

# UNITED STATES DEPARTMENT OF LABOR

L. B. SCHWELLENBACH, Secretary

# WOMEN'S BUREAU

FRIEDA S. MILLER, Director

# Women's Occupations Through Seven Decades

Ву

JANET M. HOOKS

Women's Bureau Bulletin No. 218

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1947

For Sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. - - - - Price 45 Cents

# LETTER OF TRANSMITTAL

# UNITED STATES DEPARTMENT OF LABOR.

WOMEN'S BUREAU.

Washington, June 9, 1947.

SIR: I have the honor to transmit a report on trends in women's occupations. Because underlying social and economic forces have made women an important part of the labor force, such information has far-reaching general significance. Moreover, accurate knowledge about the work women do and the direction of changes in their work is vital in dealing in a realistic and constructive way with current employment problems of women workers.

The Women's Bureau has made an analysis of women's occupational distribution after each decennial census. The present study, based on census data, is the third of this nature prepared by the Bureau and is more comprehensive than earlier reports. The first showed the changes in women's occupations from 1910 to 1920. The second traced the occupational progress of women from 1910 to 1930. The present study covers a much longer period, from 1870 to 1940, and presents to a greater extent than heretofore long-time trends in particular fields.

The cooperation of the Bureau of the Census in furnishing the Women's Bureau with adjustment indexes for women's occupations is gratefully acknowledged, as are the helpful suggestions made by Census officials in the course of consultations with them.

The analysis was made and the report written by Janet M. Hooks, of the Bureau's Research Division. Computations were made and checked by Caroline E. Brooks, in the early stages of this work, and by Elisabeth D. Benham and Emily L. Banker. Elsie Katcher assisted in library research.

Respectfully submitted.

FRIEDA S. MILLER, Director.

Hon. L. B. Schwellenbach, Secretary of Labor.

# **CONTENTS**

	Page
Letter of Transmittal	iii
INTRODUCTION AND SUMMARY	
Progress and Change	3
Women Workers in 1940	4
Broad Changes in Fields of Work	5
Changes in Individual Occupations	6
Factors Affecting Change in Women's Occupations	7
1. Need for expanding labor supply	7
2. Women's economic and social status	7
3. The traditional spheres of women	8
4. Public policy	9
5. Technology	9
6. Occupational barriers	9
7. Wars	10
8. Immigration	11
9. Living standards, tastes, and styles	11
Data on Which this Report is Based	12
Labor force and gainful workers	12
Data for specific occupations, 1870-1940	13
Occupational classification in 1940	13
Changes in census dates	14
References cited	14
I. WOMEN'S OCCUPATIONS IN 1940	
Employment Status of Women in 1940	
General Fields of Work of Women in the Labor Force	17 19
Clerical, Sales, and Kindred Occupations	21
Operatives and Kindred Workers	
Domestic Service Workers Service Workers, Except Domestic and Protective	
Professional and Semiprofessional Workers  Principal Individual Occupations of Employed Women in 1940.	26 26
Principal Individual Occupations of Employed Women in 1940.  Principal Individual Occupations with Women in Demand	
Trincipal filurvidual Occupations with Women in Demand	20
II. GENERAL TRENDS IN NUMBERS AND CHARACTERISTICS OF WOMEN WORKERS	
Progress of Women in the Labor Force	33
Trends Among Age Groups	_
White and Negro Women Workers	
Residence of Women Workers	
Changes Among Married and Single Women Workers	. 39
III. TRENDS IN SOCIAL-ECONOMIC GROUPS, 1910 and 1940	
Social-Economic Groups	45
Major Shifts in Women's Work	
Relative Growth of Women Workers in Different Fields	

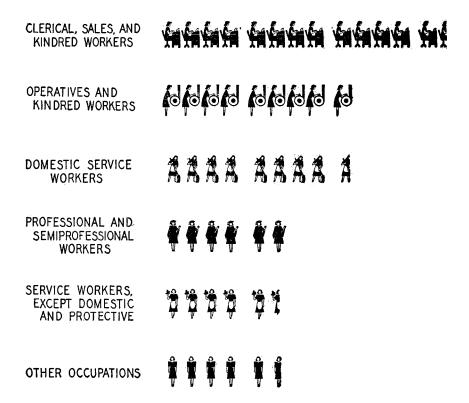
IV.	THE OCCUPATIONAL PROGRESS OF WOMEN	Page
	Census Techniques as a Record of Occupational Change	53
	History of census data on women's occupations	53
	Leading individual occupations at each census	56
	Occupation names that have disappeared	60
	Occupational Position of Women, 1910 and 1940	62
	Occupations with notable growth or decline	62
	Occupational concentration of women	65
	Women's occupational concentration relative to men	67
v.	CHANGES IN INDIVIDUAL OCCUPATIONS OF WOMEN, 1870	0-1940
	The Advance of White-Collar Workers	71
	The woman "office worker"	
	Bookkeepers, accountants, and cashiers	
	Telegraph and telephone operators	
	Attendants, physicians' and dentists' offices	81
	Agents, collectors, and credit men	
	Messengers, errand, and office boys	
	Sales occupations	83
	Hucksters and peddlers	
	Insurance agents and brokers	
	Real estate selling	89 89
	Newsboys	
	Changes Among Operatives and Laborers	
	Food manufacturing Beverage industries	
	Tobacco manufacturing	
	Textile manufacturing	
	Clothing workers	
	Hats, except cloth and millinery	
	Woodworking industries	
	Paper making	
	Printing and publishing	
	Chemical manufactures	
	Rubber workers	. 123
	Footwear manufacture	_ 124
	Leather tanning and currying	125
	Leather products, except footwear	_ 126
	Glass workers	126
	The pottery industry	. 127
	Structural clay products	128
	Metal trades workers	
	Electrical machinery and equipment	
	Fruit and vegetable graders and packers	
	Trends in Service Occupations.	_
	Service workers in private households and in public house	
	keeping	
	Laundry workers	
	Barbers, beauticians and manicurists	
	Practical nurses and midwives	
	A Lactical Hulbes and Hillwives	

