island report some employment data, not by sex, but these are not among the larger woman-employing States, all employing fewer women than Iowa, for which data regarding women have not been analyzed. See p. 49.

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every industry that could be compared with that in another State, except hosiery and knit wear and confectionery, in which declines were greater in Pennsylvania than in Massachusetts.

The industries in which the decline in employment was greatest in Massachusetts were men's clothing and boots and shoes; in Pennsylvania and Wisconsin the metal group, with one of the textile industries second in each case—woolen and worsted in Pennsylvania and hosiery and knit wear in Wisconsin. Cotton goods showed a relatively large employment decline in Massachusetts and Pennsylvania, as did foundries and machine shops and woollens and silk goods in Massachusetts, electrical machinery in Massachusetts and Pennsylvania, and shoe manufacture in Wisconsin.

The least employment decline in Massachusetts was in hosiery and knit wear (bearing in mind that in confectionery there was an increase), in Pennsylvania in cigars and tobacco,³ and in Wisconsin in printing and publishing. The industry last named also showed a small decline relative to the other industries in Massachusetts and Pennsylvania, as did paper and wood pulp in Massachusetts, shoes and confectionery in Pennsylvania, and clothing in Wisconsin.

TABLE 18.—Percent decline from November 1929 to November 1931 in indexes of employment in chief woman-employing industries in certain important industrial States not reporting employment data by sex

Massachusetts ¹		Pennsylvania ²		Wisconsin ³	
Industry	Percent decline November 1929 to November 1931	Industry	Percent decline November 1929 to November 1931	Industry	Percent decline November 1929 to November 1931
All industries.....	30.6	All manufacturing.....	24.8	All manufacturing.....	30.8
Textiles:		Textile products.....	14.8	Textiles ⁴	18.2
Cotton goods.....	43.7	Cotton goods.....	20.2		
Woolen and worsted goods.....	36.1	Woolen and worsted goods.....	30.8		
Silk goods.....	34.1	Silk goods.....	13.9		
Hosiery and knit goods.....	11.0	Hosiery.....	13.9	Hosiery and other knit goods.....	19.5
Clothing industries:		Knit goods, other.....	16.0		
Men's clothing.....	45.7				
Women's clothing.....	23.4	Shoes.....	5.4	Clothing ⁴	15.2
Boots and shoes.....	44.8	Paper and printing.....	5.8	Shoes.....	18.5
Printing and publishing.....	15.6			Printing and publishing.....	10.2
Paper and wood pulp.....	20.4	Confectionery.....	7.7	Paper products.....	16.6
Food, confectionery.....	24.7	Electrical apparatus, machinery, and supplies.....	29.8	Food industries.....	16.8
Rubber footwear.....	22.7	Metal products.....	32.0		
Electrical machinery, apparatus, and supplies.....	35.3				
Foundry and machine shops.....	36.7	Cigars and tobacco.....	2.5	Metal.....	44.7
		Chemical products.....	20.1		

¹ Massachusetts Department of Labor and Industries. Special report of an investigation as to the causes of existing unemployment. January 1931. Indexes based on average for 1925, 1926, and 1927.

² Pennsylvania Department of Labor and Industry. Labor and Industry. Monthly issues. Indexes based on average for 1923-25.

³ Wisconsin Industrial Commission. Wisconsin Labor Market. Monthly issues. Indexes based on average for 1925, 1926, 1927, except 1928 indexes which were based on January 1922.

⁴ Clothing included under textiles.

⁵ Increase.

⁶ Reported under metal products.

⁷ This is of especial interest in view of the fact that the declines in this industry had been so considerable in Ohio and New York. See statement in this connection pp. 87 and 109. Although according to these official Pennsylvania figures, employment in Pennsylvania had declined from November 1929 to March 1931, production in this industry had doubled from 1926 to 1930 in the Philadelphia area. (See Women's Bureau Bulletin 100, p. 15.)

COMPARISON OF EMPLOYMENT FLUCTUATIONS AFFECTING WOMEN IN VARIOUS INDUSTRIES IN FOUR STATES

Owing to the differences in relative importance of the various employment groups, in occupational classification, in type of reporting, and, consequently, in the statistical basis of the material used, it is not possible to make exact and complete comparisons of the situation in the four States whose reports on woman employment have been analyzed. However, a few of the more striking facts with relation to how certain industries compare with others in the extent of fluctuation in woman employment may be commented upon.

Census data for 1930 show that in the three States of Illinois, New York, and Ohio from about 17 percent to about 21 percent of the employed women were in manufacturing industries, in Minnesota about 10 percent. (See table 19.) In the four States from one fourth to three tenths of the women were in domestic and personal service, roughly one tenth were in trade, and from one fifth to over one fourth were in clerical pursuits.

Reports in the four States all include women in manufacturing. Those of New York cover no others, but the remaining three States all report for trade. In addition to this, women in certain service employments are reported in Illinois and Ohio—much more inclusive in Ohio—in clerical pursuits in Ohio and for the city of Minneapolis, and in the telegraph and telephone industry in Ohio and in the telephone industry in Illinois and Minneapolis. Table 19 shows the proportions the industry groups reported formed of all employed women as reported by the census of 1930.

TABLE 19.—Occupational distribution of women in four States¹

Industry	Percent of all women reported in—											
	Illinois			Ohio			New York			Minnesota		
All occupations.....	100.0			100.0			100.0			100.0		
Manufacturing and mechanical industries.....	17.5	100.0		18.9	100.0		21.1	100.0		10.2	100.0	
Clothing industries.....		20.0			15.6			35.5			20.0	
Metal and machinery ²		16.9	100.0		17.2	100.0		4.6	100.0		2.9	100.0
Iron and steel, machinery and vehicle industries.....			25.6			51.6			49.0			63.3
Metal industries (except iron and steel).....			27.1			17.0			17.5			24.3
Electrical machinery and supply factories.....			47.3			31.4			33.5			12.4
Food and allied industries.....		9.8			4.0			3.4			12.8	
Paper, printing, and allied industries.....		6.0			6.2			4.0			6.3	
Shoe factories.....		5.6			4.7			3.8			2.1	
Trade.....	10.6		100.0	11.3		100.0	8.3		100.0	10.6		100.0
Saleswomen.....			55.2			61.8			56.3			59.0
Domestic and personal service.....	26.9		100.0	29.3		100.0	26.6		100.0	30.8		100.0
Hotels and restaurants ³			20.1			17.1			13.5			21.0
Laundering, cleaning, and dyeing ⁴			7.3			5.4			5.8			5.2
Telephone operators.....	3.1			2.7			3.2			2.7		
Clerical occupations.....	26.6			21.4			26.3			20.4		

¹ U. S. Bureau of the Census. Fifteenth Census, 1930. Occupational Statistics.

² Not possible to get as a census group. Figures used are totals of the 3 groups shown.

³ Housekeepers and stewards, cooks, waiters, other servants.

⁴ Laborers and other operatives in cleaning, dyeing, and pressing shops, and laborers and other operatives in laundries.

TABLE 20.—Industries showing greatest and least fluctuations in employment in each of 4 years in three States

State and year	Points of difference between high and low index of employment within the year for—							
	Women				Men			
	Greatest		Least		Greatest		Least	
	Industry or occupation	Points of difference	Industry or occupation	Points of difference	Industry or occupation	Points of difference	Industry or occupation	Points of difference
Illinois: ¹								
1928.....	Confectionery.....	52	Telephone.....	9	Watches and jewelry.....	37	Telephone.....	3
1929.....	do.....	49	Watches and jewelry.....	8	Confectionery.....	27	Watches and jewelry; hotels and restaurants.....	3
1930.....	Women's clothing.....	69	Telephone.....	8	Department stores.....	47	Telephone.....	6
1931.....	do.....	57	Men's clothing; telephone..	10	Confectionery.....	35	Paper boxes, bags, and tubes.....	3
New York: ¹								
1928.....	Machinery and electrical apparatus.....	44	Printing and bookmaking; paper boxes and tubes.....	8	Women's clothing.....	36	Bakeries; woollens, carpets, and felts.....	5
1929.....	Women's clothing.....	47	Printing and paper goods.....	4	do.....	47	Printing and paper goods.....	4
1930.....	do.....	49	Laundrying and cleaning.....	6	do.....	44	Bakery products.....	6
1931.....	Candy.....	62	Men's furnishings; laundry- ing and cleaning; bakery products.....	7	Shoes.....	43	do.....	4
Ohio: ²								
1928.....	Radios and parts.....	114	Bookkeepers, stenogra- phers, and office clerks.....	6	Radios and parts.....	131	Textiles.....	4
1929.....	do.....	164	do.....	6	do.....	168	Men's clothing.....	5
1930.....	Radios and parts; food and food products.....	62	Cigars and cigarettes.....	4	do.....	84	Bookkeepers, stenogra- phers, and office clerks; printing and publishing; wage earners in stores.....	4
1931.....	Food and kindred prod- ucts.....	67	Bookkeepers, stenogra- phers, and office clerks; all wage earners.....	7	do.....	55	Wage earners in stores.....	3

¹ Index numbers based on June 1928.² Excludes canning and preserving, because of extreme fluctuations, and because these fluctuations were much greater than was the case in this industry in any other State. The industry second in fluctuation in New York is presented here. Indexes based on June 1923.³ Index numbers based on average for 1928.

Table 20 shows the industries in which variation of employment was greatest and was least within each year in Illinois, New York, and Ohio. The greatest differences between the high and low employment for women in any 1 year were in candy, confectionery, or women's clothing in New York and Illinois, except that in New York in 1928 the greatest was in machinery and electrical apparatus; in Ohio they were in the radio industry in 3 years and in the food group in 1931, and the variation was the same for the food group as for radios and parts in 1930.

Table 21 shows for both men and women the points of difference in the employment indexes in various industries over the 4-year period 1928-31 in New York, Ohio, and Illinois.

TABLE 21.—*Difference between month of highest employment and month of lowest employment in 4-year period 1928-31 for Illinois, New York, and Ohio in selected industries included in study*

Industry	Points of difference in index of employment		
	Illinois ¹	New York ^{2,3}	Ohio ^{4,5}
WOMEN			
All manufacturing.....	45	33	42
Clothing and millinery.....	41	30	(⁶)
Men's clothing.....	42	30	32
Women's clothing.....	90	53	35
Metal and machinery.....		56	
Iron and steel and their products.....			56
Electrical machinery and supplies ⁷	94	97	76
Food and kindred products.....			78
Printing and paper goods.....		32	22
Printing and bookmaking ⁸	76	37	57
Paper boxes, bags, and tubes ⁹	49	31	
Boots and shoes ¹⁰	65	68	34
Trade—Department stores ¹¹	60		58
Service.....			22
Laundering, cleaning, and dyeing ¹²	31		
Telephone ¹³	23		36
MEN			
All manufacturing.....	43	32	49
Clothing and millinery.....	28	31	
Men's clothing.....	31	37	21
Women's clothing.....	47	52	34
Metal and machinery.....		44	
Iron and steel and their products.....			62
Electrical machinery and supplies ⁷	72	48	56
Food and kindred products.....			35
Printing and paper goods.....		18	16
Printing and bookmaking ⁸	42	19	13
Paper boxes, bags, and tubes ⁹	32	21	
Boots and shoes ¹⁰	57	56	37
Trade—Department stores ¹¹	47		35
Service.....			24
Laundering, cleaning, and dyeing ¹²	34	23	
Telephone ¹³	22		33

¹ Index numbers based on June 1928.

² Index numbers based on June 1923.

³ Shop workers only.

⁴ Index numbers based on average for 1928.

⁵ Wage earners, except the store group, who were sales persons.

⁶ Clothing included in textiles.

⁷ Electrical apparatus in Illinois.

⁸ Job printing in Illinois; printing and publishing in Ohio.

⁹ Paper boxes and tubes in New York.

¹⁰ Boots, shoes, and findings in Ohio, shoes in New York.

¹¹ Salespersons in stores, wholesale and retail.

¹² Not reported before July 1928.

¹³ Telephone and telegraph and messenger service in Ohio.

If the manufacturing total and the chief woman-employing groups outside manufacturing be considered over the 4-year period, the greatest difference between high and low point in employment for both sexes is found among salespeople in stores, both in Illinois and in Ohio. In Illinois the least fluctuation was among telephone employees, in Ohio in the service group.

Among the various manufacturing industries the greatest employment fluctuation for women in the 4-year period was in electrical machinery, apparatus, and supplies, both in Illinois and New York; this industry came second in Ohio, with variation somewhat greater in the food group. In Illinois women's clothing came second, then job printing; in New York boots and shoes came second, then the metal and machinery group, followed closely by women's clothing.

In Illinois and New York the employment of women varied least in the clothing and millinery group, or in one of the clothing industries; it varied considerably less in men's than in women's clothing. In Ohio the least variation was in the printing and paper group, with men's clothing second.

Reports for Ohio and the Minnesota cities so nearly approximate total employment that the actual variation from 1928 to 1931 in the numbers reported is of some significance. This may be seen for the main industry groups in table 17, page 128. Total declines for women in the 4 years ranged from 21.8 to 27 percent. In two cases they were greatest in the clothing industries, in the other two in the food industries. Some data by occupations are afforded by the Ohio and Minneapolis studies. (See p. 129.) In each case smaller proportions for the clerical than for the sales group of those employed at date of maximum employment were not on the rolls in 1931. In both these groups smaller proportions employed in Ohio than in Minneapolis were not on the rolls in 1931 (except for men in sales).

Variations in woman employment in the period under discussion were very considerable in almost every industry and group for which rough comparisons could be made among the four States. However, the data presented in the foregoing, whether given on the basis of points of variation in the employment index or of percentage difference between maximum and minimum numbers employed, showed a marked similarity in the position taken by certain industries or groups in their relation to other industries or groups, and in the extent of these variations, regardless of the State or city under consideration. This illustrates the fact that great fluctuations in woman employment are more common in some industries than in others, and that some either have regularized employment more effectively than have others or have had less serious problems of regularization due to the character of the industry.

The differences between high and low in the 4-year period were greater for women than for men—often considerably greater—in 18 of the 26 Ohio groups, in all but 1 of those in Illinois, in 12 of 23 in New York, in the Minnesota cities in the totals and in all manufacturing except in St. Paul, and in stores except in Duluth.

Part V.—DATA PUBLISHED BY STATES ON ACTIVITIES OF PUBLIC EMPLOYMENT AGENCIES AS THEY APPLY TO WOMEN, 1928-31

Public employment agencies well may be thought of as a source of information upon what has happened to women as employees in a period of economic readjustment. In certain countries in which the administration of some system of social insurance is closely connected with the public authority for job placement much can be learned along this line from the records resulting.

But in the American States no such systems have existed in correlation with the methods of occupational placement, and an examination of the reports issued by the various States concerning the activities of their public employment offices shows the great diversity found when the practices of 48 Commonwealths are traced with regard to any single subject. In this country so few public employment offices have existed in relation to the need of placing workers, and consequently the use of these has been so limited as to afford only a minor source of employment information for any group of workers or employers. However, it has been demonstrated that the relation of demand for workers to applicants for jobs is of considerable value in showing the trend of the labor market.¹

VARIATIONS AMONG THE STATES IN PUBLIC EMPLOYMENT AGENCIES

The variations among the States in existence of such agencies, in method of their establishment, in type or extent of State supervision or control, in fundamental organization, and in method of administration, are manifold. At the beginning of 1931, 17 States had no laws establishing State employment offices, and 8 States that had such laws had not put offices into operation.² Of those that are in existence, some are administered by a superintendent or director, some are assigned to bureaus having other duties, some are assigned to a member of the State industrial commission, some have no central direction (though receiving State money), some are supervised directly by the office of the commissioner of labor.³

More than this, the records kept, if any, and the manner of reporting these, vary widely even with well-established offices. As stated by Dr. Bryce M. Stewart of the Industrial Relations Counselors, Inc., at the conference of governors of seven eastern States on unemployment and other interstate industrial problems held at Albany in January 1931—

As far as the public employment offices are concerned there are nearly as many statistical procedures as there are offices and State services.⁴

¹ By William A. Berridge with the assistance of Woodlief Thomas. For description of methods used, see Federal Reserve Bulletin, February 1924. p. 83ff. Dr. Berridge's index combined the data for several States, correcting for seasonal variation, industrial importance of the State, and other variables. See also footnote 27 on p. 149.

² The American Labor Legislation Review. March 1931, p. 94.

³ United States Bureau of Labor Statistics. Monthly Labor Review, January 1931, pp. 20-21.

⁴ Proceedings of Conference on Unemployment and Other Interstate Industrial Problems, Albany, N.Y., January 1931, p. 29.

The varied types of differences found from office to office and State to State have been summarized well in an article in the Federal Reserve Bulletin of February 1924, describing the methods used by William A. Berridge and Woodlief Thomas in preparing from such data, taken from several States, an index of the labor market. The statement is as follows:

The statistical data available vary widely from State to State in many respects. Most of the statistics are collected weekly, and monthly figures usually represent the sum of 4 or 5 weeks. This practice makes possible comparison between different items for the same month, but makes difficult comparison with other months or with data from other States using different periods. In some offices records are kept more accurately or more completely than in others, and recourse to the bureaus by both employers and employees is more common in some localities, hence the statistics provided by the different offices vary as to comprehensiveness. Furthermore, such a variety of definitions of terminology exists that the various items are frequently not at all comparable as between different States. For example, in certain States an applicant for a position is listed every time he inquires at the office, although he may inquire every day in the week before he is given a position, whereas in other States he is registered only once during the period. There are similar diversities in the recording of employers' applications for workers. Moreover, definitions have from time to time been changed in some States, thereby interrupting the continuity of the series. Variation is found also in geographical and occupational representation. Certain States have offices only in the largest cities or industrial communities, whereas in others they are more widely distributed. Generally many lines of work are covered by the operations of the offices—manufacturing, clerical, building, domestic, agricultural, and others; but it is nevertheless true that in many offices the greater part of the applications are confined to a limited number of job classifications. This may be due to the local importance of certain industries in some instances but not in all. Not infrequently an office has been established with the view of catering almost exclusively to one class of work, such as domestic or professional or commercial service.

In 1929 the International Association of Public Employment Services requested the Committee on Governmental Labor Statistics of the American Statistical Association to undertake a study of the statistics of public employment offices in order that a better and more uniform system of reporting such data from the various States might be developed. This involved examination of the methods established in certain important European countries with long experience along these lines, as well as in Canada and the States of the United States operating employment services. The plan suggested for the United States by the report^a was based on a daily record of transactions in each office and central compilation of statistics from this record in State or Federal bureaus of labor statistics. It also suggested that the actual numbers of openings and applicants available on a given date should be given in addition to statistics on the volume of transactions over a given period, as is now the practice.

GROWTH OF PUBLIC EMPLOYMENT AGENCIES IN THE UNITED STATES

In the United States public employment agencies generally have developed from a beginning in local offices, chiefly municipal, though in some instances initiative appears to have been taken first by the State. Their history goes back over 60 years, and that of State initiative in their connection over 40 years. The first free employment agency seems to have been established in San Francisco in 1868, fol-

^a Stewart, Annabel M. and Bryce M. *Statistical Procedure of Public Employment Offices*. Russell Sage Foundation. 1933. ch. XVI, p. 367ff.

lowed by one in New York City in 1869.⁶ An Ohio act of 1890 drafted and sponsored by the Municipal Labor Congress of Cincinnati constitutes the first service under State authority, though it provided that the salaries of the superintendents and clerks employed should be paid by the city in which offices were established.⁷ Early agencies under municipal control were those established during depression years in Los Angeles in 1893, and in Seattle, Wash., in 1894; these were followed by offices in Detroit in 1895 and Superior, Wis., in 1899.^{8 9}

The lead taken for the States by Ohio was followed by Iowa in 1892 on the "mail-order" basis, and by New York in 1896, in an act repealed 10 years later.^{8 9} Offices were established in Kansas and West Virginia in 1901.⁸ Acts giving the commissioner of labor authority to provide for public employment offices were passed by Illinois, Missouri, and Nebraska before 1900, and by Connecticut, Wisconsin, Michigan, Minnesota, Colorado, Oklahoma, Rhode Island, and Indiana before 1910.⁹ New York, whose earlier legislation had been repealed, passed such an act in 1914.⁹ In 1904, a western association of free employment bureaus was formed by the commissioners of labor of Iowa, Kansas, Minnesota, Missouri, Nebraska, Oklahoma, and South Dakota, to secure better distribution of farm labor during harvest.⁸ Massachusetts established its first agency in 1906 in Boston, and it has differed from most other States in not soliciting local financial support in the maintenance of its offices.¹⁰ By 1900, 6 States had 13 offices; by 1910, 19 States had 61 offices; by 1916 there were 96 public employment offices in this country; and by 1928, 35 States and the District of Columbia had 170 offices.^{8 8}

PUBLIC-EMPLOYMENT DATA CONSIDERED IN THIS REPORT

For the purposes of the present study, some showing may be made as to States that have reported data by sex from their public-employment services in the 4 years 1928-31 and the type of such information reported; and some analysis may be made of the direction of the stream of applications and of available jobs in the years covered, always remembering, however, a fact that will be more fully discussed later—that, on account of repetitions in applications and placements, their numbers ordinarily do not represent occurrences in respect to individuals. No consideration of the administrative set-up and type of placement organization in the various States can be undertaken here, nor can account be given of the many local factors that have affected reporting from time to time.¹¹ The material dealt with is

⁶ Proceedings of the Conference on Unemployment and Other Interstate Industrial Problems, Albany, N.Y., January 1931. Address of Bryce M. Stewart, p. 23.

⁷ Ibid., and Monthly Labor Review, January 1931, p. 11.

⁸ Stewart, Annabel M. and Bryce M. Statistical Procedure of Public Employment Offices, Russell Sage Foundation, 1933, pp. 215-216.

⁹ Preliminary Report of Joint Legislative Committee on Unemployment, New York State. Feb. 15, 1932, p. 136.

¹⁰ Massachusetts. Preliminary Report of the Special Commission on the Stabilization of Employment, December 1931, pp. 19 and 20.

¹¹ Examples representative of the manifold local details that may affect employment-office figures at some time are given in the following. In Illinois there was a noticeable increase in applications in October 1930. It was stated that this was in part affected by a local unemployment census at which time persons registered were referred to the free employment office in Chicago. Their applications continued through December and to some extent may have done so in January. Available jobs also may have been increased at this time, since employers were urged to cooperate. Another instance may be cited from Pennsylvania, where greatly increased applications in 1932—a year later than the coverage of the present report—were attributed to a considerable extent to a greater publicity urging those out of jobs to use the office in Philadelphia.

only such as is available from official State publications, usually those printed or mimeographed, and in a very few cases the State furnished additional unpublished data from its files. It does not include separate data from the few new offices now devoting attention to the preparation of more accurate statistics, except where these are incorporated into State reports, or where special mention is made of such inclusion.

STATE REPORTS CLASSIFYING DATA BY SEX IN THE PERIOD 1928 TO 1931

The period for which State reports have been examined includes the 4 years 1928 to 1931. States are listed in appendix C (p. 221) according to type and contents of reports. In all, 23 States had published some information on the activities of their State public employment agencies within this time.¹² In one of these (New Hampshire) none of the data reported were by sex, and in another (Oklahoma) they were not by sex before 1931; a third (Missouri) had issued no report since 1928.

In most cases the data comprised registrations or applications for jobs, help wanted, persons referred, and those placed. One of the States (California) gave no report on applications or registrations. (See appendix table XIII.)

Seven of the remaining 19 States (New York, Pennsylvania, Illinois, Ohio, Massachusetts, Michigan, and New Jersey) are among the 9 largest woman employers in the United States, based on number of gainfully employed women as reported in the census of 1930; 4 others (North Carolina, Indiana, Wisconsin, and Minnesota) employ considerable numbers of women. The other 8 are not among the largest woman employers, and consequently their reports cover only relatively small numbers of women,¹³ although three of them (Virginia, Connecticut, and Iowa) are within the first half of the States when ranked as to woman employment, and another (Rhode Island) though a small State has well over two fifths of its employed women in manufacturing.

Seven of the 11 States cited in the foregoing paragraph as among the more important woman employers—that is, all but Indiana, Michigan, Massachusetts, and North Carolina—have reported applications, help wanted, and placements monthly by sex and occupation through the 4-year period covered by this report.¹⁴

Considering the foregoing primarily from the view of the importance of the States in woman employment, the types of data they furnish are as follows:

Among the first half of the States ranked according to the United States census, 8 have issued no reports within the period of study, 1 has not included applications in its reports, and 1 reported for 1928 only. For 10 of the remaining 14 ranking in the first half of the States, reports giving monthly figures are available, and for the other 4 States annual or biennial figures are given, though 1 gives monthly figures in its annual report. These 14 and the 1 additional State, which though small has a large proportion of its employed women

¹² That is, reports of the State; this takes no account of the additional States that reported some activities of offices to the United States Employment Service, of reports of private agencies, separate city reports, nor of Colorado State reports based on the activities of private agencies alone.

¹³ Arkansas, Connecticut, Iowa, Kansas, Nevada, Rhode Island, Virginia, and West Virginia.

¹⁴ Monthly and occupational data for Massachusetts, though recorded in the State office by month and occupation for each sex, are published by sex only for the year's totals and not by occupation.

in manufacturing occupations (Rhode Island), will be considered as follows (in order of importance as woman employers): New York, Pennsylvania, Illinois, Ohio, Massachusetts, New Jersey, Michigan, North Carolina, Indiana, Wisconsin, Minnesota, Virginia, Connecticut, Iowa, and Rhode Island. The types of data reported by sex in these States are shown in the summary following.

Data reported by sex in latest reports of 15 States, 1928-31¹

State	Rank of State in census as woman employer	Applications or registrations			Places open or help wanted, etc.			Placements		
		Year only	Month	Industry or occupation	Year only	Month	Industry or occupation	Year only	Month	Industry or occupation
New York.....	1	-----	X	X	-----	X	X	-----	X	X
Pennsylvania....	2	-----	X	X	-----	X	X	-----	X	X
Illinois.....	3	-----	X	X	-----	X	X	-----	X	X
Ohio.....	5	-----	X	X	-----	X	X	-----	X	X
Massachusetts....	6	X	-----	-----	X	-----	-----	X	-----	-----
New Jersey.....	8	-----	X	X	-----	X	X	-----	X	X
Michigan.....	9	-----	X	-----	-----	X	-----	-----	X	-----
North Carolina...	12	X	-----	X	-----	-----	-----	X	-----	-----
Indiana.....	14	X	-----	X	X	-----	X	X	-----	X
Wisconsin.....	16	-----	X	X	-----	X	X	-----	X	X
Minnesota.....	18	-----	X	X	-----	-----	X	-----	X	X
Virginia.....	21	-----	X	-----	-----	X	-----	X	-----	-----
Connecticut.....	22	-----	X	-----	-----	X	-----	X	-----	-----
Iowa.....	23	-----	-----	X	-----	-----	X	-----	-----	X
Rhode Island...	32	-----	X	X	-----	X	X	-----	X	X

¹ Others in the first half of the States ranked according to woman employment are accounted for as follows (figure after State indicates rank of State in woman employment): No report of applications, California (4); report only for 1928, Missouri (11); no reports, Texas (7), Georgia (10), Alabama (13), Mississippi (15), South Carolina (17), Tennessee (19), Louisiana (20), Maryland (24).

² Monthly figures given in annual report.

TERMINOLOGY USED IN STATE REPORTS AND CHARACTER OF THEIR STATISTICS

From an examination of the State reports of the activities of public employment offices the diversity in their terminology is immediately apparent.¹⁵ Table 22 gives the terms used in designating the types of information ordinarily made public by the 22 States that have issued some reports by sex.

In attempting an interpretation of the figures from the States, it must be remembered that what they actually show is the volume of office activity within a given period, with some general indication of the direction of the movements of labor supply and demand. They do not show the exact number of separate individuals that have sought employment through the agency nor the exact number of separate jobs open. In some places the custom is to count an individual every time he or she comes into the office. It is important to note that even where several States or offices use exactly the same terminology the meaning may be entirely different. For example, the term "registrations" as used in some cases may be similar to "applications," used elsewhere—either word may mean persons newly applying according to the form required, or it may comprise both new registrants and renewals, or it may refer to all persons who

¹⁵ For some analysis of the content of these statistics, see Stewart and Stewart, op. cit. p. 222ff. and pp. 248-264.

TABLE 22.—*Terminology*¹ of reports of State public employment offices ²

State	Applications	Help wanted	Referred	Placed	Ratios (usually not by sex)
Arkansas.....	Registrations.....	Help wanted.....	Referred.....	Reported placed.....	Situations secured to applications for employment. Employees furnished to applicants for help. Both by sex for each month. Ratio of persons registered to every 100 positions open.
California.....	Applications for employ- ment.....	Applications for help.....	.....	Placements.....	
Connecticut.....	.....	.....	.....	Situations secured.....	
Illinois.....	Registrations.....	Help wanted.....	Referred.....	Placed.....	
Indiana.....	do.....	Calls.....	do.....	do.....	
Iowa.....	Registration for jobs.....	Jobs offered.....	Number referred.....	Number placed.....	Percent placements of total applications. Percent placements of total referred.
Kansas.....	Registered.....	Help wanted.....	Referred.....	Placed.....	
Massachusetts.....	Registrations.....	Persons called for by employers.....	Persons referred to positions.....	Positions reported filled (include dup- lications).....	
Michigan.....	Applications.....	Help wanted.....	Referred.....	Placements.....	
Minnesota.....	Registrations.....	do.....	do.....	Verified placements.....	
Missouri.....	Number of applications for employment.....	Positions offered by employers.....		Number of applicants put to work.....	Number of placements per each 100 registrations. Number of workers registered for each 100 places open.
Nevada.....	Number of persons applying for work.....	Number of persons requested by em- ployers.....	.....	Number of places filled. Number of places un- filled.....	
New Jersey.....	Registrations.....	Help wanted.....	Referred.....	Reported placed.....	
New York.....	do.....	do.....	do.....	Placed.....	
North Carolina.....	do.....	do.....	do.....	Reported placed.....	
Ohio.....	Total number of applicants (new registrations separate after June 1930).....	do.....	do.....	do.....	Percent of applicants placed. Percent of openings filled.
Oklahoma.....	Registered.....	do.....	do.....	Placed.....	
Pennsylvania.....	Persons applying.....	Persons asked for.....	Persons sent to positions.....	Persons receiving po- sitions.....	
Rhode Island.....	Registrations or new regis- trations (used interchange- ably).....	Help wanted.....	Referred.....	Placed.....	Percent of persons referred placed.
Virginia.....	Attendance.....				Number registered per 100 places open (by month).
West Virginia.....	Registrations.....	do.....	Persons referred.....	Positions filled.....	
Wisconsin.....	do.....	do.....	Referred.....	Placed.....	
.....	Persons applying (called new registrations in 1930 and 1931 in annual reports).....	do.....	Persons referred to positions.....	Persons placed in po- sitions.....	

¹ Terminology used in 1931 or nearest available annual or monthly report.² The States listed here are those that have issued some reports by sex in the period 1928 to 1931. See footnote 12, p. 140.

called at the office within a given period, regardless of number of times some individuals may have appeared. In regard to these great variations in terminology, a further example is afforded by the following quotation from a comprehensive study of public employment offices made several years ago by the Russell Sage Foundation:

What is a renewal? The question has confused and embroiled employment workers for years. When a man applies for work several times before getting it, how shall we record his applications and show them in our statistics? The practice of those offices which still refuse to record by registration or otherwise the requests of applicants whom they cannot place on the spot cannot be considered a basis for general statistics in any case.

There have been some two dozen methods, many of which vary only in details and in definitions of terms. It would not profit us to go into all of them.

According to one method a single registration is valid for 1 week (or 2 weeks, or a month, or other definite period), and further appearances at office on the part of the applicant are not recorded within the period unless he shall have been placed. After the period elapses or after he has been placed, the first subsequent application is recorded as a new registration.

According to another method a registration is the filling out of a card; all subsequent applications for work (only one application being noted for the same day) are "renewals" of that registration; unless the registration has been allowed to lapse for 2 (or 1, or 3, or 10) calendar years without renewal, in which case a new card is necessary, and then it is recorded as an entirely new application or registration.

The elements of these typical methods have been combined in almost every conceivable way * * *¹⁶

A more recent statement testifying to the fact that duplications in applications cannot be eliminated is contained in correspondence received by the Women's Bureau in connection with the present report, from a research official of one of the newer offices that is attempting to organize its reporting in a more definite manner:

It is almost impossible to estimate the margin of error in the applicants' figures. The recently accepted practice is to differentiate new applicants from reapplicants and renewals or re-registrants. In the year 1932, for example, this office had over three times as many reapplications as new applications. But, unless there is a master file between local offices and departments, there is apt to be much duplication even among new applications. It is my impression that only a few employment offices in the country have an accurate count of individuals seeking jobs for the first time. Certain junior employment offices and the Rochester Employment Center have practically eliminated the duplication of registrants for any reason.

The study of employment offices made by Annabel M. and Bryce M. Stewart makes some analysis of the content of statistics issued by different States on applications for employment.¹⁷

Even where a definite period is counted as one registration, and additional visits to the office within that time are considered as renewals, the same individual still may be counted more than once, since he or she may be placed temporarily and, at the termination of the work, apply to the office for another job and be counted again. Similar duplications are likely to occur in recording the positions open within a given period, as well as the placements, especially where turnover is high.

Methods of following the candidate to insure that the referral resulted in placement vary in different offices, some having no very

¹⁶ Public Employment Offices, by Shelby M. Harrison and associates. New York, 1924. Part Three. Methods of Organizing and Performing the Placement and Administrative Functions of a Local Office, ch. XXVI. Employment Office Reports and Employment Statistics, by Leslie E. Woodcock, pp. 484-485, 486-487.

¹⁷ Stewart, Annabel M. and Bryce M. Statistical Procedure of Public Employment Offices, Russell Sage Foundation, 1933, p. 222ff. and pp. 248-264.

adequate system of assuring that the worker actually was engaged. Though placement actually is made in a job described as for a considerable duration of time, the worker may remain only a day or a week, leaving of his own accord, and may reappear seeking another job, or the employer may dispense with his services and request a more satisfactory person. A subsequent filling of that job counts as another placement, and the demand therefor as an additional number in the help-wanted column.

Some States report the ratio of applications to jobs open or of placements to applications. Though in these States such data scarcely can be used for determining with exactitude situations as to individuals or as to particular occupations, they do give some indication of the movement of the labor market.¹⁸ Certain of the officials of agencies in these States are quick to call attention to this fact and to warn against an overstraining of the interpretation of the figures.

It cannot be emphasized too frequently that while the available data may show more or less accurately *the flow of work through the office*, and can form some basis for indication of the direction taken in supply and demand in the labor market, yet they *tell nothing definite so far as concerns positions open or individual applicants* and (except in a few States that report new registrations during a given period) they are indefinite as to placements since placements in temporary employment (one or more days) and in employment of considerable duration are not separated.¹⁹ Of course, this fact is especially disappointing to persons expecting that employment-agency data may afford exact information as to individual occupational problems, or may indicate in some degree the extent of unemployment in a given period, or the types of occupations that are particularly overcrowded and of those that are more likely to afford places. The fact is—as indicated on page 146 that occupations are very unevenly represented at the agencies, this representation often varying even from office to office within any State.

In the future there is likelihood that much more accurate basic data will be available. A few public employment offices with private financial assistance are endeavoring to improve method of procedure and reporting.²⁰ The three outstanding instances of this type of work are the Public Employment Center of Rochester, N. Y.; the Minnesota Employment Stabilization Research Institute, with headquarters at the State University and the three cities of Minneapolis, St. Paul, and Duluth cooperating; and the State Employment Commission located in Philadelphia. The valuable research carried on in connection with the placement in these centers bids fair to be the forerunner of widespread improvements in connecting worker and job and of the development of types of reporting that will afford more accurate information on employment movements. None of them was in existence early enough to provide records prior to the years of depression. The material used in this report, though it overlaps the creation of some of these new offices, does not cover their data unless included in the State reports used, and is in no degree representative of their improvements in reporting.

¹⁸ See footnote 27 on p. 149.

¹⁹ The study of methods of reporting made under the auspices of the Committee on Governmental Labor Statistics and referred to on p. 138, gives detailed information showing the methods used and the consequent meaning of the data published in the American States, in several European countries, and in Canada.

²⁰ For a popular discussion of the three new-type offices see the Survey Graphic for February 1933.

PREPONDERANCE OF DEMAND MADE AT AGENCIES FOR CERTAIN TYPES OF WORK

The numbers of help wanted usually were especially concentrated in certain occupations. Table 23 shows for several of the more important woman-employing States the proportions of those called for at the agencies that were in demand for various selected types of work.

TABLE 23.—Percent women in specified occupations formed of all persons reported gainfully employed in the census, of all help wanted at agencies, and of all women wanted at agencies—selected States, 1930

Occupation group and State	Percent the occupation specified formed of—			
	All help wanted at agencies ¹	Woman help wanted at agencies ¹	All persons 10 years of age or more gainfully occupied in the State ²	All women 10 years of age or more gainfully occupied in the State ²
Domestic and personal service: ³				
New York.....	⁴ 19.7	⁴ 33.0	12.5	26.6
Pennsylvania.....	(⁹)	(⁹)	8.9	27.2
Illinois.....	24.2	47.8	10.3	26.9
Ohio.....	18.4	34.7	9.3	29.3
Wisconsin.....	⁶ 31.3	⁶ 84.5	7.7	27.0
Minnesota.....	⁷ 15.6	35.5	9.3	30.8
Manufacturing:				
New York.....	9.6	9.0	33.8	21.1
Pennsylvania.....	⁸ 20.9	⁸ 4.2	38.1	26.5
Illinois.....	⁸ 18.1	⁸ 40.4		
Ohio.....	¹⁰ 23.6	¹⁰ 4.2	32.5	17.5
Wisconsin.....	7.0	3.6	37.9	18.9
Minnesota.....	12.3	4.4	32.3	19.1
	4.6	3.8	20.8	10.2
	¹¹ 31.4	¹¹ 11.2		
Clerical:				
New York.....	3.3	5.7	13.6	26.3
Pennsylvania.....	¹² 6.3	¹² 7.2	8.9	19.2
Illinois.....	4.1	6.4	11.9	26.6
Ohio.....	3.8	4.6	8.9	21.4
Wisconsin.....	¹³ 2.6	¹³ 3.8	7.1	19.2
Minnesota.....	3.6	6.0	8.1	20.4
Casual: ¹⁴				
New York.....	42.2	46.9		
Pennsylvania.....	¹⁵ 18.3	¹⁵ 28.1		
Illinois.....	24.5	30.3		
Ohio.....	42.0	54.9		
Wisconsin.....	(¹⁶)	(¹⁶)		
Minnesota.....	34.7	47.4		

¹ Data from State reports on public employment agencies. For complete references see table XIII in the appendix.

² U. S. Bureau of the Census. Fifteenth Census, 1930. Occupation Statistics.

³ The small proportions of help wanted reported in hotels and restaurants are included here.

⁴ Includes hotels and restaurants, and institutions.

⁵ Domestic and personal service not classified separately. Hotels and restaurants wanted 3.2 percent of the total help asked for.

⁶ Includes homes, hotels, restaurants, and institutions.

⁷ State reports no figures for men. The percent given here is that which the women wanted in domestic and personal service formed of the total help wanted for both sexes.

⁸ Skilled workers in manufacturing industries only (not the total of skilled workers wanted in all types of occupation).

⁹ Semiskilled, including those in both manufacturing and nonmanufacturing industries.

¹⁰ Unskilled, including those in both manufacturing and nonmanufacturing industries.

¹¹ Industrial for women; skilled and unskilled for men (probably including some not in manufacturing employment).

¹² Clerical and professional.

¹³ Office workers.

¹⁴ No census data sufficiently comparable.

¹⁵ Casual and day workers.

¹⁶ This classification not used in 1930. A. J. Altmeyer states that in 1930 common and casual workers formed 50.5 percent of all placements. See Altmeyer, A. J. The Industrial Commission of Wisconsin, 1932, p. 248.