	771
	Elevator operators
	Janitors and sextons
	Attendants, ushers, operatives, amusement and recreation
	Boarding house and lodginghouse keepers
	Opening Doors in Professional Work
	The teaching field
	Trained nurses
	Social and welfare workers, religious workers, and
	clergymen
	Music, art and entertainment
	Literary occupations
	The "learned professions" and related fields
	Some professional occupations related to science and
	industry
	Other professional occupations
	Businesswomen
	Food and dairy products stores
	Eating and drinking places
	Other trade
	General merchandise, apparel, and shoes
	Proprietors, managers, and officials, primarily in industry
	Hotels and lodging places
	Government officials and inspectors
	Postmasters
	Druggists and pharmacists
	Banking and other finance
	Officials, lodge, society, union, etc.
	Insurance
	Agricultural Workers
	Women in Trades and Crafts
	Foremen
	Decorators and window dressers
	Painters
	Paperhangers
	Upholsterers
	Protective Service Workers
ماد	cted References on Women's Occupational Trends
	etec rectances on woman's occupational Transport
lue	/A
	TEXT TABLES
	· • · · · · · · · · · · · · · · · · · ·
1.	Occupation group of women who were employed (except on public
	emergency work) or were experienced workers seeking work
_	and percent distribution of women and of men, 1940
2.	Detailed occupations with 50,000 or more employed women 14 years
	old and over, numbers employed in each, and percent women or
	total employees, 1940
В.	Trends in the labor force, 1870-1940
4.	Number and proportion of women 14 years old and over in the labor force or gainfully occupied, by marital status, 1900 to 1940.

		Page
5. 1	Increase in number of nonagricultural workers 1910-1940 and per-	
	cent women of total in 1910 and 1940, by social-economic group.	<b>4</b> 9
6. I	Number and percent distribution of women clerical, sales, and kin-	
	dred workers in selected occupations, 1870 and 1940	73
7.	Number and percent distribution of women operatives and kindred	
	workers and laborers, except farm, in selected occupations, 1870	
	and 1940	92
8. N	umber and percent distribution of women service workers, except	
	protective, in selected occupations, 1870 and 1940	138
9. 1	Number and percent distribution of women professional and semi-	
	professional workers in selected occupations, 1870 and 1940	156
10. 1	Number and percent distribution of women proprietors, managers,	
	and officials, except farm, in selected occupations, 1870 and 1940	181
	APPENDIX TABLES	
I.	Persons 14 years old and over in the labor force (except new	
	workers) in 1940, and gainful workers 14 years old and over	
	in 1930, in 1920, and in 1910, classified into social-economic	
	groups, by sex, for the United States	206
IIA.	Occupations of women workers, 1870 to 1940	208
IIB.	Occupations of all workers, 1870 to 1940	224
	CHARTS	
I.	Occupations of women workers, 1940faci	ng 1
II.	Proportion of all workers who were women, 1870-1940	32
III.	Number of women workers and of all workers, 1870-1940	35
IV.	A social-economic grouping of women workers 14 years and over,	
	1910-1940	44
V.	The leading 10 occupations of women workers, 1870-1940	52
VI.	<u> -</u>	
	occupations or occupation combinations, 1940 and 1910	66
VII.	Proportion of all workers who were women in each of 246 com-	
	parable occupations or occupation combinations	68
VIII.	Women in selected clerical occupations, 1870-1940	70
IX.	Women in selected operative and laborer occupations, 1870-1940	90
Χ.	Women in selected service occupations, 1870-1940	136
XI.	Women in selected professional occupations, 1870-1940	154

#### CHART I.—OCCUPATIONS OF WOMEN WORKERS, 1940

Women who were employed (except on public emergency work) or who were experienced workers seeking work



Each symbol represents 250,000 women workers

Source: Table 1.

# WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

# INTRODUCTION AND SUMMARY

The emergence during World War II of the woman welder, barber, truck driver, lathe operator, riveter, blast furnace topman, railroad sectionman, and her sisters in many other occupations formerly unusual for women focused attention anew on the whole question of the extent of women's paid occupation and the nature of the work women do. From the attack on Pearl Harbor in December 1941 to March 1944 some 6½ million women newly entered the labor force. Because new women entrants greatly exceeded those who withdrew from the labor force in the same period, the number of women in the civilian labor force rose markedly.¹ At the war peak in July 1944 women in the labor force totaled 20.6 million, compared with 13.8 million in March 1940.²

Not only was there a considerable net influx of women into the labor force during the war, but there were also notable shifts in the types of work they were doing. From March 1940 to March 1944 the proportion of employed women who were craftsmen, foremen, operatives, and nonfarm laborers and the proportion who were clerical and kindred workers rose. Women in professional and semiprofessional occupations, on the other hand, though they increased slightly in absolute numbers, decreased in proportion to the total, and women domestic service workers showed both a relative and an absolute decline.

During the war considerable numbers of women entered the labor force for the first time, unemployed women obtained jobs, and many of those already working changed from one occupation to another. After the end of the war, the numbers of women workers soon receded from the high wartime levels to about 16 or 17 million, and the occupational pattern resulting from the rapid shifts dictated by the war began to return to a peacetime model.

<sup>&</sup>lt;sup>1</sup> U. S. Department of Labor. Women's Bureau. Changes in women's employment during the war. By Mary Elizabeth Pidgeon. Special Bulletin 20. Washington, U. S. Government Printing Office, 1944, pp. 2-3.

<sup>&</sup>lt;sup>2</sup> Revised figures. U. S. Department of Commerce. Bureau of the Census. Labor force, employment, and unemployment in the United States, 1940 to 1946. P-50, No. 2, Washington 25, D. C. [1947].

Whether the work undertaken by women in World War II will hasten the broad stream of women's occupational history along its course or whether it will to some extent divert that course cannot be told as yet. It well may be that the character of women's work in World War II will intensify and speed up long-time trends. An analysis of developments in women's gainful work helps to answer some significant questions, vital to all those interested in the broad problem of women's social and economic status as well as to individuals and groups more directly concerned with employment opportunities for women in the present and future.

The questions most frequently asked about trends in women's employment refer to the number and proportion of women in the labor force, the particular industries and occupations where women work, and the relative advantages and disadvantages of these jobs among all women workers and among women in relation to men. This report seeks primarily to describe in detail changes in the numbers of women in particular occupations and the relative importance of women to men in these occupations.

The extent of paid work among women, the fields that offer them special opportunity, the rise in some fields, and the decline in others will also be examined in this report. Changes in the various occupations will throw light on the extent to which women are entering "men's work" or are expanding in fields in which they always have worked; on the degree to which the needs of the population for goods and services depend upon formal employment activities by women; and on the economic needs and abilities of women as evidenced by their occupational distribution at various periods.