Domestic and personal and casual workers form a large proportion of all those called for in these States, the proportions ranging from nearly one sixth to nearly one third of all help wanted for the former and nearly one fifth to over two fifths for the latter. As high as 42 percent of those in demand in New York and in Ohio were for casual work. Of course, it must be remembered that it is likely to be in this type of occupation that duplications of individual calls may occur with the greatest frequency. In 4 of the 6 States shown in table 23 practically half or more of the help wanted applied to the combined groups of domestic and personal and casual and day workers. Those wanted for domestic and personal service formed larger proportions than such workers formed of all persons gainfully occupied. In regard to the great number of casuials placed, A. J. Altmeyer in his analysis of the work of the offices in Wisconsin writes as follows:

The fact that so many of the workers placed are classified as common and casual laborers is conclusive evidence that the offices handle unskilled labor primarily * * *. In any event, the labor market for skilled laborers is so constituted that direct methods of bringing the man and the job together can be depended upon to a larger extent than in the case of unskilled labor. Therefore, the offices are probably performing the greatest social service when they do handle unskilled labor primarily. Of course, this should not preclude rendering service as regards skilled labor as well. However, the big problem in employment-office management is how to do both. This requires not only breaking down of existing prejudices but also much more time and thought per placement as well as better quarters and higher-grade personnel.²¹

The proportions of the workers wanted who were for manufacturing jobs varied considerably from State to State, usually being below that for domestic or casual or both but always above that for clerical help. In New York and Ohio very roughly one tenth of the demands were for manufacturing jobs, in Illinois and Wisconsin smaller proportions. In Pennsylvania about one fifth of those wanted were for manufacturing work classified by the State as skilled, while another two fifths were for semiskilled and unskilled jobs not all of which were in manufacturing. In Minnesota nearly one third of the demands applied to industrial women combined with skilled and unskilled men.

The clerical help wanted was small in proportion—roughly 3 to 6 percent of the total.

EXTENT OF DEMAND REPORTED FOR WOMAN HELP

The demand for women employees at the agencies was large. Table XIV in appendix A indicates that places open to women at employment agencies frequently formed a proportion of all the help wanted that greatly exceeded the proportion all employed women formed of the total employees in the State in 1930.²² In the 14 States included in this table, woman employment according to the census of 1930 represented from about 17 to nearly 30 percent of the whole, while of the places open in 1930 from 10 to 68 percent involved calls for women. It is not surprising that a similar statement could be made in regard to placements.²³

²¹ Altmeyer, A. J. The Industrial Commission of Wisconsin, University of Wisconsin studies, 1932, p. 264. In 1930, 50.5 percent of the placements in Wisconsin had been those of common and casual workers. (Ibid., p. 248.)

²² States shown on the table referred to were those in which reports were given or could be obtained for the calendar year. Arkansas and Nevada had such reports also, but these were not analyzed owing to the smallness of the numbers involved.

²³ The wide range in help wanted and placements of women was due largely to differences in types of situations handled.

Though the large demand at the agencies for domestic employees had a considerable share in producing the effect just commented upon, table 24 gives evidence that even in this occupation there was a demand for women that outran their position in gainful employment.

TABLE 24.—Percent women formed of all persons gainfully occupied and of all help wanted, in selected occupation groups in five States, 1930¹

State	Percent women formed of—									
	All persons 10 years of age or more gainfully occupied in the State ¹	All help wanted in the State ²	Those in the occupation specified who were—							
			Employed ³ in the State in—				Wanted at agencies ⁴ in—			
			Domestic and personal service	Manufacturing and mechanical industries	Clerical occupations	Domestic and personal service	Casual occupations	Manufacturing occupations	Clerical occupations	
New York	25.6	47.7	54.5	16.0	49.3	(7) 79.9	52.9	44.6	82.7	
Pennsylvania	21.6	36.0	65.7	15.0	46.8	(9)	55.2	Three groups Skilled manufacturing ⁷ Semiskilled ⁸ Unskilled ⁹ Unskilled and semi-skilled combined	53.9 7.2 80.4 6.4 38.5	41.6
Illinois	22.5	44.5	58.4	12.1	50.1	¹⁰ 87.8	65.8	¹¹ 22.7	68.6	
Ohio	20.6	43.9	64.6	10.3	49.8	¹⁰ 82.6	57.4	¹¹ 15.8	52.4	
Wisconsin	19.1	35.3	66.8	11.3	51.9	¹² 95.3	(13)	¹⁴ 29.7	¹⁵ 51.6	
Minnesota	20.2	44.1	67.3	10.0	51.3	(16)	60.3	¹⁷ 15.7	74.1	

¹ The occupation groups selected are those most important in woman employment or in help wanted at the agencies. The States given are all large woman employers for which this information could be obtained from State reports on the agencies.

² U. S. Bureau of the Census. Fifteenth Census, 1930. Occupation Statistics.

³ Data from State reports on public employment agencies. For complete references see table XIII in appendix A.

⁴ Includes help wanted in hotels and restaurants and institutions, which formed in 1930 about 36.3 percent of all help wanted in this group.

⁵ This occupation not given separately in published reports. Those wanted in hotels and restaurants as skilled help (unskilled and semiskilled not reported separately) formed 5.1 percent of all help wanted of both sexes.

⁶ Casual and day workers.

⁷ This is a total prepared by the Women's Bureau for all skilled workers in manufacturing industries proper. It is not the total computed by the State for skilled industrial workers, which includes also those in mines, transportation, hotels, and trade.

⁸ Includes those not in manufacturing as well as those in manufacturing.

⁹ Clerical and professional.

¹⁰ Includes hotels and restaurants.

¹¹ Manufacturing total prepared by Women's Bureau.

¹² Homes, hotels, restaurants, and institutions totaled by Women's Bureau. The total in homes forms 84.9 percent of the entire domestic and personal service group.

¹³ Not reported separately in 1930 Operation of Public Employment Offices.

¹⁴ Does not include those in building and construction as is done in the other States and in census manufacturing and mechanical industries.

¹⁵ Office workers.

¹⁶ No figures given for men.

¹⁷ Term used "industrial" for women, "skilled and unskilled" for men (probably including some not in manufacturing as in Pennsylvania).

From this table, which uses six large woman-employing States as its sample of the situation, it may be seen that in the domestic and personal and clerical and manufacturing help wanted, the proportion of women in demand ordinarily exceeded to a very considerable degree the proportion women formed of all persons employed in those occupations in the State according to the census. In the two first mentioned

it is not surprising to find that women were asked for to a greater extent than was the case for the total of all help wanted at the agencies though the same ordinarily was not true of manufacturing. Further, over half the requests for casual or day workers were for women, even though in most of these States this classification was separate from domestic and personal service.

The demand for women as domestic and clerical workers may have been especially heavy in the particular centers in which the agencies were located. In some instances it may have been possible that employers had formed a habit of consulting agencies especially where woman help was wanted, depending for the men needed on other sources, perhaps, because men are more likely than women to seek jobs at the source of the work.

Table XIV in appendix A shows the proportions of women in the help wanted in the various years covered. In half the 14 States (see footnote 3, p. 12), including 4 of the 5 largest woman employers, there was an increase in the proportion of woman help wanted, continuous either through the 4 years or after 1929. Whether or not this may give any indication of some demand for women where men had been employed, or whether it was largely attributable to a special demand for those in certain occupations or to some administrative rearrangement or expansion, is not possible to say with any certainty on the basis of the evidence at hand.

In six States—some of them relatively smaller woman employers—there was a decline in proportion of women wanted in 1931 as compared to 1930, in one of these the drop being continuous through the 4 years.

YEAR'S DATA FROM EMPLOYMENT AGENCIES

Year's figures applying to women in the 23 States that have afforded some data by sex within the period of study are shown in table XIII in appendix A. This is the only table contained in the present report that gives some showing of all the States affording any public employment agency data as to women within the period covered. However, it must be noted that because of the varying methods of reporting, the data for the States included on this table are not necessarily comparable one with another. One of these States reports data only for a private agency. For 13 of these States the record of applications, help wanted, and placements in the calendar year is available throughout the 4 years 1928 to 1931, either as given in the annual report or as obtained by adding monthly figures.²⁴ For 3 other States complete reports coinciding with the calendar year were obtainable for 2 or 3 of the 4 years.²⁵ Reports for the remaining 7 States were incomplete for one reason or another.²⁶

The method of adding monthly figures to obtain totals for the year was employed by the States publishing such totals, whatever the report year. It has been explained that there are duplications in the

²⁴ Connecticut, Illinois, Iowa, Kansas, Massachusetts, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, and Wisconsin. The report year did not coincide with the calendar year in Connecticut, Illinois, Iowa, Minnesota, New Jersey, Ohio, and Virginia, but monthly figures have been added for the calendar year.

²⁵ Arkansas, Michigan, and Nevada.

²⁶ In Indiana, Missouri, North Carolina, and Oklahoma year's figures were given but not by calendar year, and no monthly reports were given; California did not report applications; the Colorado State reports referred to private agencies and were available for only part of the period. Figures given for West Virginia are for the period Mar. 1, 1930, to Nov. 15, 1930.

individuals applying and the places open in the month, and these are increased by totaling the 12 months' figures, in some cases probably to a considerable degree and in most cases to a degree that cannot be measured. This emphasizes the fact that information cannot be obtained in this way as to the *individual applicant*. That the data do not afford exact determination of these factors but serve only to indicate in a very general manner the pressure of applicants on the offices and the extent to which employers' calls for help have come in must be borne clearly in mind throughout the discussion of table XIII.

The data under consideration for the 13 States with complete reports show that in 7 the number of applications or registrations for jobs had been greater in 1931 than in any other year. And in 4 of these States the rise in applications had been continuous from year to year. In 4 of the 7 States and in 6 others—10 of the 13—the jobs open were fewer in 1931 than in any other of the 4 years; in all of these the decline in help wanted had been continuous after the peak of 1929. In connection with this analysis, the preponderance of domestic and casual workers handled in most States must be considered.

Even though duplications exist that cannot be accounted for (as in reports of both applications and help wanted), the ratio of applications to help wanted, such as some States publish for the two sexes combined, gives at least a rough picture of the relationship of these two factors in successive years.²⁷

In the 4-year period included here, the ratio of help wanted to applications as computed in the Women's Bureau is lower for women in 1931 than in any other year in 12 of the 13 States; in at least 6 of them it is more than 10 points below any other year.

MONTHLY REPORTS ON APPLICATIONS AND HELP WANTED

Reference to the summary on page 141 shows that monthly data on applications and help wanted were reported by sex for the following 12 States: New York, Pennsylvania, Illinois, Ohio, New Jersey, Michigan, Wisconsin, Minnesota, Virginia, Connecticut, Iowa, and Rhode Island;²⁸ in 1 of these—Michigan—the full 4 years were not available. These monthly data, so far as published for the 4 years included in the study are shown in table XV in appendix A.

While the analysis that follows goes into considerable detail, it must be borne in mind continually that its comparisons and findings are only approximate, since the extent of duplication in the reports of both applications and help wanted cannot be measured, and their definitions vary with the States. Furthermore, in most States either casual or domestic workers or both formed a large part of the entire group covered, and consequently their employment changes greatly affected the total. The following pages summarize the general situation; separate discussions for each State are given in appendix C.

Relative numbers of women and men applying and called for

Of the applications for jobs, in almost all cases more were by men than by women in every State but New Jersey, where, on the whole,

²⁷ William A. Berridge, in the study of the index of the ratio of openings to applicants referred to on p. 137, included data from 6 States—Illinois, Massachusetts, New York, Ohio, Pennsylvania, Wisconsin—1919-23. Finding a close agreement in the contour of their respective curves, he considered that such a ratio is of some value as a labor-market barometer when used in connection with other labor-market indications. For further description of Dr. Berridge's results, see Federal Reserve Bulletin, February 1924, pp. 63-67; Review of Economic Statistics, July 1926; and Stewart, Annabel M. and Bryce M., op. cit., pp. 36-38.

²⁸ Arkansas, Nevada, and Kansas also reported monthly by sex, but these States are not large woman employers, and their monthly data for women were very small.

women's applications predominated, as they did in Minnesota throughout most of 1930 and 1931 but usually not in 1928 and 1929. Ordinarily, except in New Jersey and Rhode Island, more male than female help was called for, but in 1930 women apparently were more in demand than men in Connecticut and Virginia, for half the time in Michigan and New York, and in 3 months in Minnesota; and in 1931 more women than men were wanted in Connecticut, New Jersey, and in most months in Minnesota and New York, in half the month in Virginia, and also in Michigan until late in the year, when calls for male help again predominated. In Connecticut and in Michigan (with a few exceptions) demands for help, whichever sex be considered, were lower in most of 1931 than in the corresponding months of the year preceding, and consequently the fact that more women than men were called for would appear to indicate very low turnover in certain large man-employing industries (as, for example, in Michigan). On the other hand, in New York more women were called for in 1931, than in corresponding months of the year preceding, though in most months fewer men were wanted in 1931 than in 1930. This may have meant some substitution of women for men by employers using the offices, or it may have meant increase in number of employers calling for help in industries employing many women, with decline in calls from employers in industries engaging chiefly men, or it may have been influenced by preponderance in demand in certain types of occupations.²⁹

Seasonal indications

For either sex there appeared to be a tendency in most States for both applications and calls for help to be heavier in the spring and the fall, a fact not surprising in respect to help wanted, since these ordinarily are seasons of good activity. Low points, both in applications and in requests for help for either sex, came with decidedly greatest frequency in the winter months.³⁰

High points in demand for women and men employees

It is significant that in 9 of the 12 States at some time in 1929 demands for woman help touched a high point that never again was reached; this period came as early as April in Ohio, in May in Wisconsin, in the summer in New Jersey, Michigan,³¹ and Virginia, and in the fall in Illinois, Iowa, Connecticut, and Rhode Island.³² In 7 of these States and 3 others the demand for men employees reached its high point in 1929, as early as May in 5 of the States, in the summer in the other 5. In 8 of the 12 States the high point never again reached in demands for help came earlier for women than for men; in 2 it was the earlier for men, in 2 it came in the same month for both sexes.

The high point in help wanted that never again was reached came earlier for women than for men in 3 of the 5 States that were large employers of women—New York, Ohio, and Wisconsin. It is of

²⁹ See p. 148.

³⁰ In at least one State January registration tended to be high, owing to the fact that in that month a complete reregistration takes place of all persons then remaining unplaced and still desiring to be registered.

³¹ No report prior to July 1929, therefore the high point may have come earlier in the year.

³² In 3 States (New York, Minnesota, and Pennsylvania) the spring 1928 high demand for woman help never again was reached, though this was not the case with the 1929 high.

interest to notice the relation of the demands for help in these States in each year to the demands in the same months of the year preceding.

In New York, on this basis, requests for women were lower in the majority of the months of 1929 and of 1930 than in the year preceding, but they were somewhat higher in 1931 than in 1930. For men they were higher in 1929 but lower in 1930 and 1931. Thus, while requests for men ordinarily remained up in 1929 and those for women declined, the opposite was the case in 1931, women being relatively more in demand.

In Ohio the situation in this respect was similar for the two sexes, both men and women being more in demand in 1929 than in most corresponding months of 1928, but ordinarily less wanted in 1930 and in 1931 than in the year preceding.

In Wisconsin each year showed in most months a smaller demand for both men and women than in the corresponding months of the previous year.

Two of the States in which the high point in the demand for help never again reached came earlier for men than for women were employers of considerable numbers of women in manufacturing—Illinois and Connecticut.

In Illinois, as in New York, 1931 was significant in showing, in most months, the demand high for women but low for men as compared with the corresponding months of 1930, which had been low for both sexes.

In Connecticut the situation was quite similar for men and women, both ordinarily being more in demand in 1929 than in 1928 but less wanted in 1930 and in 1931 than in the year preceding.

Applications and help wanted as compared with year previous

The foregoing discussion in connection with the high point in demand for help according to sex may be followed by a consideration of applications and help wanted from one year to the next in 9 of the more important manufacturing States in which comparisons can be made for the entire period of study.³³

Applications.—It was to be expected that 1930 and 1931 would see applications increase over the year preceding. For the more important manufacturing woman-employing States, this was true in most months of 1930 for both sexes in Illinois,³⁴ New York, Pennsylvania, and Rhode Island and in 1931 in all months in New York and in most months in Pennsylvania; in Minnesota it was true of women in 7 months of 1930 and of 1931. However, the pressure of demand for jobs in 1930 was less than in the year before for both sexes in every month in Wisconsin, and for women in all months and men in most months in Ohio, for men in all months in Minnesota, for both men and women in 6 months in New Jersey, and for women in most months and for men in 6 months in Connecticut. Similarly in 1931 applications of both sexes in Illinois, New Jersey, Wisconsin, Ohio, and Connecticut, and of men in Minnesota, were lower in most months of the year than in the corresponding months of 1930. This may have been due to changed reporting, to other office changes, or—a reason likely to have considerable weight—to the general discouragement of

³³ Ohio included. See discussion on Ohio in appendix C, p. 231.

³⁴ See footnote 11, p. 130.

workers in applying to agencies for jobs. One or more of these reasons undoubtedly obtained in most of the States reported.

It would seem reasonable that in 1929—a year of relatively good industrial activity—applications for jobs might be less than in 1928, barring special occurrences in some industries or in some localities, or special efforts on the part of the offices to extend their field of service. Among the larger manufacturing woman-employing States this was the case for both sexes in at least half the months in Wisconsin and New York, for women in Pennsylvania, and for men in 6 months in New Jersey and Minnesota. However, applications for jobs in important manufacturing States in 1929 exceeded those of 1928 for both sexes in all or most months in Illinois, Ohio, and Connecticut, for men in Pennsylvania and Rhode Island, and for women in 7 months in Minnesota and New Jersey.

Demands for help.—It was to be expected that 1929 demands for help would exceed those of 1928, and such was the case for both sexes in most months in Illinois, Ohio, New Jersey, Connecticut, and Rhode Island, while more men, but not more women, than in 1928 were wanted in New York and Pennsylvania. In Minnesota and Wisconsin fewer women were wanted in 1929 than in 1928 in 7 months, fewer men in 6. Again, it was to be supposed that requests for help would be lower in 1930 than in 1929, and possibly still lower in 1931. This was true of 1930, for all the States included and for both sexes in all or most months (except for men in Rhode Island), and in 1931 for men—again excepting Rhode Island—in all States and for women in most cases. However, it may be very significant that in the three largest industrial States included—New York, Pennsylvania, and Illinois—demands for woman help in most months of 1931 exceeded those of 1930, while demands for men were below those of 1930. In Wisconsin, for both sexes there were decreases in most months in each year in requests for help.

Relation between applications and demands for help

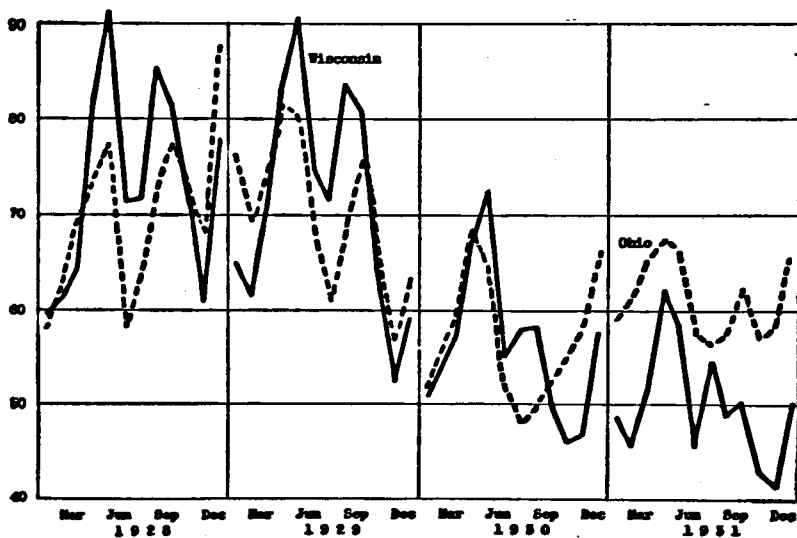
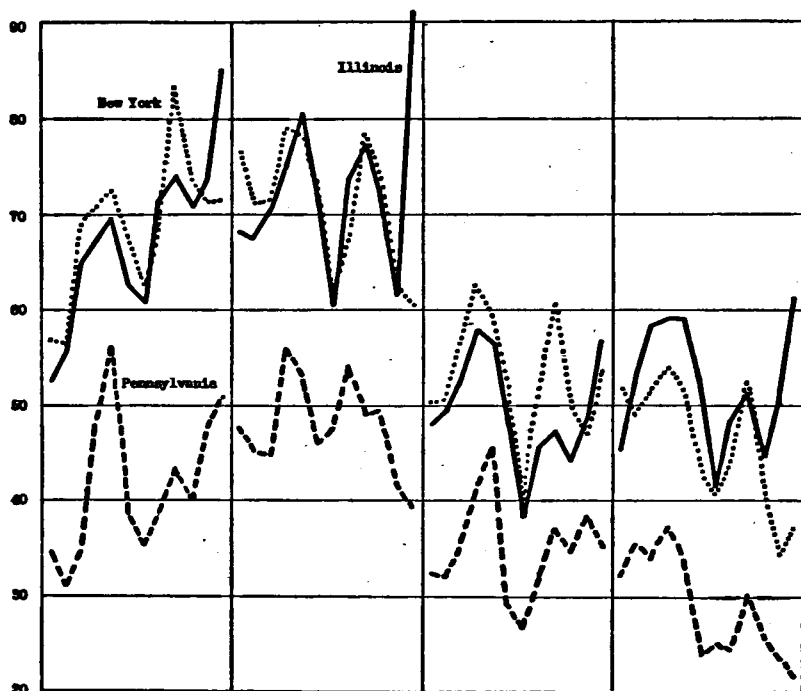
If the number of demands for help in each 100 applications be considered in States reporting in all four years—always remembering that there are unmeasured duplications in each of these categories—it is found that in 9 States (6 of them important as regards women in manufacturing) more women than men employees in relation to their respective applications ordinarily were called for. In Wisconsin relatively more men than women were called for most of the time until 1931, after which the ratio of help wanted to applications ordinarily was higher for women than for men.

For both sexes the ratio of help wanted to applications showed a tendency to be high in some cases in the fall and more frequently in the spring. It was low for men usually in the winter months; for women in some cases in the winter but more often in summer.

It was the usual case in most States and for both sexes to find the ratio of help wanted to applications higher in 1929 than in the corresponding months of 1928, lower in 1930 than in 1929, and still lower in 1931.

The ratios of woman help wanted to the applications of women have been charted for five large industrial States and are shown on page 153. These illustrate both the seasonal character of the labor market and the definitely lower plane upon which it moved in the

CHART 36.—RATIO OF HELP WANTED TO 100 APPLICATIONS—WOMEN IN 5 STATES, 1928-31



depressed years of 1930 and 1931 as compared to 1928 and 1929. The similarity of the general employment shown for each of these States is striking. A more detailed analysis of the monthly data in the more important woman-employing States will be found in appendix C.

STATES REPORTING SOME OCCUPATIONAL DATA ON APPLICATIONS AND HELP WANTED

Occupational data of some type are reported by sex in 14 States. Six of the large woman-employing States among these—New York, Pennsylvania, Illinois, Ohio, Wisconsin, and Minnesota—report according to a somewhat detailed classification of the main woman-employing occupations. Five other States classify data for women under three main occupation groupings—clerical and professional, industrial, and domestic (New Jersey, North Carolina, Indiana, Kansas, and Arkansas) and a very detailed list in Rhode Island can be fitted into these same general groups.³⁵ Figures from the two remaining States—Connecticut and Iowa—have not been presented, in the former case because occupations are reported only for situations secured, and in the latter case because totals given are those for a biennium, and the State is relatively such a small woman-employer that occupation figures published each month have not been totaled for inclusion here.

An abstract from this material as it applies to women is given in appendix table XVI-A for the six important industrial States that report by a detailed classification, and in appendix table XVI-B for six States whose material has been grouped under three chief occupational heads. These tables show the applications and help wanted in each chief woman-employing occupation group in 1929 and 1931 (or 1929 and 1930 for those States³⁶ for which information for 1931 was either not completed or not comparable.).

The data reported for New York, Pennsylvania, Wisconsin, Minnesota, Kansas, and Rhode Island apply to the calendar year. Those for other States are for a fiscal year ending either June 30 (Illinois, Ohio, New Jersey, North Carolina, Arkansas) or September 30 (Indiana). In all cases but North Carolina and Indiana, monthly publications would enable calendar-year totals to be obtained by occupation, but since at best the employment figures are so far from satisfactory, and afford basis for only very rough interpretation, this extra presentation was not undertaken.

The analysis that follows must be taken only as a very general suggestion of what the figures reported contain. Differences in classification as between the States and even variations from year to year in a single State, unreported differences in status of offices, changes due to such outside factors as stimulation of use of offices by certain groups, and many other matters that are of significance locally but that must remain unaccounted for here, would have to enter into any attempt at real interpretation of the data. Little vocational or occupational information can be obtained from these data other than that of the most general indication of possible situa-

³⁵ This classification was used by a number of States since it was the one under which reports were made to the Federal Employment Service. See Stewart, Annabel M. and Bryce M. *Op. cit.* p. 238.

³⁶ Arkansas, North Carolina, and Wisconsin. The Arkansas biennial report for the period ending June 30, 1932, gives no tabulations for employment agencies. That for the same period in North Carolina (a mimeographed report) omits help wanted. Wisconsin changed its classification in 1930.

tions. In the ordinary case the greatest bulk of the applications and placements were those in domestic and personal service or in casual work.

Occupational data in six large industrial States

The six large industrial States having relatively full occupation classifications will be considered first. In four of these—Pennsylvania, New York, Wisconsin, and Minnesota—the information is for the calendar year, in the other two (Illinois and Ohio) the year ends June 30.

Casual workers.—Casual workers ordinarily formed the largest, or one of the largest, groups of those applying, called for, and placed. In most cases these included domestic day workers, sometimes even when domestic workers were classed elsewhere. In Pennsylvania semiskilled industrial, and in Illinois domestic and personal-service workers, ran neck and neck with casual workers; in Wisconsin the latter group greatly exceeded the casuials after 1929 (due to the adoption of a more complete classification).³⁷ In New York either casual or domestic workers were most in demand, and the greatest number of applications came from casuials until 1931, when they were exceeded by the clerical group.

It would be expected that applications for this type of work—casuals—would increase, especially when opportunities for other work became less and people in desperation sought whatever they could get. Such increases might be minimized by especial concentration of the offices on some other occupation or phase of work, by changes in the method of registration or reporting, or by various other local factors. Such increases in applications occurred in 1931 as compared to 1929 in New York, Pennsylvania, and Minnesota. The inclusion of domestic day workers in the casual group contributed to this increase in some cases. Considerable declines occurred in Wisconsin,³⁸ Illinois, and Ohio. Calls for help of this type declined heavily in all States but Minnesota, though in Pennsylvania there was some rise in 1931 above 1930.

Workers in domestic and personal service.—Another large group ordinarily was that of domestic and personal workers. These occupations were not listed separately in Pennsylvania, and in Illinois hotel and restaurant employees—who formed a separate group in the other five States—were combined with the domestic and personal occupations. (This may account for the fact that this formed the largest group of registrations in Illinois in every year.) In Wisconsin, the group in 1929 was domestic and personal, and in the 2 succeeding years the bulk of these were given under the caption “homes”, with a small number under “institutions” given separately. Those in “homes” after 1929 formed the largest group of persons applying for work in this State. Hotel and restaurant workers were kept distinct in each year in Wisconsin.

Applications for domestic and personal work increased steadily after 1929 in each of the five States in which they were reported. The increases in 1931 over 1929 in Ohio, Illinois, New York, and Minnesota

³⁷ This new classification was adopted after the U. S. Employment Service discontinued its earlier report form (form Emp. 44) at the close of 1929. Prior to that time the Wisconsin classification had been influenced by that used by the Federal service, as was also the case in other States. See footnote 35, p. 154.

³⁸ Because classifications changed in 1930, this year instead of 1929 is compared with 1931.

were respectively 17.5, 21.6, 81, and 98.6 percent. In Wisconsin there was a 6 percent increase in 1931 over 1930.³⁹ Demands for this type of help had decreased considerably in Illinois and Ohio (year ending June 30 in each). In Wisconsin there was also a decrease from 1930 to 1931. In New York and Minnesota, on the other hand, they had increased—the number in 1931 was nearly twice that in 1929.

Workers in hotels and restaurants.—Applications for employment in hotel and restaurant work showed increases similar in degree to those in the domestic and personal classification in New York, and in Pennsylvania they had increased considerably. In Wisconsin the persons applying for such positions had fallen off more than 10 percent, though those desiring work in homes had increased,⁴⁰ and in Ohio and Minnesota there was a falling off of about one fifth. Demands for help from employers showed the same movement in respect to hotel and restaurant workers as for those in domestic and personal service in Ohio—a steady decline after 1929. In New York and in Minnesota, however, while demands for domestic and personal workers had increased from 1929 to 1931, those for hotel and restaurant employees had declined; this may or may not be accounted for in part by some overlapping in the classifications. Pennsylvania was the only State in which some increase was shown in persons asked for for hotel and restaurant work.

Workers in clerical, professional, and technical occupations.—A great increase in applications for jobs ordinarily occurred among clerical workers, and in New York this group of registrants was larger than that in any other occupation in 1931 and second only to the casual workers in 1928 and 1929, while it ranked third in 1930. In Pennsylvania and Ohio it included professional applicants, in Wisconsin professional and technical in 1929, clerical only thereafter. Steady increases in the numbers seeking work of this kind were shown after 1929 in three States; 1931 applications were nearly twice those of 1929 in New York, and had increased over 40 percent in Illinois and 55 percent in Pennsylvania. In Wisconsin and Ohio a decline was shown, but the decline was negligible in each case and was chiefly from 1929 to 1930. In Minnesota the decline was great.

The decline in demand for this type of help was universal. In Wisconsin the help of this type wanted in 1931 had declined more than one third from the 1930 demand, in New York it had declined nearly one half, in Minnesota more than one half, and in Ohio nearly one third from the 1929 demand. The discrepancy between the demand for these workers and the numbers seeking jobs was very great, ordinarily being likely to exceed that in any other group.

Workers in manufacturing occupations.—Naturally the manufacturing industries showed quite different classifications. For these, New York has reported only totals. Pennsylvania reported a semiskilled and an unskilled group, the latter including workers in other employments in addition to manufacturing; those included as skilled manufacturing workers have been totaled by the Women's Bureau. Similar totals have been prepared for Wisconsin, Illinois, and Ohio. The

³⁹ No comparison of 1929 to 1931 can be made, as classification is not the same, being "domestic and personal service" in the former and "homes" in 1930 and 1931.

⁴⁰ These data for Wisconsin apply mainly to positions for work in resort hotels, as the bulk of other hotel and restaurant placement was handled by an effective private agency until toward the close of 1931.

three major manufacturing groups reported in Pennsylvania, Wisconsin, and Ohio are clothing and textiles, metals and machinery (metals and metal products in Pennsylvania), and food, beverages, and tobacco (food and kindred products in Pennsylvania); they are clothing and textiles, metals and machinery, and printing trades in Illinois. Numbers applying to specific industries ordinarily are too small to warrant any attempt at analysis.

Applications for industrial employment had increased steadily after 1929 in New York, Pennsylvania, and Minnesota, those in 1931 being above 1929 by nearly 300 percent in the Pennsylvania skilled groups, nearly 80 percent in New York, and 12 percent in Minnesota. In Illinois, Ohio, and Wisconsin applications for this type of work had declined, which was the case with several other groups in these States, only registrations for domestic and personal work increasing in all three, for clerical in Illinois, and for trade in Wisconsin and Ohio.

On the whole, demands for help declined notably in all States but Pennsylvania, though in New York and Wisconsin a slight rise occurred in 1931, not, however, approximating 1929 for New York; in Pennsylvania the decline was among the unskilled, while there had been a considerable increase in demand for the semiskilled and nearly 40 percent increase in the requests for skilled help. This may have reflected a desire to substitute more skilled help for unskilled at a time when the market showed a surplus of workers and when a high type of labor could be had relatively cheap. In Ohio 1931 showed little more than half the help wanted that was in demand in 1929. The discrepancy between the demand for help and the number of applications for jobs was especially great in the manufacturing industries in some instances—for example, in the totals for Wisconsin and among skilled workers in Pennsylvania, even though the demand for them had increased.

Workers in wholesale and retail trade.—One woman-employing group of importance remains to be considered—that of trade (classed as wholesale and retail trade in each of the five States reporting, mercantile establishments in the later years in Wisconsin). In four States, applications for this employment had increased in 1931 over 1929 (or over 1930 as in the case of Wisconsin), those in 1931 being nearly two thirds greater than in 1929 in Ohio, well over 50 percent greater than 1929 in Pennsylvania. The only State in which decline was shown was Illinois.

The demand for help reported in trade during this period had increased in three States and had declined only in Illinois and New York, and in the last named 1931 showed some increase over 1930. The increase in calls for workers in trade in the three States was considerable, the 1931 figure being over one fourth greater than that of 1929 in Pennsylvania, nearly three fifths greater than 1930 in Wisconsin, and over one half as great again as 1929 in Ohio.

Occupational data in six States having a few general classifications

It has seemed to insure greater clarity to discuss separately the six States having a few general occupation classifications^a—Indiana, New Jersey, North Carolina, Kansas, Rhode Island, and Arkansas—

^a See footnote 25, p. 154.

though in a number of instances the data relating to these occupation groups were similar to those in States reporting under a fuller classification. The largest number of applications, calls for help, and placements were either for domestic and personal service or for casual workers. The domestic and personal service workers also had been one of the largest groups in the five States that reported this classification. The smallest groups served in Indiana, North Carolina, and for the most part in Rhode Island were the industrial women, and in Kansas, New Jersey, and for the most part in Arkansas were the clerical and professional workers.

Applications for industrial and clerical work had for the most part increased through the entire period reported (as also was the case in three of the six States considered heretofore), except that the latter declined in Indiana and North Carolina in 1931 (years ending September 30 and June 30, respectively) and industrial work declined in Kansas in 1931. Applications for domestic work had declined from 1929 to 1931 in New Jersey, North Carolina, and Indiana, but they had increased in Rhode Island, Kansas, and Arkansas. It will be remembered that they had increased in the five States formerly discussed that reported this classification.

Demands for help in all the classifications ordinarily decreased after 1929, in some instances sharply. Placements, likewise, ordinarily had declined after 1929 with the following exceptions: In Indiana (year ending September 30) those for domestic and industrial workers increased somewhat in 1931, while clerical placements increased in 1930, decreased in 1931; in Rhode Island clerical and industrial workers increased consistently after 1929; and in Arkansas placements in each occupational group were somewhat larger in 1930 than in 1929, and 1931 figures are not available.

For all occupational groups the ratio of help wanted to applications was highest in 1929, lowest in 1931 in most cases, though in Indiana this showing was irregular, with the lows in 1928 or 1930. In each State the largest numbers placed in relation to those applying, in the three classifications presented, were in domestic and personal service. Practically always the number of persons wanted in relation to those applying was much smaller for the clerical workers than for any other group.

Summary of occupational data

The largest groups handled by the offices usually were the casual and domestic and personal workers.

In general it may be said that applications increased steadily throughout the period—1928 to 1931 inclusive—ordinarily without regard to occupation, though this increase in Illinois was confined to the clerical and domestic and personal groups, in Wisconsin to the occupations last named. Declines occurred in those asking for domestic and personal work in New Jersey, North Carolina, and Indiana, and for clerical and hotel and restaurant jobs in Minnesota. In several States specially great increases occurred in those seeking clerical jobs.

Declines in demands for help were usual in most States, with notable exceptions in some groups. Help wanted increased on the whole in

wholesale and retail trade in Ohio and Wisconsin as well as in Pennsylvania. In Wisconsin, Minnesota, and New York the demand for those in domestic and personal service increased in these States, though in Wisconsin the figure for 1931 was less than that for 1930. In Pennsylvania the declines applied only to persons asked for as clerical and professional, casual and day workers, and in the unskilled trades, demands for those in other occupation groups having increased. Especial declines were notable in the demand for clerical, technical, and professional workers, 1929 requests for them having been cut in 1931 by practically one half in New York and Minnesota and by about one third in Ohio and Wisconsin.

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APPENDIXES

APPENDIX A—GENERAL TABLES

**APPENDIX B—METHODS USED BY NEW YORK STATE
DEPARTMENT OF LABOR IN PREPARA-
TION OF EMPLOYMENT FIGURES;
STATISTICAL WORK SHEET USED BY
NEW YORK STATE IN PREPARING
WEIGHTS**

**APPENDIX C—INFORMATION BY SEX PUBLISHED
BY STATE-SUPPORTED EMPLOYMENT
AGENCIES, 1928-31**

APPENDIX A—GENERAL TABLES

TABLE I.—Numbers and proportions of the women unemployed in chief woman-employing occupational groups, selected States, April 1930¹

State	All occupational groups ²		Agriculture		Manufacturing and mechanical		Transportation and communication		Trade		Public service		Professional service		Domestic and personal service	
	Normally gainfully occupied	Unemployed, 1930	Normally gainfully occupied	Unemployed, 1930	Normally gainfully occupied	Unemployed, 1930	Normally gainfully occupied	Unemployed, 1930	Normally gainfully occupied	Unemployed, 1930	Normally gainfully occupied	Unemployed, 1930	Normally gainfully occupied	Unemployed, 1930	Normally gainfully occupied	Unemployed, 1930
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
New York.....	1,418,716	70,139	4.9	7,467	85	1.1	399,695	29,138	7.3	72,865	1,682	2.3	250,182	9,200	3.7	12,696
Pennsylvania.....	806,766	40,220	5.0	7,275	50	.7	262,068	19,932	7.6	32,956	814	2.6	138,097	5,242	3.8	7,665
Illinois.....	717,231	38,436	5.4	8,463	70	.8	178,268	12,764	7.2	44,339	1,148	2.6	147,456	6,576	4.5	5,807
California.....	558,814	30,480	5.5	12,058	418	3.5	83,341	5,427	6.5	27,021	791	2.9	133,374	6,562	4.9	9,431
Ohio.....	541,058	26,250	4.9	8,457	73	.9	143,873	9,723	6.8	24,896	643	2.6	101,217	4,026	4.0	5,330
Massachusetts.....	529,968	35,468	6.7	2,093	101	4.8	205,346	21,941	10.7	18,950	468	2.5	83,753	3,593	4.3	5,907
Texas.....	423,018	15,632	3.7	80,032	1,013	1.3	38,203	1,926	5.0	16,661	350	2.1	59,803	2,280	3.8	3,565
New Jersey.....	417,706	23,051	5.5	2,241	47	2.1	138,228	11,818	8.5	20,134	477	2.4	74,815	2,505	3.4	3,794
Michigan.....	360,701	21,943	6.1	0,721	156	2.3	82,329	6,829	8.3	17,095	599	3.3	67,083	3,576	5.3	4,327
Georgia.....	312,322	12,027	3.9	85,987	1,605	2.0	48,367	3,225	6.7	6,281	118	1.9	21,872	903	4.1	1,810
Missouri.....	299,994	13,920	4.6	12,856	114	.9	70,410	4,209	6.0	14,692	318	2.2	56,145	2,174	3.9	2,370
North Carolina.....	273,322	12,603	4.6	70,680	591	.8	71,585	6,741	9.4	4,194	80	1.0	16,708	571	3.4	1,255
Alabama.....	264,402	5,658	2.2	104,470	331	.3	24,636	1,497	6.1	3,798	78	1.9	16,849	519	3.3	1,201
Indiana.....	235,014	10,642	4.5	6,080	33	.5	65,041	4,262	6.6	9,701	198	2.0	42,290	1,388	3.3	2,300
Mississippi.....	231,940	3,987	1.6	142,222	284	.2	7,371	618	8.4	2,810	72	2.6	10,149	815	8.1	652
Wisconsin.....	215,603	7,384	3.4	0,198	35	.4	55,201	2,867	5.2	9,526	152	1.0	37,002	1,021	2.8	2,268
South Carolina.....	205,878	6,792	3.3	88,595	1,777	2.0	33,352	1,922	5.8	1,826	38	2.1	8,088	272	3.4	625
Minnesota.....	201,294	7,704	3.8	9,417	90	1.0	29,716	1,641	5.5	9,927	270	2.7	40,147	1,838	4.6	2,173

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. I, tables 6 and 7 under each State section, p. 91ff. Percents computed by Women's Bureau. Clerical occupations, which later (in vol. II) were reported separately, were included with other groups in this data—see footnote 1, table 2, p. 18. The States selected include all those in which 200,000 or more women were engaged in gainful occupations. Over 10,000 women were reported unemployed in classes A and B in all these States but Alabama, Mississippi, Wisconsin, South Carolina, and Minnesota. As many as 4.5 percent of the gainfully occupied women were unemployed in classes A and B in all these States but Alabama, Georgia, Minnesota, Texas, Wisconsin, South Carolina, and Mississippi. The following States not employing 200,000 women had as large proportions unemployed: Rhode Island, 11.3 percent; Florida, Oregon, and New Hampshire over 6 percent; Maine, Washington, and Connecticut 5 percent or over; Colorado 4.7 percent; these 8 States all had less than 10,000 unemployed in classes A and B. Classes A and B include persons out of a job though able and willing to work and persons on lay-offs without pay.

² Details aggregate less than total because two occupational groups not important in woman employment—forestry and fishing and extraction of minerals—are not shown separately.

TABLE II.—Unemployment of women by occupational group, 19 cities, January 1931¹

City	All occupational groups ¹			Manufacturing and mechanical			Transportation and communication			Trade			Professional service			Domestic and personal service			Clerical occupations		
	Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931	
		Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent		Number	Percent
19 cities.....	2,538,762	479,283	18.9	467,003	141,559	30.3	83,811	8,505	10.1	268,923	50,144	19.4	310,867	14,776	4.8	721,568	174,409	24.2	686,661	89,443	13.0
Birmingham.....	82,199	7,615	23.6	1,926	411	21.8	628	67	10.7	2,509	661	26.3	3,670	232	6.3	18,139	5,561	30.7	5,262	674	12.8
Boston.....	108,416	19,561	18.0	20,668	7,284	35.2	3,556	332	9.3	10,646	2,424	22.8	14,998	647	4.3	28,022	5,250	18.2	29,453	3,609	12.3
Buffalo.....	58,249	10,461	18.0	9,800	3,444	35.1	2,332	304	16.9	6,887	1,440	20.9	8,576	281	3.3	14,884	3,000	20.2	15,640	1,889	12.1
Chicago.....	406,750	96,204	23.7	74,068	28,049	37.9	17,010	2,276	13.4	42,888	9,584	22.3	42,225	2,574	6.1	101,034	33,087	32.5	128,028	20,576	16.1
Cleveland.....	98,968	21,159	21.4	21,036	5,391	25.6	3,056	362	11.8	10,918	2,426	22.2	11,801	499	4.2	27,879	9,409	33.7	24,069	3,067	12.7
Dayton.....	22,862	3,859	16.9	4,799	1,027	21.4	718	56	7.8	2,528	447	17.7	2,642	79	3.0	6,518	1,748	26.8	5,610	800	8.9
Denver.....	37,704	4,423	11.7	3,788	603	15.9	1,194	102	8.5	4,543	651	14.3	5,968	183	3.1	11,993	2,033	17.0	10,024	823	8.2
Detroit.....	140,879	33,382	23.7	20,978	6,172	29.4	4,834	562	11.6	16,276	3,900	24.5	17,348	788	4.5	43,620	16,128	37.0	37,569	5,722	15.3
Duluth.....	10,759	1,450	13.5	888	181	20.4	443	36	8.1	1,804	338	18.9	1,022	98	4.8	3,460	540	15.6	2,701	270	10.0
Houston.....	37,689	9,786	26.0	3,299	847	25.7	1,047	146	13.9	8,631	714	19.7	4,141	182	4.4	17,819	7,122	40.0	7,647	749	9.8
Los Angeles.....	163,345	28,135	14.2	19,308	3,381	17.5	4,282	468	10.9	23,632	3,574	15.1	28,575	2,210	7.7	45,904	8,769	19.1	40,794	4,689	11.5
Minneapolis.....	64,437	7,830	12.2	8,822	1,488	16.9	1,824	143	7.8	7,302	1,401	19.0	9,603	402	4.2	18,151	2,511	13.8	18,575	1,879	10.1
New Orleans.....	61,108	14,561	23.8	9,440	2,325	24.6	1,472	136	9.2	5,788	1,221	21.1	6,187	231	3.7	28,269	9,298	32.9	9,722	1,319	13.6
New York ³	737,996	117,408	15.9	153,980	45,443	29.5	25,277	2,108	8.3	60,228	9,702	16.1	88,828	3,875	4.4	197,205	28,607	14.5	212,010	27,617	13.0
Bronx.....	137,324	23,015	16.8	8,903	29.6	5,961	404	8.3	13,809	2,637	19.1	13,381	881	6.6	18,615	2,094	11.2	55,307	7,999	14.5	
Brooklyn.....	240,773	48,557	17.8	64,950	20,341	31.3	11,434	936	8.2	23,555	4,689	19.7	28,810	1,428	5.0	50,292	7,150	14.2	101,283	14,006	13.8
Manhattan.....	319,890	45,836	14.3	58,908	16,199	27.3	7,882	678	8.6	22,764	2,306	10.5	46,137	1,566	3.4	128,298	19,363	15.1	55,420	5,612	10.1
Philadelphia.....	246,136	59,865	24.3	65,534	24,473	37.3	5,884	568	9.7	22,602	5,109	22.9	25,735	1,059	4.1	69,070	21,006	30.4	55,840	7,448	13.5
Pittsburgh.....	69,925	13,542	19.4	6,908	1,929	27.9	2,674	262	9.8	9,266	2,466	26.6	9,272	339	3.7	23,810	6,166	25.9	17,895	2,379	13.3
San Francisco.....	84,352	7,935	9.4	11,047	1,774	16.1	3,518	193	5.5	10,994	1,175	10.7	12,463	444	3.6	19,162	2,244	11.7	27,005	2,101	7.8
Seattle.....	45,365	5,312	11.7	4,769	842	17.7	1,180	82	6.9	6,694	874	13.1	7,258	331	4.6	13,074	2,069	15.8	12,206	1,109	9.0
St. Louis.....	106,583	21,735	20.4	24,947	6,495	26.0	2,882	212	7.4	10,239	1,887	18.4	10,157	326	3.2	31,725	9,865	31.1	26,491	2,935	11.1

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. II, table 9, p. 418ff. Percents computed by Womens' Bureau.² Details aggregate less than total because agriculture, forestry and fishing, extraction of minerals, and public service are not shown separately.³ Includes only 3 boroughs, but they contain over 85 percent of the gainfully employed women in the city.

TABLE III.—Unemployment of women by age group, 19 cities, January 1931¹

City	All ages ²			Under 20 years			20 to 24 years			25 to 49 years			50 years and over		
	Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931		Normally gainfully occupied	Unemployed, 1931	
		Num-ber	Per-cent		Num-ber	Per-cent		Num-ber	Per-cent		Num-ber	Per-cent		Num-ber	Per-cent
Birmingham.....	32,199	7,615	23.6	3,288	964	29.3	6,995	1,774	25.4	19,074	4,381	23.0	2,813	489	17.4
Boston.....	108,416	19,561	18.0	13,565	4,578	33.7	24,467	4,578	18.7	52,990	7,834	14.8	17,233	2,543	14.8
Buffalo.....	58,249	10,461	18.0	9,871	3,086	31.3	13,869	2,822	20.3	27,766	3,882	14.0	6,645	633	9.5
Chicago.....	406,760	96,264	23.6	63,643	21,588	33.9	96,304	22,095	22.9	209,129	46,512	22.2	37,098	5,938	16.0
Cleveland.....	98,968	21,159	21.4	16,297	4,675	28.7	24,296	5,180	21.3	49,947	10,041	20.1	8,292	1,242	15.0
Dayton.....	22,862	3,859	16.9	2,549	535	21.0	5,298	836	15.8	11,816	2,040	17.3	3,175	440	13.9
Denver.....	37,704	4,423	11.7	3,929	720	18.3	7,019	858	12.2	20,049	2,253	11.2	6,693	500	8.9
Detroit.....	140,879	33,842	23.7	21,128	6,935	32.8	34,870	7,887	22.6	74,413	16,908	22.7	10,386	1,614	15.6
Duluth.....	10,759	1,450	13.5	1,001	331	20.7	2,824	383	13.6	5,316	616	11.6	1,017	120	11.8
Houston.....	37,699	9,786	26.0	4,128	1,510	36.6	8,440	2,144	25.4	21,879	5,502	25.1	3,112	627	20.1
Los Angeles.....	163,385	23,135	14.2	10,318	2,435	23.6	27,524	4,339	15.8	98,875	13,398	13.5	26,536	2,930	11.0
Minneapolis.....	64,437	7,830	12.2	7,439	1,555	20.9	15,652	1,824	11.7	34,219	3,617	10.6	7,059	826	11.7
New Orleans.....	61,108	14,561	23.8	7,779	2,597	33.4	12,192	3,062	25.1	33,135	7,689	23.2	7,962	1,183	14.9
New York.....	737,996	117,408	15.9	123,693	30,497	24.7	188,148	32,025	17.0	357,122	47,844	13.4	68,045	6,851	10.1
Bronx.....	137,324	23,015	16.8	27,366	6,652	24.3	41,535	7,196	17.3	60,180	8,161	13.6	8,104	954	11.8
Brooklyn.....	280,778	48,557	17.3	60,888	15,768	25.9	82,349	14,551	17.7	115,909	15,829	13.7	21,251	2,331	11.0
Manhattan.....	319,899	45,836	14.3	35,439	8,077	22.8	64,264	10,278	16.0	181,033	23,854	13.2	38,690	3,566	9.2
Philadelphia.....	246,126	59,866	24.3	41,717	14,468	34.7	55,514	13,976	25.2	118,391	26,982	22.8	30,318	4,323	14.3
Pittsburgh.....	69,925	13,542	19.4	12,305	3,162	25.7	17,096	3,158	18.4	32,596	6,172	18.9	7,876	1,042	13.2
San Francisco.....	84,352	7,935	9.4	6,013	1,103	18.3	16,861	1,741	10.3	49,298	4,167	8.5	11,691	890	7.6
Seattle.....	45,865	6,312	11.7	3,644	647	17.8	8,962	1,041	11.6	25,790	2,763	10.7	6,896	858	12.4
St. Louis.....	106,583	21,735	20.4	16,621	4,375	26.3	28,401	4,394	15.5	53,755	11,096	20.6	12,738	1,844	14.5

¹ U. S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. II, table 8, p. 383ff. Percents computed by Women's Bureau.² Details aggregate less than total because group with age unknown is not shown separately.³ Includes only 3 boroughs, but they contain over 85 percent of the gainfully employed women in the city.

TABLE IV.—Unemployment of women by nativity and race, 19 cities, January 1931¹

City	All classes ¹			Native white				Foreign-born white				Negro						
	Normal-ly gain-fully occu-pied	Unemployed, 1931		Normal-ly gain-fully occu-pied	Unemployed, 1931			Normal-ly gain-fully occu-pied	Unemployed, 1931			Normal-ly gain-fully occu-pied	Unemployed, 1931					
		Num-ber	Per-cent		Class A ³	Class B ³	Classes A and B		Class A ³	Class B ³	Classes A and B		Class A ³	Class B ³	Classes A and B			
							Num-ber				Per-cent				Num-ber	Per-cent	Num-ber	Per-cent	Num-ber	Per-cent
Birmingham	32,199	7,615	23.6	13,745	1,898	177	2,075	15.1	386	9	2	11	2.8	18,067	5,046	483	5,529	30.6
Boston	108,416	19,561	18.0	74,243	11,359	3,096	14,425	19.4	30,115	3,041	872	3,913	13.0	4,027	949	273	1,222	30.3
Buffalo	58,249	10,461	18.0	46,906	6,479	2,374	8,853	18.9	9,675	637	290	927	9.6	1,621	623	58	681	42.0
Chicago	406,750	96,204	23.6	285,044	48,077	10,179	58,256	20.4	70,535	9,208	2,665	11,873	16.5	44,421	24,617	1,373	25,990	58.5
Cleveland	98,998	21,159	21.4	68,741	10,205	2,071	12,276	17.9	19,231	2,180	661	2,841	14.8	10,967	5,445	595	6,040	55.1
Dayton	22,802	3,859	16.9	19,293	2,220	445	2,665	13.8	1,009	70	24	94	9.3	2,559	986	114	1,100	43.0
Denver	37,704	4,423	11.7	32,675	3,254	414	3,668	11.2	3,030	138	39	177	5.8	1,610	459	83	492	30.6
Detroit	140,879	33,342	23.7	94,093	15,206	2,628	17,804	19.0	31,230	3,271	662	3,933	12.6	15,381	10,590	941	11,531	75.0
Duluth	10,769	1,450	13.5	8,912	1,118	87	1,205	13.5	1,776	207	27	234	13.2					
Houston	37,699	9,786	26.0	21,490	2,782	161	2,943	13.7	1,041	60	11	71	6.8	14,396	6,341	304	6,645	46.2
Los Angeles	163,385	23,135	14.2	124,290	15,910	907	16,817	13.5	21,944	1,643	108	1,749	8.0	8,454	3,003	141	3,234	38.3
Minneapolis	64,437	7,830	12.2	56,376	6,513	495	7,008	12.4	7,416	548	85	633	8.5	619	181	5	186	30.0
New Orleans	61,106	14,561	23.8	31,980	4,429	538	4,967	15.5	1,488	46	7	53	3.6	27,531	8,420	1,116	9,536	34.6
New York ⁴	737,908	117,408	15.9	433,637	61,514	6,214	67,728	15.6	229,239	24,923	3,652	28,575	12.5	74,704	19,846	1,172	21,058	28.2
Bronx	137,324	23,015	16.8	91,366	14,344	1,081	15,425	16.9	43,605	6,225	933	7,158	16.4	2,327	401	30	431	18.5
Brooklyn	280,773	48,557	17.3	190,843	26,822	3,856	33,678	17.6	75,995	9,191	1,745	10,936	14.4	13,825	3,375	562	3,937	28.5
Manhattan	319,890	45,836	14.3	151,328	17,348	1,277	18,625	12.3	109,630	9,507	1,745	10,481	9.6	58,552	16,110	580	16,690	28.5
Philadelphia	240,136	59,865	24.8	169,280	31,529	5,977	37,506	22.2	34,033	4,018	801	4,819	14.2	42,729	15,702	1,775	17,537	41.0
Pittsburgh	69,925	13,542	19.4	54,756	7,773	1,471	9,244	16.9	8,235	672	209	781	9.5	6,923	2,538	678	3,516	50.8
San Francisco	84,352	7,935	9.4	64,222	5,863	480	6,343	9.9	17,363	1,150	123	1,273	7.3	772	145	12	157	20.3
Seattle	45,365	5,312	11.7	36,279	4,010	468	4,478	12.3	7,914	606	94	700	8.8	487	111	4	115	23.6
St. Louis	106,583	21,736	20.4	83,097	10,635	2,207	12,842	15.5	5,994	443	96	539	9.0	17,436	7,750	594	8,344	47.9

¹ U.S. Bureau of the Census. Fifteenth Census, 1930. Unemployment, vol. II, table 2, p. 370ff. Percents computed by Women's Bureau.² Details aggregate less than total because of nativity groups not shown separately.³ Class A—Persons out of a job, able to work, and looking for a job; Class B—Persons having jobs but on lay-off without pay, excluding those sick or voluntarily idle.⁴ Includes only 3 boroughs, but they contain over 85 per cent of the gainfully employed women in the city.

TABLE V.—Industrial distribution of women employees in selected industries in Illinois

Women wage earners as reported by the State of Illinois for August 1930 ¹					Women wage earners in Illinois as reported by U.S. Census of Occupations, 1930 ²				
Industry	Main industrial groups		Subdivisions of main groups		Industry	Main industrial groups		Subdivisions of main groups	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
All industries.....	72,378	100.0			All industries ⁴	715,408	100.0		
All manufacturing industries.....	41,491	57.3	100.0		Manufacturing and mechanical industries.....	125,324	17.5	100.0	
Metals, machinery, conveyances.....	15,892	38.3		100.0	Metal industries (except iron and steel).....	5,744	4.6		100.0
Electrical apparatus.....			8,347	52.5	Clock and watch factories.....			3,133	54.5
Watches and jewelry.....			2,874	18.1	Tinware, enamelware, etc., factories.....			1,925	33.6
Steel-metal work and hardware.....			1,672	10.5	Electrical machinery and supply factories.....			10,024	(⁵)
Cooking and heating apparatus.....			747	4.7					
Automobiles and accessories.....			663	4.2					
Machinery.....			468	2.9					
Instruments and appliances.....			392	2.5					
Iron and steel.....			376	2.4	Iron and steel, machinery and vehicle industries.....	5,436	4.3		
Brass, copper, zinc, and other.....			190	1.2					
Cars and locomotives.....			72	.5					
All other.....			37	.2					
Tools and cutlery.....			30	.2					
Agricultural implements.....			24	.2					
Food, beverages, and tobacco.....	7,185	17.3		100.0	Food and allied industries.....	12,263	9.8		100.0
Slaughtering and meat packing.....			2,609	36.3	Slaughter and packing houses.....			2,923	23.8
Confectionery.....			2,345	32.6	Candy factories.....			4,622	37.7
Bread and other bakery products.....			767	10.5	Bakeries.....			1,573	12.8
Fruit and vegetable canning.....			549	7.6					
Miscellaneous groceries.....			368	5.1					
Cigars and other tobaccos.....			179	2.5					
Dairy products.....			163	2.3					
Beverages.....			80	1.1					
Flour, feed, and cereals.....			70	1.0					
Ice cream.....			65	.9					

¹ Illinois Department of Labor, Labor Bulletin, September 1930, p. 56.

² U.S. Bureau of the Census, Fifteenth Census, 1930, Occupation Statistics, Illinois, table 4.

³ Only groups having 1,000 or more women are shown here. Percents computed by Women's Bureau.

⁴ "Other" not specified occupations have not been shown separately regardless of size.

⁵ Included in miscellaneous manufacturing in the census.

TABLE V.—Industrial distribution of women employees in selected industries in Illinois—Continued

Women wage earners as reported by the State of Illinois for August 1930					Women wage earners in Illinois as reported by U.S. Census of Occupations, 1930 ¹				
Industry	Main industrial groups		Subdivisions of main groups		Industry	Main industrial groups		Subdivisions of main groups	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
Clothing and millinery.....	6,609	15.9		100.0	Clothing industries.....	26,116	20.0		100.0
Men's clothing.....			3,188	48.2	Suit, coat, and overall factories.....			5,430	21.6
Women's clothing.....			1,992	80.1	Glove factories.....			1,221	4.9
Women's underwear.....			629	9.5	Dressmakers and seamstresses (not in factories).....	9,858	7.9		
Men's shirts and furnishings.....			600	9.1	Milliners and millinery dealers.....	3,883	8.1		
Women's hats.....			144	2.2	Tailoresses.....	2,563	2.0		
Overalls and work clothes.....			88	.6					
Men's hats and caps.....			18	.8					
Printing and paper goods.....	4,418	10.6		100.0	Paper, printing, and allied industries..	7,470	6.0		100.0
Job printing.....			2,630	59.6	Printing, publishing, and engraving.....			4,918	65.8
Paper boxes, bags, and tubes.....			1,064	24.1					
Miscellaneous paper goods.....			288	6.4					
Lithographing and engraving.....			150	3.4					
Edition bookbinding.....			146	3.3					
Newspapers and periodicals.....			140	3.2					
Furs and leather goods.....	3,253	7.8		100.0	Leather industries.....	7,761	6.2		100.0
Boots and shoes.....			3,070	94.4	Shoe factories.....			7,043	90.7
Leather.....			132	4.1					
Miscellaneous leather goods.....			30	.9					
Furs and fur goods.....			21	.6					
Chemicals, oils, and paints.....	1,624	3.9		100.0	Chemical and allied industries.....	2,664	2.1		
Drugs and chemicals.....			690	42.5					
Miscellaneous chemicals.....			698	36.8					
Mineral and vegetable oils.....			243	15.0					
Paints, dyes, and colors.....			98	6.7					
Textiles.....	1,232	3.0		100.0	Textile industries.....	5,774	4.6		100.0
Knit goods.....			481	39.0	Knitting mills.....			1,587	27.5
Miscellaneous textiles.....			330	26.8					
Cotton and woolen goods.....			231	18.7					
Thread and twine.....			190	15.4					

Wood products.....	688	1.8	100.0	Lumber and furniture industries.....	1,818	1.8	100.0
Furniture and cabinet work.....	418		60.0				
Miscellaneous wood products.....	101		14.4				
Saw and planing mills.....	88		12.8				
Pianos and musical instruments.....	20		2.8				
Stone, clay, and glass.....	619	1.5	100.0	Foremen and overseers (manufacturing).....	2,318	1.8	100.0
Glass.....	508		91.0	Transportation and communication.....	20,817	8.7	100.0
Brick, tile, and pottery.....	42		6.8	Telephone operators.....	22,280		84.0
Miscellaneous stone and minerals.....	9		1.5	Telegraph operators.....	1,708		6.7
Lime, cement, and plaster.....	8		.8				
Public utilities.....	21,407	50.7	100.0	Trade.....	78,842	10.8	100.0
Telephone.....	21,307		99.1	Salesmen and saleswomen, etc.....	42,909		57.0
Railway car repair.....	182		.6	Salesmen and saleswomen.....			41,806
Water, gas, light, and power.....	48		.2	"Clerks" in stores.....	18,070		18.8
Street railways.....	20		.1	Retail dealers.....	8,407		11.2
Trade—wholesale and retail.....	8,068	7.8	100.0	(Groceries.....)			2,180
Mail-order houses.....	8,740		100.0	Dry goods, clothing, boots and shoes.....			1,804
Department stores.....	1,827		27.0	Candy and confectionery.....			1,078
Wholesale groceries.....	109		2.8	Real-estate agents and officials.....	1,088		2.3
Wholesale dry goods.....	148		3.6	Real-estate agents.....			1,088
Milk distributing.....	80		1.0	Insurance agents, managers, and officials.....	1,089		1.4
Metal jobbing.....	88		.6	Domestic and personal service.....	102,811	20.9	100.0
Services.....	8,788	8.2	100.0	Waiters.....	18,750		9.8
Hotels and restaurants.....	8,409		94.8	Housekeepers and stewards.....	14,442		7.8
Laundering, cleaning, and dyeing.....	1,840		20.8	Housekeepers in hotels, restaurants, boarding houses, etc.....			1,022
				Laundry operatives.....	12,880		6.7
				Cooks.....	11,744		6.1
				Cooks in hotels, restaurants, board- ing houses, etc.....			6,808
				Other servants in hotels, restaurants, etc.....	11,780		6.1
				Laundresses (not in laundries).....	9,918		5.3
				Boarding- and lodging-house keepers.....	9,271		4.8
				Barbers, hairdressers, and manicurists.....	9,184		4.7
				Midwives and nurses (not trained).....	7,781		4.0
				Nurses (not trained).....			7,084
				Charwomen and cleaners.....	8,004		1.0
				Restaurant, cafe, and lunchroom keep- ers.....	8,778		1.4
				Janitors and sextons.....	8,780		1.4
				Cleaning, dyeing, and pressing shop workers.....	1,082		.9

See footnotes on p. 171.

174 EMPLOYMENT FLUCTUATIONS AND UNEMPLOYMENT OF WOMEN

TABLE VI.—*Indexes of employment for women and*

[June 1928=100]

Month	All manufacturing				Electrical apparatus				Watches and jewelry				Sheet-metal work and hardware			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
Women:																
January	98.3	100.0	103.0	80.3	97.0	105.1	112.3	66.4	101.6	109.1	107.0	88.0	73.0	90.3	98.3	87.1
February	101.5	101.5	102.4	86.4	94.5	114.5	107.9	60.6	101.3	111.4	105.6	88.6	86.1	103.0	102.6	88.8
March	99.0	102.7	100.5	79.1	88.4	120.0	103.7	57.7	100.9	111.6	104.4	83.5	88.2	107.9	100.7	96.5
April	97.2	102.6	95.5	78.5	87.1	123.1	93.6	58.0	100.7	111.2	101.7	84.4	96.2	100.3	99.1	100.2
May	97.0	104.4	94.4	79.4	88.1	125.3	83.9	57.2	100.6	108.3	101.2	75.8	94.9	113.2	97.8	96.6
June	100.0	106.9	92.1	77.8	100.0	129.7	80.5	56.0	100.0	105.5	100.3	74.7	100.0	119.1	106.9	96.1
July	94.6	106.5	85.9	75.4	88.0	114.7	68.7	53.6	61.3	104.1	58.0	74.6	102.4	116.5	112.5	92.7
August	97.5	107.4	91.1	78.3	86.2	125.0	70.7	57.2	99.7	104.5	98.3	74.0	101.3	104.9	99.1	89.2
September	104.1	110.6	88.8	75.5	91.6	129.5	70.1	51.3	101.0	105.2	97.2	73.7	103.1	91.9	89.3	82.4
October	103.1	107.9	85.8	70.3	102.0	137.1	72.6	48.9	104.1	105.5	96.8	66.3	102.8	97.2	96.1	74.7
November	101.3	109.0	81.3	66.0	103.1	136.1	67.7	44.2	107.0	110.4	94.5	65.6	102.9	95.3	91.2	66.1
December	101.4	105.3	81.1	67.3	100.3	115.7	63.7	42.8	108.0	108.6	93.1	61.4	100.1	97.4	87.3	67.2
Men:																
January	93.8	100.6	100.5	79.8	103.1	106.7	104.7	66.9	100.9	104.2	104.3	79.7	80.3	102.1	91.2	99.6
February	96.6	103.1	100.8	79.3	103.3	111.9	101.6	67.4	100.4	105.6	103.6	84.0	91.9	102.8	92.3	99.9
March	97.8	104.9	100.3	79.5	101.6	114.9	97.4	66.0	100.2	106.6	101.6	79.0	94.2	106.2	92.8	96.2
April	97.4	106.2	98.8	78.3	100.7	114.4	90.7	65.0	99.1	106.2	100.0	76.9	95.6	110.3	91.7	95.3
May	98.4	106.7	97.0	76.8	101.3	116.1	85.4	63.3	100.0	104.9	98.4	74.6	98.0	109.3	91.6	97.4
June	100.0	106.8	94.7	73.8	100.0	122.9	80.9	62.0	100.0	103.2	92.0	74.4	100.0	108.3	106.6	95.0
July	98.7	105.8	88.9	71.8	102.7	112.5	70.5	59.6	66.8	101.7	68.1	74.0	95.6	109.4	106.5	91.7
August	101.1	107.9	87.2	71.0	105.7	115.3	70.8	58.7	99.5	103.4	96.8	73.9	102.1	105.5	104.7	86.7
September	101.2	106.4	89.4	69.2	104.3	116.8	70.6	55.1	100.3	103.8	96.1	75.7	97.5	100.3	101.3	86.5
October	101.1	106.3	82.5	67.1	118.4	116.4	70.7	53.4	102.3	104.2	94.6	74.0	101.6	98.7	102.3	87.0
November	101.3	104.7	80.7	65.0	113.2	115.7	67.7	51.8	103.3	105.9	93.4	71.6	101.5	93.4	103.0	86.7
December	101.8	101.3	81.0	65.3	110.8	106.9	68.4	51.3	104.0	106.4	90.4	68.0	102.2	93.6	99.9	82.9
Job printing																
Paper boxes, bags, and tubes																
Boots and shoes																
Chemicals, oils, and paints																
Women:																
January	119.3	120.3	108.9	93.3	101.4	98.6	95.4	85.7	104.8	102.6	92.6	80.0	93.3	102.2	100.2	86.8
February	118.1	90.6	86.0	90.9	100.1	94.0	91.2	81.1	105.3	103.2	93.6	82.5	94.7	105.2	97.6	91.6
March	94.8	93.0	74.0	65.6	105.4	101.4	91.3	85.2	96.6	100.0	92.3	81.5	95.9	117.4	104.1	92.7
April	90.3	83.6	71.5	61.7	100.2	107.1	88.7	81.9	92.2	103.2	89.6	80.6	100.8	125.4	100.9	93.7
May	105.7	95.7	97.0	75.4	99.8	106.6	86.7	83.6	85.8	99.7	88.0	66.6	100.7	124.1	99.7	94.3
June	100.0	96.8	86.6	70.3	100.0	114.4	87.0	81.0	100.0	102.0	89.6	68.1	100.0	121.7	86.7	85.2
July	116.3	114.0	109.7	65.3	100.5	100.6	86.0	80.7	103.7	107.8	90.0	66.4	105.8	122.7	79.9	91.8
August	115.8	127.1	106.4	88.2	101.9	106.4	96.8	74.6	104.1	111.5	94.2	69.9	110.7	116.9	87.9	93.5
September	119.0	117.4	64.7	53.2	107.9	110.3	103.7	91.6	101.6	107.2	91.7	61.9	114.5	110.2	81.7	96.8
October	104.4	93.9	67.4	54.3	118.2	112.9	102.5	93.2	101.0	98.3	88.7	55.6	116.7	113.4	81.3	95.7
November	109.7	91.4	73.3	51.4	123.8	118.4	96.7	90.5	102.2	98.9	78.4	46.1	108.5	115.9	78.0	86.1
December	109.5	105.4	89.5	58.1	115.1	106.3	93.0	83.0	102.2	92.6	77.9	47.4	104.5	109.8	82.4	81.2
Men:																
January	111.3	113.8	114.6	103.8	102.8	97.9	92.8	79.4	101.6	103.0	93.2	81.9	91.3	99.3	95.2	83.4
February	106.8	107.3	105.0	98.1	104.5	102.7	88.8	80.8	103.8	103.2	94.2	83.0	93.7	101.0	94.5	83.8
March	97.3	103.1	98.7	90.2	104.6	100.1	87.6	79.4	100.2	99.5	95.5	83.2	94.9	101.9	97.6	83.0
April	93.6	99.1	96.8	87.2	103.4	101.2	90.1	78.2	96.0	100.5	94.1	79.7	98.2	104.0	98.6	83.7
May	94.6	101.0	98.8	85.5	98.6	99.7	86.4	78.9	76.0	100.8	93.0	73.1	100.2	103.0	97.5	83.4
June	100.0	106.5	104.1	81.7	100.0	96.3	86.1	78.7	100.0	106.9	93.0	64.7	100.0	103.5	91.8	79.4
July	109.9	112.8	111.4	82.4	100.7	95.0	84.5	79.2	104.1	107.2	94.1	69.2	99.7	103.8	90.2	77.5
August	106.1	114.2	105.1	89.4	104.2	96.1	82.6	78.6	105.3	111.4	97.9	71.3	100.2	103.1	90.9	75.1
September	100.1	105.7	89.7	77.0	106.5	98.3	88.6	77.6	106.0	111.3	94.6	64.9	101.0	100.5	88.5	75.6
October	99.5	101.9	88.8	74.3	107.6	98.5	84.4	78.6	102.9	108.2	89.7	54.9	100.6	97.0	83.6	75.8
November	101.2	102.0	91.6	72.7	104.9	100.2	82.2	75.6	104.6	98.8	82.7	56.7	99.2	96.8	78.6	74.4
December	107.3	106.8	95.4	80.1	102.1	93.7	77.8	75.4	103.1	95.2	81.1	62.3	99.6	95.5	79.5	72.0

1 No report before June 1928

men in selected industries in Illinois, 1928-31

[June 1928=100]

Slaughtering and meat packing				Confectionery				Clothing and millinery				Men's clothing				Women's clothing			
1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
97.4	103.4	107.9	100.2	110.2	113.1	113.2	103.2	100.9	90.1	89.6	74.9	104.8	95.1	82.6	76.5	102.8	96.3	115.0	88.3
95.5	103.2	114.4	94.6	108.0	121.1	117.7	111.7	103.3	94.1	94.1	79.4	105.0	95.6	82.9	76.3	108.1	104.2	132.3	97.7
97.9	100.0	108.9	91.7	106.2	118.1	103.2	108.8	102.5	93.3	97.7	80.4	102.3	95.4	82.2	75.8	106.4	108.1	149.8	101.3
94.2	99.8	106.3	92.0	91.0	112.1	120.0	101.0	99.2	89.8	86.0	80.3	96.0	86.2	63.2	70.8	102.1	107.8	156.5	107.8
90.4	107.6	108.5	97.4	94.0	127.8	128.3	104.1	96.7	84.1	84.7	79.9	92.3	77.6	67.2	66.7	101.3	104.6	157.0	119.2
100.0	106.2	113.5	95.5	100.0	132.7	141.0	104.2	100.0	93.6	86.8	80.4	100.0	88.3	80.8	69.2	100.0	113.6	139.4	124.0
96.9	108.9	107.6	96.5	109.8	127.1	129.3	95.0	95.3	91.8	80.0	76.7	98.3	87.9	80.8	74.7	90.8	103.7	94.1	96.5
93.2	109.6	105.4	95.4	106.9	139.9	129.4	101.7	92.3	84.1	85.0	71.7	98.1	85.8	80.6	75.6	93.6	100.0	101.7	93.0
95.3	115.2	108.4	99.0	130.5	153.3	137.0	118.7	91.7	82.7	80.9	71.8	96.5	84.9	79.3	74.1	95.2	87.0	111.3	90.4
99.4	110.6	107.0	99.5	143.2	161.1	126.9	85.6	91.2	81.1	77.1	69.1	94.2	74.5	67.8	73.1	89.5	95.9	102.2	79.2
104.3	117.9	105.6	102.7	120.7	146.4	110.5	79.5	83.9	85.7	67.5	62.4	81.4	79.0	66.6	66.3	98.4	107.2	89.1	66.6
107.6	119.6	99.2	105.3	122.1	120.8	107.5	83.6	89.0	86.2	70.7	69.9	93.7	82.9	74.6	72.6	96.0	102.9	87.9	91.9
102.2	108.3	102.6	94.5	112.0	108.8	112.3	89.6	102.8	99.9	96.5	87.4	102.5	99.4	94.3	86.9	108.8	102.0	106.0	77.7
103.6	103.9	99.9	91.2	116.8	106.5	110.1	91.2	102.7	99.7	97.2	88.9	103.1	98.6	94.5	87.9	108.1	105.3	111.9	85.6
100.1	102.4	93.5	87.3	114.7	104.9	103.5	87.6	99.7	98.8	92.8	87.6	99.0	97.5	88.9	86.6	108.7	108.2	112.8	83.5
95.4	98.5	91.3	86.7	107.2	101.8	106.2	87.4	93.0	95.2	77.0	84.4	90.7	93.6	72.2	58.3	102.3	105.3	113.8	80.1
96.6	102.8	90.8	86.5	104.3	109.2	104.7	86.0	95.0	93.8	81.7	78.0	93.6	82.9	78.7	77.1	106.2	98.9	110.7	72.7
100.0	102.8	97.7	86.2	100.0	111.5	104.8	85.0	100.0	101.8	88.1	82.0	100.0	101.3	87.7	80.6	100.0	104.2	97.3	81.9
100.1	102.7	94.1	88.1	98.7	110.9	102.0	73.7	99.7	101.8	89.0	89.8	99.7	99.7	100.8	89.2	90.5	102.5	103.2	88.8
98.4	103.0	90.6	84.0	104.1	113.2	96.0	76.4	98.8	97.8	88.9	87.9	97.9	96.2	88.2	87.8	115.7	110.7	100.7	82.3
99.0	105.4	92.0	85.6	106.8	116.7	100.7	87.5	99.0	95.9	86.0	84.3	97.9	93.0	84.1	83.4	117.9	113.6	108.6	83.1
101.7	105.8	91.3	85.9	111.9	128.5	96.5	108.6	96.5	87.5	75.2	80.7	94.2	82.9	72.8	79.8	119.7	116.6	103.3	80.8
105.1	106.9	94.5	86.9	106.5	116.9	92.7	103.9	91.5	93.7	75.0	78.0	90.1	91.4	73.7	77.1	103.1	105.4	92.4	75.5
108.5	107.0	94.7	90.8	106.4	114.8	101.5	104.7	98.6	97.1	83.2	84.9	98.3	95.5	84.7	85.4	100.9	100.4	72.8	75.5

Textiles				Telephone				Department stores				Laundering, cleaning, and dyeing			
1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
106.0	99.4	95.9	74.5	93.5	98.7	102.5	95.0	94.8	100.9	91.6	97.8	-----	99.0	113.3	98.7
117.3	83.8	93.9	82.9	93.1	100.4	100.0	94.2	95.1	102.3	88.9	90.7	(1)	99.6	106.6	95.0
102.2	91.1	93.3	90.9	92.8	101.5	99.3	93.3	94.6	109.4	88.5	90.6	-----	104.1	103.2	95.7
101.8	90.1	92.2	92.3	94.3	103.1	101.2	92.5	97.2	103.6	92.4	92.6	-----	106.0	103.3	92.2
98.6	96.8	92.8	91.7	97.4	105.8	103.3	91.6	95.2	101.6	88.1	93.4	-----	105.0	104.1	91.7
100.0	95.3	84.9	93.1	100.0	102.9	103.6	90.7	100.0	102.9	87.4	92.7	100.0	106.2	103.5	92.5
82.4	96.3	84.6	85.2	101.8	108.0	103.7	89.6	97.8	99.4	83.3	86.6	102.6	111.0	102.2	91.8
84.9	93.3	71.8	78.4	102.0	107.5	101.7	88.2	98.8	93.9	82.3	79.4	99.3	117.5	102.7	90.0
108.3	103.9	79.5	77.5	100.4	105.8	99.9	87.5	95.5	94.7	83.5	84.4	100.8	111.0	99.9	91.4
93.4	113.1	90.8	82.8	99.0	104.4	98.2	86.6	100.9	98.3	99.8	88.3	98.7	104.0	103.1	88.2
94.4	109.9	90.3	76.1	98.4	104.4	97.3	85.9	103.7	99.1	106.7	93.3	97.3	100.5	100.9	86.8
90.1	102.8	86.5	76.1	97.4	103.3	96.1	85.4	139.8	116.5	135.1	111.2	98.1	102.4	97.8	86.1
105.1	100.1	92.5	92.5	98.1	98.5	103.3	98.7	107.8	106.3	103.7	102.5	-----	102.8	115.0	92.8
105.2	100.2	96.8	98.1	98.2	98.4	102.0	96.0	108.4	103.7	100.8	96.6	-----	100.1	110.7	91.2
107.3	95.8	96.2	100.1	98.7	98.8	101.3	96.6	102.2	91.3	99.8	98.6	(1)	103.5	107.5	91.6
102.7	96.3	102.7	101.3	100.9	100.5	102.2	96.2	104.5	104.7	102.4	98.6	-----	107.5	109.5	89.2
101.1	99.0	101.6	101.3	101.0	104.9	104.7	95.5	100.8	102.0	99.1	101.9	-----	104.9	108.0	89.2
100.0	99.7	97.0	97.3	100.0	103.5	103.3	95.0	100.0	102.2	98.3	104.0	100.0	104.2	107.4	86.8
99.3	92.6	95.0	100.0	100.3	105.4	103.8	93.3	102.3	102.0	94.1	98.3	102.9	106.7	100.7	88.2
105.9	92.6	90.6	97.4	101.6	105.9	104.1	85.7	99.7	100.9	95.9	100.6	102.0	102.3	97.2	86.3
102.5	102.4	94.2	96.4	100.1	104.8	103.4	84.4	107.8	102.5	93.2	98.2	100.4	98.8	95.9	89.3
108.3	99.4	97.6	94.8	99.8	105.3	100.8	89.0	104.9	107.2	103.7	99.0	100.2	114.2	96.8	87.4
107.1	96.8	93.3	89.9	98.9	104.9	100.7	88.5	106.9	107.3	113.5	102.6	107.1	116.9	94.8	85.4
101.2	93.9	90.9	69.7	98.8	102.2	98.7	88.4	116.8	117.7	140.4	106.3	109.2	111.1	93.5	82.8

TABLE VII.—*Industrial distribution of women in selected manufacturing industries in New York*

Women wage earners in manufacturing as reported by the State of New York for September 1928 ¹					Women wage earners in manufacturing and mechanical industries in New York as reported by U.S. Census of Occupations, 1930 ²				
Industry	Main industrial groups		Subdivisions of main groups		Industry	Main industrial groups		Subdivisions of main groups	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
All manufacturing.....	466,357	100.0	-----	-----	Manufacturing and mechanical industries ⁴	297,958	100.0	-----	-----
Metals and machinery.....	167,067	35.8	-----	100.0	Iron and steel, machinery, and vehicle industries.....	6,684	2.2	-----	100.0
Machinery and electrical apparatus.....	-----	-----	51,699	30.9	Automobile factories.....	-----	-----	1,082	16.2
Railroad equipment and repair shops.....	-----	-----	21,759	13.0	Electrical machinery and supply factories.....	-----	-----	4,568	(9)
Instruments and appliances.....	-----	-----	19,206	11.5	Metal industries (except iron and steel).....	2,380	.8	-----	-----
Automobiles, airplanes, etc.....	-----	-----	18,293	10.9	-----	-----	-----	-----	-----
Brass, copper, and aluminum.....	-----	-----	13,445	8.0	-----	-----	-----	-----	-----
Sheet metal and hardware.....	-----	-----	12,397	7.4	-----	-----	-----	-----	-----
Iron and steel.....	-----	-----	11,623	7.0	-----	-----	-----	-----	-----
Cooking, heating, and ventilating apparatus.....	-----	-----	6,499	3.9	Clothing industries.....	105,886	35.5	-----	100.0
Firearms, tools, and cutlery.....	-----	-----	4,765	2.9	Shirt, collar, and cuff factories.....	-----	-----	10,394	9.8
Boat and ship building.....	-----	-----	2,926	1.8	Suit, coat, and overall factories.....	-----	-----	10,306	9.7
Silverware and jewelry.....	-----	-----	2,798	1.7	Glove factories.....	-----	-----	6,159	5.8
Structural and architectural iron.....	-----	-----	1,767	1.1	Corset factories.....	-----	-----	2,747	2.6
Clothing and millinery.....	57,891	12.4	-----	100.0	Hat factories (felt).....	-----	-----	2,287	2.2
Men's clothing.....	-----	-----	21,089	36.4	Dressmakers and seamstresses (not in factories).....	19,990	6.7	-----	-----
Men's furnishings.....	-----	-----	11,354	19.6	Milliners and millinery dealers.....	10,936	3.7	-----	-----
Women's clothing.....	-----	-----	11,143	19.2	Tailoresses.....	4,531	1.5	-----	-----
Laundering and cleaning.....	-----	-----	5,279	9.1	Textile industries.....	39,096	13.1	-----	100.0
Women's underwear.....	-----	-----	4,078	7.0	Woolen and worsted mills.....	-----	-----	2,681	6.9
Women's headwear.....	-----	-----	2,927	5.1	Knitting mills.....	-----	-----	9,772	25.0
Miscellaneous sewing.....	-----	-----	2,021	3.5	Silk mills.....	-----	-----	8,172	20.9
Textiles.....	47,320	10.1	-----	100.0	Cotton mills.....	-----	-----	4,007	10.2
Woolens, carpets, and felts.....	-----	-----	16,488	34.8	Carpet mills.....	-----	-----	4,765	12.2
Knit goods, except silk.....	-----	-----	10,538	22.3	Lace and embroidery mills.....	-----	-----	2,165	5.5
Silk and silk goods.....	-----	-----	6,588	13.9	Food and allied industries.....	10,177	3.4	-----	100.0
Cotton goods.....	-----	-----	4,776	10.1	Bakeries.....	-----	-----	2,425	23.8
Other textiles (including dyeing and finishing).....	-----	-----	8,930	18.9	-----	-----	-----	-----	-----
Food and tobacco.....	43,793	9.4	-----	100.0	-----	-----	-----	-----	-----
Bakery products.....	-----	-----	13,276	30.3	-----	-----	-----	-----	-----

Super and other groceries.....			7,468	17.1	Candy factories.....			4,027	89.6
Candy.....			5,001	13.0	Fruit and vegetable canning, etc.....			1,017	10.0
Tobacco.....			5,000	12.6	Cigar and tobacco factories.....	2,800	1.0		
Meat and dairy products.....			4,414	10.1					
Canning and preserving.....			3,001	7.0					
Flour, feed, and cereals.....			2,404	5.5					
Beverages.....			1,071	4.5					
Printing and paper goods.....	38,356	8.2		100.0	Paper, printing, and allied industries.....	12,028	4.0		100.0
Printing and bookbinding.....			20,455	76.8	Printing, publishing, and engraving.....			5,705	47.4
Miscellaneous paper goods.....			5,308	14.0	Paper-box factories.....			2,526	21.0
Paper boxes and tubes.....			2,513	9.2	Blank book, envelope, tag, paper bag, etc., factories.....			1,946	16.2
Pulp and paper.....	7,003	1.5			Paper and pulp mills.....			1,851	15.4
Furs, leather, and rubber goods.....	87,471	8.0		100.0	Compositors, linotypers, and typesetters.....	1,134	.4		
Shoes.....			24,708	66.2	Leather industries.....	13,824	4.0		100.0
Gloves, bags, and canvas goods.....			4,108	11.0	Shoe factories.....			11,405	82.5
Rubber and gutta percha.....			2,062	7.2	Leather belt, leather goods, etc., factories.....			2,071	15.0
Pearl, horn, bone, etc.....			2,510	6.7	Rubber factories.....			1,175	(*)
Leather.....			1,910	5.1					
Furs and fur goods.....			1,473	3.9					
Chemicals, oils, paints, etc.....	20,166	5.6		100.0	Chemical and allied industries.....	4,915	1.6		
Oil products.....			9,337	28.7					
Photographic and miscellaneous chemicals.....			5,083	15.2					
Drugs and industrial chemicals.....			5,050	15.2					
Paints and colors.....			2,100	5.4					
Wood manufactures.....	21,941	4.7		100.0	Lumber and furniture industries.....	2,208	.8		100.0
Furniture and cabinet work.....			5,303	27.8	Furniture factories.....			1,040	45.9
Pianos and other musical instruments.....			4,870	22.2					
Miscellaneous wood, etc.....			4,443	20.2					
Saw and planing mills.....			4,326	19.7					
Stone, clay, and glass.....	14,004	3.0		100.0	Clay, glass, and stone industries.....	1,812	.4		
Brick, tile, and pottery.....			4,305	31.3					
Miscellaneous stone and minerals.....			3,306	23.6					
Lime, cement, and plaster.....			3,219	23.0					
Glass.....			3,004	22.1					
Water, light, and power.....	5,245	1.1			Foremen and overseers (manufacturing).....	5,714	1.9		
					Managers and officials (manufacturing).....	2,115	.7		

1 New York State Department of Labor, Industrial Bulletin, October 1928, p. 405. This includes office employees. The numbers are the actual figures reported. For weighted absolutes see table 11, p. 72, and statistical work sheet, p. 219.