The detailed analysis is introduced, in Part I, by a description of the occupations of women in 1940, which serves as a bench-mark against which the description of changes can be more readily understood. Part II presents general trends among women in the labor force, with brief analyses of changes in various age, racial, residence, and marital groups. As an indication of broad occupational changes a summary of trends from 1910 to 1940 in "Social-economic groups" is given in Part III. In Part IV the discussion deals with historical changes in occupational terminology and with conclusions on whether or not the occupational distribution of women is becoming less concentrated. Part V is the core of the report. It presents, for individual occupations, long-time trends in numbers of women, the amount of detail varying with the importance of the occupation.

These introductory pages will summarize certain of the main conclusions that appear in the body of the report and will give some background regarding underlying factors which will help to explain detailed changes in occupations. At the conclusion of this introduction a short technical note is given, pointing out differences in concepts and methodology at the various censuses.

# PROGRESS AND CHANGE

The great growth in the number of women workers over the past seven decades shows the effect of changing economic and social conditions under which it has become increasingly customary for women to work. In 1870 less than 10 percent of the total female population of all ages were gainful workers, whereas in 1940 the proportion in the labor force was nearly 20 percent. The rise of the contemporary mass-production economy with all its attendant modern conveniences and sales techniques, the broadening of educational opportunities, the development of urban centers, the decline in the birth rate, and the accompanying changes in customs and modes of living are among the primary forces that brought about the growth in numbers of women workers, from less than 2 million in 1870 to over 13 million in 1940. In part the numerical growth is due also to the increase in the female population, which tripled in the period. To some extent the expansion has resulted from a shift in the age distribution, such that nearly three-fifths of all females were in the ages from 20 to 64 years in 1940, compared with less than half in 1870. is the age range from which the labor force is largely drawn.

The long-time increase in the proportion of women at work has occurred despite a drop in the proportions at work among certain groups of women. A smaller proportion of women under 20 years, of those 65 years and over, and of Negro women worked in 1940 than in previous decades. However, among women from 20 to 64 years, as among white women and among married women, the factors tending to raise the rate of participation in paid work have been dominant.

The vast and important developments in the country's economic structure have been of vital significance in occupational trends. The predominance of agriculture and of the extractive industries in the early days of the country's history gave place at first to rapidly expanding manufacturing, construction, and transportation industries. Such industrial expansion was followed by the growth of commerce, trade, and service industries.

These successive changes have brought tremendously increased occupational opportunities for women. Outlets for wom-

en's employment, limited in an economy primarily concerned with agricultural activities, became greatly enlarged as industrial production grew in volume and variety and particularly as consumer demand rose for items whose production is particularly suited to women. The development of activities still another step removed from agriculture and industry likewise made prominent additional types of work in clerical and service fields, for which women are particularly well adapted. The importance of certain aspects of women's work in 1940 reflects the results of the evolution of the country's economic structure along these lines.

# WOMEN WORKERS IN 1940

One-fourth of the nearly 51 million women aged 14 years and over in 1940 (13 million) were in the labor force. Most of the remaining 38 million were engaged in their own home housework, though some were in school, unable to work, or in institutions.

Of every 10 women who were employed or seeking work, 3 were clerical, sales, or kindred workers; 2 were operatives or kindred workers; 2 were domestic service workers; 1 was a professional worker; and 1 was a service worker in other than domestic or protective service work.

Within each of the major fields of work for women one or two occupations accounted for a considerable proportion of the women who were employed or seeking work. Nearly one-third of women classed as clerical, sales, and kindred workers were stenographers, typists, or secretaries; over three-fourths of women professional workers were nurses or teachers; nearly fourfifths of the women operatives and kindred workers were in manufacturing, and of these well over one-half were engaged in the production of apparel and textiles; and nearly half of the service workers, except domestic and protective, were waitresses or beauticians.

Information on the occupations of employed women shows that, on the basis of the detailed census classification, over four-fifths of these women were in 35 occupations, in each of which over 50,000 women were employed. The concentration of employed women in a limited number of occupations was more marked than among men, for less than three-fifths of the latter were in the 35 leading men's occupations. Women constituted over half of the workers in 38 out of a total of 451 occupations listed in the 1940 census. In nearly 100 fields over 99 in 100 workers were men.

From 1900 to 1940 married women rose from 15 percent of all women workers to over 35 percent. At the latter date their occupational distribution differed significantly from that of single women. Over one-third of the single women were in clerical and sales occupations, compared with less than one-fourth of the married women. Over one-sixth of the single women were professional and semiprofessional workers, compared with about onetwelfth of the married women. About 55 percent of the married women were in more or less routine manual jobs working as operatives or as domestic and other service workers. Occupations in which more than half of the women workers were married included those of several groups of operatives in manufacturing industries. A large proportion of the women in boarding house and lodginghouse keeping, work carried on in the home, were married. as well as of those in several proprietor-manager occupations, which may frequently involve the operation of small establishments near to the family living quarters. In addition more than half the charwomen, janitors, and porters and more than half the cooks who were not working in private families were married women.

# BROAD CHANGES IN FIELDS OF WORK

In the 30-year period from 1910 to 1940 women workers showed significant changes in terms of the social-economic groups to which they were attached. These groups are based partly on social and partly on economic criteria and differ from the major occupational groups of the 1940 census. Broad groups of non-manual and manual workers may be distinguished. While only 28.2 percent of all women workers were nonmanual workers in 1910, the proportion had risen to 45.5 percent by 1940. The rise among women engaged in nonmanual work resulted primarily from the swelling proportions that streamed into the group of clerks and kindred workers. Dwindling proportions among manual workers reflect the slackening flow of women into work as farm laborers and in the servant classes.

Farmers and farm laborers are omitted from the discussion of specific social-economic groups because comparable data from 1910 to 1940 are lacking. Each of the remaining nonagricultural social-economic groups had more men and women in 1940 than in 1910. The number of women in all nonagricultural social-eco-

<sup>&</sup>lt;sup>3</sup> Groups developed by Dr. Alba M. Edwards, long an outstanding expert on occupational statistics in the Census Bureau, as follows: Professional persons; proprietors, managers, and officials; clerks and kindred workers; skilled workers and foremen; semiskilled workers; and unskilled workers. See Part III for further details. Data for social-economic groups are available for 1910 to 1940 only.

nomic groups increased by about 94 percent from 1910 to 1940. Considerably higher rates of increase occurred among women who were clerks and kindred workers (238 percent); nonfarm proprietors, managers and officials (207 percent); and professional persons (114 percent). Among clerks and kindred workers and among professional persons, the rate of growth in the number of women outstripped that of men, so that women had a greater share of these fields relative to men in 1940 than in 1910. Notably less rapid growth for women than for men occurred in the servant classes, a subgroup of unskilled workers. Women also were losing out relatively among semiskilled workers.