2 U. S. Bureau of the Census, Fifteenth Census, 1930, Occupation Statistics, New York, table 4.

3 Only groups having 1,000 or more women are shown here. Percents computed by Women's Bureau.

4 "Other" not specified occupations are not shown separately, though more than 1,000 women fell in the group.

5 Included in miscellaneous manufacturing in the census.

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TABLE VIII.—Indexes of employment for women and men in

[June 1923=100]

Month	All manufacturing				Clothing and millinery				Women's clothing				Men's clothing			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
Women:																
January.....	80	81	81	66	81	79	82	69	87	86	98	82	76	80	88	67
February.....	82	84	81	69	83	84	83	73	92	96	96	88	75	84	86	75
March.....	95	88	83	74	87	91	86	80	101	109	107	100	81	85	79	80
April.....	82	87	79	73	84	89	81	80	97	103	102	101	76	84	69	80
May.....	80	84	77	70	80	83	78	74	91	94	97	92	72	76	67	70
June.....	79	83	75	67	77	82	73	67	77	85	94	73	76	87	72	70
July.....	75	80	71	63	70	72	64	61	63	62	58	56	82	87	81	73
August.....	79	84	73	67	73	77	70	67	68	74	73	70	85	92	82	71
September.....	85	91	80	73	82	87	80	75	86	96	98	83	87	91	82	79
October.....	88	92	78	69	85	89	80	72	90	102	105	82	86	90	67	73
November.....	85	89	74	65	83	86	73	65	87	98	90	70	81	84	62	63
December.....	84	83	69	62	83	82	71	64	91	95	90	67	79	80	65	65
Men:																
January.....	83	85	82	68	84	77	81	68	103	100	105	91	72	61	70	56
February.....	84	88	82	69	87	84	83	74	109	103	108	101	75	73	72	62
March.....	84	89	82	70	88	89	84	78	110	117	118	105	77	76	68	67
April.....	83	88	80	70	80	81	77	77	100	105	107	100	66	65	61	68
May.....	81	87	78	67	68	70	67	68	83	85	88	83	52	55	49	59
June.....	81	87	77	65	69	77	66	62	74	81	74	66	58	71	58	56
July.....	82	88	77	65	75	79	73	69	85	70	81	80	66	81	69	63
August.....	83	89	76	64	82	89	77	73	95	106	96	90	75	83	71	64
September.....	84	90	77	66	82	89	82	77	104	117	113	102	69	76	69	66
October.....	85	90	75	63	80	88	77	71	104	117	106	93	65	73	62	60
November.....	84	87	72	60	74	82	70	63	93	101	93	80	58	70	57	52
December.....	84	83	69	58	75	77	65	58	96	101	90	73	58	62	50	46

Month	Knit goods (except silk)				Woolens, carpets, and felts				Silk and silk goods				Candy			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
Women:																
January.....	59	55	49	38	81	89	88	61	64	64	62	54	81	83	91	78
February.....	63	60	57	41	82	89	81	70	64	65	62	55	89	82	88	89
March.....	64	62	58	41	83	95	77	76	64	66	62	56	90	77	84	94
April.....	65	64	54	40	79	98	75	80	60	64	58	60	80	74	75	85
May.....	59	62	59	47	91	97	66	74	59	61	55	55	81	80	69	84
June.....	58	60	60	48	93	100	59	75	57	60	54	53	85	75	66	79
July.....	54	58	52	47	85	99	69	72	48	57	53	53	81	76	71	68
August.....	51	57	48	47	82	98	72	80	63	65	52	53	85	91	73	83
September.....	55	58	53	48	87	100	71	66	61	61	56	54	102	99	88	105
October.....	63	63	54	48	92	102	66	59	65	63	57	58	116	106	95	121
November.....	61	63	52	48	88	105	71	52	67	66	59	62	108	102	97	119
December.....	61	59	46	42	85	90	51	50	68	63	55	62	97	94	98	130
Men:																
January.....	70	69	64	48	96	100	95	84	75	85	78	75	99	92	91	80
February.....	76	74	68	51	97	101	95	82	79	89	81	73	99	96	92	82
March.....	74	73	70	45	95	103	96	83	79	89	82	74	95	88	91	87
April.....	75	74	61	46	96	105	99	82	77	81	72	71	96	85	87	85
May.....	71	71	64	55	99	108	91	81	78	79	65	63	96	85	80	83
June.....	72	70	66	56	95	108	89	89	75	79	66	57	92	84	78	78
July.....	68	70	60	55	94	107	92	87	74	75	69	62	91	87	79	83
August.....	59	71	54	58	94	106	89	91	77	75	72	67	90	90	71	90
September.....	67	73	64	61	94	107	88	82	80	72	73	67	104	97	82	91
October.....	73	77	65	62	96	115	98	74	83	76	77	73	112	103	88	96
November.....	73	76	62	58	98	114	88	66	82	77	77	72	103	99	84	96
December.....	72	69	57	54	97	105	71	64	84	77	76	69	94	97	83	93

selected manufacturing industries in New York State, 1923-31

[June 1923=100]

Laundering and cleaning				Men's furnishings				Women's headwear				Women's underwear				Textiles			
1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
122	125	130	125	69	67	60	43	91	78	74	62	60	56	58	51	69	71	70	50
120	125	124	121	71	71	62	44	85	74	78	68	65	64	62	55	72	74	71	53
117	124	125	123	71	71	61	46	98	93	93	89	63	66	64	58	72	77	69	57
119	130	125	124	66	68	56	46	100	98	92	89	60	62	60	57	72	77	67	59
120	131	129	126	65	64	52	46	90	91	83	76	58	60	57	54	71	76	63	58
121	134	129	128	64	62	49	45	87	82	67	63	57	62	56	50	70	72	62	57
127	132	130	127	64	63	46	45	50	52	43	50	53	59	47	43	64	70	60	56
123	126	126	123	62	62	46	47	64	63	60	74	55	61	48	47	66	74	55	58
125	133	128	126	66	67	49	48	88	86	82	83	59	65	54	57	69	74	60	56
124	133	130	124	71	66	50	48	93	90	78	72	63	67	61	56	75	78	58	55
124	133	127	123	72	66	48	45	89	80	67	60	65	67	61	56	74	80	59	53
124	130	125	121	71	62	47	41	82	67	59	54	63	62	53	64	73	74	51	50
101	112	114	108	76	72	62	49	110	96	93	79	77	75	74	65	81	83	79	64
101	107	110	105	78	72	64	48	124	107	93	89	82	79	76	67	84	85	81	67
100	110	111	109	76	75	63	48	115	117	104	101	76	82	77	71	83	86	81	68
100	111	111	111	69	73	60	46	122	118	99	102	75	76	73	69	83	87	78	69
101	109	113	113	71	70	59	46	108	111	97	87	71	77	72	67	82	86	73	69
105	113	113	114	68	66	51	43	99	103	84	70	70	78	72	63	80	85	73	68
106	112	110	113	68	67	51	47	84	82	70	61	71	77	70	62	78	83	72	67
107	112	107	113	68	67	49	50	100	102	82	82	72	77	69	64	76	84	66	70
106	117	111	113	70	70	52	49	117	111	101	89	74	83	75	68	79	85	70	68
107	117	112	112	74	68	52	49	106	105	87	77	75	83	77	66	81	90	72	66
107	117	110	110	74	66	52	49	107	90	72	58	77	83	77	67	83	89	70	61
109	114	108	107	75	66	51	55	103	84	67	54	75	74	68	65	83	84	62	60
Bakery products				Canning and pre-serving				Tobacco				Shoes				Gloves, bags, and canvas goods			
1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
82	79	68	60	43	49	34	30	47	53	34	18	100	116	137	123	90	88	98	82
81	83	69	59	63	69	33	32	46	56	35	37	107	113	141	120	93	90	106	94
85	83	68	59	55	54	33	33	53	56	39	39	106	118	146	120	93	105	102	100
81	81	65	57	66	55	30	34	55	56	38	40	100	110	134	115	94	102	101	95
82	78	65	58	56	63	37	34	52	58	38	40	90	114	144	110	93	101	107	83
84	80	71	57	81	68	82	69	52	57	38	41	93	118	134	106	97	86	100	73
79	75	67	55	78	116	170	110	59	56	38	39	99	129	140	106	92	93	78	72
78	69	61	55	167	169	171	121	57	57	38	41	108	138	143	110	97	105	97	81
91	72	63	61	158	204	259	196	57	56	40	39	110	141	130	101	94	115	114	90
89	78	63	57	149	139	136	58	58	58	40	41	106	135	129	95	100	121	121	94
84	73	63	54	83	102	98	52	57	53	42	43	105	128	116	83	107	118	114	89
82	71	61	54	71	43	36	35	57	40	32	42	100	130	116	78	99	112	99	63
94	92	82	76	66	69	69	61	63	70	36	24	94	97	112	100	77	84	86	68
93	94	83	76	68	70	61	56	62	70	32	35	96	100	116	100	80	93	92	80
92	93	82	76	72	69	60	56	73	69	38	40	98	98	119	106	87	100	90	83
93	92	83	74	69	65	65	64	75	70	37	41	93	98	113	103	86	100	88	69
93	92	82	76	69	70	76	71	71	67	37	42	82	97	119	101	85	98	91	56
94	92	83	74	79	80	115	99	72	66	38	43	82	97	117	92	84	71	85	50
93	90	82	75	136	118	348	186	74	67	36	42	90	104	119	99	82	80	60	47
91	87	80	74	100	103	151	121	73	67	37	42	98	109	119	96	88	99	81	60
95	88	83	75	149	173	262	235	76	65	39	39	98	107	114	92	87	106	95	67
96	89	79	75	118	132	162	91	76	69	38	43	95	104	110	82	91	111	100	71
95	87	83	74	96	96	114	65	76	63	40	44	90	103	101	63	100	105	95	68
96	86	77	72	75	65	62	53	77	51	38	43	91	107	98	71	92	97	80	48

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TABLE VIII.—*Indexes of employment for women and men in selected manufacturing industries in New York State, 1928-31—Continued*

[June 1923=100]

Month	Printing and paper goods (total)				Printing and bookmaking				Paper boxes and tubes				Metals and machinery				Machinery and electrical apparatus			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
Women:																				
January	91	90	89	73	94	98	100	80	80	74	65	58	90	102	88	65	91	117	93	64
February	90	91	87	73	94	97	96	78	75	75	67	60	92	105	86	63	90	120	90	63
March	91	92	86	73	94	99	96	79	78	74	68	59	95	107	83	64	86	122	85	63
April	89	91	86	71	93	99	95	75	77	73	67	59	98	108	82	65	90	125	84	61
May	89	90	85	70	97	100	94	75	75	71	68	59	99	107	83	63	92	128	84	57
June	88	90	81	68	94	101	90	72	78	71	65	58	99	110	80	61	93	140	80	58
July	86	91	81	63	95	102	90	70	74	70	63	51	97	110	75	58	99	145	74	59
August	89	91	79	63	95	101	87	68	74	68	63	54	98	106	72	54	98	132	70	53
September	91	91	80	67	96	100	84	67	77	74	68	63	103	108	72	59	116	136	68	61
October	93	94	80	68	97	104	88	67	79	78	71	66	107	109	72	56	124	143	72	59
November	95	94	80	68	101	101	82	68	82	80	74	66	109	105	70	57	130	132	68	57
December	92	93	75	66	98	102	81	68	79	76	65	60	107	96	67	54	126	107	67	48
Men:																				
January	95	94	95	87	96	96	98	91	85	88	86	72	78	87	84	63	81	90	93	69
February	95	96	95	87	96	98	98	90	83	90	87	75	79	91	82	64	80	93	91	69
March	94	94	96	89	96	96	99	83	82	91	88	78	79	93	81	63	79	95	89	69
April	92	94	95	87	94	96	98	91	80	87	87	76	80	94	81	63	79	98	87	68
May	92	94	94	87	95	96	97	80	79	86	85	75	80	95	79	62	79	99	85	67
June	92	93	92	83	95	96	95	86	77	90	84	75	80	94	77	59	79	101	84	65
July	90	93	89	81	93	95	92	84	75	90	80	74	79	94	72	56	79	103	79	62
August	88	93	88	79	91	95	91	82	79	87	80	75	80	92	71	53	81	101	78	57
September	90	95	89	80	93	97	92	83	79	89	81	79	81	93	70	53	83	103	76	56
October	93	97	90	80	94	100	93	82	92	91	90	80	83	92	68	52	86	104	75	57
November	94	96	89	80	96	99	93	82	93	89	77	80	84	89	67	52	88	101	76	56
December	95	97	90	79	97	100	93	81	91	88	76	77	85	86	65	51	90	97	71	56

TABLE IX.—Industrial distribution of manufacturing employees in selected industries in Ohio

Women wage earners in manufacturing as reported by the State of Ohio for September 1928 ¹					Women wage earners in manufacturing and mechanical industries in Ohio as reported by U.S. Census of Occupations, 1930 ^{1,2}				
Industry ⁴	Main industrial groups		Subdivisions of main groups		Industry	Main industrial groups		Subdivisions of main groups	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
All manufacturing-----	113,747	100.0			Manufacturing and mechanical industries ⁵ -----	101,791	100.0		
Textiles-----	28,152	24.7		100.0	Textiles-----	5,547	5.4		100.0
Men's clothing-----			10,959	38.9	Knitting mills-----			1,736	31.3
Women's clothing-----			4,153	14.8	Woolen and worsted mills-----			1,524	27.5
Hosiery and knit goods-----			3,403	12.1	Clothing industries-----	15,884	15.6		100.0
Gloves, cloth-----			1,741	6.2	Glove factories-----			1,601	10.1
Woolen, worsted, and wool felts (including fur and felt hats)-----			1,722	6.1	Suit, coat, and overall factories-----			3,637	22.9
Silk and silk goods (including throwsters)-----			1,206	4.3	Dressmakers and seamstresses (not in factories)-----	8,236	8.1		
Rubber products-----	11,674	10.3		100.0	Milliners and millinery dealers-----	1,725	1.7		
Tires and tubes-----			9,741	83.4	Tailoresses-----	2,634	2.6		
Druggists' sundries and toys, rubber-----			1,396	12.0	Rubber factories-----			7,429	(⁶)
Food and kindred products-----	8,895	7.8		100.0	Food and allied industries-----	4,080	4.0		100.0
Canning and preserving-----			2,356	28.5	Bakeries-----			1,047	25.8
Bakery products-----			2,211	24.9	Candy factories-----			1,340	33.0
Confectionery-----			1,832	20.6	Paper, printing and allied industries-----	6,273	6.2		100.0
Paper and printing-----	8,182	7.2		100.0	Blank book, envelope, tag, paper bag, etc., factories-----			1,766	28.2
Printing and publishing-----			3,147	38.5	Paper and pulp mills-----			1,595	25.4
Boxes, fancy and paper; drinking cups-----			1,578	19.3	Printing, publishing, and engraving-----			2,402	38.3
Paper, including stationery-----			1,513	18.5	Metal industries (except iron and steel)-----	2,975	2.9		100.0
Metals and metal products, other than iron and steel-----	6,459	5.7		100.0	Tinware, enamelware, etc., factories-----			1,331	44.7
Gas and electric fixtures, lamps and reflectors-----			2,818	43.6	Iron and steel, machinery and vehicle industries-----	9,086	8.9		100.0
Copper, tin, and sheet-iron products-----			2,294	35.5					
Iron and steel and their products-----	7,840	6.9		100.0					
Foundry and machine-shop products-----			3,318	42.3					
Calculating machines-----			1,152	14.7					

Vehicles.....	4,205	3.7	-----	100.0	Automobile factories.....	-----	-----	3,494	38.7
Automobiles and parts (including assembling plants).....	-----	-----	3,860	91.8	-----	-----	-----	-----	-----
Tobacco.....	7,797	6.9	-----	100.0	Cigar and tobacco factories.....	4,999	4.9	-----	-----
Cigars and cigarettes.....	-----	-----	6,162	79.0	-----	-----	-----	-----	-----
Leather and leather products.....	6,861	6.0	-----	100.0	Leather industries.....	5,270	5.2	-----	100.0
Boots, shoes, cut stock, and findings.....	-----	-----	6,164	89.7	Shoe factories.....	-----	-----	4,807	91.2
Stone, clay, and glass.....	6,562	5.8	-----	100.0	Clay, glass, and stone industries.....	5,446	5.4	-----	100.0
Pottery, terra-cotta, and fire-clay products.....	-----	-----	3,987	60.8	Potteries.....	-----	-----	3,259	59.8
Glass.....	-----	-----	1,348	20.5	Glass factories.....	-----	-----	1,624	28.0
Lumber and its products.....	1,916	1.7	-----	-----	Lumber and furniture industries.....	1,567	1.5	-----	-----
Chemicals and allied products.....	1,615	1.4	-----	-----	Chemical and allied industries.....	1,933	1.9	-----	-----
Miscellaneous manufactures.....	13,559	11.9	-----	100.0	Miscellaneous manufacturing industries.....	18,742	18.4	-----	100.0
Electrical machinery, apparatus, and supplies.....	-----	-----	4,794	35.4	Electrical machinery and supply factories.....	-----	-----	5,503	29.4
Radios and parts.....	-----	-----	2,342	17.3	-----	-----	-----	-----	-----
Toys and games.....	-----	-----	1,694	12.5	Foremen and overseers (manufacturing).....	1,895	1.9	-----	-----

¹ Bulletin of the Department of Industrial Relations and the Industrial Commission of Ohio. Division of Labor Statistics. Report No. 19. Rates of Wages, Fluctuation and Employment, Wage and Salary Payments in Ohio, 1928, p. 302ff.

² U.S. Bureau of the Census. Fifteenth Census, 1930. Occupation Statistics, Ohio, table 4.

³ Only groups having 1,000 or more women are shown here. Percents computed by Women's Bureau.

⁴ The Ohio classification is much more detailed than that in the other two States—Illinois and New York. This table includes all main groups of wage earners in manufacturing where 1,000 or more women were employed and all the separate industries within these groups that employed 1,000 or more women.

⁵ "Other" not specified occupations have not been shown separately, regardless of size.

⁶ Included in miscellaneous manufacturing in the census.

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TABLE X.—Index of employment for women and
[Average of 1928=100]

Month	Wage earners in—															
	All industries				All manufactures				Service				Telegraph and telephone (including messenger service)			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
Women:																
January.....	93.4	102.9	97.8	84.5	92.0	102.8	92.3	74.9	96.1	106.3	112.7	109.1	95.6	117.3	119.8	104.7
February.....	96.0	105.5	98.0	86.7	96.1	106.8	93.5	78.1	96.5	106.8	112.9	110.4	95.7	116.9	119.7	103.9
March.....	97.6	106.2	99.1	88.3	97.8	106.7	93.8	80.0	97.5	107.7	113.7	111.4	96.3	119.8	118.3	103.2
April.....	97.2	107.4	99.7	89.1	96.3	106.9	93.7	80.0	98.9	109.7	115.3	113.2	97.8	122.2	116.9	102.1
May.....	98.4	108.1	99.6	89.5	97.1	107.3	92.8	80.5	100.9	111.4	117.2	114.7	100.4	123.7	118.8	101.1
June.....	100.4	108.9	98.9	89.4	99.3	107.2	91.7	79.9	102.4	114.3	117.6	116.1	103.6	125.9	118.6	100.4
July.....	99.4	108.2	94.2	86.7	98.8	106.9	96.5	77.4	99.6	112.3	113.3	112.9	103.9	127.1	115.8	99.4
August.....	100.9	109.8	93.9	86.4	101.8	110.0	87.4	78.2	99.6	111.4	111.9	110.3	102.9	126.8	112.3	98.5
September.....	103.7	113.1	96.0	89.8	105.1	114.4	90.4	82.3	102.2	113.6	113.6	111.8	101.2	124.3	110.4	96.7
October.....	105.6	112.8	94.8	86.8	107.2	113.3	88.5	78.2	102.6	114.0	112.8	110.2	100.6	123.3	110.7	95.6
November.....	104.0	108.6	91.9	83.9	105.0	107.4	84.6	74.9	102.1	112.1	111.0	108.5	101.2	125.4	110.5	92.6
December.....	103.4	104.0	90.2	82.6	103.4	99.8	81.9	72.3	101.6	111.7	109.9	107.1	100.8	125.0	103.7	91.0
Men:																
January.....	89.2	98.9	92.5	74.5	91.3	104.8	93.6	73.3	92.5	101.6	101.5	98.2	87.4	107.7	120.2	97.3
February.....	92.0	101.3	92.7	75.0	95.8	108.1	94.0	74.1	92.3	102.1	101.4	99.4	87.6	109.1	119.5	96.9
March.....	94.9	104.2	93.5	76.2	98.1	110.1	93.8	75.4	94.3	105.5	103.5	100.6	89.1	114.0	113.0	95.8
April.....	97.7	107.5	97.1	78.6	98.7	111.4	95.6	76.2	99.1	110.3	109.9	106.3	103.7	115.1	113.1	93.4
May.....	100.8	110.0	98.1	79.0	100.2	112.6	94.8	75.7	101.7	113.0	111.2	107.6	105.5	112.8	112.4	93.6
June.....	102.4	111.3	96.0	78.1	101.0	112.2	91.5	73.9	103.5	115.5	112.2	108.7	106.0	112.3	111.9	92.6
July.....	102.8	111.8	93.0	76.4	100.6	111.6	87.1	71.5	102.6	114.9	107.7	107.1	104.3	114.2	113.0	91.3
August.....	104.9	110.5	90.8	74.4	102.4	109.7	84.8	69.1	103.5	114.5	107.8	106.0	105.7	116.9	111.5	91.1
September.....	106.1	109.4	89.5	73.6	104.1	108.7	83.6	68.2	105.4	116.5	109.0	106.6	103.4	114.1	110.7	90.5
October.....	105.6	107.7	87.1	71.3	103.5	106.3	81.6	66.1	104.0	113.5	105.5	103.4	102.9	114.1	110.4	89.8
November.....	103.2	99.7	82.8	68.9	102.5	98.0	78.4	65.2	101.2	110.1	103.3	99.7	102.3	115.9	100.7	88.9
December.....	100.4	94.6	79.6	66.3	101.8	94.1	76.9	63.6	99.9	107.4	99.6	98.1	102.2	117.3	100.4	88.9

Month	Wage earners in—Continued															
	Women's clothing (including corsets)				Hosiery and knit goods				Tires and tubes				Food and kindred products			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
Women:																
January.....	98.4	97.9	90.1	88.1	88.8	98.7	99.1	73.5	97.8	116.3	87.7	59.6	80.9	92.4	97.2	87.6
February.....	105.6	104.1	100.8	93.5	93.5	105.6	100.1	76.3	95.0	119.7	84.0	58.3	84.8	96.4	100.3	89.6
March.....	105.6	107.8	99.7	96.5	95.6	107.7	97.2	74.6	95.9	122.6	83.0	61.9	86.8	97.8	98.7	89.3
April.....	104.5	106.5	105.4	96.0	97.4	103.9	97.6	72.8	90.8	126.9	83.2	61.3	86.1	96.6	98.5	90.6
May.....	100.5	105.2	101.8	96.0	98.6	103.3	99.0	76.5	88.6	129.1	85.6	63.9	90.0	102.1	101.9	94.0
June.....	95.0	101.9	92.5	91.2	100.0	107.5	107.9	81.0	91.8	130.3	83.3	64.5	100.7	111.9	103.3	99.5
July.....	103.8	89.9	82.7	88.6	101.8	102.9	89.6	71.1	94.6	129.5	79.9	62.2	98.7	106.6	98.5	94.5
August.....	105.9	106.2	95.1	91.9	97.4	101.3	92.0	83.2	105.7	124.8	76.7	60.0	100.4	111.5	103.7	101.6
September.....	98.0	101.3	90.0	86.0	111.4	115.9	100.8	101.6	108.1	120.8	69.8	57.8	138.0	152.3	159.0	154.5
October.....	100.8	94.0	88.4	84.7	118.1	111.2	100.2	94.2	107.9	112.6	63.1	56.4	120.0	138.0	142.5	122.4
November.....	91.9	82.6	76.7	72.6	100.7	99.9	88.7	87.7	110.9	103.3	60.8	55.5	109.0	119.3	112.0	103.9
December.....	90.0	83.6	76.8	74.5	96.8	92.9	77.7	73.8	112.8	95.9	62.2	55.2	104.7	110.2	106.8	101.2
Men:																
January.....	101.7	96.3	89.0	80.5	93.4	96.3	96.6	68.1	96.4	102.7	83.4	67.5	91.0	96.8	111.0	105.4
February.....	104.4	100.2	94.2	87.1	99.4	99.2	96.6	68.8	97.6	105.1	81.9	66.1	92.0	96.5	110.8	104.9
March.....	103.9	101.1	95.2	89.3	100.6	101.0	93.5	71.2	98.3	106.2	80.6	65.0	92.6	96.7	110.4	104.3
April.....	104.7	97.3	93.6	84.7	101.0	100.7	92.2	69.0	97.2	107.5	82.4	64.3	93.3	97.3	111.4	104.6
May.....	92.6	89.6	83.7	74.3	101.2	97.0	82.2	69.0	97.0	109.7	84.0	66.2	116.9	98.9	113.2	107.0
June.....	92.4	83.3	82.7	78.4	100.0	99.0	98.3	71.8	98.5	111.7	83.0	67.6	98.8	105.6	116.4	111.4
July.....	104.3	89.2	82.7	84.5	98.5	96.2	90.9	69.7	100.3	110.7	79.1	67.0	100.0	106.1	115.0	109.8
August.....	103.1	95.8	93.0	83.3	97.0	96.0	81.7	75.1	103.9	105.0	76.5	66.0	100.8	106.7	114.7	113.8
September.....	101.1	95.3	91.0	81.2	102.4	101.5	89.6	84.1	104.7	100.6	71.1	64.3	101.6	116.8	125.8	123.4
October.....	100.4	90.5	90.0	83.6	104.9	105.1	89.4	78.7	103.7	94.7	68.4	63.4	105.0	109.0	119.8	110.7
November.....	85.2	83.0	82.0	74.3	101.4	99.0	84.0	74.9	101.8	87.8	67.1	63.6	102.2	106.2	114.8	106.7
December.....	86.5	83.4	78.2	70.9	99.7	96.5	76.9	67.6	100.5	84.9	67.2	63.3	96.8	101.1	110.4	104.7

men in selected industries in Ohio, 1928-31

[Average of 1928=100]

Wage earners in— Continued				Bookkeepers, stenographers, and office clerks in all industries				Salespeople (not traveling) in retail and wholesale stores				Wage earners in—							
Stores (retail and wholesale)												Textiles				Men's clothing (including shirts and coat pads)			
1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
96.4	97.5	96.7	91.1	96.9	106.5	111.9	101.4	89.1	94.2	93.3	89.9	98.1	98.5	98.0	81.6	99.3	103.4	103.1	84.9
95.3	98.3	95.5	90.3	97.4	107.3	111.4	101.0	88.4	93.8	93.7	88.9	101.7	103.4	100.1	85.0	102.1	108.2	103.7	88.9
97.5	100.4	98.0	93.5	98.0	108.0	111.8	101.1	93.6	100.5	97.4	94.1	102.3	106.2	99.3	86.0	102.8	110.0	102.8	89.0
99.3	105.8	103.5	99.4	98.7	109.1	111.6	100.5	96.2	102.7	105.1	99.4	100.3	105.9	99.0	85.1	97.9	109.3	102.2	86.4
99.7	104.8	102.5	96.7	99.0	109.8	111.1	100.3	96.0	103.8	99.3	98.4	100.0	105.5	97.0	84.3	100.3	107.5	99.1	86.2
100.6	106.1	99.3	95.1	99.8	110.5	111.1	98.7	96.7	104.9	98.7	97.7	99.6	106.6	95.9	84.9	98.5	110.5	99.0	86.2
96.9	101.0	94.3	90.2	100.5	111.6	110.0	98.6	94.4	99.8	91.9	92.6	97.3	103.7	87.5	80.7	95.9	110.8	92.5	87.2
93.5	102.1	91.8	88.5	101.2	112.1	109.5	98.1	91.4	98.5	90.1	91.7	99.0	106.5	89.6	84.2	97.8	112.4	94.8	91.4
97.9	102.9	94.5	96.9	101.6	112.2	108.6	97.4	98.4	104.1	95.6	97.8	100.7	109.7	90.5	87.7	99.8	113.6	96.3	91.2
102.5	110.6	97.8	98.4	101.7	112.1	107.2	95.8	102.7	110.6	99.5	98.7	103.8	110.1	90.2	84.1	102.8	115.9	95.7	89.2
105.5	110.3	101.2	95.4	101.9	112.4	106.1	94.6	107.9	113.0	105.2	101.2	99.2	105.5	87.1	80.7	100.5	113.3	95.1	88.0
115.0	119.0	107.9	110.7	103.3	111.9	106.3	94.5	145.2	146.0	132.9	126.5	98.0	102.5	83.9	76.7	102.4	110.4	91.9	83.7
95.8	96.3	109.9	103.7	97.0	103.9	116.9	103.0	94.4	111.2	100.0	99.2	97.9	99.2	97.0	80.4	100.3	104.1	107.9	92.2
95.5	96.8	109.5	103.1	97.4	104.8	116.7	102.7	94.5	110.9	99.3	98.8	100.0	101.1	97.8	82.1	100.1	104.3	108.1	95.9
96.1	98.1	111.1	103.8	98.1	105.6	117.2	102.5	95.9	113.5	99.6	99.6	100.9	102.9	97.0	82.6	100.4	105.6	107.3	96.0
98.1	99.8	113.2	105.6	98.5	106.3	117.2	101.7	97.2	116.0	101.9	101.8	101.1	104.3	98.0	83.0	98.9	104.2	112.6	96.0
99.1	100.3	113.3	105.6	98.9	107.0	117.2	101.4	98.0	117.5	101.5	102.6	100.3	103.0	97.5	81.8	99.6	103.8	109.7	91.4
99.4	101.4	112.9	105.2	100.0	108.1	117.2	100.7	99.4	118.7	101.4	102.8	100.6	103.6	96.5	82.9	99.4	106.1	109.5	95.4
99.5	101.5	111.4	103.5	100.8	109.2	116.9	100.0	99.4	119.0	99.1	101.2	98.9	103.7	91.5	82.8	97.6	106.9	101.7	96.0
99.7	102.1	109.7	104.0	101.5	110.1	116.0	99.5	99.0	119.9	97.7	100.8	99.0	101.6	89.0	82.4	99.7	108.1	101.9	98.6
102.2	103.3	109.8	105.3	101.6	109.8	114.5	98.4	102.0	122.7	99.2	101.0	99.7	102.5	89.6	83.8	100.7	108.4	102.6	99.1
103.2	104.5	110.2	104.1	101.7	109.3	114.8	97.3	104.1	124.7	100.1	100.3	101.9	103.4	90.2	81.1	103.1	110.5	106.8	98.5
104.0	104.0	109.5	102.9	102.1	109.0	113.5	96.2	104.8	125.5	100.6	100.4	99.9	100.5	88.4	78.9	100.1	107.2	104.4	95.5
107.5	107.4	111.7	104.2	102.4	108.5	112.9	95.6	110.3	129.3	104.5	103.5	99.7	98.6	86.5	76.2	100.3	105.8	103.6	91.6

Wage earners in—Continued

Bakery products				Paper and printing				Printing and publishing				Cigars and cigarettes				Iron and steel and their products			
1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
90.1	99.1	112.9	100.6	96.7	110.3	109.3	108.3	97.6	134.2	132.3	153.3	90.9	86.4	74.9	55.3	90.3	101.3	381.8	862.8
91.5	103.2	116.2	101.4	96.8	111.9	107.8	107.7	96.0	134.2	131.3	147.8	98.3	87.0	77.7	67.6	95.8	108.3	382.2	864.7
93.4	105.8	116.9	102.7	99.0	112.6	111.4	106.6	98.9	132.0	134.3	145.9	98.8	85.4	77.3	68.1	97.8	109.1	182.2	866.2
93.8	107.6	119.4	102.3	97.9	112.9	111.0	106.7	97.7	129.7	132.9	145.8	96.2	82.6	74.1	67.5	97.1	110.2	186.6	866.5
97.0	114.0	119.8	106.1	99.0	113.5	108.0	106.3	98.5	133.9	127.1	146.6	98.3	80.1	75.5	68.1	96.9	111.1	631.2	866.3
104.8	117.5	121.8	108.9	100.4	112.6	108.0	104.4	100.3	130.5	126.0	144.0	98.1	80.3	76.6	77.5	97.8	108.7	778.2	863.8
104.9	115.2	120.3	105.2	98.4	113.8	104.0	101.0	99.3	131.8	123.7	138.3	101.2	82.9	77.2	77.2	94.4	109.7	772.2	861.2
107.7	111.7	116.0	102.3	99.4	114.4	103.0	100.0	101.1	134.6	119.6	135.9	99.2	84.3	76.7	77.1	100.0	104.2	274.0	858.5
107.9	115.5	125.8	107.7	100.0	117.0	103.3	101.6	99.6	138.2	121.3	139.1	99.8	84.5	75.9	69.0	105.0	101.8	872.3	857.9
108.0	119.3	132.1	108.6	103.7	118.7	104.1	101.5	102.2	134.5	120.9	137.6	105.5	91.0	77.5	69.8	108.5	99.9	971.4	858.0
108.2	120.0	119.5	108.3	105.8	117.5	103.5	101.4	104.5	132.9	121.4	144.2	106.0	93.3	77.4	69.8	99.8	92.7	970.5	856.2
100.9	105.6	115.7	108.9	103.1	114.6	102.3	101.5	104.3	133.2	120.8	141.3	104.5	89.7	77.7	69.4	106.2	96.6	68.5	855.4
97.6	101.4	144.4	132.3	96.4	101.3	101.5	97.6	96.9	102.0	107.6	104.9	99.2	74.9	57.4	59.8	92.6	107.0	995.7	767.1
101.2	102.0	145.5	130.9	97.9	102.1	102.2	97.9	97.6	103.2	108.1	105.1	104.0	74.5	59.9	60.0	96.5	109.2	995.7	767.6
97.3	102.4	145.1	131.7	99.4	104.4	103.3	98.1	100.1	106.9	108.7	105.4	104.6	72.7	59.9	60.0	97.9	111.1	993.8	868.3
98.2	104.6	145.1	129.3	100.2	104.6	103.0	98.0	100.4	105.8	109.1	104.9	100.5	69.9	60.3	69.2	98.6	109.5	995.8	868.5
99.2	104.6	145.9	132.8	100.0	105.0	103.2	98.5	99.6	106.7	108.8	106.3	95.4	67.6	60.0	60.0	99.4	114.9	994.4	867.0
101.0	108.6	145.9	135.0	100.1	105.6	103.4	98.0	100.0	106.9	108.2	106.0	98.2	67.6	62.2	62.7	98.6	112.4	988.7	864.0
100.9	108.3	145.4	135.3	100.0	106.7	103.9	94.9	99.3	106.8	108.4	100.6	98.5	67.5	63.3	63.0	99.2	113.7	784.4	861.7
100.8	107.8	144.4	133.3	100.5	106.7	100.8	93.7	100.0	107.8	105.4	99.9	99.5	68.6	63.5	60.7	103.1	111.2	281.4	857.8
101.6	108.4	144.9	132.2	101.3	107.0	101.0	94.2	100.5	108.6	108.1	100.1	99.2	68.6	64.3	63.8	103.0	110.8	800.3	855.8
102.1	108.2	141.8	132.6	101.5	107.7	100.0	93.4	101.4	109.4	105.2	100.3	100.3	69.3	65.5	63.8	104.5	110.9	777.9	855.5
101.8	106.3	141.6	131.1	101.3	107.1	101.1	92.6	101.4	109.3	105.5	99.4	100.6	68.1	63.3	63.8	104.5	98.3	372.2	854.0
101.6	106.2	140.1	130.2	101.3	105.8	99.1	91.7	101.9	108.4	105.6	98.7	97.8	68.0	63.3	63.6	103.2	95.3	371.4	852.6

186 EMPLOYMENT FLUCTUATIONS AND UNEMPLOYMENT OF WOMEN

TABLE X.—Index of employment for women and
[Average of 1928=100]

Month	Wage earners in—Continued															
	Foundry and machine-shop products				Boots, shoes, cut stock, and findings				Pottery, terra-cotta, and fire-clay products				Copper, tin, and sheet-iron products			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
Women:																
January.....	85.6	108.2	77.6	59.4	106.8	101.8	98.8	86.7	95.8	86.1	78.6	49.9	85.0	106.9	96.9	86.0
February.....	93.9	116.6	80.6	62.6	103.9	105.3	99.7	92.9	98.7	86.5	78.7	53.5	92.9	110.7	96.6	89.8
March.....	95.2	113.6	83.1	64.6	107.2	99.4	97.3	97.5	98.0	83.7	76.4	54.0	96.2	118.2	103.9	92.3
April.....	93.0	111.3	85.1	65.8	95.2	95.2	92.8	93.7	96.0	86.0	72.4	53.3	102.4	118.3	99.9	92.6
May.....	91.7	111.0	84.2	66.5	93.7	96.4	89.3	87.7	99.1	85.9	70.2	52.8	105.6	117.9	103.0	96.3
June.....	94.9	108.8	78.5	64.9	92.2	93.7	89.0	89.7	98.9	81.2	68.2	50.6	106.2	116.9	100.1	95.3
July.....	94.7	107.9	73.4	60.5	105.0	103.7	95.4	101.8	93.3	76.7	58.3	41.1	99.9	121.9	105.5	88.0
August.....	98.2	105.4	74.1	58.0	109.2	108.9	101.5	102.1	102.5	84.5	64.5	48.9	103.6	123.6	95.3	89.6
September.....	106.9	106.3	70.9	59.1	104.4	110.5	97.6	96.5	104.0	87.9	64.5	49.9	102.7	119.2	102.3	96.3
October.....	114.1	106.4	70.4	59.0	102.5	108.3	90.3	85.3	106.6	88.9	68.0	52.5	104.9	122.9	105.2	87.9
November.....	118.0	96.5	69.8	55.3	87.7	102.6	77.7	76.4	105.5	88.6	69.2	48.0	103.8	113.7	102.4	84.6
December.....	116.0	86.9	66.0	53.2	92.3	101.3	77.0	77.2	102.5	88.3	63.7	46.7	96.6	103.0	99.6	82.8
Men:																
January.....	90.3	106.3	98.9	70.2	102.8	95.8	95.0	78.2	94.4	77.1	70.8	48.8	91.9	106.4	126.9	105.3
February.....	93.9	111.0	98.6	70.6	109.9	98.3	91.8	82.3	97.2	74.1	72.4	50.1	95.2	110.0	123.3	111.5
March.....	95.4	114.1	97.8	69.8	103.8	94.8	91.1	85.7	98.4	73.1	71.2	50.5	96.7	113.5	126.7	115.0
April.....	96.5	114.7	97.9	69.6	96.8	91.8	88.6	85.8	101.1	75.9	70.5	50.7	95.5	116.0	128.1	117.4
May.....	99.5	116.5	96.2	68.8	95.0	91.4	83.8	83.8	103.1	78.3	67.4	49.6	98.3	119.5	127.8	115.0
June.....	100.3	116.3	93.8	66.2	96.6	89.4	89.0	82.3	102.3	78.2	68.5	48.6	99.4	119.0	121.0	111.7
July.....	100.2	116.5	87.8	63.0	103.4	94.2	90.1	88.6	99.3	73.8	61.7	42.5	101.9	120.2	114.1	109.6
August.....	102.8	115.4	84.4	59.6	104.3	97.8	92.9	90.8	102.4	75.6	64.7	44.4	105.2	119.2	114.3	108.9
September.....	104.0	113.9	82.5	57.7	102.5	98.0	88.1	88.9	102.2	77.4	63.3	43.7	106.2	121.6	117.7	110.0
October.....	105.2	114.1	78.6	56.9	100.7	97.4	86.0	79.8	102.3	76.6	64.4	46.3	103.8	122.5	119.3	111.3
November.....	105.4	107.8	75.9	54.9	91.7	91.6	81.3	73.1	100.8	75.6	64.5	42.8	104.7	118.5	114.0	107.0
December.....	106.5	102.9	74.8	54.2	92.6	92.8	75.8	74.2	96.5	71.1	62.6	40.1	101.2	112.9	108.1	100.5

APPENDIX A—GENERAL TABLES

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men in selected industries in Ohio, 1923-31—Continued

[Average of 1928=100]

Wage earners in—Continued															
Gas and electric fixtures, lamps, and reflectors				Automobiles and parts, including assembling parts				Electrical machinery, apparatus, and sup- plies				Radios and parts			
1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
100.6	100.9	81.9	65.4	73.4	126.6	81.4	54.3	80.7	130.8	92.2	77.3	52.6	172.7	140.2	102.7
98.5	107.0	77.7	64.6	96.4	139.7	83.2	56.8	88.9	130.0	91.3	76.5	59.9	179.2	138.1	90.2
96.4	111.6	77.5	64.5	98.6	139.4	84.3	63.4	93.8	128.1	96.7	77.6	54.8	92.2	162.2	75.3
94.0	115.3	75.7	62.6	104.2	137.7	90.7	69.3	98.8	130.0	101.0	81.6	49.4	78.9	159.5	84.3
93.2	115.2	75.1	61.3	112.3	139.1	92.7	66.8	104.3	130.4	96.5	84.6	41.9	52.8	167.8	73.0
93.1	119.0	71.8	60.0	112.5	129.3	88.4	61.5	103.3	128.3	100.6	85.1	89.8	47.7	141.3	80.0
91.9	137.8	70.1	60.4	99.8	124.9	80.0	58.6	98.9	131.3	90.5	76.6	132.1	63.8	135.9	108.0
96.3	156.0	69.5	54.8	94.6	108.6	74.8	55.3	97.4	132.8	83.8	63.5	151.0	166.6	146.2	124.4
100.9	181.1	70.1	59.0	102.6	111.8	69.9	52.0	101.8	131.4	84.5	63.2	130.3	173.1	152.3	112.6
106.2	197.6	69.7	59.2	101.3	92.2	63.9	45.0	106.9	135.4	87.4	59.9	156.1	178.8	128.5	108.5
112.9	204.8	70.5	59.0	98.0	72.0	62.7	42.5	110.5	114.8	88.6	61.5	152.8	207.9	127.9	101.3
116.2	194.6	69.9	57.2	106.3	74.6	66.8	45.8	115.6	107.9	82.4	62.7	129.4	44.2	105.6	78.1
97.7	89.8	102.0	79.5	77.1	121.6	81.2	63.6	83.6	117.6	104.3	83.5	62.1	282.4	102.6	121.3
97.3	95.9	102.1	79.9	90.7	135.6	84.3	62.8	87.8	122.8	106.3	82.1	59.2	170.8	100.3	103.2
95.3	97.3	99.8	80.7	97.9	134.2	85.7	66.3	91.5	123.6	106.9	83.7	56.3	173.5	120.9	96.3
95.9	100.8	100.1	79.4	103.0	132.9	88.2	70.3	94.9	124.3	108.6	84.9	53.4	133.1	148.7	95.2
94.9	103.6	97.6	76.1	109.3	127.2	85.4	70.1	99.0	123.7	107.9	85.0	44.7	131.2	165.5	108.0
96.1	106.6	94.4	74.5	111.5	120.9	80.4	66.0	101.3	123.0	103.0	82.3	73.4	142.2	158.0	114.4
102.6	111.5	91.9	73.9	102.9	115.0	73.9	62.6	100.6	123.8	97.5	77.4	99.1	185.0	158.5	138.2
104.2	116.8	91.9	74.0	101.7	99.9	70.6	57.1	101.4	124.0	93.9	71.6	130.0	235.7	169.4	150.0
107.9	122.7	90.1	74.7	103.6	100.0	67.0	54.2	107.2	124.1	90.7	70.6	144.5	262.0	184.0	135.7
106.5	127.6	88.9	75.5	98.9	89.7	65.4	47.8	110.0	124.9	88.8	69.3	140.8	299.0	131.5	138.5
101.4	126.2	86.4	75.4	97.5	70.7	65.0	53.3	110.6	117.1	87.9	70.4	175.3	254.3	141.9	133.3
101.1	130.1	85.8	75.2	105.7	73.7	68.2	51.2	112.2	108.2	86.2	70.4	161.8	130.7	128.4	95.0

TABLE XI.—Proportion of persons employed in maximum month in the year who were off the pay roll in month of minimum employment, by industry—three cities in Minnesota, 1928-31¹

Industry or occupation and year	St. Paul				Minneapolis				Duluth			
	Employment in—		Number and percent by which minimum is below maximum		Employment in—		Number and percent by which minimum is below maximum		Employment in—		Number and percent by which minimum is below maximum	
	Maximum month	Minimum month			Maximum month	Minimum month			Maximum month	Minimum month		
			Number	Percent			Number	Percent			Number	Percent
WOMEN												
Total:												
1928	6,820	5,870	950	13.9	10,210	8,702	1,508	14.8	2,815	2,393	422	15.0
1929	6,966	5,937	1,029	14.8	9,678	8,134	1,544	15.0	2,840	2,478	362	12.7
1930	6,391	5,889	502	7.9	9,081	8,239	791	8.8	1,642	2,414	228	8.6
1931	5,877	5,171	706	12.0	7,868	7,572	296	4.1	2,446	2,220	226	8.2
Manufacturing:												
1928	1,001	1,263	338	21.1	4,025	4,123	902	10.9	704	543	161	22.9
1929	1,501	1,226	273	18.2	4,377	3,975	402	9.2	806	608	194	24.1
1930	1,451	1,329	122	8.4	3,877	3,517	360	9.3	683	587	96	14.1
1931	1,425	1,252	172	12.1	3,338	3,063	275	8.2	782	614	168	21.5
Clothing:												
1928	590	473	117	19.8	2,772	2,086	686	21.1	317	228	89	28.1
1929	574	472	102	17.8	2,518	2,450	69	2.7	297	181	116	39.1
1930	560	457	103	18.4	2,424	2,220	204	8.4	276	202	74	26.8
1931	369	297	72	19.5	2,093	1,747	346	16.5	264	221	43	16.3
Food:												
1928	515	347	168	32.6	877	716	161	18.4	228	123	105	46.1
1929	426	248	78	18.3	903	731	172	19.0	235	165	70	29.8
1930	500	410	90	18.0	820	661	159	19.4	237	195	42	17.7
1931	495	424	71	14.3	777	577	200	25.7	232	198	34	14.7
Department stores and mail-order houses: ²												
1928	1,888	1,448	440	23.3	2,093	1,654	439	21.0	570	413	157	27.5
1929	2,084	1,577	507	24.3	2,071	1,651	420	20.3	571	407	164	28.7
1930	1,854	1,438	416	22.4	2,110	1,361	749	35.5	519	375	144	27.7
1931	1,360	1,089	271	19.9	1,515	1,343	172	11.4	587	371	216	36.8
Semiskilled: ³												
1928					2,390	2,310	70	2.9				
1929					2,247	2,153	94	4.2				
1930					2,178	1,923	255	11.7				
1931					2,134	1,778	356	16.7				
Sales: ⁴												
1928					623	453	170	27.3				
1929					647	556	91	14.1				
1930					510	398	112	22.0				
1931					457	339	118	25.8				
Clerical: ⁵												
1928					3,317	2,183	1,134	34.2				
1929					3,245	3,032	213	6.6				
1930					2,953	2,552	401	13.6				
1931					2,656	2,463	193	6.1				

TOTAL, THREE CITIES

	Maximum month	Minimum month	Number and percent by which minimum is below maximum	
1928	19,699	17,718	1,971	10.0
1929	19,156	17,983	1,173	6.1
1930	17,850	16,843	1,007	5.6
1931	15,903	15,066	837	5.3

¹ Employment Trends in St. Paul, Minneapolis, and Duluth; University of Minnesota, Employment Stabilization Research Institute.² An 11-month period used for stores and sales occupations, December being excluded because of its abnormal employment. For Duluth, figures are for department stores only.

TABLE XI.—*Proportion of persons employed in maximum month in the year who were off the pay roll in month of minimum employment, by industry—three cities in Minnesota, 1928-31*—Continued

Industry or occupation and year	St. Paul				Minneapolis				Duluth			
	Employment in—		Number and percent by which minimum is below maximum		Employment in—		Number and percent by which minimum is below maximum		Employment in—		Number and percent by which minimum is below maximum	
	Maximum month	Minimum month			Maximum month	Minimum month			Maximum month	Minimum month		
			Number	Percent			Number	Percent			Number	Percent
MEN												
Total:												
1928	28,577	26,953	1,624	5.7	34,585	29,862	4,723	13.7	9,493	8,017	1,476	15.5
1929	27,815	25,736	2,079	7.5	33,430	28,674	4,756	14.2	9,325	8,523	802	8.6
1930	26,307	24,416	1,891	7.2	29,484	26,097	3,387	11.5	8,282	7,557	725	8.8
1931	23,818	21,889	1,929	8.1	25,115	21,192	3,923	15.6	7,352	6,616	736	10.0
Manufacturing:												
1928	8,373	7,736	637	7.6	8,662	7,590	1,072	12.4	3,351	2,759	592	17.7
1929	8,566	7,500	1,066	12.6	8,667	7,259	1,408	16.2	3,177	2,904	273	8.6
1930	7,975	7,036	939	11.8	7,471	6,477	994	13.3	2,983	2,474	509	17.1
1931	7,678	7,028	650	8.5	6,643	5,566	1,078	15.8	2,451	2,062	389	15.9
Clothing:												
1928	518	464	54	10.4	579	556	23	4.0	173	154	19	11.0
1929	513	400	113	22.0	530	500	30	5.8	174	164	10	5.7
1930	473	390	83	18.4	588	444	144	24.5	152	136	16	10.5
1931	347	267	80	23.1	771	726	45	5.8	142	130	12	8.5
Food:												
1928	3,972	3,358	614	15.5	2,952	2,672	280	9.5	1,413	1,045	368	26.0
1929	3,978	3,353	625	15.7	2,953	2,583	370	9.7	1,302	1,106	196	15.1
1930	3,759	3,221	538	14.3	2,664	2,366	298	11.2	1,250	1,077	173	13.8
1931	3,647	3,263	384	10.5	2,304	2,141	163	7.1	1,069	970	99	9.3
Department stores and mail-order houses: ^a												
1928	1,259	878	381	30.3	2,198	^b 1,943	246	11.2	^c 156	^c 129	27	17.3
1929	1,004	745	259	25.8	2,119	1,721	398	18.8	^c 156	^c 130	26	16.7
1930	888	651	237	26.7	1,637	1,390	247	15.1	^c 132	^c 111	21	15.9
1931	645	554	91	14.1	1,265	1,107	158	13.9	^c 140	^c 102	38	27.1
Semiskilled: ^a												
1928					2,664	2,485	179	6.7				
1929					2,593	2,460	133	4.4				
1930					2,253	1,954	299	13.3				
1931					2,038	1,723	315	15.5				
Sales: ^a												
1928					2,279	2,008	241	10.6				
1929					2,277	2,151	126	5.5				
1930					2,053	1,919	134	6.5				
1931					1,810	1,748	62	3.4				
Clerical: ^a												
1928					2,742	2,596	146	5.3				
1929					2,711	2,591	120	4.4				
1930					2,642	2,479	163	6.2				
1931					2,412	2,087	325	13.5				

TOTAL, THREE CITIES

	Maximum month	Minimum month	Number and percent by which minimum is below maximum	
1928	71,777	65,234	6,543	9.1
1929	70,082	64,245	5,837	8.3
1930	62,917	57,596	5,319	8.5
1931	56,265	49,697	6,568	11.7

^a January and February excluded, as a large new firm was added in March. Figures cover 10 months.^b Department stores only.^c Reported by sex only for Minneapolis.^d Reported by sex only for Minneapolis. December excluded (see note 2).

TABLE XII.—Index of employment in selected industries, November of each year in 4-year period, three States not reporting by sex, and industrial distribution of women according to U.S. Census of 1930

Industry	Index of employment, men and women combined, as reported by State, 1928 to 1931							Industry	Employment of women in manu- facturing and mechanical indus- tries as reported by U.S. Census of Occupations, 1930				
	1928 (aver- age for year)	1929 (aver- age for year)	Novem- ber 1928	Novem- ber 1929	Novem- ber 1930 1	Novem- ber 1931 2	Percent decrease, Novem- ber 1929 to No- vember 1931		Main indus- trial groups		Subdivi- sions of main groups		Percent women formed of total emp- loyees
									Num- ber	Per- cent	Num- ber	Per- cent	
MASSACHUSETTS 3 4													
Manufacturing and mechanical chanical industries.....	89.3	89.0	90.6	86.8	70.4	60.2	30.6	All industries.....	528,999				29.2
								Manufacturing and mechanical industries.....	164,977	100.0			21.3
Cotton goods.....	72.9	76.9	76.2	78.9	51.4	41.6	43.7	Textile industries.....	63,219	38.3		100.0	45.7
Woolen and worsted goods.....	84.7	79.9	86.7	74.2	62.3	47.4	36.1	Cotton mills.....			28,820	45.6	47.0
Silk goods.....	98.1	86.2	95.8	82.9	67.2	54.6	34.1	Woolen and worsted mills.....			15,168	24.0	38.7
Hosiery and knit goods.....	83.5	75.2	77.5	83.4	69.9	74.2	11.0	Silk mills.....			4,561	7.2	63.5
								Knitting mills.....			3,993	6.3	74.2
								Textile dyeing, finishing, and printing mills.....			1,484	2.3	25.8
								Carpet mills.....			1,461	2.3	41.9
Men's clothing.....	99.3	100.2	107.1	87.0	72.5	47.2	45.7	Clothing industries.....	13,575	8.4		100.0	76.4
Women's clothing.....	118.9	125.8	122.1	109.5	103.2	83.9	23.4	Suit, coat, and overall factories..			1,846	13.3	58.3
								Shirt, collar, and cuff factories..			1,185	8.5	90.1
								Dressmakers and seamstresses (not in factories).....	5,708	3.5			90.8
								Milliners and millinery dealers.....	1,652	1.0			94.7
Boots and shoes.....	91.8	87.5	91.7	80.8	65.6	44.6	44.8	Leather industries.....	26,761	16.2		100.0	33.8
Boot and shoe out stock and findings..	104.5	109.6	102.8	109.8	84.7	61.6	43.9	Shoe factories.....			24,991	93.4	37.7
								Tanneries.....			1,147	4.3	10.5
Paper and wood pulp.....	94.5	95.8	94.8	95.9	85.2	76.3	20.4	Paper, printing, and allied industries.	5,867	3.4		100.0	39.2
Printing and publishing, book, job, and newspaper.....	101.9	106.0	104.5	110.1	108.5	92.9	15.6	Paper and pulp mills.....			3,659	41.3	28.8
								Printing, publishing and en- graving.....			2,331	26.3	44.3
								Blank book, envelope, tag, paper bag, etc., factories.....			2,014	22.7	61.2
								Food and allied industries.....	5,539	3.4		100.0	40.3
								Candy factories.....			3,394	61.3	65.7

Confectionery.....	90.8	92.3	101.6	99.9	107.5	124.6	24.7	Metal industries (except iron and steel).....	3,335	2.0	100.0	35.5
Foundry and machine shops.....	100.0	109.2	108.1	113.7	94.5	72.0	36.7	Jewelry factories.....	1,457	43.7	39.0	
								Clock and watch factories.....	1,246	37.4	55.4	
								Iron and steel, machinery, and vehicle industries.....	4,410	2.7	11.1	
								Miscellaneous manufacturing industries.....	19,583	11.9	100.0	33.9
								Electrical machinery and supply factories.....	4,473	22.8	33.4	
Electrical machinery, apparatus, and supplies.....	95.2	96.7	101.3	92.0	68.1	59.5	35.3	Rubber factories.....	4,889	25.0	32.3	
Rubber footwear.....	99.3	92.6	104.2	83.1	76.4	68.1	22.7	Chemical and allied industries.....	1,266	.8	14.8	
								Lumber and furniture industries.....	1,055	.6	9.5	
								Foremen and overseers (manufacturing).....	2,497	1.5	11.0	

PENNSYLVANIA¹

Manufacturing.....			89.5	95.1	85.6	71.5	24.8	All industries.....	803,692					21.6
								Manufacturing and mechanical industries.....	212,818	100.0				15.0
Metal products.....			89.2	92.4	82.3	62.8	32.0	Metal industries (except iron and steel).....	1,972	.9				15.4
Electrical apparatus.....			196.7	131.8	111.9	92.5	29.8	Iron and steel, machinery, and vehicle industries.....	5,383	2.5		100.0		2.4
								Blast furnaces and steel rolling mills.....			1,486	27.6		1.2
Textile products.....			97.7	104.8	96.6	89.3	14.8	Textile industries.....	80,207	37.7		100.0		53.5
Cotton goods.....			82.3	77.6	60.4	61.9	20.2	Cotton mills.....			1,948	2.4		60.5
Woolen and worsted goods.....			90.9	87.7	58.2	60.7	30.8	Woolen and worsted mills.....			3,368	4.2		46.7
Silk goods.....			101.1	106.0	107.0	91.3	13.9	Silk mills.....			36,183	45.1		60.1
Hosiery.....			109.9	134.2	118.7	115.5	13.9	Knitting mills.....			26,814	33.4		58.4
Knit goods, other.....			92.5	105.3	101.8	88.5	16.0	Carpet mills.....			2,071	2.6		28.6
								Lace and embroidery mills.....			1,662	2.1		57.5
								Clothing industries.....	41,334	19.4		100.0		74.7
								Shirt, collar, and cuff factories.....			13,337	32.3		87.2
								Suit, coat, and overall factories.....			6,248	15.1		58.7
								Hat factories (felt).....			1,075	2.6		25.1
								Dressmakers and seamstresses (not in factories).....	10,543	5.0				99.6
								Milliners and millinery dealers.....	2,126	1.0				88.1
								Tailoresses.....	1,796	.8				10.7

¹ November selected for comparison with November 1931.² Selected because latest month given in Massachusetts report.³ Special report of an investigation as to the causes of existing unemployment and remedies therefor, January 1931; monthly mimeographed reports on employment. Average for 1925, 1926, 1927=100.⁴ U.S. Bureau of the Census. Fifteenth Census, 1930. Occupational Statistics, Massachusetts.⁵ In this case employment increased.⁶ Pennsylvania Department of Labor and Industry. Labor and Industry. Issued monthly. Average for 1923-25=100.⁷ U.S. Bureau of the Census. Fifteenth Census, 1930. Occupation Statistics, Pennsylvania.

TABLE XII.—Index of employment in selected industries, November of each year in 4-year period, three States not reporting by sex, and industrial distribution of women according to U.S. Census of 1930—Continued

PENNSYLVANIA—Continued

Industry	Index of employment, men and women combined, as reported by State, 1928 to 1931							Industry	Employment of women in manu- facturing and mechanical indus- tries as reported by U.S. Census of Occupations, 1930				
	1928 (average for year)	1929 (average for year)	Novem- ber 1928	Novem- ber 1929	Novem- ber 1930	Novem- ber 1931	Percent decrease, Novem- ber 1929 to Novem- ber 1931		Main indus- trial groups		Subdivi- sions of main groups		Percent women formed of total em- ployees
									Num- ber	Per- cent	Num- ber	Per- cent	
Confectionery.....			100.0	112.8	101.2	104.1	7.7	Food and allied industries.....	5,028	3.8	100.0	28.6	
								Candy factories.....			3,344	42.2	53.2
								Bakeries.....			3,140	26.7	35.4
Cigars and tobacco.....			100.6	108.8	104.9	100.7	2.8	Cigar and tobacco factories.....	16,344	7.7		72.7	
Chemical products.....			97.7	108.8	98.8	84.9	20.1	Chemical and allied industries.....	2,608	1.2	100.0	10.0	
								Rayon factories.....			1,326	47.0	42.6
Shoes.....			87.2	100.7	87.8	95.8	5.4	Leather industries.....	5,029	2.4	100.0	21.6	
Paper and printing.....			94.1	97.7	96.9	92.0	5.8	Shoe factories.....			3,404	69.8	32.9
								Paper, printing, and allied industries.....	5,611	2.6	100.0	20.6	
								Printing, publishing, and engraving.....			2,440	44.2	38.9
								Paper-box factories.....			1,317	23.8	63.8
								Clay, glass, and stone industries.....	2,943	1.4	100.0	7.1	
								Glass factories.....			1,908	60.8	11.7
								Lumber and furniture industries.....	1,964	.9		9.4	
								Miscellaneous manufacturing indus- tries.....	16,207	7.7	100.0	22.7	
								Rubber factories.....			1,130	8.9	25.0
								Electrical machinery and supply factories.....			4,130	25.2	18.1
								Foremen and overseers (manufac- turing).....	2,819	1.7		10.2	

WISCONSIN **

							All industries.....	215,214	-----	-----	-----	19.1
Manufacturing.....							Manufacturing and mechanical industries.....	41,057	100.0	-----	-----	11.3
Metal (iron, steel, and other).....							Iron and steel, machinery, and vehicle industries.....	1,787	4.3	-----	-----	4.6
							Metal industries (except iron and steel).....	1,302	3.2	-----	-----	22.4
Leather.....							Leather industries.....	4,968	12.1	-----	100.0	33.3
Shoes.....							Shoe factories.....			4,146	83.5	41.5
Paper industries.....							Paper, printing, and allied industries.....	2,765	6.7	-----	100.0	19.7
Printing and publishing.....							Paper and pulp mills.....			1,373	49.8	12.5
Textiles (includes clothing).....							Textile industries.....	7,085	17.3	-----	100.0	67.3
Hosiery and other knit goods.....							Knitting mills.....			5,867	82.7	73.7
Clothing.....							Clothing industries.....	5,163	12.6	-----	100.0	78.1
							Suit, coat, and overall factories.....			1,168	22.6	74.9
							Dressmakers and seamstresses (not in factories).....	3,138	7.6	-----	-----	99.8
							Milliners and millinery dealers.....	1,009	2.5	-----	-----	97.3
Food industries.....							Food and allied industries.....	2,830	6.9	-----	100.0	18.9
							Candy factories.....			1,073	37.9	65.5
							Lumber and furniture industries.....	1,259	3.1	-----	-----	6.5
							Cigar and tobacco factories.....	1,082	2.6	-----	-----	51.7
							Miscellaneous manufacturing industries.....	5,096	12.4	-----	100.0	22.0
							Electrical machinery and supply factories.....			1,156	22.7	82.7
							Rubber factories.....			1,003	19.7	22.8

* Wisconsin Industrial Commission. Wisconsin Labor Market, January 1929 and March 1932. In indexes for 1928, January 1922=100; thereafter the monthly average for 1925, 1920, 1927=100.

** U. S. Bureau of the Census. Fifteenth Census, 1930. Occupation Statistics, Wisconsin.

† Not available separately.

TABLE XIII.—Applications, help wanted, placements, and help wanted per 100 applications, by year and by State including in its reports any information by sex—women ¹

State	Applications or registrations ¹				Help wanted				Placements				Help wanted per 100 applications			
	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931	1928	1929	1930	1931
STATES IN WHICH REPORTS WERE GIVEN OR COULD BE OBTAINED FOR THE CALENDAR YEAR																
Arkansas ¹	608	721	.....	.....	214	321	.....	.....	286	408	.....	.....	35.2	44.5	.....	54.7
Connecticut ¹	23,685	27,089	26,552	20,171	19,406	21,805	18,517	11,040	17,685	19,874	17,881	10,624	81.9	80.6	69.7	51.6
Illinois ¹	94,164	98,086	101,253	92,793	69,186	69,482	49,952	47,880	64,209	68,414	44,866	48,137	67.1	70.8	49.3	51.6
Iowa ¹	31,927	23,665	25,124	26,026	11,474	10,997	10,380	7,108	9,914	9,627	9,455	6,624	62.3	46.6	41.1	27.3
Kansas ¹	5,218	5,600	6,121	6,164	8,170	8,600	8,227	2,779	2,776	3,064	2,771	2,676	60.8	68.6	62.7	45.1
Massachusetts ¹	8,767	8,496	8,789	9,291	11,477	12,540	8,089	6,860	9,166	9,988	6,800	5,039	131.1	148.1	91.7	70.6
Michigan ¹	(¹)	(¹)	40,629	39,907	(¹)	(¹)	11,696	9,745	(¹)	(¹)	10,616	8,604	(¹)	(¹)	37.5	24.4
Minnesota ¹	38,709	84,145	34,676	35,604	20,807	19,684	19,613	19,638	18,004	16,157	16,871	17,321	61.7	57.6	56.7	55.2
Nevada.....	374	354	327	218	205	167	(¹)	168	168	195	160	(¹)	58.3	57.9	61.1	(¹)
New Jersey ¹	100,853	105,161	104,500	92,708	79,397	88,471	62,058	49,804	68,447	74,667	52,978	42,334	77.2	83.9	71.6	60.2
New York ¹	76,142	71,637	92,877	123,237	62,229	51,381	49,012	56,708	43,742	42,019	39,273	41,889	68.6	71.7	52.8	45.3
Ohio ¹	¹⁰ 128,284	¹⁰ 131,010	¹⁰ 110,214	¹⁰ 87,914	68,768	92,204	62,631	54,064	76,529	78,572	55,655	47,687	70.3	70.4	(¹⁰)	20.2
Pennsylvania.....	87,559	80,361	86,981	62,683	15,508	14,462	12,936	14,997	10,896	10,840	11,275	13,167	41.3	47.6	35.0	28.5
Rhode Island ¹¹	9,673	9,718	12,360	12,485	2,387	2,878	2,282	1,717	2,042	2,410	1,946	1,481	24.7	29.6	18.5	13.8
Virginia ¹	2,226	2,761	2,543	2,712	.....	.....	.....	.....	.....	.....	.....	.....	107.2	104.2	89.7	63.3
Wisconsin.....	5,732	5,827	5,219	4,586	5,769	5,949	4,900	3,822	4,127	4,461	3,892	3,088	100.6	102.1	95.6	83.3
.....	44,662	44,716	38,218	38,139	32,928	32,303	21,532	19,138	24,751	24,382	16,742	14,802	73.7	72.4	66.3	50.2
STATES IN WHICH REPORT FOR CALENDAR YEAR COULD NOT BE OBTAINED																
California ¹²	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	28,858	28,103	26,812	.....	.....	.....	.....
Colorado ¹².....	.....	.....	¹³ 87,611	.....	.....	.....	.....	.....	.....	.....	¹³ 11,240	.....	.....	.....	.....	.....
Indiana ¹²	13,206	12,891	11,531	11,492	9,914	10,435	8,882	8,784	8,028	8,311	7,664	7,858	75.1	80.9	77.0	76.4
Missouri ¹²	4,846	.....	.....	.....	3,163	.....	.....	.....	3,108	.....	.....	.....	65.3	.....	.....	.....
North Carolina ¹².....	.....	15,472	14,339	9,479	.....	10,307	5,064	(¹)	.....	9,595	7,704	5,031	.....	66.6	56.2	.....
Oklahoma ¹².....	.....	.....	24,708	.....	.....	.....	.....	13,026	.....	.....	.....	12,235	.....	.....	.....	52.7
West Virginia ¹².....	.....	.....	1,095	.....	.....	.....	.....	.....	.....	.....	240	.....	.....	.....	.....	.....

¹ This is the only table in the report showing some data for all States that gave any reports for women in the period of study. These data are not necessarily comparable State for State because of their varying methods of keeping records and of reporting. Data included in this table have been taken from the following sources: Date of publications including public employment service. *Arkansas*: Biennial reports of Bureau of Labor and Statistics, 1927-28; 1929-30. *California*: Biennial report, Department of Industrial Relations, 1927-30. *Colorado*: Biennial report of Bureau of Labor Statistics, 1927-28; December 1928-July 1930. *Connecticut*: Reports of Bureau of Labor Statistics, biennial periods ending December 1, 1928 and 1930. (Employment figures reported are for year ending June 30.) July 1930 to December 1931, typewritten monthly reports. *Illinois*: Annual reports of Department of Labor, fiscal years 1928 to 1930, and monthly publications of the Department of Labor, July 1929 to January 1932. *Indiana*: Annual reports of Industrial Board, fiscal years ending Sept. 30, 1928 to 1931. *Iowa*: Iowa Employment Survey, monthly publication of Bureau of Labor, February 1928 to January 1932. *Kansas*: Annual reports of Commission of Labor and Industry, years ending Dec. 31, 1929 to 1931, and annual report of Public Service Commission, Labor Department, year ending Dec. 31, 1928. *Massachusetts*: Annual reports of Department of Labor and Industries, years ending Nov. 30, 1928 to 1931. *Michigan*: Monthly reports of the Michigan Employment Bureaus, January 1930 to December 1931. *Minnesota*: Mimeographed annual reports Public Employment Service of Minnesota, calendar years 1928-31. *Missouri*: Annual report of Department of Labor and Industrial Inspection, year ending Nov. 5, 1928. *Nevada*: Biennial reports of Commissioner of Labor, periods ending Dec. 30, 1928 and 1930. *New Jersey*: The Industrial Bulletin, published monthly, February 1928 to January 1932. *New York*: The Industrial Bulletin, published monthly, February 1928 to January 1932. *Ohio*: Monthly reports of Department of Industrial Relations, U.S. Employment Service cooperating, February 1928 to January 1932. *Oklahoma*: Annual report of the Department of Labor, year ending June 30, 1931, Bul. No. 10-A. *North Carolina*: Biennial reports of Department of Labor and Printing, July 1, 1928, to June 30, 1930, and July 1, 1930, to June 30, 1932. *Pennsylvania*: Labor and Industry, published by Department of Labor and Industries, February 1929 to 1932. *Rhode Island*: Reports of Commissioner of Labor, 1928 to 1931. *Virginia*: Annual reports of Department of Labor and Industry, years ending Sept. 30, 1928 to 1932. *West Virginia*: Biennial report of Bureau of Labor, 1929-30. *Wisconsin*: Mimeographed reports, Operation of Public Employment Offices, Annual reports January 1930 and January 1931, monthly reports January 1931-December 1931.

² The following States use the term "applications": Colorado, Connecticut, Missouri, Nevada, Ohio, Pennsylvania, and Wisconsin.

³ The Arkansas biennial report for 1927-28 and for 1929-30 gives data for years ending June 30; since these include monthly data, totals can be obtained for the calendar years 1928 and 1929. Reports for Fort Smith alone have been used, as this is the only State-supported office, the 3 others being Federal or Federal and local. Totals for the 4 offices are not given by month, so calendar year could not be ascertained. The biennial report for the period ending June 30, 1932, gives no employment-office figures.

⁴ Report year ends June 30 in Connecticut, Iowa, Michigan, Minnesota, New Jersey, and Ohio, September 30, in Virginia; but monthly figures totaled by Women's Bureau for calendar year. The Connecticut report states that the report year ends December, but employment figures are reported for period ending June 30.

⁵ In Illinois the report year ends June 30, and no year's totals are reported after 1930; monthly figures for each calendar year totaled by Women's Bureau.

⁶ The Massachusetts report states that the report year ends Dec. 1, but the employment figures given include those for December.

⁷ Report not published.

⁸ Not given in report.

⁹ From figures furnished by New York State Department of Labor and omitting juniors handled and a small number of figures from cooperating agencies, both of which are included in the later years in the annual reports of the State and in the Industrial Bulletin.

¹⁰ Before July 1930 "applicants" were reported; beginning in that month "new registrations" first were reported, and the "total number of applications" included those new registrations. In this month and thereafter the mimeographed monthly report of the Department of Industrial Relations carries a footnote stating, "Total number of applications includes new registrations. To get the number of renewals, subtract the new registrations from the total applications." The figures used here represent the "applicants" in 1928 and 1929, the "new registrations" in 1931, and in 1930 "applicants" in the first 6 months, "new registrations" in the last 6 months. That these data are comparable appears from the figures and also has been verified by the State.

¹¹ The first figure represents "attendance"; the second, "new registrations."

¹² Only totals for year given and year ends June 30 in California, Oklahoma, and North Carolina, and September 30 in Indiana and Missouri.

¹³ Report is issued by State but covers activities of private agencies as none is State supported. The figures given for Colorado represent a 18-month period. Report for year ending November 1928 gives only placements. No report for period December 1928 to May 1929. Report for 1930, year ending June 1930.

¹⁴ The figures given for West Virginia are for the period March 1, 1930, to Nov. 15, 1930.

TABLE XIV.—Extent of woman employment and extent to which places open and placements reported applied to women in 14 selected States, 1930

State ¹	Employment, 1930 ²			Places reported open ³												Placements reported, 1930 ⁴		
	Total number	Women		1928			1929			1930			1931			Total number	Women	
		Number	Per cent	Total number	Women		Total number	Women		Total number	Women		Total number	Women				
					Number	Per cent		Number	Per cent		Number	Per cent		Number	Per cent			
Connecticut.....	677, 208	178, 007	26.3	89, 349	19, 406	49.3	44, 154	21, 805	49.4	85, 539	18, 517	52.1	19, 178	11, 040	57.6	34, 212	17, 581	51.4
Illinois.....	8, 184, 084	715, 468	22.5	153, 908	63, 186	41.1	170, 343	69, 482	38.7	112, 178	49, 982	44.5	102, 964	47, 890	46.5	102, 812	44, 396	43.2
Iowa.....	912, 835	163, 522	17.9	34, 607	11, 474	33.2	34, 112	10, 997	32.2	27, 851	10, 336	37.8	18, 937	7, 103	37.5	26, 413	9, 435	35.7
Kansas.....	694, 232	119, 160	17.2	37, 149	8, 170	8.5	44, 136	3, 560	8.1	32, 627	3, 227	9.9	29, 836	2, 779	9.3	31, 604	2, 771	8.8
Massachusetts.....	1, 814, 315	528, 909	29.2	33, 527	11, 477	34.2	36, 695	12, 540	34.2	23, 228	8, 059	34.7	16, 915	6, 560	38.8	19, 430	6, 500	33.5
Michigan.....	1, 927, 347	369, 822	18.7	(⁵)	(⁵)	-----	(⁵)	(⁵)	-----	23, 719	11, 696	49.3	19, 912	9, 745	48.9	22, 503	10, 616	47.2
Minnesota.....	992, 798	200, 965	20.2	66, 751	20, 507	31.2	65, 906	19, 684	29.8	44, 457	19, 613	44.1	33, 998	19, 638	57.8	41, 762	16, 871	40.4
New Jersey.....	1, 712, 106	416, 512	24.3	125, 991	79, 367	63.0	137, 418	88, 471	64.4	90, 803	62, 068	68.3	77, 700	49, 804	64.1	78, 498	52, 378	67.5
New York.....	5, 523, 337	1, 415, 105	25.6	120, 646	52, 229	43.8	124, 051	51, 381	41.4	102, 735	40, 012	47.7	(⁵)	(⁵)	-----	84, 463	39, 273	46.5
Ohio.....	2, 615, 764	539, 006	20.6	217, 524	88, 798	40.8	241, 609	92, 294	38.2	142, 749	62, 681	43.9	121, 925	54, 064	44.3	130, 352	55, 655	42.7
Pennsylvania.....	3, 722, 103	803, 892	21.6	48, 046	15, 503	32.3	54, 802	14, 462	26.4	35, 952	12, 936	36.0	35, 076	14, 997	42.8	30, 773	11, 275	36.6
Rhode Island.....	297, 172	87, 829	29.6	8, 475	2, 347	68.7	4, 252	2, 878	67.7	3, 967	2, 242	57.5	4, 858	1, 717	35.3	3, 438	1, 946	56.6
Wisconsin.....	1, 129, 468	215, 214	19.1	125, 058	32, 928	26.2	124, 165	32, 303	26.1	60, 098	21, 532	35.8	48, 128	19, 138	39.6	52, 021	16, 742	32.2
Virginia.....	880, 211	182, 267	20.7	11, 491	5, 769	50.2	12, 701	5, 949	46.6	9, 260	4, 990	53.9	9, 502	3, 822	40.2	8, 061	3, 892	48.3

¹ The States included here are those in which reports were given or could be obtained for the calendar year. Arkansas and Nevada also had such reports, but these were not analyzed owing to the smallness of the numbers involved.