# CHANGES IN INDIVIDUAL OCCUPATIONS

The nature of the work done by women in this Nation showed marked changes between 1870 and 1940 as the modern economic and industrial structure evolved. Indicative of this evolution is the replacement of occupations of leading importance for women as reported by the census before 1900—such as those of tailoress and dressmaker, agricultural worker, cotton and woolen mill operative, and laundress—with a number of clerical and sales occupations, with the occupation of operative in the apparel industry, and with that of housekeeper in private families in 1940. At the same time there has been a tendency for occupations typical as women's work to continue to be so. Domestic service remained the largest single occupation for women at every decennial census from 1870 to 1940; teaching was among the first ten occupations throughout the period; and nursing was among the leading fields of work both in 1870 and in 1940.

Many of the occupations reported as separate types of work done by women in the earlier period seem quaint or relatively unimportant in the present state of development. The rise of new mass-production industries, the use of new materials, and vast technological changes have lessened the relative importance and distinctiveness of numbers of women's occupations formerly reported in detail by the Census.

At all periods women have tended to cluster in a relatively few occupational fields, as was shown for 1940 on page 27. However, indications are that there has been a slight tendency toward less marked concentration. A smaller proportion of all women workers were in the leading women's occupations in 1940 than in 1910. Over the same period women tended to advance slightly in occupations where they had formerly constituted insignificant proportions of all workers in the occupation, and simultaneously men tended to form slightly higher proportions in

"women's" occupations. In occupations with significant proportions of both men and women, increases in proportions of women from 1910 to 1940 tended to counterbalance decreases.

# FACTORS AFFECTING CHANGE IN WOMEN'S OCCUPATIONS

It is not proposed to summarize here in detail the trends in individual occupations pointed out in the body of the report. Such changes appear to be tied up with a multitude of underlying factors that act and interact. A brief discussion of some of the forces having special importance in specific fields and illustrative examples of the occupations in which they appear to have played a part are presented in the following paragraphs.<sup>4</sup>

#### I. NEED FOR EXPANDING LABOR SUPPLY

At various periods in the history of the country economic developments along certain lines seemed to be reaching an advanced stage, whereupon the beginnings of new developments along unprecedented lines burgeoned forth. Such, for example, was the situation in the nineteenth century, when the system of household manufacturing began to give place to factory production. At that time much of the population was occupied with agriculture. The need for a wholly new source of labor was imperative if the potentialities offered by the infant factory system were to be realized. Then it was that industry turned to women and children, welcoming them into the cotton establishments and pointing out the value to the community and to themselves of taking up work as textile weavers and spinners.

Again toward the end of the nineteenth century the achievement of vast industrial progress paved the way for great industrial concentration and for large-scale business organization and distribution systems. Here again a new source of labor was vital to integrate the activities of the great business network, and here too women, released by the greatly expanded products of industry from the former more laborious and time-consuming household duties, constituted an important share of the needed supply.

# 2. WOMEN'S ECONOMIC AND SOCIAL STATUS

The rise of a highly industrialized economy has been accompanied by vast and fundamental social changes, which have been

<sup>&</sup>lt;sup>4</sup> For a summary of eleven factors affecting occupational trends, see Anderson, H. Dewey and Davidson, Percy E. Occupational trends in the United States. Stanford University, Calif., Stanford University Press, 1940, pp. 51-63. The list comprises 1) public policy, 2) technology, 3) occupational barriers, 4) "Acts of God," 5) depletion, 6) labor disputes, 7) alterations in working conditions, 8) the business cycle, 9) age and sex composition of the labor force, 10) access to capital, 11) tastes and styles. These factors undoubtedly affected women as a part of the general group of workers, but certain of them more particularly affected women and possibly in somewhat specialized ways. Furthermore, other factors appear to have been even more important in occupational trends among women.

both cause and effect. Among such changes are significant developments in the social and economic status of women. In the pioneer period most women were expected to and did exercise their capacities in production and service for the needs of the family—the social unit that performed indispensable economic, educational, recreational, and protective functions. As time went on, spinning and weaving, food preparation, clothing manufacturing, laundering, and many personal services came to be done commercially. Child training and recreational activities were taking place within the family circle to a smaller extent than before. Agencies other than the family came more and more to be concerned with the care of the aged or the ill and with the protection of the child from excessive labor or inadequate education.

All these shifts meant an increasing need on the part of the family for money income. New attitudes and customs in regard to the status of women opened the way for women's entrance into types of activity that would enable them to contribute to the family by means of money income. Gradually women were offered more extensive opportunities to obtain education and higher training. It became increasingly commonplace, when work opportunities were not available at hand, for young women to proceed to the localities where jobs were to be found, though women continued to be less mobile in the labor market than men. It came to be generally accepted that commercially supplied food, clothing, and other necessities should be utilized by the family, a development that both enabled women to take up paid employment more easily and at the same time swelled the demand for women workers to produce these necessities.

#### 3. THE TRADITIONAL SPHERES OF WOMEN

Social changes take place slowly, on the whole, and occur in such a way that the new developments are built on the foundations of the old. Consequently as activities formerly carried on in the home came to be done in the factory and by the commercial agency, the most natural trend was for women to continue, in new surroundings, the activities they had formerly performed for their own families. The production of cloth and clothing, the preparation of food, the care of the sick, and the training of children have been women's activities both in the pioneer period and in the present highly developed industrial economy. But the methods by which women have performed these vital family and social services differ vastly in these two ages.

# 4. PUBLIC POLICY

Legislation and government programs have had both direct and indirect effects on opportunities for the employment of women. The spread of compulsory education, for example, required more teachers, and public health programs, more nurses. Welfare programs, more and more developed on a State and National scale, have brought increased opportunities for social case workers and also have added greatly to the need for clerical and other services both by Federal and local governments.

#### 5. TECHNOLOGY

The inventive genius of the American people has been noted many times, and the peculiar conditions that fostered it described. Numerous inventions have had special importance for women's work. Some inventions, such as the typewriter and the telephone, have opened up entirely new groups of jobs for women. Others have caused skilled occupations to give way to more routine jobs. carried on under considerably greater pressure. This was true of the sewing machine, which led ultimately to the substitution of factory-made clothing for the former custom product of the dressmaker. In some instances, as in cigar and cigarette manufacturing, the introduction of machines resulted in the replacement of men by women, or, as in textile weaving, the use of heavier machinery tended to bring men into women's places. Inventions that served to lighten the physical effort required in the performance of jobs have been introduced into a variety of fields of work, thus tending to eliminate physical requirements as the overriding consideration in employing men rather than women for a particular job.

#### 6. OCCUPATIONAL BARRIERS

Entrance to many types of work is limited by standards developed by those already engaged in the field. Thus, many of the craftsmen's occupations require a long apprenticeship, and the number of apprentices who may enter is limited. Along with other factors, these restrictions have kept the numbers of women in these fields at low levels. Furthermore, in manual work of all degrees of skill there are many jobs that require greater physical strength than the average woman has. In professional occupations the long training required and the difficulties encountered in becoming established, which have affected both men and women, formerly barred women almost completely, and in more recent years they have tended in many instances to keep the number of women small.

747639°-48=2

The attitude on the part of the public and of employers that certain types of work are not appropriate for women has also restricted their opportunities. It has sometimes been considered more suitable for a man to deal with the public, to work on jobs that require considerable traveling, or to supervise a group of male workers, even though women otherwise qualified may be available and may have done such work successfully in a limited number of instances. Prejudice against the employment of married women, due to unawareness of their economic problems as well as to traditional social attitudes, toward their employment, tends to limit the advancement of women to the more responsible positions by requiring them to leave jobs frequently when the training and experience acquired might equip them for higher grades of work.

# 7. WARS

The emergencies of war sweep aside established traditions and customary ways of doing things. With the increased need for manpower and the siphoning off of men for military duties, women are called upon to undertake various tasks generally considered unsuitable for them. Peacetime readjustments bring a tendency to revert to the prewar situation, but inevitably an extension of the range of occupations open to women takes place.

The Civil War brought women into the schoolrooms to replace men, caused numbers of them to undertake nursing duties, and gathered groups of them together in "sewing rooms" to manufacture clothing and other articles required for military personnel. World War I greatly advanced women's employment in factories and raised their numbers in metal and machinery and other plants making war implements. Even more important, it offered to women the opportunity to undertake occupations of a more skilled nature than they had previously been permitted to do. their numbers dropped after the end of the war, some women continued in these fields. World War I also emphasized women's special aptitudes for assembly and inspection operations and ensured their continuance in such a developing industry as that of electrical manufacture. In certain occupations, such as that of elevator operator, the wartime experiment led to the retention by women of a considerable portion of the field. World War II again broadened the scope of women's employment activities. While it is still too soon to determine what will be the more permanent effects, it appears likely that women will retain an established position in the aircraft industry, in the armed forces, and in various fabricated plastic industries, to name but a few fields.

#### 8. IMMIGRATION

The waves of immigration that poured into the United States, their changing character, and later their virtual cessation have affected the occupational trends among women. Over many years immigrant women provided a steady supply of recruits for domestic service and other less attractive occupations. At some periods the influx turned native-born women to new fields. In the early days of the cotton textile industry, for example, the workers at many New England textile mills were native-born girls of rural families. Such young women at a slightly later period tended to seek employment as teachers, nurses, or white-collar workers, thus helping to meet the rising demand in these fields, while the Irish and French Canadian immigrants entered textile manufacturing. Along with this shift went an increasing utilization of men in textile production.

Similarly in the clothing industry a shift to increasing proportions of men occurred. The immigration of the 1880's brought into the United States groups who were non-English-speaking and who therefore tended to crowd into occupations already followed by family members and friends who had preceded them. The employment of whole family groups in the garment trades under the unfortunate conditions of the contract system had the effect, along with various other circumstances, of causing the proportions of men in the industry to rise.

Domestic service had long offered opportunities for the newly arrived immigrant to obtain a living despite language handicaps and even without occupational training or experience. As opportunities in industry grew and later when but small numbers of immigrants were admitted, this source of household workers disappeared. The declining supply of immigrants was among the causes of a downward trend in the numbers of women in servant occupations.

#### 9. LIVING STANDARDS, TASTES, AND STYLES

Broad changes in production, prices, and wages have had important effects on consumption habits. As the standard of living has risen, there have been increasing refinements in the material aspects of daily life. The sparse furnishings of the pioneer cabins have been replaced by innumerable comforts and conveniences. The self-sufficiency of the pioneer family disappeared as whole new industries and services placed the fruits of their endeavors at the command not only of the few most well-to-do but even of the average citizen.

The greater variety of material comforts available made possible choices of alternate methods of meeting particular needs. developed the creation of new demands, and enhanced the importance of styles and fashions in all sorts of commodities. All these factors affect occupational trends. Thus a flourishing industry met the demand that arose out of the widespread acceptance and use by women of cosmetics and the beautician's services; employment for numbers of women was occasioned by the spread of the cigarette smoking habit; and new opportunities for women workers appeared with the everyday use of silk hosiery, as changes in clothing styles made this item more prominent in women's costumes.

# DATA ON WHICH THIS REPORT IS BASED

This report is based upon data published by the U.S. Bureau of the Census. The material does not, however, derive from a single set of consistent figures available for the 70-year period. Not only do trend data cover varying periods, depending on the availability of comparable occupational classifications at various censuses, but they are subject to general effects arising from basic changes in census concepts and procedures.