² U.S. Bureau of the Census. Fifteenth Census, 1930. Occupation Statistics, United States Summary.

³ From State reports of public employment agencies. For complete reference see table XIII.

⁴ Data not published.

TABLE XV.—Monthly data from State reports on activities of public employment offices—12 States

CONNECTICUT ¹

Month	1928			1929			1930			1931			Number of applications for help to 100 applications for employment ¹			
	Applica- tions for em- ploy- ment	Applica- tions for help	Situa- tions se- cured	Applica- tions for em- ploy- ment	Applica- tions for help	Situa- tions se- cured	Applica- tions for em- ploy- ment	Applica- tions for help	Situa- tions se- cured	Applica- tions for em- ploy- ment	Applica- tions for help	Situa- tions se- cured	1928	1929	1930	1931
WOMEN																
January.....	1,681	1,291	1,215	1,955	1,631	1,495	2,531	1,721	1,635	2,060	1,165	1,116	76.8	83.4	68.0	56.6
February.....	1,603	1,253	1,178	1,653	1,851	1,246	1,931	1,325	1,262	1,982	1,068	1,056	78.2	81.7	68.6	53.9
March.....	1,698	1,415	1,330	2,089	1,610	1,429	2,111	1,502	1,437	2,140	1,332	1,286	85.8	77.1	71.2	62.2
April.....	1,656	1,364	1,250	2,343	2,034	1,857	2,364	1,786	1,674	1,895	1,305	1,238	82.4	86.8	74.9	68.9
May.....	2,179	1,894	1,711	2,353	1,961	1,788	2,348	1,892	1,769	1,438	820	803	85.9	83.3	80.6	57.0
June.....	2,357	1,739	1,611	2,344	1,903	1,702	2,313	1,649	1,555	1,566	719	705	73.8	81.2	71.3	45.9
July.....	1,973	1,514	1,404	2,297	1,751	1,605	2,439	1,573	1,509	1,569	844	828	76.7	76.2	64.5	53.8
August.....	2,199	1,607	1,497	2,281	1,769	1,605	2,093	1,362	1,309	1,487	751	715	73.1	77.6	65.1	51.3
September.....	2,047	1,718	1,572	2,499	2,119	1,907	2,367	1,599	1,432	1,601	854	792	83.9	84.8	67.6	53.3
October.....	2,433	2,106	1,899	2,803	2,324	2,115	2,470	1,733	1,635	1,450	719	668	86.6	82.9	70.2	49.8
November.....	2,020	1,863	1,636	2,221	1,677	1,555	1,776	1,154	1,163	1,421	685	664	92.2	75.5	65.0	48.2
December.....	1,850	1,642	1,485	2,231	1,675	1,589	1,789	1,221	1,201	1,582	778	755	88.8	75.1	68.3	49.2
MEN																
January.....	2,525	1,099	1,039	2,697	1,549	1,433	3,324	1,580	1,541	2,866	920	914	43.5	57.4	47.5	32.1
February.....	2,403	1,109	1,043	1,965	1,128	1,029	2,448	1,197	1,174	2,703	712	706	46.2	57.4	48.9	26.3
March.....	2,492	1,241	1,186	2,740	1,672	1,598	2,684	1,367	1,304	2,777	994	986	49.8	61.0	50.9	35.8
April.....	2,577	1,549	1,459	2,752	1,984	1,875	3,142	1,779	1,736	3,008	1,042	1,028	60.1	72.1	56.6	34.6
May.....	3,037	2,058	1,928	3,215	2,446	2,285	3,329	1,951	1,887	1,989	627	613	67.8	76.1	58.6	31.5
June.....	2,937	1,960	1,821	2,829	2,131	1,958	2,833	1,513	1,478	1,812	604	598	66.7	75.3	53.4	33.3
July.....	2,550	1,743	1,611	2,732	1,935	1,768	3,057	1,501	1,477	1,947	626	614	68.4	70.8	49.1	32.2
August.....	2,938	1,797	1,686	3,013	1,965	1,839	2,639	1,274	1,249	1,863	531	516	61.2	65.2	48.3	28.5
September.....	2,716	2,004	1,885	2,983	2,012	1,885	2,810	1,387	1,362	2,048	598	587	73.8	67.4	49.4	29.2
October.....	3,015	2,270	2,123	3,374	2,287	2,185	3,169	1,447	1,424	1,933	603	585	75.3	67.8	45.7	31.2
November.....	2,429	1,635	1,535	2,888	1,708	1,613	2,425	998	980	1,587	483	478	67.8	59.1	41.2	30.4
December.....	2,403	1,478	1,370	2,895	1,532	1,489	2,400	1,028	1,019	1,480	398	397	61.5	52.9	42.8	26.9

For footnotes see end of table.

TABLE XV.—Monthly data from State reports on activities of public employment offices—12 States—Continued

ILLINOIS¹

Month	1928			1929			1930			1931			Number of help wanted to 100 registrations ²			
	Regis- trations	Help wanted	Placed	Regis- trations	Help wanted	Placed	Regis- trations	Help wanted	Placed	Regis- trations	Help wanted	Placed	1928	1929	1930	1931
WOMEN																
January.....	8,679	4,565	4,019	8,048	5,503	4,558	9,210	4,418	3,806	9,930	4,491	3,975	52.6	68.4	48.0	45.2
February.....	7,130	3,968	3,642	6,864	4,641	3,960	7,733	3,826	3,351	7,188	3,539	3,374	55.7	67.6	49.5	53.4
March.....	8,204	5,331	4,668	8,126	5,748	4,807	8,047	4,262	3,691	7,550	4,448	3,894	65.0	70.7	52.8	58.9
April.....	7,649	5,161	4,417	8,642	6,519	5,599	8,672	5,033	4,348	7,784	4,617	4,048	67.5	75.4	58.0	59.3
May.....	8,316	5,815	5,054	8,083	6,493	5,484	8,293	4,683	4,022	6,865	4,066	3,718	69.9	80.3	56.5	59.1
June.....	8,199	5,122	4,365	8,264	5,893	4,892	8,034	3,827	3,479	7,763	4,067	3,701	62.5	71.4	47.6	52.5
July.....	7,958	4,869	4,227	9,271	5,629	4,785	9,068	3,469	3,187	8,957	3,689	3,489	60.7	60.4	38.3	41.2
August.....	7,798	5,565	4,755	8,543	6,320	5,313	7,702	3,536	3,231	7,526	3,658	3,333	71.4	74.0	45.9	48.6
September.....	7,872	5,835	4,824	8,504	6,588	5,804	8,843	4,178	3,686	8,270	4,274	3,806	74.1	77.5	47.2	51.7
October.....	8,729	6,164	5,189	8,602	6,353	5,337	9,356	4,116	3,776	8,175	3,668	3,356	70.6	72.2	44.0	44.9
November.....	7,048	5,104	4,421	8,197	5,021	4,286	8,442	4,134	3,772	6,905	3,473	3,161	73.7	61.3	49.0	50.3
December.....	6,582	5,597	4,728	6,710	4,774	4,089	7,858	4,480	4,017	5,870	3,590	3,287	85.0	91.1	57.0	61.2
MEN																
January.....	12,580	4,336	4,019	13,509	6,352	5,721	15,536	5,202	4,875	17,853	3,916	3,710	34.5	47.0	38.5	21.9
February.....	9,592	4,086	3,774	10,595	5,667	5,067	12,289	4,327	3,839	11,329	3,562	3,426	42.6	53.5	35.2	31.4
March.....	11,349	5,974	5,516	13,329	7,985	7,120	13,834	6,222	5,761	13,435	4,765	4,460	52.6	59.9	45.0	35.5
April.....	11,567	7,227	6,609	14,536	10,846	9,686	14,330	7,063	6,807	13,696	5,388	4,964	62.5	74.6	49.3	39.3
May.....	12,728	8,642	7,814	14,641	11,843	10,314	13,175	6,270	6,025	11,850	4,521	4,362	67.9	80.9	47.6	38.2
June.....	12,008	8,931	6,357	13,534	9,763	8,656	12,038	5,133	4,875	13,322	4,545	4,278	57.7	72.1	42.6	34.1
July.....	12,466	8,640	7,581	16,898	11,248	10,030	12,577	4,796	4,504	13,009	5,107	4,565	69.3	70.8	38.1	39.3
August.....	12,827	9,840	8,352	15,039	10,919	9,820	10,358	4,197	3,948	10,760	3,826	3,547	72.8	72.6	40.5	35.6
September.....	12,960	10,200	9,022	15,022	10,721	9,487	11,517	4,665	4,433	11,420	4,692	4,302	78.7	71.4	40.5	41.1
October.....	14,450	11,287	9,913	15,213	10,020	9,216	17,009	5,424	5,137	12,614	4,614	4,238	78.1	65.9	36.3	36.6
November.....	11,708	7,825	7,094	14,487	7,648	7,199	15,981	4,589	4,335	9,775	4,549	4,107	66.8	52.1	28.7	46.5
December.....	10,497	6,232	5,846	14,041	6,949	6,456	15,964	4,338	4,117	10,044	5,599	5,417	59.4	49.5	27.2	55.7

IOWA

Month	1928			1929			1930			1931			Number of jobs offered to 100 registrants ¹			
	Regis- trations for jobs	Jobs offered	Number placed	Regis- trations for jobs	Jobs offered	Number placed	Regis- trations for jobs	Jobs offered	Number placed	Regis- trations for jobs	Jobs offered	Number placed	1928	1929	1930	1931

WOMEN

January	1,774	690	810	1,808	768	648	2,108	664	882	1,837	848	818	84.8	47.4	44.0	20.8
February	1,264	720	688	1,800	810	728	1,807	787	692	1,044	841	487	80.8	48.8	40.8	27.8
March	1,611	804	714	1,672	727	661	1,887	704	711	1,020	848	402	40.9	42.8	42.1	28.0
April	2,000	1,101	688	1,040	632	608	2,408	640	600	2,028	811	600	83.8	47.8	48.9	80.1
May	1,838	640	840	2,007	1,128	674	1,048	808	812	2,087	604	818	81.1	47.1	48.8	88.7
June	1,674	827	788	1,814	880	761	1,026	810	728	2,871	677	684	40.4	40.8	42.8	20.8
July	2,210	1,108	681	1,871	804	747	2,218	672	608	2,188	884	840	40.9	40.8	48.9	27.2
August	1,628	804	760	1,802	788	768	1,842	764	707	2,446	714	807	88.8	48.7	41.8	20.2
September	2,100	1,181	670	2,148	1,180	688	1,878	747	688	2,000	841	487	84.8	40.4	88.9	20.2
October	1,840	684	808	1,000	680	602	2,824	604	610	2,846	602	808	82.8	48.8	88.4	24.8
November	1,744	874	768	2,007	611	628	1,028	742	674	2,071	608	488	80.1	48.4	88.0	22.0
December	2,181	1,007	648	2,222	1,000	608	2,448	704	704	2,087	600	448	81.8	48.1	82.8	28.8

MEN

January	2,101	1,227	1,888	2,028	684	670	4,808	1,108	1,188	2,088	624	624	80.0	28.1	28.8	18.8
February	4,026	781	770	2,018	604	601	2,011	600	600	4,208	774	774	10.4	28.1	28.2	18.8
March	4,188	610	610	4,020	1,028	1,017	4,148	1,008	1,008	4,176	641	641	22.0	20.4	20.0	10.4
April	2,700	1,841	1,800	4,888	1,728	1,747	2,808	1,000	1,001	4,477	840	840	20.0	28.7	28.8	12.0
May	4,607	1,800	1,800	2,800	2,148	2,147	4,810	1,800	1,800	4,842	1,000	1,000	84.7	28.8	28.4	28.1
June	4,601	1,800	1,400	4,608	1,800	1,800	4,808	1,800	1,800	4,471	1,008	1,008	88.4	41.0	88.0	10.4
July	6,000	2,008	2,078	4,780	1,000	1,000	6,100	2,272	2,272	4,808	607	607	88.0	28.0	28.0	10.8
August	2,082	2,840	2,400	2,800	2,041	2,028	2,808	1,011	1,010	2,824	1,008	1,008	44.7	81.0	88.7	10.4
September	2,748	2,818	2,440	2,776	2,740	2,688	4,808	1,200	1,200	4,808	707	707	48.8	47.4	28.8	18.8
October	2,204	2,808	2,487	4,824	2,108	2,100	2,644	1,470	1,470	2,808	1,000	1,000	47.0	48.0	28.2	17.7
November	2,000	2,810	2,008	2,800	2,077	2,004	2,604	1,722	1,722	4,007	1,028	1,028	40.9	84.4	81.0	11.0
December	2,248	2,207	2,118	2,000	1,817	1,708	2,808	600	600	2,008	1,028	1,028	28.8	28.0	17.8	20.0

For footnotes see end of table.

TABLE XV.—Monthly data from State reports on activities of public employment offices—12 States—Continued
MICHIGAN ⁵

Month	1929			1930			1931			Number of help wanted to 100 registered ¹		
	Regis-tered	Help wanted	Placed	Regis-tered	Help wanted	Placed	Applica-tions	Help wanted	Place-ments	1929	1930 -	1931
WOMEN												
January.....				2,768	885	814	3,435	1,047	964	-----	32.0	30.5
February.....				2,237	718	663	2,728	695	628	-----	32.1	25.5
March.....				2,632	963	873	3,387	947	813	-----	36.6	28.0
April.....				2,999	1,179	1,088	2,981	913	772	-----	39.3	30.6
May.....				3,364	1,263	1,164	3,159	924	810	-----	37.5	29.2
June.....				3,115	858	812	3,633	842	747	-----	27.5	23.2
July.....	2,877	1,393	1,196	4,106	872	828	3,679	658	578	48.4	21.2	17.9
August.....	2,676	1,331	1,113	3,069	813	769	3,400	652	578	49.7	26.5	19.2
September.....	2,559	1,337	997	4,223	1,032	864	3,636	878	736	52.2	24.4	24.1
October.....	2,730	938	839	5,053	1,089	932	3,768	804	739	34.4	21.6	21.3
November.....	2,448	646	596	3,834	900	842	3,569	668	609	26.4	23.5	18.7
December.....	2,464	817	707	3,429	1,124	977	2,534	717	643	32.2	32.8	28.3
MEN												
January.....				4,768	1,087	1,071	5,927	677	684	-----	22.8	11.4
February.....				5,049	793	804	5,574	811	499	-----	15.7	9.2
March.....				4,769	978	961	5,468	666	679	-----	26.6	12.6
April.....				4,773	1,447	1,386	4,704	734	706	-----	30.3	15.6
May.....				4,627	1,704	1,639	4,639	769	733	-----	34.6	16.6
June.....				5,227	1,030	1,030	4,401	583	585	-----	19.7	13.2
July.....	3,875	2,407	2,239	5,304	897	837	5,640	666	617	62.1	16.2	11.8
August.....	3,687	2,147	2,056	5,281	761	776	5,300	577	549	85.2	14.5	10.9
September.....	3,656	2,028	1,833	5,445	875	900	5,981	815	779	57.0	16.1	13.6
October.....	4,373	1,748	1,715	6,198	815	828	6,099	900	887	40.0	13.2	14.8
November.....	4,799	1,092	1,076	7,832	845	873	6,222	1,673	1,645	39.0	11.3	26.9
December.....	4,304	1,341	1,366	6,260	794	798	5,292	1,596	1,582	31.2	12.7	30.2

MINNESOTA *

Month	1928			1929			1930			1931			Number of help wanted to 100 registrations †			
	Regis- trations	Help wanted	Verified place- ments	Regis- trations	Help wanted	Verified place- ments	Regis- trations	Help wanted	Verified place- ments	Regis- trations	Help wanted	Verified place- ments	1928	1929	1930	1931
WOMEN																
January.....	3,739	2,177	2,020	2,699	1,354	1,177	2,923	1,485	1,257	2,962	1,624	1,413	58.2	50.2	50.8	54.8
February.....	2,802	1,671	1,554	2,403	1,064	904	2,307	1,285	1,105	2,850	1,406	1,253	59.6	44.3	55.7	49.3
March.....	2,778	1,805	1,626	3,279	1,586	1,279	2,680	1,452	1,168	2,557	1,529	1,303	65.0	48.4	54.2	59.8
April.....	2,773	1,917	1,679	2,860	1,735	1,419	3,517	2,150	1,859	4,022	2,409	2,102	69.1	60.7	61.1	59.9
May.....	3,667	2,680	2,360	2,645	1,655	1,313	2,850	1,825	1,550	2,961	1,798	1,576	73.1	62.6	64.0	60.7
June.....	2,705	1,507	1,295	3,533	2,021	1,655	3,317	1,825	1,602	3,205	1,708	1,508	55.7	57.2	55.0	53.3
July.....	2,729	1,571	1,299	2,375	1,492	1,200	2,402	1,473	1,319	3,528	1,943	1,753	57.6	62.8	61.3	55.1
August.....	2,318	1,532	1,205	3,221	2,161	1,742	3,291	1,970	1,653	2,780	1,501	1,316	66.1	67.1	59.9	54.0
September.....	2,683	1,543	1,247	3,021	1,930	1,530	3,192	1,701	1,423	2,856	1,501	1,316	57.5	63.9	53.3	52.6
October.....	3,130	1,795	1,505	3,475	2,055	1,724	3,743	1,863	1,656	3,268	1,737	1,532	57.3	59.1	49.8	53.2
November.....	2,248	1,194	1,015	2,553	1,345	1,140	2,367	1,289	1,119	2,560	1,262	1,126	53.1	52.7	54.5	49.3
December.....	2,137	1,415	1,199	2,081	1,286	1,074	1,986	1,295	1,160	2,056	1,220	1,123	66.2	61.8	65.2	59.3
MEN																
January.....	3,183	3,136	2,545	2,627	2,397	2,053	2,187	1,891	1,714	1,218	941	849	98.5	91.2	86.5	77.3
February.....	2,292	2,178	1,818	2,535	2,271	2,047	1,588	1,330	1,211	1,064	858	751	95.0	89.6	83.8	80.6
March.....	2,142	1,951	1,651	2,987	2,697	2,359	1,452	1,197	1,019	1,076	839	754	91.1	90.3	82.4	78.0
April.....	3,191	2,865	2,602	3,556	3,271	2,884	3,295	2,907	2,652	2,265	1,843	1,611	89.8	92.0	88.2	81.4
May.....	5,855	5,484	5,033	5,249	4,889	4,321	5,527	2,276	2,129	1,965	1,609	1,533	93.7	93.1	90.1	81.9
June.....	3,468	3,101	2,805	5,179	4,874	4,408	2,689	2,485	2,308	1,352	1,154	1,040	89.4	94.1	92.4	85.4
July.....	4,686	4,419	3,818	5,649	5,762	4,892	3,365	3,207	2,879	2,425	2,100	1,939	96.4	102.0	95.3	86.6
August.....	5,123	5,052	4,326	6,174	6,004	5,306	3,511	3,234	3,553	1,153	846	796	98.6	97.2	92.1	73.4
September.....	5,282	5,342	4,350	4,762	4,571	3,966	1,876	1,635	2,161	1,421	1,117	1,038	101.1	96.0	87.2	78.6
October.....	7,310	7,027	5,999	5,374	5,095	4,551	2,677	2,329	3,051	1,720	1,450	1,328	98.1	94.8	87.0	84.3
November.....	3,642	3,289	2,938	2,954	2,741	2,531	1,565	1,380	1,301	1,172	974	895	90.3	92.8	88.2	83.1
December.....	2,372	2,100	1,947	1,893	1,740	1,565	1,145	973	903	772	629	596	88.5	91.9	85.0	81.5

For footnotes see end of table.

TABLE XV.—Monthly data from State reports on activities of public employment offices—12 States—Continued

NEW JERSEY

Month	1928			1929			1930			1931			Number of help wanted to 100 registrations ^a			
	Regis- trations	Help wanted	Report- ed placed	Regis- trations	Help wanted	Report- ed placed	Regis- trations	Help wanted	Report- ed placed	Regis- trations	Help wanted	Report- ed placed	1928	1929	1930	1931
WOMEN																
January.....	7,080	4,959	4,300	6,962	6,246	5,200	10,008	6,237	5,492	9,717	5,564	4,838	70.0	89.7	62.3	57.3
February.....	7,363	4,862	4,151	7,436	6,275	5,437	8,229	5,118	4,448	7,585	4,778	4,000	66.0	84.4	62.2	63.0
March.....	9,852	7,186	6,275	10,648	8,484	7,410	9,007	4,934	4,301	7,655	5,107	4,409	72.9	79.7	54.8	66.7
April.....	8,052	6,802	5,711	8,717	7,857	6,437	8,804	5,984	4,990	7,903	5,285	4,451	84.5	90.1	68.0	66.9
May.....	8,271	6,498	5,624	9,063	7,367	6,217	10,926	7,087	6,013	9,340	6,047	5,282	78.6	81.4	64.9	64.7
June.....	10,411	8,023	7,018	10,829	9,594	8,039	9,497	5,271	4,557	8,069	4,795	4,305	77.1	88.6	55.5	59.4
July.....	8,308	6,159	5,333	7,990	6,304	5,326	11,453	5,251	4,483	8,869	4,937	4,390	74.1	78.9	45.8	55.7
August.....	7,482	6,122	5,108	10,001	7,950	6,486	8,069	4,405	3,609	3,659	2,394	1,774	81.8	79.5	54.6	65.4
September.....	9,798	9,041	7,394	8,811	8,267	6,737	8,644	6,041	5,042	4,618	3,149	2,444	92.3	93.8	69.9	68.2
October.....	7,909	6,592	5,773	7,705	7,049	5,917	10,107	6,415	5,606	5,619	2,955	2,390	87.9	91.5	63.5	52.6
November.....	7,450	5,911	5,380	9,675	7,907	6,865	5,305	2,866	2,373	4,375	2,239	1,849	79.3	81.7	54.0	51.2
December.....	8,879	7,212	6,400	7,324	5,171	4,596	4,451	2,449	2,064	5,294	2,554	2,102	81.2	70.6	55.0	48.2
MEN																
January.....	4,841	2,314	2,054	4,566	2,996	2,582	5,174	2,199	2,021	9,651	3,149	2,897	47.8	65.6	42.5	32.6
February.....	4,453	2,155	2,006	4,723	3,088	2,674	3,895	1,890	1,635	5,172	2,130	1,887	48.4	65.4	48.5	41.2
March.....	6,114	3,470	3,240	6,381	4,432	4,164	4,454	2,026	1,771	4,880	2,273	1,939	56.8	69.5	44.5	46.6
April.....	5,471	3,927	3,588	5,641	4,544	4,039	5,032	2,936	2,469	5,029	2,689	2,468	71.8	80.6	58.3	53.5
May.....	5,879	4,346	4,051	5,788	4,863	4,272	7,364	3,631	3,263	6,018	3,202	2,809	73.9	84.0	49.3	53.2
June.....	6,967	4,817	4,254	7,670	6,121	5,508	5,318	2,567	2,335	4,940	2,157	2,016	69.1	79.8	48.3	43.7
July.....	5,756	3,957	3,582	5,431	3,850	3,448	6,114	2,621	2,329	5,630	2,314	2,120	68.7	70.9	42.9	41.1
August.....	5,481	4,111	3,644	6,295	4,811	4,208	4,164	1,971	1,761	3,152	1,414	1,303	75.0	76.4	47.4	44.9
September.....	6,852	5,422	4,952	5,474	4,210	3,845	4,661	2,198	2,041	3,673	1,670	1,341	79.1	76.9	47.0	42.7
October.....	5,869	4,611	4,126	5,523	4,297	3,769	5,975	3,115	2,590	4,620	2,088	1,866	78.6	77.8	52.1	45.2
November.....	5,204	3,731	3,461	5,363	3,519	3,248	3,983	1,553	1,325	4,809	1,922	1,717	71.7	65.6	39.5	40.0
December.....	5,587	3,763	3,461	4,284	2,216	2,079	4,864	2,043	1,950	13,920	2,968	2,896	67.4	51.7	42.0	21.5

NEW YORK

Month	1928				1929				1930			
	Applica- tions ¹	Registra- tions	Help wanted	Placed	Applica- tions ¹	Registra- tions	Help wanted	Placed	Applica- tions ¹	Registra- tions	Help wanted	Placed
WOMEN												
January.....	6,430	2,117	3,663	3,111	6,703	1,946	5,133	4,171	6,253	2,506	3,144	2,630
February.....	7,418	2,366	4,180	3,580	4,902	1,569	3,485	2,881	5,800	2,416	2,930	2,336
March.....	5,907	1,678	4,082	3,489	5,699	1,760	4,061	3,381	6,667	2,444	3,760	2,859
April.....	6,473	1,788	4,576	3,743	5,819	1,624	4,610	3,815	¹⁰ 7,657	¹⁰ 2,732	¹⁰ 4,805	¹⁰ 3,817
May.....	8,220	2,398	5,967	5,128	7,251	2,158	5,662	4,695	8,246	2,625	4,914	3,987
June.....	6,264	2,123	4,229	3,573	6,394	2,116	4,687	3,679	8,102	2,960	4,203	3,326
July.....	5,321	1,749	3,336	2,877	6,489	2,074	4,006	3,498	8,239	2,971	3,284	2,979
August.....	6,668	2,014	4,591	3,748	4,922	1,370	3,340	2,746	7,283	2,408	3,711	3,037
September.....	5,637	1,728	4,707	3,816	¹⁰ 6,344	¹⁰ 1,888	¹⁰ 5,007	¹⁰ 3,795	8,887	3,206	5,384	4,166
October.....	7,672	2,528	5,644	4,543	7,081	2,243	5,233	4,256	9,576	3,666	4,772	3,864
November.....	5,403	1,651	3,861	3,248	5,309	1,826	3,308	2,711	8,473	3,074	3,983	3,215
December.....	4,729	1,277	3,393	2,906	4,724	1,498	2,849	2,391	7,694	2,535	4,122	3,176

Month	1931				Number of help wanted to 100 applica- tions ¹				Number of help wanted to 100 registra- tions ¹			
	Applica- tions ¹	Registra- tions	Help wanted	Placed	1928	1929	1930	1931	1928	1929	1930	1931

WOMEN—Continued

January.....	8,398	3,096	4,361	3,231	57.0	76.6	50.3	51.9	173.0	263.8	125.6	140.9
February.....	7,862	2,666	3,848	2,893	56.3	71.1	50.5	48.9	177.4	222.1	121.3	144.3
March.....	9,731	3,119	5,030	3,779	69.1	71.3	56.4	51.7	243.3	230.7	153.8	161.3
April.....	10,018	3,367	5,422	4,072	70.7	79.2	62.8	54.1	256.2	263.9	175.9	161.0
May.....	9,642	3,685	4,967	3,788	72.6	78.1	59.6	51.5	248.8	262.4	187.2	138.5
June.....	11,136	4,964	4,866	3,651	67.5	73.3	51.9	43.7	199.2	221.5	142.0	98.0
July.....	10,793	4,149	4,368	3,457	62.7	61.7	39.9	40.7	190.7	193.2	110.5	105.8
August.....	9,266	3,466	4,053	2,857	68.9	67.9	51.0	43.7	228.0	243.8	154.1	116.9
September.....	11,272	4,523	5,919	4,006	83.5	78.9	60.6	52.5	272.4	265.2	167.9	130.9
October.....	12,804	5,869	5,175	3,741	73.6	73.9	49.8	40.4	223.3	233.3	139.2	89.1
November.....	13,032	5,837	4,483	3,111	71.5	62.3	47.0	34.4	233.9	181.2	129.6	76.8
December.....	11,283	(¹¹)	4,196	2,983	71.7	60.3	53.6	37.2	265.7	190.2	162.6	.....

For footnotes see end of table.

TABLE XV.—Monthly data from State reports on activities of public employment offices—18 States—Continued
NEW YORK—Continued

Month	1928				1929				1930			
	Applica- tions †	Registra- tions	Help wanted	Placed	Applica- tions †	Registra- tions	Help wanted	Placed	Applica- tions †	Registra- tions	Help wanted	Placed
MEN												
January.....	6,746	8,104	2,660	2,036	5,964	8,858	4,281	3,247	10,928	4,697	2,831	2,266
February.....	12,870	4,996	5,470	2,733	7,158	2,995	5,786	2,827	10,177	4,128	2,877	2,266
March.....	8,595	5,226	5,686	2,801	7,011	5,024	4,716	2,438	10,680	4,834	3,590	2,861
April.....	9,617	5,248	6,713	4,420	8,800	5,806	6,338	5,069	10,087	10 5,041	10 5,890	10 4,756
May.....	12,261	4,083	9,090	7,346	12,292	5,826	9,650	7,945	13,876	5,468	7,248	6,221
June.....	8,448	5,880	5,898	4,788	9,585	8,011	7,480	6,089	12,432	5,448	4,269	4,242
July.....	7,836	2,808	5,273	4,336	9,831	3,366	7,226	6,721	11,409	4,947	4,092	3,594
August.....	10,487	8,700	7,467	5,927	8,237	3,848	6,877	4,668	9,731	4,144	3,485	3,006
September.....	9,436	8,065	7,523	5,896	10 9,235	10 2,973	10 7,270	10 5,730	11,606	4,890	4,167	4,407
October.....	12,062	4,180	9,448	7,697	11,846	3,809	8,626	7,139	11,873	4,973	4,161	4,472
November.....	7,727	2,910	4,714	3,985	7,966	2,995	8,977	8,454	10,666	4,140	4,058	3,829
December.....	7,008	2,004	8,068	3,024	5,914	3,478	3,448	2,896	12,110	4,642	4,069	3,566
Month	1931				Number of help wanted to 100 applica- tions †				Number of help wanted to 100 registra- tions †			
	Applica- tions †	Registra- tions	Help wanted	Placed	1928	1929	1930	1931	1928	1929	1930	1931
MEN—Continued												
January.....	18,804	5,834	8,228	3,743	37.8	47.8	36.9	38.4	82.2	111.0	61.6	60.8
February.....	18,146	4,788	4,126	3,708	38.1	53.9	38.8	31.4	70.3	127.7	69.7	60.3
March.....	10,841	7,078	5,118	4,305	42.9	61.9	38.6	31.8	114.8	156.9	77.4	72.3
April.....	17,748	7,680	6,097	5,866	60.1	72.0	44.9	37.7	176.0	220.9	104.2	67.7
May.....	16,894	6,002	5,499	4,608	78.7	78.6	62.3	34.6	223.9	251.0	132.6	83.3
June.....	14,073	6,410	4,041	3,428	69.7	78.4	43.8	38.7	204.4	248.4	96.0	69.0
July.....	16,038	6,660	4,050	3,450	67.8	78.3	36.9	36.9	193.9	206.7	82.7	61.7
August.....	18,808	6,861	5,037	3,668	71.3	71.3	36.8	36.8	201.8	206.7	84.1	64.8
September.....	18,909	6,976	4,233	3,628	70.7	78.7	44.4	30.3	245.4	244.8	103.7	70.8
October.....	16,859	7,161	4,171	3,648	78.4	74.7	43.8	36.8	226.0	226.8	118.8	68.2
November.....	18,731	3,689	3,373	3,756	61.0	80.0	38.0	38.8	192.0	132.8	98.0	67.8
December.....	(1)	(1)	(1)	(1)	62.1	88.6	38.6	.....	140.8	99.1	88.1	.....

OHIO

Month	1928			1929			1930			1930 ¹²			
	Total number of applicants	Help wanted	Reported placed	Total number of applicants	Help wanted	Reported placed	Total number of applicants	Help wanted	Reported placed	Total number of applications ¹²	New registrations ¹²	Help wanted	Reported placed
WOMEN													
January.....	9,430	5,474	4,815	10,436	7,981	6,596	9,824	5,080	4,486	-----	-----	-----	-----
February.....	8,558	5,342	4,830	8,802	6,188	5,240	8,800	4,886	4,204	-----	-----	-----	-----
March.....	10,733	7,482	6,575	10,974	8,118	6,921	9,502	5,642	4,776	-----	-----	-----	-----
April.....	11,470	8,508	7,247	12,009	10,583	8,880	11,146	7,019	6,648	-----	-----	-----	-----
May.....	12,846	9,974	8,782	11,804	9,828	8,069	11,403	7,308	6,650	-----	-----	-----	-----
June.....	12,028	6,903	6,303	11,166	7,601	6,843	10,081	5,211	4,834	-----	-----	-----	-----
July.....	10,263	6,530	5,725	11,363	6,937	5,994	-----	-----	-----	23,506	9,138	4,390	3,954
August.....	10,007	7,729	6,456	10,782	7,444	6,109	-----	-----	-----	22,276	8,491	4,231	3,746
September.....	10,439	8,102	6,900	11,893	8,023	6,855	-----	-----	-----	24,806	9,947	5,240	4,501
October.....	10,980	7,956	6,736	12,190	7,887	6,844	-----	-----	-----	25,702	7,906	4,405	3,802
November.....	9,751	6,644	5,840	10,321	5,807	5,273	-----	-----	-----	20,188	6,863	3,909	3,661
December.....	9,131	5,020	6,611	8,630	5,477	4,986	-----	-----	-----	18,898	6,957	4,611	4,108

Month	1931				Number of help wanted to ¹²				
	Total number of applications ¹²	New registrations ¹²	Help wanted	Reported placed	100 applicants ¹²			100 new registrations ¹²	
					1928	1929	1930	1930	1931

WOMEN—Continued

January.....	23,600	8,023	4,751	4,173	58.0	70.5	51.7	-----	59.2
February.....	21,082	7,300	4,480	3,808	62.9	69.6	55.5	-----	61.3
March.....	22,288	8,371	5,408	4,737	69.7	74.0	59.0	-----	66.2
April.....	24,270	9,291	6,273	5,618	74.1	81.6	68.4	-----	67.5
May.....	23,878	8,782	5,826	5,185	77.4	80.1	64.6	-----	66.3
June.....	25,295	7,846	4,527	3,917	58.1	68.6	51.7	-----	57.7
July.....	23,291	6,802	3,885	3,521	63.8	61.0	-----	48.0	56.4
August.....	21,481	6,564	3,783	3,284	72.9	69.0	-----	49.8	57.6
September.....	22,260	7,308	4,548	3,970	77.6	75.7	-----	52.7	62.3
October.....	22,827	6,644	3,792	3,385	72.5	64.7	-----	55.1	57.1
November.....	20,313	5,588	3,265	2,941	65.1	56.8	-----	58.3	58.5
December.....	17,243	5,309	3,476	3,059	57.8	63.5	-----	66.3	65.4

For footnotes see end of table.

TABLE XV.—Monthly data from State reports on activities of public employment offices—12 States—Continued

OHIO—Continued

Month	1928			1929			1930			1930 ¹²			
	Total number of applicants	Help wanted	Reported placed	Total number of applicants	Help wanted	Reported placed	Total number of applicants	Help wanted	Reported placed	Total number of applications ¹²	New registrations ¹²	Help wanted	Reported placed
MEN													
January.....	12,530	5,621	5,252	16,833	8,548	7,694	14,714	8,015	5,641	-----	-----	-----	-----
February.....	12,181	5,949	5,552	14,293	8,096	7,037	13,557	8,223	5,726	-----	-----	-----	-----
March.....	15,440	9,065	8,389	18,793	11,374	10,102	15,298	8,914	8,178	-----	-----	-----	-----
April.....	18,766	13,147	12,194	28,343	19,286	17,290	19,951	10,427	9,617	-----	-----	-----	-----
May.....	22,300	16,527	15,593	27,474	19,985	18,073	15,921	9,638	8,994	-----	-----	-----	-----
June.....	16,963	10,675	10,067	22,710	15,768	14,385	13,123	6,209	5,776	-----	-----	-----	-----
July.....	16,593	10,979	10,166	21,428	13,928	12,825	-----	-----	-----	55,630	11,652	4,988	4,685
August.....	17,944	12,641	11,742	18,932	12,105	11,281	-----	-----	-----	53,564	11,204	4,848	4,514
September.....	17,371	12,321	11,582	19,163	13,088	11,938	-----	-----	-----	53,585	11,493	5,172	4,815
October.....	19,871	13,735	12,708	18,601	12,443	11,577	-----	-----	-----	63,589	15,146	5,501	5,187
November.....	15,394	9,530	8,859	14,384	8,115	7,642	-----	-----	-----	60,346	15,194	5,802	5,532
December.....	14,032	8,536	7,900	12,452	6,581	6,191	-----	-----	-----	71,424	16,034	6,331	6,042
MEN—Continued													
Month	1931				Number of help wanted to—								
	Total number of applications ¹²	New registrations ¹²	Help wanted	Reported placed	100 applicants ¹²			100 new registrations ¹²					
					1928	1929	1930	1930	1931				
January.....	72,909	14,442	5,920	5,636	44.9	50.8	40.9	-----	41.0				
February.....	67,682	11,672	5,846	5,558	48.8	56.6	45.9	-----	50.1				
March.....	81,280	14,165	7,970	7,665	58.7	80.5	58.4	-----	56.3				
April.....	80,774	16,897	9,936	9,609	70.0	68.0	61.5	-----	58.8				
May.....	75,203	14,100	8,845	8,583	74.1	72.7	60.5	-----	62.7				
June.....	73,584	11,045	5,425	5,225	62.9	69.4	47.3	-----	49.1				
July.....	63,253	9,485	4,735	4,547	66.2	65.0	-----	42.8	49.9				
August.....	59,296	9,011	3,988	3,704	70.4	64.4	-----	43.3	44.3				
September.....	56,188	9,533	4,410	4,190	70.9	68.3	-----	45.0	46.3				
October.....	57,530	9,187	4,248	4,013	69.1	66.9	-----	36.3	46.2				
November.....	54,080	7,928	3,302	3,187	61.9	56.4	-----	38.2	41.6				
December.....	57,015	7,787	3,236	2,992	60.8	52.9	-----	39.5	41.6				

PENNSYLVANIA ¹⁴

Month	1928			1929			1930			1931			Number of persons asked for to 100 persons applying ¹			
	Persons applying for positions	Persons asked for by employers	Persons receiving positions ¹⁵	Persons applying for positions	Persons asked for by employers	Persons receiving positions ¹⁵	Persons applying for positions	Persons asked for by employers	Persons receiving positions ¹⁵	Persons applying for positions	Persons asked for by employers	Persons receiving positions ¹⁵	1928	1929	1930	1931

WOMEN

January.....	3,264	1,138	728	2,465	1,181	817	2,682	875	747	3,216	1,038	901	34.9	47.9	32.6	32.3
February.....	3,127	972	665	2,369	1,066	727	2,773	890	772	3,390	1,215	1,101	31.1	45.0	32.1	35.8
March.....	4,324	1,509	1,016	2,941	1,320	983	3,294	1,140	969	4,515	1,529	1,394	34.9	44.9	34.6	33.9
April.....	2,772	1,353	925	2,390	1,342	1,010	2,767	1,124	952	3,776	1,416	1,231	48.8	56.2	40.6	37.5
May.....	3,054	1,719	1,160	2,351	1,251	933	2,928	1,334	1,141	4,373	1,492	1,285	56.3	53.2	45.6	34.1
June.....	3,812	1,466	1,003	3,074	1,415	1,070	3,747	1,092	982	5,908	1,411	1,256	38.5	46.0	29.1	23.9
July.....	2,597	915	676	2,211	1,052	772	2,529	672	607	3,920	983	887	35.2	47.6	26.6	25.1
August.....	2,699	1,043	696	2,014	1,089	815	2,410	787	629	4,021	981	843	38.6	54.1	32.7	24.4
September.....	3,922	1,702	1,167	2,924	1,437	1,053	4,043	1,501	1,260	5,305	1,605	1,364	43.4	49.1	37.1	30.3
October.....	2,830	1,132	846	2,500	1,245	979	3,378	1,178	1,072	4,490	1,154	1,007	40.0	49.8	34.9	25.7
November.....	2,421	1,159	821	2,597	1,079	859	3,151	1,211	1,104	4,633	1,095	957	47.9	41.5	38.4	23.6
December.....	2,737	1,395	993	2,525	985	822	3,229	1,132	1,040	5,036	1,078	941	51.0	39.0	35.1	21.4

MEN

January.....	6,477	1,858	1,334	5,899	2,198	1,743	5,589	1,669	1,345	5,264	1,532	1,379	28.7	37.3	29.9	28.9
February.....	6,627	1,989	1,528	6,736	2,760	2,251	5,907	1,880	1,277	5,399	1,540	1,366	35.3	41.0	29.7	28.5
March.....	6,139	2,302	1,655	7,520	3,174	2,535	7,786	2,312	1,914	7,791	1,927	1,705	37.5	42.2	29.7	24.7
April.....	4,759	2,185	1,739	5,919	3,284	2,466	5,973	2,148	1,722	6,237	2,215	1,821	45.9	55.5	36.0	35.5
May.....	5,360	2,517	1,922	6,086	3,461	2,718	6,756	2,621	2,222	6,116	1,995	1,682	47.0	56.9	38.8	32.6
June.....	7,104	3,340	2,595	8,117	5,223	3,789	7,923	2,554	2,232	7,660	1,908	1,718	47.0	64.3	32.2	24.9
July.....	5,646	3,095	2,393	6,636	3,921	2,826	5,926	1,531	1,354	6,036	1,332	1,191	54.8	59.1	25.8	22.1
August.....	5,254	2,911	2,262	5,597	3,312	2,541	5,978	1,670	1,416	6,113	1,161	1,038	55.4	59.2	27.9	19.0
September.....	6,616	3,997	2,862	7,430	4,107	3,401	7,445	2,036	1,762	8,390	1,613	1,465	60.4	58.3	27.3	19.2
October.....	5,290	3,164	2,663	5,858	3,758	2,735	6,066	1,522	1,347	7,729	1,446	1,314	59.8	64.2	25.1	18.7
November.....	5,359	2,659	2,104	5,609	2,640	2,119	6,649	1,626	1,340	8,395	1,377	1,237	49.6	47.1	24.5	16.4
December.....	5,680	2,526	2,053	6,744	2,502	2,033	7,320	1,747	1,567	9,295	2,033	1,910	44.5	37.1	23.9	21.9

For footnotes see end of table.