#### LABOR FORCE AND GAINFUL WORKERS

In the 1940 census a very considerable change from preceding years was made in the entire basic concept of the labor force, a term then introduced for the first time. Consequently many difficulties arise in comparing 1940 with earlier years, in terms both of total figures and of specific occupations. The 1940 data were based on the labor force activity of persons during the week of March 24 to 30, 1940. The gainful workers reported in 1930 and earlier were persons reported as having a gainful occupation regardless of their activity at the time of the census. The 1940 labor force figures thus excluded seasonal workers not employed or seeking work during the census week, inmates of institutions, and retired and disabled persons, groups included in 1930 and earlier if they reported a gainful occupation. In 1940 new workers seeking their first jobs were included, whereas they had not been included among previous gainful worker data. differences arise because in 1930 some persons failed to report their occupation and were not counted as gainful workers, while in 1940 some persons failed to report their employment status and others, especially some employed on public emergency work, were improperly returned as not in the labor force. No adjustments have been made in figures for individual occupations to eliminate these differences. However, with the possible exception of farm laborers, it is unlikely that failure to exclude seasonal workers prior to 1940 affects significantly the comparisons for women workers, since the tendency was for a woman not actually working to report, or for the census enumerator to assume, that she was engaged in housework. New workers do not affect occupational data because, though included in the total count of the labor force in 1940, they were omitted from occupational data, and other differences appear to be of minor significance in trend data for individual occupations.

# DATA FOR SPECIFIC OCCUPATIONS, 1870-1940

Usually data for specific occupations in 1930 and earlier cover gainful workers 10 years old and over, and corresponding 1940 occupational data are for experienced persons in the labor force 14 years old and over included in that occupation. By this procedure practically all workers at the various periods are included.

Because of innovations in the 1940 occupational classification direct comparisons cannot be made of most 1940 occupations with those in 1930 and earlier years. The types of work covered by each of the 1940 occupation classifications frequently differ from the types covered by the same or similar classifications used in 1930 and previous censuses. The Census Bureau has worked out adjustment factors for the figures on total workers and on women workers. These factors can be applied to the 1930 figures on individual occupations (and to previous figures comparable with 1930) to obtain a comparable series. Before applying the adjustment factor it is often necessary to group a number of occupations in earlier censuses to make the earlier figures comparable with those in 1940.

Because of the application of adjustment factors and because of this grouping of occupations, data appearing in this report on occupations in 1870 to 1930 may differ considerably from figures published in the decennial census volumes. Detailed notes enabling persons interested to follow the method of deriving these figures are included with Appendix Tables II A and II B.

# OCCUPATIONAL CLASSIFICATION IN 1940

The number of different titles in the occupational classification has varied from one census to another. In 1940 there were 451 detailed occupations. In addition the census presented certain tabulations for a condensed classification, the "intermediate list," which was derived by combining those of the 451 titles that were

# 14 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

closely related or numerically small. For women, this intermediate list consisted of 76 titles. The use of the 76-title list is confined in general to Part I of this report. Both the detailed and the intermediate lists may be grouped into 11 major occupational groups. Further subdivisions of certain of the major occupational groups bring the number of major groups discussed in some sections to 13.

#### CHANGES IN CENSUS DATES

No adjustments have been made in figures for individual occupations to allow for changes in the date at which the census was taken. The chief occupations affected by changes in census dates include those of farm laborers, whose numbers are at a low point in midwinter, rising to a peak at crop-planting and harvesting time; food processing occupations such as those of operatives and laborers in the canning and preserving industry and of fruit and vegetable canners and graders; and the occupations of saleswomen and other retail store workers, whose numbers are greatly increased at the pre-Christmas and pre-Easter periods. Many manufacturing industries reach a high level of employment in the fall, but no censuses were taken during this part of the year. Census months were as follows:

1940	March	1900	June
1930	April	1890	June
1920	January	1880	June
1910	April	1870	June

# REFERENCES CITED

It has not been the purpose of this report to present a comprehensive or exhaustive treatment of individual occupations. Further information about general trends in women's occupations can be found in the selected list of references given at the end of the report, though only the most significant publications have been listed. In the text an effort has been made to cite for the more important individual occupations of women outstanding studies dealing with general trends or with special factors affecting women's employment. In addition to substantiating statements in the text, these citations serve to indicate the leading literature on the subject.

# I. WOMEN'S OCCUPATIONS IN 1940

Census data for 1940 represent a point of reference against which long-time trends in women's occupational activities may be measured. Comprehensive statistics from the decennial census are available for this date, the last peacetime year before the United States entered World War II. The 1940 picture also serves as background for consideration of changes that may be anticipated for the future. While there is little doubt that the occupational activities of women workers will be affected in the years ahead by the wartime experiences and by the level of economic operation at any specific period, it likewise is probably true that basic underlying tendencies will continue to have effect.

# EMPLOYMENT STATUS OF WOMEN IN 1940

Of the nearly 51 million women aged 14 years or over in 1940, over 11 million were at work during the week of March 24 to 30 or had jobs from which they were merely temporarily absent. In addition, there were over a million women actively seeking employment and almost half a million employed on public emergency work. These 13 million constituted all the women who were in the 1940 labor force. They were over one-fourth of all women aged 14 years or over.

Men in the population participated in the labor force to a greater extent than did women. The number of men in the labor force totaled almost 40 million, and they constituted four-fifths of all men aged 14 years or over in 1940. For most of these men, their labor force activity was their primary concern, and it would probably continue to be so for most of their adult lives. This was true also of numbers of the women workers. However, a larger group among the women than among the men workers were employed less than full time, and somewhat greater proportions of women worked for only part of the year, though not always through choice.

Almost three times as many women were outside the labor force (38 million) as were in it. Most of them were engaged in doing housework in their own homes. If these are combined with the numbers in the labor force, 82 percent of all women who were 14 years or over may be considered as contributing (or seeking to contribute) to the well-being of the Nation through either paid or unpaid work. The remainder were in school or were not working because of physical disability or other reasons. The distribution of the women in the population in the United States in 1940 is shown in the summary following.

Women 14 years and over	Number of women in the United States 50,549,176	Percent distribution 100.0
In the labor force	12,845,259	$\phantom{00000000000000000000000000000000000$
Employed	11,138,178	-22.0
On public emergency work		0.9
Seeking work	1,249,569	2.5
Experienced workers	944,588	1.9
New workers	304,981	0.6
Not in the labor force	37,703,917	74.6
Engaged in own home housework	28,664,744	56.7
In school	4,419,712	8.7
Unable to work	2,302,502	4.6
İn institutions	409,519	0.8
Other and not reported	1,907,440	3.8

Millions of women, therefore, have as workers a great concern in the state of the economy, in the nature of work opportunities available, and in the wages, hours, and working conditions in the enterprises of the country. However, society depends to a greater extent upon men for the paid work done on farm and in factory and upon women for the unpaid work carried on in the home. The relative proportion of women among all persons of each employment status reflects this difference of function. Though the population of working age was about equally divided between men and women in 1940, men constituted over three-fourths of all persons in the labor force. On the other hand, the persons engaged in home housework were, in practically all instances, women.

By custom and tradition women are responsible for the care of the home. Even when women enter the labor force, many of them must continue with their unpaid services in the home, thus carrying a double burden. If they lose their jobs, or if they consider their employment of minor importance, experience has shown that they may be reported in the census in their alternative type of activity (engaged in home housework), rather than as being employed or as seeking work. This is at least part of the reason for the relatively low proportion of women among those designated in the census as experienced workers seeking work—only one in five, compared to one in four among the employed. The difference in the extent of women's participation in the various activities of the 1940 working-age population appears in the following summary.

Persons 14 years old and over	Percent wome of total 50.0
In the labor force	24.3
Employed	24.7
On public emergency work	
Seeking work	
Experienced workers	21.8
New workers	39.7
Not in the labor force	
Engaged in own home housework	99.1
In school	49.0
Unable to work	43.7
In institutions	34.8
Other and not reported	48.6

#### GENERAL FIELDS OF WORK OF WOMEN IN THE LABOR FORCE<sup>1</sup>

The largest proportion of the 12,082,766 women who were employed or seeking work during the week of March 24 to 30, 1940, were clerical, sales, or kindred workers (28.0 percent). (See Table 1.) Among the occupations in which women in this group were engaged were the routine office activities of typists, file clerks, office machine operators, telephone operators, etc., and the work in stores of saleswomen and sales clerks. Another 18.5 percent were designated as operatives and kindred workers, a classification that includes manual occupations requiring not more than a short period of training and requiring only moderate judgment, dexterity, or force. Domestic service occupations accounted for 17.9 percent of all working women, and service occupations in other than domestic and protective service, for 11.3 percent. For women the latter field includes cleaning services in buildings other than private homes, and personal services such as those of waitresses, cooks, beauticians, practical nurses, etc. Women in professional occupations were 11.7 percent of all working women.

In brief then, of every 10 women employed or seeking work in 1940, 3 were in clerical, sales, or kindred occupations, 2 were operatives or kindred workers, 2 were in domestic service, 1 in professional work, and 1 in service work other than domestic or protective. Eight other groups of workers (semiprofessional

<sup>&</sup>lt;sup>1</sup> Occupational data from the 1940 census discussed on pp. 17 to 26 apply to the 12,082,766 women who were employed or who were experienced workers seeking work. These data exclude workers employed on public emergency work and new workers. Experienced workers seeking work were classified by last occupation of 1 month or more. Because data for experienced women workers seeking work by last occupation were not presented by the census in greater detail, the intermediate list of 76 occupations is the basis for the discussion on these pages. (See Introduction, p. 13.)

workers, farmers, the proprietor-manager group, the craftsmen group, protective service workers, farm laborers, unpaid farm family workers, and laborers other than farm) accounted for relatively few women.

Table 1.—Occupation Group of Women Who Were Employed (Except on Public Emergency Work) or Were Experienced Workers Seeking Work, and Percent Distribution of Women and of Men, 1940

	Women		Women		Men
Occupation group	Number	Percent	Percent		
Total employed (except on emergency work) and seeking work (experienced)	12,082,766	100.0	100.0		
Professional workers Semiprofessional workers Farmers and farm managers Proprietors, managers, and officials, except farm Clerical, sales, and kindred workers	1,414,037	11.7	4.2		
	105,609	0.9	1.0		
	152,532	1.3	18.4		
	430,075	3.6	9.1		
	3,383,623	28.0	12.5		
Craftsmen, foremen, and kindred workers.  Operatives and kindred workers.  Domestic service workers.  Protective service workers.  Service workers, except domestic and protective.	114,202	0.9	14.8		
	2,241,476	18.5	18.4		
	2,165,478	17.9	0.4		
	4,535	(¹)	1.9		
	1,364,238	11.3	4.5		
Farm laborers (wage workers) and farm foremen Farm laborers (unpaid family workers) Laborers, except farm	114,882	0.9	5.6		
	225,853	1.9	2.6		
	116,013	1.0	10.2		
	250,213	2.1	1.4		

Source: U. S. Department of Commerce. Bureau of the Census. 16th census of the United States: 1940. Population. Vol. III, The labor force. Part I, United States summary, table 61. Washington, U. S. Government Printing Office, 1943.

The five major groups in which almost 9 out of every 10 women were concentrated accounted for only about 4 men out of every 10 who were employed on other than public emergency work or were seeking work as experienced workers. The proportion of persons classified as operatives or kindred workers was similar for men and for women, about 18 percent. The proportion of women in domestic service, however, was over 40 times that for men, while the proportion of women in clerical, sales, or kindred work, in service work other than domestic and protective service, and in professional service was in each group over twice as high as the proportion of men so employed.

On the other hand, much higher proportions of the men than of the women were farmers or farm managers; craftsmen, foremen, or kindred workers; proprietors, managers, or officials; and laborers, except farm.

Women were approximately one-fourth of all workers in 1940, but their proportions varied considerably from one occupation group to another. Domestic service work, for example, was

<sup>1</sup> Less than 0.05 percent.

preeminently a woman's field; more than 9 out of 10 domestic workers were women. In contrast, five fields were almost exclusively men's province; in these considerably less than 1 worker in 10 was a woman. The five fields included protective service workers; craftsmen, foremen, and kindred workers; farmers and farm managers; laborers, except farm; and farm laborers (wage workers) and farm foremen.

In the largest occupational field for men and women combined—operatives and kindred workers—the proportion of women was about the same as the proportion of women among all workers, nearly 25 percent. Three of the six remaining occupation groups had higher proportions of women than this average: women constituted somewhat under half of the professional workers, 4 out of 10 of those classified as clerical, sales, or kindred workers, and between 4 and 5 out of 10 service workers, in other than domestic and protective service. Among semiprofessional workers and among unpaid family workers engaged in farm labor, about 1 worker in 5 was a woman, less than the average proportion for all occupations combined. Only slightly more than 1 worker in 10 was a woman among nonfarm proprietors, managers, and officials. The proportion in each occupation group was as follows:

Total employed (except on emergency work)	Percent women of total workers
and seeking work (experienced)	24.4
Domestic service workers	93.1
Professional workers	47.4
Clerical, sales, and kindred workers	42.0
Service workers, except domestic and protective	44.8
Operatives and kindred workers	24.6
Semiprofessional workers	21.4
Farm laborers (unpaid family workers)	19.1
Proprietors, managers, and officials, except farm	
Farm laborers (wage workers) and farm foremen	5.2
Laborers, except farm	3.0
Farmers and farm managers	2.9
Craftsmen, foremen, and kindred workers	
Protective service workers	0.6
Occupation not reported	32.6

# CLERICAL, SALES, AND KINDRED OCCUPATIONS

The present economic pattern requires large numbers of people to carry on such office activities in plants and businesses as preparing and caring for written communications and records, compiling data, operating office machines or telephones, and assisting in other ways. Others are needed to sell the many commodities and services available to the consumer.