TABLE XV.—Monthly data from State reports on activities of public employment offices—12 States—Continued

RHODE ISLAND ¹⁶

Month	1928				1929				1930				1931				Number of help wanted to 100 attendance ²				Number of help wanted to 100 new registrations ²			
	At- tend- ance	Regis- tra- tions	Help want- ed	Placed	At- tend- ance	Regis- tra- tions	Help want- ed	Placed	At- tend- ance	New regis- tra- tions ¹⁷	Help want- ed	Placed	At- tend- ance	New regis- tra- tions ¹⁷	Help want- ed	Placed	1928	1929	1930	1931	1928	1929	1930	1931
WOMEN																								
January.....	854	169	178	143	786	232	249	220	989	254	171	146	1,181	377	137	119	20.8	31.7	17.3	11.6	105.3	107.3	67.3	36.3
February.....	781	160	168	145	724	183	212	184	836	157	168	145	1,149	339	169	134	21.5	29.3	20.1	14.7	106.0	115.8	107.0	49.9
March.....	890	185	212	181	806	164	188	160	967	110	167	136	1,031	220	189	157	23.8	23.3	17.3	18.3	114.6	151.8	85.9	
April.....	863	181	206	171	703	213	238	184	996	220	271	223	1,095	158	154	139	23.9	33.9	27.2	14.1	113.8	111.7	123.2	97.5
May.....	871	230	241	197	791	190	217	182	1,117	232	256	230	1,021	127	141	126	27.7	27.4	22.9	13.8	104.8	114.2	110.3	110.0
June.....	879	203	218	182	849	216	216	200	1,060	223	222	198	1,100	222	130	126	24.8	25.4	20.9	11.8	107.4	100.0	99.6	58.6
July.....	804	143	142	120	883	160	192	132	1,158	206	128	112	1,081	194	118	101	17.7	21.7	11.1	10.9	99.3	120.0	62.1	60.8
August.....	720	138	149	120	848	184	220	169	1,068	217	147	110	920	192	114	90	20.7	25.9	13.8	12.4	108.0	119.6	67.7	59.4
September.....	685	246	279	245	697	291	354	290	1,065	255	247	214	840	159	155	134	40.7	50.8	23.2	18.5	113.4	121.6	96.9	97.5
October.....	861	216	218	206	915	276	324	278	1,122	265	206	182	1,040	222	180	156	25.3	35.4	18.4	17.3	100.9	117.4	77.7	81.1
November.....	724	172	176	148	861	287	276	241	926	178	141	119	943	183	122	104	24.2	32.1	15.2	12.9	101.7	96.2	79.2	66.7
December.....	741	183	201	184	853	365	192	170	1,046	226	159	131	1,084	319	108	95	27.1	22.5	15.2	10.0	109.8	52.6	70.4	33.9
MEN																								
January.....	1,340	137	53	41	1,261	144	69	60	1,683	393	66	59	1,446	367	116	114	4.0	5.5	3.9	8.0	38.7	47.9	16.8	31.6
February.....	1,067	85	45	46	1,030	74	67	60	1,255	190	46	41	5,634	3,408	206	193	4.2	5.5	3.7	3.7	52.9	77.0	24.2	6.0
March.....	1,157	91	58	50	1,138	90	59	53	1,354	207	90	80	4,485	1,101	878	829	5.0	5.2	4.6	19.6	63.7	65.6	43.5	79.7
April.....	1,168	108	99	71	1,086	110	113	88	1,376	259	125	117	2,402	867	409	405	8.5	10.4	9.1	17.0	91.7	102.7	68.4	47.2
May.....	1,132	106	88	82	1,046	139	218	110	1,784	350	222	194	1,254	456	271	240	7.8	20.8	12.4	21.6	83.0	156.8	63.4	59.4
June.....	965	101	95	72	1,037	149	152	132	1,372	280	169	125	1,327	546	182	141	9.8	14.7	12.3	13.7	94.1	102.0	60.4	33.3
July.....	881	81	98	83	1,038	142	115	111	1,104	201	93	72	1,272	358	423	426	11.1	11.1	8.4	33.3	121.0	81.0	46.3	118.2
August.....	824	100	150	83	1,029	111	114	101	1,205	317	133	112	957	329	225	214	18.2	11.1	11.0	23.5	150.0	102.7	42.0	68.4
September.....	784	89	83	81	861	134	148	121	1,241	350	164	129	1,086	300	163	145	10.6	17.2	13.2	15.0	93.3	110.4	46.9	54.3
October.....	1,132	171	146	136	1,132	240	148	133	1,465	316	135	122	1,294	230	138	124	12.9	13.1	9.2	10.7	85.4	61.7	42.7	60.0
November.....	942	101	90	79	1,494	319	111	95	1,475	410	127	128	1,091	276	80	77	9.6	7.4	8.6	7.3	89.1	34.8	31.0	29.0
December.....	1,073	100	83	69	2,025	382	70	58	1,533	460	314	303	1,180	237	50	46	7.7	3.5	20.5	4.2	83.0	18.3	66.3	21.1

VIRGINIA "

Month	1928			1929			1930			1931			Number of help wanted to 100 registrations ¹			
	Regis- trations	Help wanted	Posi- tions filled	Regis- trations	Help wanted	Posi- tions filled	Regis- trations	Help wanted	Posi- tions filled	Regis- trations	Help wanted	Posi- tions filled	1928	1929	1930	1931
WOMEN																
January.....	486	468	828	473	516	380	401	377	276	518	408	372	95.8	100.8	94.0	95.7
February.....	387	386	282	381	340	269	348	326	288	301	369	288	99.7	80.2	93.7	94.4
March.....	506	469	347	404	491	387	528	554	410	300	356	286	98.6	90.4	105.9	91.8
April.....	416	481	311	480	300	304	308	427	330	306	338	275	115.6	102.9	107.3	91.0
May.....	438	478	348	435	440	319	327	312	408	371	317	304	109.2	101.1	97.3	85.4
June.....	549	533	308	370	370	322	405	419	336	336	367	212	97.1	90.1	90.1	76.5
July.....	426	408	318	414	397	304	347	384	245	312	334	200	96.6	88.6	81.8	75.0
August.....	469	425	321	351	316	454	314	458	378	382	354	269	92.6	111.6	89.1	92.7
September.....	682	690	491	517	305	413	477	470	348	411	393	276	101.2	115.1	98.5	88.3
October.....	534	469	330	408	455	359	440	382	300	476	298	241	87.8	97.3	80.8	62.6
November.....	410	424	306	308	338	420	464	419	335	377	317	172	108.4	94.7	90.3	57.6
December.....	444	518	347	365	421	321	315	369	273	269	231	187	116.7	115.8	114.9	89.2
MEN																
January.....	707	338	287	710	444	437	691	368	356	1,166	612	606	47.1	62.5	53.8	51.2
February.....	558	340	237	708	522	428	473	252	226	1,501	1,041	1,045	62.0	74.3	53.8	69.4
March.....	795	608	408	1,082	810	733	579	443	434	1,683	1,448	1,438	63.3	74.9	76.5	57.6
April.....	755	468	392	911	736	674	591	442	416	586	377	307	61.3	80.8	74.8	64.3
May.....	640	490	452	734	387	523	605	499	409	523	279	272	76.6	80.0	75.0	53.8
June.....	796	494	459	937	686	646	508	386	371	571	350	335	62.8	63.2	68.0	61.8
July.....	703	386	359	673	486	469	497	278	296	440	226	222	54.9	72.2	55.9	51.4
August.....	840	375	352	814	625	578	577	342	314	606	370	347	44.6	76.8	59.3	61.1
September.....	1,007	747	670	605	481	521	546	305	325	498	291	260	74.2	79.5	55.9	58.4
October.....	818	630	549	614	463	458	461	257	257	301	262	262	77.0	75.4	55.7	32.7
November.....	599	498	381	789	536	510	594	292	285	491	213	208	78.1	67.9	49.2	48.4
December.....	694	487	439	599	436	435	773	406	407	483	211	208	70.2	72.8	52.5	48.7

For footnotes see end of table.

TABLE XV.—Monthly data from State reports on activities of public employment offices—12 States—Continued

WISCONSIN ¹⁰

Month	1928			1929 ¹⁰			1930			1931			Number of help wanted to 100 persons applying ¹			
	Applica- tions for work	Help wanted	Posi- tions secured	Applica- tions for work	Help wanted	Posi- tions secured	Persons applying for posi- tions	Help wanted by em- ployers	Persons placed in posi- tions	Persons applying for posi- tions	Help wanted by em- ployers	Persons placed in posi- tions	1928	1929	1930	1931
WOMEN																
January.....	3,144	1,879	1,526	3,837	2,507	2,043	3,712	1,884	1,498	3,405	1,661	1,166	59.8	65.3	60.8	48.8
February.....	2,847	1,748	1,459	3,136	1,924	1,541	2,791	1,515	1,214	2,978	1,365	1,079	61.4	61.4	54.2	48.8
March.....	4,011	2,597	1,960	3,231	2,304	1,804	2,940	1,691	1,310	2,733	1,402	1,111	64.7	71.3	57.5	51.3
April.....	3,420	2,810	2,002	3,621	3,014	2,132	3,073	2,077	1,562	3,811	2,371	1,775	82.2	83.2	67.6	62.2
May.....	4,608	4,207	2,968	4,571	4,135	2,879	4,073	2,968	2,246	3,076	1,794	1,375	91.3	90.5	72.8	58.3
June.....	3,833	2,738	2,115	3,901	2,983	2,250	3,375	1,855	1,428	3,345	1,523	1,206	71.4	74.7	58.0	46.5
July.....	4,577	3,286	2,441	3,587	2,549	1,893	2,598	1,512	1,206	3,596	1,971	1,543	71.8	71.7	58.2	54.8
August.....	3,356	2,867	2,011	4,105	3,443	2,333	3,416	1,993	1,537	2,935	1,430	1,073	85.4	83.9	58.3	48.7
September.....	3,800	3,085	2,242	3,793	3,062	2,132	3,131	1,556	1,222	3,307	1,658	1,241	81.2	80.7	49.7	50.1
October.....	4,792	3,397	2,726	4,957	3,184	2,688	4,061	1,869	1,503	4,006	1,724	1,407	70.9	64.2	46.0	43.0
November.....	3,417	2,082	1,736	3,232	1,693	1,477	2,791	1,309	1,043	2,722	1,124	909	60.9	62.4	46.9	41.3
December.....	2,859	2,232	1,565	2,685	1,595	1,210	2,257	1,305	976	2,223	1,115	917	73.1	69.4	57.5	50.2
MEN																
January.....	5,435	2,840	2,236	10,094	7,585	6,524	6,698	3,429	3,182	5,170	2,067	1,949	52.3	75.1	51.2	40.0
February.....	5,286	2,949	2,338	7,068	5,259	4,028	4,425	2,359	2,145	4,588	1,656	1,502	55.8	74.4	53.2	36.1
March.....	7,478	4,528	3,757	6,977	5,116	4,068	5,110	2,869	2,544	4,320	2,178	1,922	60.6	73.3	56.1	50.4
April.....	7,860	5,798	4,575	10,207	8,888	8,904	6,638	4,045	3,468	6,385	3,573	3,145	73.6	86.3	60.9	56.0
May.....	12,308	11,115	8,918	15,234	14,470	11,209	7,321	4,450	4,855	5,591	2,615	2,344	90.3	95.0	74.4	46.8
June.....	9,864	8,359	7,064	10,515	9,130	7,861	8,182	3,678	3,110	5,370	2,587	2,270	84.8	86.8	71.0	48.2
July.....	13,475	12,666	10,063	9,071	8,392	6,588	4,591	3,276	2,839	6,287	3,341	2,946	94.0	92.5	71.4	53.1
August.....	10,589	10,204	7,749	10,648	9,219	7,881	5,271	3,363	3,132	4,451	2,276	1,924	96.4	86.6	63.8	51.1
September.....	11,878	11,666	8,877	8,886	7,806	6,511	5,106	2,816	2,535	5,320	2,061	1,819	100.8	87.8	55.1	38.7
October.....	14,290	13,094	11,073	10,378	8,832	7,934	6,066	3,812	3,515	6,898	2,649	2,424	91.6	85.1	62.8	38.4
November.....	7,502	5,696	5,411	5,838	3,972	3,672	4,596	2,208	2,011	4,170	1,938	1,739	75.9	68.0	48.0	45.5
December.....	5,481	3,820	3,499	4,991	3,108	2,821	4,380	2,161	1,953	4,190	2,040	1,874	69.7	62.2	46.3	48.9

¹ From biennial reports of State Bureau of Labor Statistics, fiscal years, 1928 to 1930, and typewritten monthly reports, July 1930 to December 1931.

² Computed in Women's Bureau.

³ From annual reports of State Department of Labor, fiscal years 1928 and 1929, and monthly reports August 1929 to January 1932.

⁴ From monthly reports of State Bureau of Labor, Iowa Employment Survey.

⁵ From July 1929 to June 1930; from December 1930 copy of Labor and Industry, published by the Department of Labor and Industry. From July 1930 to January 1932; from mimeographed monthly reports of activities of Michigan Public Employment Bureaus. "Registered" in Labor and Industry. "Applications" and "Placements" on mimeographed sheets.

⁶ From annual report of the Public Employment Service operated by the Industrial Commission of Minnesota, for each calendar year. The commercial and professional division was organized in each city in July 1931. The numbers for each month reported by this division were not by sex (except for verified placements) and have been omitted in the monthly figures given here. In 1931 the clerical group (which at that time may have absorbed the commercial and professional applicants) formed over one tenth of the women's registrations but only about 4 percent of their help wanted and placements; for men the proportions in the clerical group were very small.

⁷ From the Industrial Bulletin, published monthly by the State Department of Labor.

⁸ From unpublished data furnished by the New York State Department of Labor. Totals differ from those given in State reports and in the Industrial Bulletin, for the following reasons: They exclude junior placements, which were included in the figures published in the State reports and in the Industrial Bulletin prior to September 1929; they exclude also reports from certain relatively small agencies cooperating with the State, whose figures are included in reports in the Industrial Bulletin in April 1930 and thereafter.

⁹ Includes registrations (as shown in column 2) and renewals as computed in the Women's Bureau.

¹⁰ See footnote 8.

¹¹ Not published.

¹² From mimeographed monthly reports of Ohio Department of Industrial Relations. Before July 1930, "applicants" were reported; beginning in July, "new registrations" and "applications." In this and succeeding months the report carries this footnote: "Total number of applications includes new registrations. To get the number of renewals subtract the new registrations from the total applications."

¹³ See footnote 12.

¹⁴ Figures are from monthly reports in Labor and Industry, published by the State Department of Labor and Industry.

¹⁵ Placement of casual or day workers recorded for only 1 placement a week.

¹⁶ From annual reports of State Commissioner of Labor.

¹⁷ Term "registrations" used interchangeably with "new registrations."

¹⁸ From annual reports of State Department of Labor and Industry, 1928 to 1931, year ended September 30.

¹⁹ From mimeographed monthly reports of State Industrial Commission.

²⁰ After June 30, 1929, terms used were the same as in 1930 and 1931.

TABLE XVI.—*Differences between 1929 and 1931 in numbers of women asking for employment and number of women workers called for by employers, by selected occupations*A.—SIX STATES PRESENTED BY DETAILED OCCUPATION CLASSIFICATION¹

Pennsylvania (calendar year)							New York (calendar year) ²						
Industry	Persons applying for positions		Persons asked for by employers		Percent increase or decrease 1929-31 in—		Industry	Workers registered		Workers called for		Percent increase or decrease 1929-31 in—	
	1929	1931	1929	1931	Persons applying for jobs	Persons asked for by employers		1929	1931	1929	1931	Workers registered	Workers called for
Total ¹	80,861	52,583	14,462	14,997	+73.2	+3.7	Total ¹	84,205	130,960	59,364	55,811	+55.5	-0.9
Clerical and professional.....	4,868	7,547	999	817	+55.0	-18.2	Clerical.....	14,862	29,459	8,026	2,552	+98.2	-48.6
Hotel and restaurant.....	2,869	6,918	857	1,389	+141.1	+62.1	Domestic and personal.....	14,486	20,222	10,331	20,651	+41.0	+99.9
Wholesale and retail trade.....	1,156	1,782	475	600	+54.2	+25.2	Hotels and restaurants.....	7,953	14,806	4,483	3,810	+82.4	-15.0
Casual and day workers.....	8,312	11,100	4,962	8,798	+33.5	-23.9	Trade, wholesale and retail.....	10,077	13,813	4,479	3,797	+37.1	-15.2
Skilled manufacturing workers ²	828	8,267	377	524	+297.0	+39.0	Casual workers.....	26,188	27,857	26,833	20,836	+6.4	-22.3
Semiskilled.....	7,882	13,466	5,295	6,574	+75.3	+24.2	Manufacturing (total).....	10,638	19,122	8,211	7,136	+79.8	-13.1
Unskilled.....	2,002	5,537	749	678	+176.6	-9.5							

Wisconsin (calendar year)							Illinois (year ending June 30)						
Industry	New registrations		Help wanted		Percent increase or decrease 1930-31 in—		Industry	Registrations		Help wanted		Percent increase or decrease 1929-31 in—	
	1930 ¹	1931	1930 ¹	1931	New registrations	Help wanted		1929	1931	1929	1931	Regis-trations	Help wanted
Total ¹	88,218	88,130	21,532	19,138	-0.2	-11.1	Total ¹	94,004	98,364	68,021	49,441	+4.6	-27.3
Office workers.....	5,149	5,133	819	823	-0.8	-36.1	Clerical.....	11,870	16,742	3,794	8,459	+41.0	-8.1
Home.....	21,719	23,037	16,011	14,933	+6.1	-9.7	Domestic and personal, hotel and restaurant.....	36,130	43,942	28,728	24,678	+21.6	-14.1
Institutions.....	244	279	142	144	+13.1	+1.4	Total manufacturing ¹	8,372	3,047	2,677	1,899	-0.3	-40.3
Hotels and restaurants.....	4,558	4,018	2,040	1,814	-11.8	-35.8	Wholesale and retail trade.....	472	306	420	187	-22.5	-55.5
Mercantile establishments.....	1,706	1,097	710	1,118	+17.1	+57.5	Casual workers.....	31,710	23,679	27,056	17,056	-25.3	-37.0
Casual labor ¹	736	80	613	30	(?)	(?)							
Manufacturing ¹	3,473	3,044	828	838	-12.4	+1.2							

Ohio (year ending June 30)							Minnesota (calendar year)							
Industry	Applicants ¹		New registrations	Help wanted		Percent increase or decrease 1929-31		Industry	Registrations		Help wanted		Percent increase or decrease 1929-31 in—	
	1929	1931	1931	1929	1931	"Applicants" in 1929 to "new registrations" in 1931	In help wanted		1929	1931	1929	1931	Regis-trations	Help wanted
Total ¹	127,492	273,832	99,011	95,049	58,191	-22.3	-38.8	Total.....	84,145	35,604	19,684	19,638	+4.3	(?)
Clerical and professional...	10,820	34,323	10,228	4,098	2,760	-0.9	-32.9	Clerical.....	6,806	3,747	1,908	800	-45.0	-53.3
Domestic and personal....	21,631	63,778	25,406	21,684	10,932	+17.5	-21.3	Domestic.....	4,366	3,671	3,540	3,298	+98.6	+49.7
Hotel and restaurant.....	10,425	25,440	5,454	8,814	4,042	-18.9	-52.5	Hotel and restaurant.....	3,307	6,499	4,095	2,457	-21.8	-40.0
Total manufacturing ¹	7,475	24,180	7,043	3,021	2,700	-5.8	-44.4	Industrial.....	4,139	4,635	1,908	1,908	+12.0	(?)
Wholesale and retail trades.....	263	868	413	837	617	+63.2	+53.4	Casual.....	10,528	12,022	3,236	9,090	+14.5	+10.3
Casual workers.....	76,674	122,148	46,460	54,979	30,091	-30.4	-44.2							

For footnotes see end of table.

TABLE XVI.—*Difference between 1929 and 1931 in numbers of women asking for employment and number of women workers called for by employers, by selected occupations—Continued*

B.—SIX STATES PRESENTED BY GENERALIZED OCCUPATION CLASSIFICATIONS *

Industry	New Jersey (year ending June 30)						Kansas (calendar year)						Rhode Island ¹⁰ (calendar year)					
	Registrations		Help wanted		Percent increase or decrease 1929-31 in—		Registered		Help wanted		Percent increase or decrease 1929-31 in—		Registrations		Help wanted		Percent increase or decrease 1929-31 in—	
	1929	1931	1929	1931	Regis- trations	Help wanted	1929	1931	1929	1931	Regis- tered	Help wanted	1929	1931	1929	1931	Regis- trations	Help wanted
Total.....	108,469	104,698	86,800	68,331	+1.2	-27.1	5,800	6,164	3,860	2,779	+10.1	-21.9	¹¹ 2,761	¹¹ 2,712	¹¹ 2,876	¹¹ 1,717	-1.8	-40.3
Clerical and professional....	8,987	12,639	3,694	3,287	+40.6	-11.8	708	841	301	198	+19.3	-24.1	72	235	17	42	+223.6	+147.1
Domestic.....	80,062	76,715	72,097	53,267	-4.2	-26.7	8,366	8,907	2,379	2,071	+18.7	-12.9	508	1,072	766	387	+111.0	-46.6
Industrial.....	14,420	16,339	10,469	6,817	+6.4	-34.9	1,829	1,326	920	610	-13.3	-44.6	11	679	11	90	+5163.6	+718.2

Industry	Indiana (year ending Sept. 30)						North Carolina (year ending June 30)						Arkansas (year ending June 30)					
	Registrations		Calls		Percent increase or decrease 1929-31 in—		Registrations		Help wanted		Percent increase or decrease 1929-30 in—		Registrations		Help wanted		Percent increase or decrease 1929-30 in—	
	1929	1931	1929	1931	Regis- trations	Calls	1929	1930	1929	1930	Regis- trations	Help wanted	1929	1930	1929	1930	Regis- trations	Help wanted
Total.....	12,891	11,492	10,486	8,784	-10.9	-15.8	16,472	14,338	10,307	8,064	-7.3	-21.8	4,765	5,662	1,980	2,247	+18.8	+15.2
Clerical and professional....	¹² 2,646	¹² 2,434	¹² 1,066	¹² 820	-8.0	-26.1	2,816	2,372	768	644	-6.7	-16.1	224	387	47	66	+72.8	+19.1
Domestic.....	9,348	7,014	8,701	7,803	-18.3	-13.1	11,544	10,424	9,017	6,891	-9.7	-23.6	4,200	4,821	1,809	2,082	+12.9	+13.4
Industrial.....	897	1,144	639	401	+27.8	-37.2	1,412	1,542	522	529	+9.2	+1.8	372	464	94	139	+86.9	+47.9

¹ Data on this table taken from the following sources: *Pennsylvania*: Monthly publications of Department of Labor and Industry. *Labor and Industry* for February 1930 and 1932 includes annual report for calendar years 1929 and 1931. *New York*: Monthly reports of Department of Labor, Industrial Bulletin. Totals for calendar year added by the Women's Bureau. *Wisconsin*: Industrial Commission, Wisconsin Labor Market, January 1931 and 1932, includes annual report for calendar years 1930 and 1931. *Illinois*: Twelfth annual report of Department of Labor, year ending June 30, 1929, and compiled by Women's Bureau from Labor Bulletin for fiscal period ending June 30, 1931. *Ohio*: Eighth annual report of Department of Industrial Relations for year ending June 30, 1929, and mimeographed report for year ending June 30, 1931. *Minnesota*: Mimeographed Annual Report of the Public Employment Service operated by the Industrial Commission of Minnesota.

² Junior placements were included.

³ This term changed to "applicants" July 1930. After July 1930, applications (including new registrations) as well as new registrations were given, the latter corresponding to the "applicants" given prior to this time; consequently "applicants" in 1929 is compared with "new registrations" in 1931.

⁴ Classifications changed in 1930, therefore 1929 not comparable with 1931.

⁵ Total exceeds details because small groups not shown separately and miscellaneous classifications have been omitted, even though the numbers sometimes were large.

⁶ Decline of less than one half of 1 percent.

⁷ The decline in this case was so great as to raise the question whether there was not some additional change in classification or in emphasis placed by the offices upon certain types of employment.

⁸ Manufacturing totals prepared by Women's Bureau.

⁹ Data on this table taken from the following sources: *New Jersey*: Industrial Bulletin, year's report in September issue. *Kansas*: Annual reports of Commission of Labor and Industry, calendar year. *Indiana*: Annual reports of Industrial Board, year ending Sept. 30. *North Carolina*: Biennial report of Department of Labor and Printing for 1928-30 and biennial report of Department of Labor, years ending June 30, 1930-32. *Rhode Island*: Annual reports of Commissioner of Labor, calendar year. *Arkansas*: Ninth biennial report of Bureau of Labor, year ending June 30, 1929-30.

¹⁰ In 1930, Rhode Island began the system of counting any individual applicant only once in the year. Prior to that time a person was counted every time coming into the office. (See report of Commissioner of Labor, 1930, pp. 34-35.) The Rhode Island occupations were combined by the Women's Bureau. For clerical and professional occupations: bookkeepers, office clerks, pharmacists, teachers, stenographers, shipping clerks. For domestic and personal services: Attendants, chambermaids, cooks, laundry, clean and dye, maids, domestics, kitchen and pantry, nurses, waiters and waitresses, elevators, cleaners, barbers, and hairdressers (last 3 groups, 1930 only). For the industrial group: Jewelry, printing, textiles, rubber, hand sewing, power machines, bakers, leather, paper box, radio tubes, paper and bugs.

¹¹ Total exceeds details, since not all groups shown separately.

¹² Indiana uses only the term "clerical."

APPENDIX B

METHODS USED BY NEW YORK STATE DEPARTMENT OF LABOR IN PREPARATION OF EMPLOYMENT FIGURES, AS DESCRIBED IN SPECIAL BULLETIN 143¹

EXTRACT FROM PAGE 8 AND FOLLOWING—WEIGHTING OF FIGURES

When the reports were retabulated, group totals and grand total were obtained by weighting the figures for the separate industries. In steel mills, railroad shops, and industries where the workers were mostly men, it was possible to secure reports for a very large proportion of the workers in the whole industry. In textile mills, shoe factories, paper-goods factories, and organizations where men and women were scattered through the plant, often working in the same departments and sometimes at the same processes, it was more difficult to cover a large section of the industry. Time-clock cards and pay rolls were made up with numbers or with initials only in place of first names, so that it was necessary to invent a special system for classifying the workers by sex. Many firms went to great lengths to cooperate with the bureau in making this useful information public. In a few industries, mostly concentrated in New York City, it was not possible to persuade enough firms of the importance of the material they could make available.

Because the make-up of the list of reporting factories was determined by internal conditions, the representation of the different industries varied enough to affect the totals and the conclusions. Small changes in the metal industries would have counted for much more than large increases or decreases in clothing and textiles. This was avoided by weighting each industry division according to its importance in the total volume of manufacturing. The details of this process are described on page 151.² The totals are now corrected so that they are not affected by the high or low representation of the separate industries.

The month of June 1923 was used as a base because it was the best practicable period. When the fixed list was established it was found in some industries that reports were missing for July, August, September, or October of 1923. The newness of the idea of separating pay rolls and the interference of summer vacations made it impossible to obtain complete information. For that reason it was decided not to tabulate any figures for those months for the groups or the grand total. That fact prevented the use of the average for the year 1923-24 as the base and left the choice to June 1923, or November 1923. A detailed attempt was made to tabulate the figures with November 1923 as a base. It was found, as was anticipated, that not only was

¹ Extracted from *Employment and Earnings of Men and Women in New York State Factories, 1922-25*, New York Department of Labor, June 1926, p. 266, 151d.

² See p. 267, post.

manufacturing in general quite seriously affected by a depression but the course of the downward movement varied so from industry to industry that it was impossible to judge the effect of the subsequent changes. June 1923 is not only the beginning of the series but is also a month when labor was generally well employed before signs of dull business had begun to appear. On these charts the base line is June 1923, but in some cases it was not possible to carry the lines on the chart back of November.

In all cases the figures for men and women separately refer to shop workers only. A small proportion of office workers is included in the figures for "all employees", but their inclusion in the separate figure would have had too much influence on earnings for women.

EXTRACT FROM PAGE 151 AND FOLLOWING

Given the number of men and women in the whole industry it was an easy matter to find out how much of the industry was included in the reporting concerns. Obviously the number of employees rather than the number of firms was used in each case.

The difficulty of securing reports varied so from one industry to another that the list covered 95 percent of the workers in the steel mills and from 3 to 4 percent of those in men's clothing. Up-State concerns were much better represented than those in New York City, with more than twice as large a share of the up-State workers covered. The representation for men was better than that for women.

* * * June 1923 was used to compute these percentages because it was found by experience to be better to use a single month during which industrial conditions were undisturbed rather than a longer period at a time when some of the representative factories were either lagging behind or going ahead of the whole industry temporarily. Seasonal difficulties were avoided because the representative list was compared with the totals for a given industry for the same month, and so both were at the same point on the seasonal curve.

If a sample could be arbitrarily selected, a representative list of reporting factories would give each industry the same weighting in the reporting list that it has in the total for all factories. Firms that can and will report separate pay rolls for men and women cannot be arbitrarily selected, however. They are taken as they come.

Because of the unevenness with which the industries were covered, their weighting in the reporting list is in many cases quite different from their true weighting.

A comparison of clothing and metals tells the whole story. The metal factories of the State employ about $2\frac{1}{2}$ times as many men as the clothing factories. In the reporting list they provide about 20 times as large a part of the total as the clothing group. The effect of this on an uncorrected index of employment in June 1924, with the metal-working factories making sharp cuts in operations, is obvious.

Similar discrepancies are to be found in the subdivisions.

Equally important differences held true for the women workers.

These irregularities are now removed and the indexes of employment and pay rolls and the average earnings for industry groups and the total are based on figures corrected to put each industry in its true relation to the other industries that make up the total of manufacturing.

For this recourse was had to the percentage representation figures. The figures for the reporting plants in each industry were divided by their percentage representation and therefore given a representation of 100. This meant that each industry in the total was restored to its original importance. Corrections were made for a few strikes.

The mathematical process involved in adjusting by representation was simple.

$$\frac{\text{Number of employees, cotton mills, reporting firms}}{\text{Percent representation, cotton mills}} = \text{Estimated number of employees cotton mills, all firms.}$$

The addition of these items gives the corrected group totals and grand totals.

Even here, however, there is a complication. In the knitting mills 15 percent of the men are covered in the reporting factories. In adjusting these figures it is safe to assume the sample is representative. In the men's furnishings division there is a coverage of 18 percent. But a large part of that is in the big up-State collar factories, and a small part in the smaller New York City tie- and cravat-making shops. Theoretically it would have been possible to weight all industries separately for New York City and up State, but the slight refinement in the figures would by no means have justified the great amount of work involved.

FIXED LIST METHOD

All these adjustments were involved in the main decision to retabulate the men's and women's reports on a fixed list basis. There is no possible way to secure accurate results except by using a fixed list of reporting concerns.

The first returns for men and women were used without any attempt to establish a constant list because reporting was so irregular. There is more likelihood that an office manager in the rush of vacation or holidays will send in his total figures without the separations than that he will fail to send in the regular report. One is much more trouble than the other, and not quite so important. Until recently it was considered unwise to urge firms to separate their pay rolls. This and the absence of data for interpolating made it impossible to establish a fixed list.

The use of these early results was severely restricted because of the changing list of firms. Average earnings often showed large variations from month to month that were traceable only to differences in reporting firms and were no evidence of increase or decrease in the volume of wage payments as a whole.

It would have been possible to compute changes in employment and pay rolls by the link-and-chain method, that is to take the firms reporting in a given month and by retabulating the previous month's record, compute changes from one month to another for a tentatively fixed list. A series of index numbers could be built up from these figures, but an actual trial of the method and analysis of the differences shown made it clear that the results were not satisfactory. Also, it would have been impossible to change the average earnings.

All of the 10 years' experience with the Labor Market is evidence against the use of the link-and-chain method. The Labor Market represents 37 percent of the State's factory workers, and the reports for

men and women combined are only 27 percent. Separated the actual number of men and of women is much smaller than the Labor Market figures and small differences would have had correspondingly more weight.

Statistical work-sheet used by New York State in preparing weights for women's index

Industry or industry groups	U.S. Census of Manufactures, 1929		New York State tabulations by sex—weighted absolutes—average 1929						
	Average number of wage earners	Per- cent of total	Number of men and women	Per- cent of total	Per- cent col. 3 to col. 1	Number of men	Per- cent of total	Number of women	Per- cent of total
Total.....	1,105,966	100.00	1,125,080	100.00	101.8	635,347	100.00	290,343	100.00
Stone, clay, and glass.....	28,709	2.14	29,384	2.61	124.4	28,249	3.38	1,135	.39
Miscellaneous stone and minerals.....	5,532	.50	10,004	.89	180.8	9,260	1.11	744	.26
Lime, cement, and plaster.....	6,421	.58	5,607	.49	87.3	5,519	.66	88	.03
Brick, tile, and pottery.....	5,756	.52	7,396	.66	128.4	7,396	.89	(¹)	(¹)
Glass.....	6,000	.54	6,379	.57	106.3	6,075	.72	304	.10
Metals and machinery.....	324,750	29.36	338,534	30.07	104.2	317,154	37.97	21,380	7.36
Silverware and jewelry.....	9,813	.89	9,145	.81	93.2	7,670	.92	1,475	.51
Brass, copper, and aluminum.....	27,930	2.52	43,701	3.88	156.4	41,085	4.92	2,616	.90
Iron and steel.....	20,968	1.90	14,496	1.29	69.1	14,411	1.73	84	.03
Structural and architectural iron.....	7,017	.63	5,030	.45	71.7	5,030	.60	(¹)	(¹)
Sheet metal and hardware.....	28,085	2.54	24,679	2.19	87.9	22,376	2.68	2,303	.79
Firearms, tools, and cutlery.....	10,331	.93	8,904	.79	86.2	8,214	.96	690	.24
Cooking, heating, ventilating apparatus.....	6,280	.57	7,510	.67	119.6	7,242	.87	268	.09
Machinery and electrical apparatus.....	107,735	9.74	100,937	8.97	93.7	93,069	11.14	7,868	2.71
Automobiles, airplanes, etc.....	35,037	3.17	46,306	4.11	132.2	45,317	5.42	989	.34
Railroad equipment and repair shops.....	35,893	3.24	38,854	3.45	108.2	38,645	4.63	209	.07
Boat and ship building.....	10,811	.96	8,068	.72	74.8	8,068	.97	(¹)	(¹)
Instruments and appli- ances.....	24,830	2.25	30,886	2.74	124.4	26,007	3.11	4,879	1.68
Wood manufactures.....	62,192	5.63	50,065	4.45	94.9	54,397	6.51	4,668	1.61
Saw and planing mills.....	12,050	1.09	14,050	1.25	116.6	13,440	1.61	610	.21
Furniture and cabinet work.....	20,438	1.86	26,619	2.36	130.2	25,319	3.03	1,300	.45
Pianos and other musical instruments.....	5,405	.49	8,991	.80	166.4	8,549	1.02	442	.15
Miscellaneous wood, etc.....	14,299	1.29	9,407	.84	65.8	7,090	.85	2,317	.80
Furs, leather, and rubber goods.....	97,649	8.83	83,269	7.40	85.2	56,494	6.76	26,775	9.22
Leather.....	5,354	.49	4,478	.40	82.6	4,310	.52	168	.06
Furs and fur goods.....	13,965	1.26	7,809	.69	55.8	6,307	.76	1,502	.52
Shoes.....	36,524	3.28	44,748	3.98	116.2	26,367	3.20	18,381	6.34
Gloves, bags, canvas goods.....	26,518	2.40	14,396	1.28	54.3	9,432	1.13	4,864	1.71
Rubber and gutta-percha.....	8,691	.78	4,137	.37	48.1	2,453	.29	684	.23
Pearl, horn, bone, etc.....	4,667	.42	7,701	.68	165.0	4,606	.55	2,095	0.76
Chemicals, oils, paints, etc.....	82,952	7.50	43,308	3.85	81.0	34,008	4.10	9,300	3.15
Drugs and industrial chemicals.....	18,252	1.65	13,056	1.15	71.5	10,037	1.20	3,019	1.04
Paints and colors.....	7,221	.65	5,861	.52	81.2	5,141	.62	720	.25
Oil products.....	15,210	1.38	12,441	1.11	81.8	9,719	1.16	2,722	.94
Photographic and mis- cellaneous chemicals.....	12,269	1.11	12,011	1.07	97.9	9,311	1.12	2,700	.92
Pulp and paper.....	16,327	1.48	15,613	1.39	95.6	14,379	1.72	1,234	.43

¹ Not computed, number of firms is too small.

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Statistical work-sheet used by New York State in preparing weights for women's index—Continued

Industry or industry groups	U. S. Census of Manufactures, 1929		New York State tabulations by sex—weighted absolutes—average 1929							
	Average number of wage earners	Per- cent of total	Number of men and women	Per- cent of total	Per- cent col. 3 to col. 1	Number of men	Per- cent of total	Number of women	Per- cent of total	
Printing and paper goods.....	103,995	9.40	92,823	8.25	89.3	66,500	7.96	26,323	9.07	
Paper boxes and tubes.....	12,290	1.11	9,571	.86	77.9	4,186	.50	5,386	1.86	
Miscellaneous paper goods.....	12,712	1.15	9,116	.81	71.7	4,196	.50	4,930	1.70	
Printing and bookmak- ing.....	78,993	7.14	74,136	6.68	93.8	58,129	6.96	16,007	5.51	
Textiles.....	97,249	8.79	87,605	7.78	90.1	44,642	5.34	42,963	14.80	
Silk and silk goods.....	11,238	1.02	11,455	1.02	101.9	4,062	.49	7,393	2.55	
Woolens, carpets, felts.....	24,440	3.11	30,029	2.67	87.2	18,900	2.25	11,229	3.87	
Cotton goods.....	6,192	.56	6,633	.58	107.1	3,591	.43	3,042	1.05	
Knit goods, except silk.....	31,558	2.85	19,386	1.72	61.4	7,998	.95	11,388	3.92	
Other textiles.....	13,821	1.25	20,102	1.79	145.4	10,192	1.22	9,910	3.41	
Clothing and millinery.....	218,538	19.76	249,119	22.13	114.0	122,085	14.62	127,034	43.75	
Men's clothing.....	48,668	4.40	78,401	6.96	161.1	52,686	6.31	25,715	8.31	
Men's furnishings.....	30,610	2.77	27,925	2.48	91.2	10,864	1.30	17,061	5.58	
Women's clothing.....	102,096	9.23	72,677	6.46	71.2	35,295	4.23	37,382	13.31	
Women's underwear.....	4,702	.42	13,181	1.17	280.3	2,013	.24	11,168	3.82	
Women's headwear.....	18,550	1.68	16,709	1.49	90.1	4,998	.60	11,711	3.39	
Miscellaneous sewing.....	13,912	1.26	9,284	.82	66.7	2,752	.33	6,532	2.30	
Laundering and cleaning.....			30,944	2.75		13,478	1.61	17,466	6.04	
Food and tobacco.....	97,666	8.83	113,009	10.03	115.7	83,356	9.98	29,653	10.21	
Flour, feed, and cereals.....	4,170	.37	4,753	.42	114.0	4,101	.49	652	.22	
Canning and preserving.....	8,477	.76	10,070	.89	118.8	4,718	.57	5,352	1.84	
Sugar and other groceries.....	12,528	1.13	12,878	1.14	102.8	8,478	1.02	4,400	1.52	
Meat and dairy products.....	10,018	.91	13,333	1.18	133.1	12,344	1.48	989	.34	
Bakery products.....	33,704	3.05	40,833	3.63	121.2	35,110	4.20	5,723	1.97	
Candy.....	13,600	1.23	13,709	1.22	100.8	6,954	.83	6,755	2.33	
Beverages.....	6,468	.59	6,555	.58	101.3	6,112	.73	443	.15	
Tobacco.....	8,701	.79	10,878	.97	125.0	5,538	.66	5,340	1.84	
Water, light, and power.....	10,939	.99	13,903	1.24	127.1	13,884	1.66	19	.01	

APPENDIX C

INFORMATION BY SEX PUBLISHED BY STATE-SUPPORTED EMPLOYMENT AGENCIES ¹

TYPE OF DATA

Alabama.—No agencies receiving State funds.

Arizona.²—No agencies receiving State funds.

Arkansas.—Biennial reports of the Bureau of Labor and Statistics for the periods ending June 30, 1930 and 1932. (The first reports available since 1924.) The later report gives no tabulations for employment agencies; that for 1929-30 gives registrations, help wanted, referred, and reported placed, by sex, month, and three occupation groupings, for the Fort Smith office, the only one supported by the State. (See p. 15 of report.) Totals for the four offices (the others supported in whole or part by Federal funds) are given by sex and occupation grouping for each year of the biennium (ending June 30) but not by month. The great majority of the women reported were from domestic occupations.

California.—The biennial report of the Department of Industrial Relations concentrates on placements, giving these by industry and sex both for permanent and temporary offices; by sex and agency; by sex, industry, and agency; and by month and agency, with totals in each case for the biennium for each year, or for both. Employees wanted and applicants referred are given by city, with totals for the biennium but not by sex. Reports of numbers applying are not given. Monthly mimeographed reports of the Division of State Employment Agencies give numbers placed in the month, but not by sex.

Colorado.—The biennial report of the Bureau of Labor Statistics gives the numbers of applications and placements for private employment agencies by sex and month, with total for 13-month period. No agencies are supported by the State within the period of study.

Connecticut.—The biennial report of the Bureau of Labor Statistics gives for each year the numbers of applications for employment, applications for help, and situations secured, by sex and month for each office in the State, with totals for all offices. These reports also are issued monthly, typed on printed forms. The ratios of situations secured to applications for employment, and of employees furnished to applications for help, are given by sex and month for each office and for all offices together. Detailed statements of situations secured, by occupation, is given by sex for each office, totaled for all offices. A similar statement is given by nationality. Maximum and minimum wages paid in the positions filled in each office are given by sex and occupation, for 6-month periods.

This is the only State reporting as to nationality and wage. A detailed occupation classification is given by sex for placements only, totals for year ending September 30, and no monthly data.

Delaware.²—No report was issued within the period of study.

Florida.²—No agencies receiving State funds.

Georgia.²—No agencies receiving State funds.

Idaho.²—No agencies receiving State funds.

Illinois.—The annual report of the Department of Labor gives the numbers of registrations, help wanted, and placed, by sex and month, and by sex and industry, with totals for the year. This information is reported for each office and for all offices together, as is the number of persons registered for each 100 places open, the latter by month and by industry but not by sex. The information noted in the foregoing forms the year's recapitulation of data issued monthly in the Labor Bulletin.

See footnotes on p. 223.

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- Indiana.**—The annual reports of the Industrial Board are given in the Indiana Year Book. The numbers of registrations, calls, referred, and placed are reported by sex under a general occupation classification for each office, with a total for all offices for the year ending September 30. No monthly reports are issued.
- Iowa.**—The biennial report of the Bureau of Labor gives the numbers of registrations, jobs offered, applicants referred, and those reported placed, by sex and occupation. This is the 2 years' report on the same information, excepting occupation, given monthly in the Iowa Employment Survey.
- Kansas.**—The annual report gives numbers registered, help wanted, referred, and placed, by sex, occupation, and month, for each city and for all cities together. Occupations are reported under the usual three headings, in the form of totals for the year by city only. No monthly reports are issued.
- Kentucky.**—No agencies receiving State funds.
- Louisiana.**—No agencies receiving State funds.
- Maine.**⁴—No figures reported.
- Maryland.**⁴—No agencies receiving State funds.
- Massachusetts.**—The annual report of the Department of Labor and Industries gives the numbers of registrations, persons called for by employers, persons referred to positions, and positions reported filled, by sex for each office and for all offices combined. The monthly data and the occupational data are not by sex. Monthly mimeographed reports are not by sex.
- Michigan.**—The December issue of Labor and Industry (published quarterly) gives by sex the year's figures on numbers registered, help wanted, referred, and placed, and percent placements formed both of total registered and of total referred. The information by sex is given by the month, and also is given for each office with totals for all offices.
- Minnesota.**—The biennial report of the Industrial Commission gives the numbers referred and verified placements by sex and month for each city but with no total for all cities. The number of persons referred to positions and the number of verified placements are given by sex, month, and occupational group for each city. Reports of numbers applying are not given. No monthly reports are issued.
- Mississippi.**—No agencies receiving State funds.
- Missouri.**—The annual report of the Labor and Industrial Inspection Department gives the numbers of applications for employment, applicants put to work, applicants unplaced, positions offered by employers, number of places filled, and number of places unfilled, by sex and occupation for each city and for all cities. No report has been issued since 1928. No monthly reports are issued.
- Montana.**²—No agencies receiving State funds.
- Nebraska.**—No agencies receiving State funds.
- Nevada.**—The biennial report of the Commissioner of Labor gives the numbers of persons applying for work, requested by employers, and reported placed, by sex and month for each office separately. Reports also are made on fee-charging agencies, with a comparison of their placements and those of public agencies (not by sex).
- New Hampshire.**—No reports by sex except for minors.
- New Jersey.**—The Industrial Bulletin, published monthly, gives the year's report of the Department of Labor in the September issue, including the number of registrations, help wanted, referred, and reported placed, by sex, city, and occupational group. The number of placements per each 100 registrations is given by sex and city. This information is published by the month also.
- New Mexico.**—No agencies receiving State funds.
- New York.**—The annual report of the Industrial Commission gives only placement figures by sex. The Industrial Bulletin, published monthly, gives the numbers of registrations (including renewals), help wanted, referred, and placed, by sex, city, and industry, with a total for all cities.

North Carolina.—The biennial report of the Department of Labor and Printing for 1928-30 and of the Department of Labor for 1930-32 give employment data for fiscal years ending June 30. The 1928-30 report states that this Department maintained public employment offices through cooperation of the Federal and local Governments. While not strictly State offices, therefore, data concerning them are given in the State report. In the earlier report registrations, help wanted, referred, and reported placed are given by sex in three general industrial groups. The later report omits help wanted. Data are not given by month.

North Dakota.¹—No agencies receiving State funds.

Ohio.—The annual report of the Department of Industrial Relations gives the numbers of applicants (new registrations separate after June 1930), help wanted, referred, and reported placed, by sex and occupation for each city with a grand total for the State. Monthly mimeographed reports give the same information for each month with an additional fuller occupation classification.

Oklahoma.—The annual report of the Department of Labor gave for the first time in the year ending June 30, 1931, the numbers registered, help wanted, referred, and placed for each office and for all offices combined, by sex. The Oklahoma Labor Market, published monthly, contains a record of placements only, by occupation but not by sex.

Oregon.²—No agencies receiving State funds.

Pennsylvania.—Labor and Industry, the monthly publication of the Department of Labor and Industry, gives the year's report in its February issue. Each month reports are given on numbers of persons applying for positions, asked for by employers, sent to positions, and receiving positions, by sex and industry or occupation. The percent of applicants placed, percent of openings filled, and percent of persons referred placed are given by sex.

Rhode Island.—The annual report of the Commissioner of Labor gives attendance, new registrations, help wanted, referred, and placed, by sex and month, and by sex with a detailed occupation classification.

South Carolina.—No agencies receiving State funds.

South Dakota.¹—No agencies receiving State funds.

Tennessee.—No agencies receiving State funds.

Texas.¹—No agencies receiving State funds.

Utah.—No agencies receiving State funds.

Vermont.¹—No agencies receiving State funds.

Virginia.—The annual report of the Department of Labor and Industry gives registrations, help wanted, persons referred, and positions filled, by sex and month. Total attendance at the offices is reported by month though not by sex. No monthly reports are issued.

Washington.¹—No agencies supported by State funds.

West Virginia.—The biennial report of the Bureau of Labor, 1929-30, gives an employment-office report for the period March 1 to November 15, 1930. The report is by sex for registrations, referred, and placed. No other report has been issued within the period of study.

Wisconsin.—The Labor Market published monthly by the Industrial Commission gives the year's report in its January issue. Number of workers registered for each 100 places open is given by month but not by sex. Both the annual report and the monthly issues give numbers of applicants, help wanted, referred, and placed, by sex and industry, and by sex after January 1930. The mimeographed information on Operation of Public Employment Offices issued monthly, reports by sex back to 1916.

Wyoming.—No agencies supported by State funds.

¹ The outline given here aims especially to show the type of data published in the States, by sex. See footnote 12, p. 140. For a more complete presentation of the material published in the States, see Stewart, Annabel M., and Bryce M., *Statistical Procedure of Public Employment Offices*, 1931, pp. 243-264.

² In 11 States, of which this is 1, the U. S. Employment Service acts through a State representative. The public employment service concerns itself with farm labor almost exclusively.

³ A special agent of the U. S. Employment Service in Arizona states that the Phoenix Free Employment Bureau, supported by State and Federal funds, was operated during part of the period surveyed. This office has supplied the Women's Bureau with reports of its activities by sex for a 5-month period beginning in July 1931, earlier records having been destroyed and not appearing by sex in the annual reports of the State. Apparently this State, which is not industrially important, falls with those stated as dealing chiefly with farm labor, the agency receiving Federal funds and not giving figures by sex, in State reports.

⁴ Maine has conducted a free public employment agency in conjunction with the Federal Department of Labor and the State Chamber of Commerce in the city of Portland. Reported in biennial report, 1927-28.

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SUMMARY

Number
of States

1. States that have published in State reports some data by sex in some recent year ¹----- 22
 - Arkansas, California, Connecticut, Illinois, Indiana, Iowa, Kansas, Massachusetts, Michigan, Minnesota, Missouri, Nevada, New Jersey, New York, North Carolina, Ohio, Oklahoma,² Pennsylvania, Rhode Island, Virginia, West Virginia, Wisconsin.
 - a. States whose reports make available in some form data on applications, placements, and help wanted, all by occupation, by year, and by month for all or most of the period of study----- 8
 - Arkansas,³ Illinois, Kansas, Minnesota, New Jersey, Ohio, Pennsylvania, Wisconsin.
 - b. States whose reports make available all the data listed in a except those by occupation----- 5
 - Connecticut,⁴ Michigan,⁵ Nevada,⁶ Rhode Island,⁴ Virginia.
 - c. States whose reports make available fewer data than are listed in a and b----- 9
 - (1) All types of data reported monthly, but only placements yearly, by sex: New York.
 - (2) All, or practically all, types of yearly data reported, but nothing by month: Indiana, Missouri,⁷ Massachusetts,⁸ North Carolina,⁹ Oklahoma,¹⁰ ¹.
 - (3) Number of applications or registrations not reported: California.
 - (4) Totals for 8 months in 1930 only: West Virginia.¹¹
 - (5) No yearly data available; monthly data not by occupation: Iowa.
2. States issuing reports, but not giving data by sex----- 1
 - New Hampshire.¹²
3. States not issuing reports on public employment agencies ¹³----- 25
 - Alabama, Arizona, Colorado,¹ Delaware, Florida, Georgia, Idaho, Kentucky, Louisiana, Maine, Maryland, Mississippi, Montana, Nebraska, New Mexico, North Dakota, Oregon, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Washington, Wyoming.

ANNUAL DATA BY SEX

1. Applications:
 - a. States reporting applications or registrations by sex ¹⁴----- 18
 - Arkansas, Connecticut, Illinois, Indiana, Kansas, Massachusetts, Michigan,¹⁵ Missouri,¹⁶ Nevada, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, Virginia, West Virginia,¹⁷ Wisconsin.
 - b. States reporting applications by sex and occupation ¹⁴----- 10
 - Arkansas, Illinois, Indiana, Kansas,¹⁸ Missouri,¹⁶ New Jersey, Ohio, Pennsylvania, Rhode Island, Wisconsin.

¹ Colorado has some reports by sex, but these concern activities of private agencies only. For these, applications and placements are reported, the data being for a 13-month period ending June 30, 1930.

² Does not separate data by sex prior to report for period ending June 30, 1931.

³ The Arkansas biennial report gives data for years ending June 30, but this is available for 2 years only.

⁴ Year's data include occupational distribution by situations secured, but data by months do not include any occupational distribution.

⁵ Figures not published before July 1929.

⁶ Monthly figures very small, not exceeding 45 women applicants in any month.

⁷ No report later than 1928.

⁸ Nothing by sex by month or by occupation.

⁹ Only totals for year given and years ending June 30; 1930 last year reported.

¹⁰ No occupational distribution.

¹¹ Office reestablished February 1930. See Monthly Labor Review, January 1931.

¹² Reports are kept by sex in the office but not published by sex.

¹³ This does not mean that these States do not make reports of employment-office activities to the United States Public Employment Service.

¹⁴ Iowa has reported applications, placements, and help wanted by sex and occupation, but the data are biennial only. Iowa monthly figures can be added to obtain annual.

¹⁵ Beginning July 1929.

¹⁶ Latest, 1928.

¹⁷ Total for 8 months in 1930 only.

¹⁸ Totals for year not given by occupation. Would involve large amount of labor to do this from monthly data.

ANNUAL DATA BY SEX—Continued

	Number of States
2. Applications and placements:	
a. States reporting both applications and placements, by sex ¹⁴ -----	18
Arkansas, Connecticut, Illinois, Indiana, Kansas, Massachusetts, Michigan, ¹⁵ Missouri, ¹⁶ Nevada, New Jersey, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, Virginia, West Virginia, ¹⁷ Wisconsin.	
b. States reporting both applications and placements, by sex and occu- pation ¹⁴ -----	11
Arkansas, Illinois, Indiana, Kansas, ¹⁸ Missouri, ¹⁶ New Jersey, North Carolina, Ohio, Pennsylvania, Rhode Island, Wisconsin.	
3. Applications and help wanted:	
a. States reporting both applications and help wanted, ¹⁴ by sex-----	16
Arkansas, Connecticut, Illinois, Indiana, Kansas, Massachusetts, Michigan, ¹⁵ Missouri, ¹⁶ Nevada, New Jersey, Ohio, Oklahoma, Pennsylvania, Rhode Island, Virginia, Wisconsin.	
b. States reporting both applications and help wanted, by sex and occu- pation ¹⁴ -----	10
Arkansas, Illinois, Indiana, Kansas, ¹⁸ Missouri, ¹⁶ New Jersey, Ohio, Pennsylvania, Rhode Island, Wisconsin.	
4. New registrations:	
States reporting "new registrations"-----	4
Ohio, for annual and by month. Wisconsin, for part of the period, annual. Rhode Island, for annual and by month. New York, in annual report gives registrations and renewals.	

MONTHLY DATA BY SEX

1. Applications:	
a. States reporting applications by sex-----	15
Arkansas, Connecticut, Illinois, Iowa, Kansas, Michigan, Minne- sota, Nevada, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, Wisconsin.	
b. States reporting applications by sex and occupation-----	9
Arkansas, Illinois, Kansas, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Wisconsin.	
2. Applications and placements:	
a. States reporting both applications and placements, by sex-----	15
Arkansas, ³ Connecticut, Illinois, Iowa, Kansas, Michigan, Minne- sota, Nevada, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, Wisconsin.	
b. States reporting both applications and placements, by sex and occu- pation-----	9
Arkansas, Illinois, Kansas, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Wisconsin.	
3. Applications and help wanted:	
a. States reporting both applications and help wanted by sex-----	15
Arkansas, Connecticut, Illinois, Iowa, Kansas, Michigan, Minne- sota, Nevada, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, Wisconsin.	
b. States reporting both applications and help wanted by sex and occu- pation-----	9
Arkansas, Illinois, Kansas, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Wisconsin.	

YEARS COVERED IN STATE REPORTS GIVING SOME DATA BY SEX AND AVAILABLE FOR THIS STUDY

1. Calendar year-----	8
Kansas—1928, 1929, 1930, 1931.	
Massachusetts ¹⁹ —1928, 1929, 1930, 1931.	
Nevada—1928, 1929, 1930.	
New York ²⁰ —1928, 1929, 1930, 1931.	
Pennsylvania—1928, 1929, 1930, 1931.	
Rhode Island—1928, 1929, 1930, 1931.	
West Virginia—1930 (but reported for 8 months only).	
Wisconsin—1928, 1929, 1930, 1931.	

¹⁴ Report states report year ends December 1, but totals given in report include December figures.¹⁵ Gives only monthly figures. Totaled for calendar year by Women's Bureau.

See footnotes on p. 224.

YEARS COVERED IN STATE REPORTS GIVING SOME DATA BY SEX AND AVAILABLE FOR THIS STUDY—Continued

	Number of States
2. Year ending June 30.....	12
Arkansas ¹ —1928, 1929.	
California—1928, 1929, 1930, 1931.	
Colorado ¹ —1930.	
Connecticut ² —1928, 1929, 1930, 1931. ³	
Illinois ² —1928, 1929, 1930, 1931. ³	
Iowa ² —1930-32 (biennial report).	
Michigan ² —1930, 1931. ³	
Minnesota ² —1928, 1929, 1930, 1931. ³	
New Jersey ² —1928, 1929, 1930, 1931.	
North Carolina—1929, 1930, 1931.	
Ohio ² —1928, 1929, 1930, 1931.	
Oklahoma—1931.	
3. Year ending September 30.....	3
Indiana—1928, 1929, 1930, 1931.	
Missouri—1928.	
Virginia ² —1928, 1929, 1930, 1931.	

SUMMARY OF MONTHLY DATA BY STATES

[Consult table XV and p. 149]

Connecticut: January 1928 to December 1931

The data used as the basis of the analysis following have been obtained from annual reports of the Bureau of Labor Statistics covering fiscal years 1928-30 and typewritten monthly reports July 1930 to December 1931.

Both applications and placements dropped markedly, beginning in November 1930 and continuing (not in complete progression with each month) through 1931, the fall being especially decided in May 1931 and thereafter. This was true in the main for both women and men.

In the 4 years, the smallest number of both applications and placements, whether for men or for women, was in January, February, November, or December. May and October seemed to be the peak months.

The number of persons applying always exceeded the help wanted, and both for men and for women the ratio dropped at the end of 1929 (November) and never showed recovery. The ratio, always higher for women than for men, was very low for both in 1931.

More applications were made by men than by women in every month but one, but situations were secured for more women than men in 31 of the 48 months, 22 of the 31 being in the second half of the 4-year period. The exceptional months in which more men than women were placed were April to October in 1928, March to August and October and November in 1929, and April and May in 1930.

With the exception of the first few months in 1928 for men, the ratio of situations secured to persons applying was lower in 1930 than in the earlier corresponding months, and still lower in 1931. This was true for both men and women, although the proportion of placements was higher for women than for men in every month throughout the period.

¹ Monthly figures would enable calendar year to be obtained.

² Report year ends Nov. 30, 1928; June 30, 1930. Only placements reported in 1928.

³ Data for 1931 from sources other than annual or biennial reports. See table XIII.

See footnote on p. 224.

Illinois: January 1928 to December 1931

The data used as a basis for the analysis following have been obtained from monthly issues of the Illinois Labor Bulletin and from annual reports of the State Department of Labor.

There was no marked heightening of number of registrations during any one period, for either men or women. With each sex, the largest numbers applied in January 1931, the next in October 1930. (See footnote 11, p. 139.) There was some tendency in most years for registrations to be high in October and lower in December or February; placements tended to be high in the spring (for both sexes in October in 1928, for men in December in 1931) and low in February (for women in July 1930 and in November 1931).

There were always more persons registering than places to be filled. The ratio of help wanted to men registering ran high in the mid months of 1929, but dropped slightly in September and sharply thereafter. For women, although there was some decline earlier, the sharp drop began in January 1930. For both sexes the ratio was lower in every month of 1930 than in the corresponding months of 1928 and 1929. The situation appeared worse for men than for women. For men, the ratio in the months of 1931 ordinarily fell still lower than in 1930, but this was not true for women.

There were more registrations of men than of women and more of the placements made were of men in every month throughout the 4 years with but two exceptions (January 1928 and January 1931). However, relation between registrations and placements would make it appear that a larger proportion of women than of men were placed in every month in 1931 and in 1930 (except July) and also in 7 months of 1928 and in 5 months of 1929.

Occupational data.—For the data on occupations the figures are taken from the annual and monthly reports of the Department of Labor, which give information for fiscal years ending June 30. The occupational information in this State, so far as women are concerned, is classified into the following chief groups in addition to manufacturing: Clerical, domestic and personal service, wholesale and retail trade, casual workers. Reports for manufacturing industries have been totaled by the Women's Bureau, the chief women's groups included being clothing and textiles, metals and machinery, and the printing trades.

The largest numbers of registrations, demands for help, and placements were for either domestic and personal service or casual work. Registrations for domestic and personal (including hotels and restaurants) and for clerical work had increased, the last mentioned being in the year ending June 30, 1931, over 40 percent above their 1929 figure. Those for manufacturing, trade, and casual work had declined.

The help wanted had declined in all occupational groups, the decrease being especially great in demands for workers in trade, in manufacturing, and for casual workers. The discrepancy between the need for jobs and the help wanted appeared particularly large for clerical workers.

Iowa: January 1928 to December 1931

The data forming the basis of the analysis following have been obtained from issues of the Iowa Employment Survey, a monthly publication of the State bureau of labor.

No marked point at which applications increased or at which demands for help declined could be ascertained. However, in the case of both sexes, there began regularly in August 1930 what had been true in about half the months preceding, that fewer jobs were offered in each month than in the corresponding month of the year before.

There was some tendency for applications and offers of jobs for either sex to be high in the spring or fall, sometimes running into the summer, and for the most part to be low in January or February.

There were always more registrants than places available, always more registrations of men than of women, and more jobs were offered men than women. However, with the exception of 3 months in the entire 4 years, the ratio of jobs offered to registrations was higher for women than for men.

Michigan: July 1929 to December 1931

The data available in this case cover only the last 2½ years of the survey and have been obtained from monthly reports of the Michigan Employment Bureau. They show no significant point of increase in registrations, though for both sexes these are smaller in number in the months reported in 1929 than in the corresponding months in either of the later years. While there always were more registrants than help wanted, the demand for help of either sex suffered a definite drop in October 1929 and never thereafter rose to its previous figure. In the last 3 months of the year more women were wanted in 1930 than in 1929; the last 3 months of 1931 showed a distinct improvement in demands for men but a decline in those for women.

There always were more registrations by men than by women. Until July 1930 more men were wanted than women; thereafter the opposite was true, with the exception of a few months in 1931. Placements of men always outnumbered those of women except for seven months of 1931 and two months late in 1930. The ratio of help wanted to registrations was higher for men than for women until December 1929 and again after October 1931; in the months intervening it was the higher for women.

Minnesota: January 1928 to December 1931

The data used as a basis for the analysis following have been obtained from the mimeographed Annual Report of the Public Employment Service Operated by the Industrial Commission of Minnesota, 1928, 1929, 1930, and 1931. The last-named includes a 6-month report of the commercial and professional offices of the public employment service operated for experimental purposes by the Tri-City Employment Stabilization Committee (St. Paul, Minneapolis, and Duluth). Table XV in the appendix gives the totals of registrations, help wanted, and placements for the three cities combined, with the number of help wanted to each 100 registrations. Table XVI in the appendix shows the increase or decrease from 1929 to 1931 in registrations and help wanted in the more important occupational groups reported.

A definite point showing increase or decrease in registrations, help wanted, and placements is not marked for either sex. In most months the numbers of help wanted, and of placements for either sex, and of registrations for men were greater in 1928 or 1929 than in the two later years, numbers of men's placements being especially low in 1931.

Practically always there were more registrations than help called for. With one exception for women, for either sex the ratio of help wanted to registrations was highest in 1928 or 1929; it was lowest for men in 1931, for women in 1931 in 8 of the last 9 months of the year.

Registrations of men exceeded those of women in most months of 1928 and 1929, but those of women were the greater in most of 1930 and in 1931. Ordinarily more male than female help was wanted until 1931 when more women usually were in demand. More of the placements were of men than of women in the first 2 years and in most of 1930, but in 1931 ordinarily more were those of women than of men. The ratio of help wanted to registrations always was considerably higher for men than for women.

Occupational data.—Reports are made for the following occupational groups: Clerical, domestic, hotel and restaurant, industrial, and casual. As in many of the other States, the largest groups both of registrations and help wanted were those for casual work, either domestic or hotel and restaurant work being second.

In all occupations combined, women's registrations had increased from 1929 to 1931 by only a little over 4 percent, help wanted had declined less than one half of 1 percent. From 1929 to 1931 women's registrations for domestic work had nearly doubled, and those for industrial and casual work showed increase. Women's registrations for clerical work in 1931 had declined from the 1929 number by about 45 percent, those for hotel and restaurant work by about 22 percent. Calls for women as domestic help were nearly half again as great in 1931 as in 1929, and those for casual work had increased 10 percent; for clerical work, however, the demand had declined over 50 percent, and a very slight decline was shown in calls for industrial workers.

New Jersey: January 1928 to December 1931

The data used in the analysis following have been obtained from monthly issues of the Industrial Bulletin, published by the Department of Labor, the year's report appearing in the September issue.

Registrations show no marked tendency to increase at one particular point, although more registrations were made by women in 1930 than in 1931 in 11 months, and in 1929 than in 1928 in 7 months; more by men in 7 months and in 6 months, respectively. For women, in 4 months of 1929 and in 6 months of 1930, the numbers were larger than in any other year.

Ordinarily, registration was greatest in the late spring or summer months, placements were highest in September, May, or June. In every year but 1931, both registrations and placements were fewest in the midwinter months; this is true of both men and women, and the peak or slump months in registration and placements ordinarily were similar for the two sexes.

For both sexes there always were more registrants than places open. The ratio of help wanted to registrations dropped sharply at the end of 1929, and was lower in each month of 1930 than in the corresponding month in either of the years preceding; and it was still lower in the months of 1931 than in 1930 in the majority of cases. This ratio was higher for women than for men in every month but May 1929.

There were fewer placements in each month of 1930 than in the corresponding month of the 2 years preceding (except in several months for women), and fewer still in 1931 in 7 months for men and

in every month but March and December for women. More registrations were made by women than by men in nearly every month, and more placements were of women than of men. Further, the relation between registrations and placements would make it appear that a larger proportion of women than of men ordinarily were placed.

Occupational data.—The data cover the period 1928 to 1931 and are from the Industrial Bulletin, September of each year. The largest numbers of registrations, help wanted, and practically all those reported placed were in domestic and personal service.

Registrations had increased for industrial employment, and greatly so for clerical and professional work, the number in the last-named for the year ending June 30, 1931, being over 40 percent more than that in the year ending June 30, 1929. Those for domestic occupations had declined somewhat in 1931.

Help wanted had declined from the middle of 1929 to the middle of 1931 in each occupation group, by a larger proportion for the industrial workers than for any others.

The discrepancy between demands for help and registrations for work was greatest for clerical and professional workers.

New York: January 1928 to November 1931

The data used as a basis for the analysis following have been obtained from monthly issues of the New York Industrial Bulletin.

There was no period in which registrations appeared to show a marked rise either for men or for women, although, with one exception for men, they were considerably higher in each month of 1931 than in the corresponding month in any other year. For women, they tended to be high in the month of October or, as in 1931, in November, but the figures for men showed little uniformity of high month. In practically every month more men than women registered. In every month there were more applications made by men than by women.

The number of places to be filled was always below that of persons applying, though for the most part exceeding the new registrations. The ratio of help wanted to applications and to new registrations showed a marked drop for both sexes in November 1929; and for both sexes in practically every month of 1930 it was far below the corresponding month of either earlier year. In 1931, this discrepancy between jobs and persons seeking them had widened still further, and in nearly every month of that year the ratio of number of jobs to number of persons registering or number of applications—whether of men or of women—was much lower even than in 1930. The number of jobs available per 100 persons registering and applying was considerably higher for women than for men throughout 1930 and 1931, and the same was true in many months of 1928 and 1929, though jobs apparently were somewhat more available for men than for women in summer and early fall of the years last mentioned.

Fewer placements of women were made in the last month of 1929 and the first months of 1930 than at any other time, and of men in the first months of 1928 and the first months of 1930. Beginning in May, in every month of 1931 fewer men were placed than in the corresponding month in any other year. The same did not apply to women throughout, although it was true in May and October.

In most months, more placements were made of men than of women, but in the earlier months of each year the opposite was true (January

to March, 1928; January and February, 1929; January, February, and August, 1930; January, and June, to December 1931). However the proportion of placements in relation to persons registering was higher for women than for men in nearly every month of the 4 years. Likewise, judging by the relation between placements and all applications, it would appear that in most months a larger proportion of women than of men applicants were placed.

Occupational data.—The data on occupations were taken from the monthly Industrial Bulletin, published by the State Department of Labor. This information is classified into the following occupational groups: Clerical, domestic and personal service, hotels and restaurants, wholesale and retail trade, casual workers, and manufacturing, only a total being given in each case. The largest numbers of women registered were for casual work until 1931, when these were exceeded by clerical workers. The numbers of women asking for clerical and domestic work ordinarily were similar.

Women's registrations had increased in all groups from 1929 to 1931, in most cases continuously from year to year. Those for clerical, hotel and restaurant, manufacturing, and domestic and personal work in 1931 were nearly double those of 1929. Calls for all types of women workers had declined except those for domestic service, which were in 1931 nearly double the 1929 number. Decreases in demands for clerical workers were especially great, those in 1931 being scarcely half those in 1929, and the discrepancy between the registrations and the demands for help were very great in this occupation.

Ohio: January 1928 to December 1931

The data used as a basis for the analysis following have been obtained from mimeographed material issued monthly by the Ohio Department of Industrial Relations, and the occupational totals are from its semiannual reports.

Up to July 1930, the reports of number of applicants appear to correspond with new registrations as reported separately from total applications in July 1930 and thereafter. Thus the figures may be considered as an unbroken series, based on "applicants" at first and "new registrations" in the later reports. In these, there were fluctuations with low periods and high periods both for men and for women, but no general trend appeared; on the whole, more men and women registered for work in 1929 than in any other year, and the fewest of all were in 1931.

The high point in placements, whichever sex be considered, was in the spring of 1929. A decided drop came after October of that year. Although there was some recovery in the spring months of 1930, this proved to be only temporary. For both sexes the last 5 months of 1931 showed the fewest placements in the 4 years.

In every month more men than women applied, and (except in December 1931) more men than women were placed. However, in almost every month throughout the 4 years, help was in demand for larger proportions of the women than of the men registering. The ratio of help wanted to new registrations usually was low for men at the beginning and at the end of the year, and tended to be high for both sexes in the spring.

In each month of the first half of 1929 and through most of 1931, the cases of help wanted formed a larger percentage of the numbers

of men and women registering than in the corresponding month of the year preceding, but from the middle of 1929 until about the end of 1930 (for women through October, for men the entire year) the ratio was below that of the year before.

Occupational data.—These data are taken from the totals given in annual reports of the Department of Industrial Relations, which give information for fiscal years ending June 30. The material, except that for manufacturing, is classified into the following main occupational groups: Clerical and professional, domestic and personal, hotel and restaurant, wholesale and retail trade, and casual workers. The reports for manufacturing have been totaled by the Women's Bureau, the chief of these that affect women being clothing and textiles; food, beverages, and tobacco; leather, rubber, and allied products; metals and machinery; the printing trades; and paper manufacture.

The greatest number of applications, demands for help, and placements were those for casual workers, though these showed a steady decline after the 1929 high point. Applications showed a decided increase throughout the period of study for work in domestic and personal service and after 1929 in trade; they declined in 1931 for clerical, manufacturing, and hotel and restaurant workers.

Requests for help had declined in all occupation groups but that of trade, which had increased by over half in 1931 from its 1929 figure. The proportional decreases had been especially great in manufacturing and hotels and restaurants, in the latter the 1931 help wanted being less than half that of 1929; in the former it had decreased well over two fifths, and demands for clerical workers in 1931 had decreased about one third.

The discrepancy between applications and help wanted was greatest in clerical in every year, and also was very large in manufacturing in the year ending June 30, 1931. In trade occupations the demand for workers in the offices of this State had exceeded the supply in each of the 4 years.

Pennsylvania: January 1928 to December 1931

The data used as a basis for the analysis following have been obtained from the issues of *Labor and Industry*, published monthly by the Pennsylvania Department of Labor.

There was no point at which there was a decided increase in either men or women applying, though the number was high in the closing months of 1931, and for women higher in June 1931, for men in December 1931, than in any other month in the 4-year period. There was a tendency with both sexes for the number of persons applying for positions to be high in June and for the most part low in the later summer months or in January.

There always were more persons applying than were asked for by employers, and there was a marked falling off in requests for help after 1929, especially for men. For both sexes, the ratio of persons asked for to persons applying was higher in most months of 1929 than in corresponding months of 1928, but it showed a marked falling off for both sexes in 1930 and, except for a slight increase in February, still more in 1931, being especially low for men in the last months of 1931.

Throughout the period, more applications were made by men than by women and more placements were of men than of women.

Occupational data.—The data on occupation were taken from the annual reports of the Department of Labor and Industry, published in February. These data were given by occupation for the 3 years after 1928, and these were organized into the following chief groups in which women applied for work (outside the manufacturing industries): Clerical and professional, hotel and restaurant, wholesale and retail trade, and casual and day jobs. Semiskilled and unskilled manufacturing groups were reported, and data for the more skilled manufacturing occupations have been totaled by the Women's Bureau, the main women's industries included being as follows: Clothing; textiles; food and kindred products; leather, rubber, and composition goods; metals and metal products; paper and printing. In each year, the largest numbers, both of women applying for work and of those asked for by employers were either in the semi-skilled or the casual and day-work group.

The applications of women for positions in all chief occupations had increased in most cases continuously from year to year. This growth was especially great for the various manufacturing groups and for hotel and restaurant work, and the 1931 applications for positions in clerical and professional work and in trade were more than 50 percent greater than were those in 1929.

In this State, employers' requests for women workers had declined in only three of the seven chief groups—clerical and professional, casual and day, and unskilled industrial. In the other four groups demand had increased, and 1931 requests exceeded those of 1929 by from about 28 percent to over 124 percent. In connection with the various manufacturing groups, this may have reflected some shift in emphasis of the office on service for workers or employers of certain types; with the clerical and professional the movement was such as was manifest in other States.

The discrepancy between employers' requests for women and women's applications for jobs was very great in the clerical and professional occupations and also was great for the unskilled workers, each of these groups having shown a large increase in applications with a notable decline in requests for such services.

Rhode Island: January 1928 to December 1931

Data for this State have been obtained from annual reports of the Commissioner of Labor, covering the calendar year. With the exception of 2 months later in the year in the case of men, the "attendance" of both sexes was markedly heavier in 1930 than in either of the earlier years; likewise, new registrations,¹ particularly for men, showed an especial increase in 1930, though in about half the months of 1931 there was a decline for each sex both in attendance and in new registrations.

While attendance of men usually was greater than that of women, more of the registrants were women than men until 1930, when the situation changed markedly.

Practically always more women than men were in demand. In almost every month of 1928 and 1929, and even in several months of 1930, there were more demands for woman help than there were new

¹ Called registrations in 1928 and 1929.

registrants, though attendance always was considerably greater than the demand for help. Among the men, almost an opposite situation was indicated: Many more were newly registered in every month of 1930 and in 1931 than were called for, and the same was true in most months of the two earlier years.

The ratio of help wanted to new registrations was higher for both sexes in the majority of cases in 1929 than in corresponding months of 1928, but much lower in 1930 than 1929, except in two spring months and December for women, and in December for men. This ratio was lower in 1931 than in 1930 for women in most months and for men in just half the months. This ratio almost always was higher for women than for men, usually considerably so.

Occupational data.—The occupational data in this State have been given by a long and detailed classification. In many classes few persons were reported, and consequently they have been grouped here into the generalized classification used in a number of States. (See footnote to table XVI in the appendix for details of this grouping.)

The largest numbers of new registrants, as well as of help wanted, were in the domestic group. In this type of work, registrations had increased greatly from 1929 to 1931, while help wanted in 1931 was only a little over half that in demand in 1929. For industrial and clerical and professional work, registrations had increased more than demands for help.

Virginia: January 1928 to December 1931

The data for this State were available through 1931 from the annual reports of the Department of Labor and Industry for fiscal years ending September 30. Those on registrations show no point of particular increase for either sex, though for men they were especially high in the first 3 months of 1931.² Both registrations and calls for help showed some tendency to be low in midwinter or in July, high from March to June.

There were always more men registering than called for, but for women the discrepancies between demand and supply were not so great as in most States—indeed, there were months in every year, with the exception of 1931, when requests for help exceeded the number of registrants.

No specific point of decline in help wanted can be noted, except for men after March of 1931, but for the most part the demands for both sexes were less in each month of 1930 than in 1929; in the majority of cases, those of 1931 were still lower. While in every month there were more registrations of men than of women, and in about half the months more men than women were asked for, the ratio of help wanted to registrations always was higher for women than for men. More men's than women's positions were filled except in 5 months of 1930 and 1 of 1928.

Wisconsin: January 1928 to December 1931

The data used as the basis of the analysis following have been obtained from mimeographed monthly reports of the Wisconsin Industrial Commission.

² Unless the figures may be explained in some other way, unusual activity in the offices, especially in behalf of men, is notable in the first 3 months of 1931.

Applications were markedly lower in 1930 and 1931 than was the case, for the most part, in 1928 and 1929, and this was true for both men and women, although there seemed no specific point at which the decline began.

With one exception, applications were in excess of help wanted, whether for men or for women. For the months that could be compared, the ratio of help wanted to applications was lower in 1930 in every case, for both sexes, than in the earlier years, and was still lower in 1931 except for women in September. This ratio ordinarily was higher for men than for women until December 1930, after which it ordinarily was the higher for women.

For both sexes, placements showed a decided drop in November 1929, and the former level never was recovered, almost every month that could be compared in 1930 and 1931 being below that in the earlier years.

Both placements and applications showed a slump at the end of each year, for both sexes. More applications were made by men than by women and more of the placements were of men in every month throughout the period. Also, the relation between applications and placements would make it appear that a larger proportion of men than of women were placed (except in February, May, September, and October, 1931). As between the two sexes, these proportions varied much less through 1931 and in the first 4 months of 1930 than at any other time.

Occupational data.—The data on occupation were taken from the annual reports of the Industrial Commission. The classification in this State was changed in 1930, though information could be obtained for substantially the same main groups as those used in 1929. No occupational data by sex were given for 1928, so the period under consideration for this part of the data covers only 3 years. The chief groups of women registrants in 1930, outside manufacturing, were as follows: Office workers (in 1929, the grouping was entitled clerical, professional, and technical); homes, institutions, hotels and restaurants (in 1929 the first two were combined under domestic and personal service, and in later years the "home" group vastly exceeded that of "institutions"); mercantile establishments (classed as wholesale and retail trade in 1929); and casual labor. Registrations for manufacturing work have been totaled by the Women's Bureau, the main groups included being as follows: Food, beverages, and tobacco; leather and its finished products; metals and metal products; paper and paper products, printing and publishing; rubber and composition manufactures; and textiles and textile products.

The numbers, both of persons applying for positions and help wanted by employers, were greatest for casual workers in 1929, domestic and personal being second in that year and "homes" greatly exceeding all others in each of the 2 later years.

Persons applying for positions had declined in the classes office workers, hotels and restaurants, and casual workers, and in the manufacturing total; in the case of the first-named group the changed classification in 1930 may have affected the numbers so reported, and in the case of casual workers the decline was so extreme as to indicate

that changes in office organization or reporting probably were responsible. Registrations for positions in "homes" and in hotels and restaurants in 1931 showed some increase over 1930, while those for mercantile jobs had increased still more. Help wanted had increased by more than half in mercantile establishments; it had declined somewhat in homes, very much more in hotels and restaurants and for casual workers, though especially in the latter case there is question whether changes in classification or in emphasis placed by offices may have made the decline appear unduly great.

Though for office, hotel and restaurant, and casual work both applications and demands for help were less in 1931 than in 1930 there still were many more applications than the help wanted.