Well over 3 million women were engaged in these and similar activities in 1940. Almost one-third of them were stenographers, typists, or secretaries. Another 23.6 percent were "clerks" in stores, demonstrators, or saleswomen not elsewhere classified by the census. One-fifth were women engaged in "other clerical and kindred" work—as agents, mail carriers, messengers, shipping and receiving clerks, library assistants, physicians' or surgeons' attendants, collectors, or similar workers. Fourteen percent of them were bookkeepers, accountants, or cashiers, and 5.8 percent were telephone operators. These five occupational classifications accounted for over 95 percent of the women who were grouped together as clerical, sales, and kindred workers. Over one-fourth of the men were in other fields than these, mainly as real estate, insurance, or other sales agents and brokers. The proportions of women and of men were as follows:

Clerical, sales, and kindred			
workers, employed (except	Wome	n	Men
on emergency work) and	Number	Percent	Percent
seeking work (experienced)	3,383,623	100.0	100.0
Stenographers, typists, and secretaries.	1,055,663	31.2	1.6
"Clerks" in stores, demonstrators, and			
salesmen and saleswomen (not else-			
where classified	799,154	23.6	24.1
Other clerical and kindred workers	736,878	21.8	38.1
Bookkeepers, accountants, cashiers,			
and ticket agents	472,797	14.0	10.2
Telephone operators	195,648	5.8	0.2
Office machine operators	54,829	1.6	0.2
Telegraph operators		0.2	0.7
All other sales workers	60,206	1.8	24.8

Oliveria and the second of the decoration

Over 9 out of every 10 persons working as telephone operators or as stenographers, typists, or secretaries were women. Women were also predominant among office machine operators, constituting well over 8 in every 10 such workers. Among the residual group of salespersons, designated in the census as "all other sales workers," women were only a small proportion of the workers. Taken together, canvassers, peddlers, and news vendors, as well as insurance, real estate, and other sales agent and brokers were men in 95 cases out of 100. As the summary following shows, women formed a higher proportion of the total in each of six specified clerical and sales occupations than the over-all average of 24.4 percent in all occupations combined.

Percent women of total workers

Clerical, sales, and kindred workers, employed (except on emergency work) and seeking work (experienced)	42.0
Telephone operators	94.6
Stenographers, typists, and secretaries	93.4
Office machine operators	86.1
Bookkeepers, accountants, cashiers, and ticket agents	49.7
"Clerks" in stores, demonstrators, and salesmen and	
saleswomen (not elsewhere classified)	41.5
Other clerical and kindred workers	29.2
Telegraph operators	20.3
All other sales workers	

#### OPERATIVES AND KINDRED WORKERS

In general, operatives are defined as workers engaged in manual work usually requiring only a short period or no period of preliminary training and only a moderate degree of judgment, manual dexterity, or muscular force. The present machine civilization depends to a great extent on this type of worker.

About 2½ million women were in this group, well over three-fourths of whom worked in factories. Among women, in fact, only two groups of nonmanufacturing operatives were of any significance in 1940. Women employed or seeking work as dress-makers and seamstresses (not in factory) numbered 145,773, and women laundry operatives and laundresses, excluding those working for private families, numbered 178,329. Women manufacturing operatives totaled 1,750,990, leaving only 166,384 in all other fields.

The majority of the women factory operatives were concentrated in two industries in 1940. The manufacture of apparel and other fabricated textile products accounted for 28.5 percent of all women operatives in manufacturing, and textile manufacture provided work for 26.0 percent more. Men working as operatives in apparel and other fabricated textile product plants were only 6.0 percent of all male factory operatives. The proportion of men in textile manufacture, 17.5 percent, was likewise lower than the corresponding proportion of women.

In none of the other 11 industry classifications in manufacturing were the women operatives as much as 10 percent of all women operatives in manufacturing, though the manufacture of iron, steel, nonferrous metal products, and machinery accounted for 9 percent. From nearly 5 to over 7 percent of the women operatives were in the production of food and kindred products; of footwear, except rubber; and of paper, paper products, and printing.

The iron, steel, nonferrous metal products, and machinery industry classification, third in importance for women in manufacturing, was the most important classification for men. The proportion of all women factory operatives in these industries was 9.1 percent, compared to 22.1 percent of the men. The second largest proportion of operatives, both of men and women, were in the manufacture of textile-mill products. The figures for various industry classifications in 1940 were as follows:

Manufacturing operatives and			
kindred workers, employed (ex-	Wom	en	Men
cept on emergency work) and	Number	Percent	Percent
seeking work (experienced)_	1,750,990	100.0	100.0
Apparel and other fabricated			
textile products	499,108	28.5	6.0
Textile-mill products <sup>1</sup>	455,487	26.0	17.5
Iron, steel, nonferrous metal products,			
and machinery	158,532	9.1	22.1
Food and kindred products	130,216	7.4	8.7
Footwear industries, except rubber	97,217	5.6	4.7
Paper, paper products, and printing	82,969	4.7	5.8
Tobacco manufactures	57,429	3.3	1.0
Chemicals, and petroleum and			
coal products	34,793	2.0	4.9
Transportation equipment	29,947	1.7	9.9
Leather and leather products,			
except footwear	28,030	1.6	2.1
Stone, clay, and glass products	26,471	1.5	3.8
Lumber, furniture, and lumber products	<b>25,</b> 836	1.5	6.5
Rubber products	23,910	1.4	2.4
Other manufacturing industries	101,045	5.8	4.7

<sup>&</sup>lt;sup>1</sup> Includes cotton, silk and rayon, and woolen and worsted manufactures, knit goods, and other textile-mill products.

Women generally formed a high proportion of the operatives in consumer-goods industries. Over three-fourths of the operatives in the manufacture of apparel and other fabricated textile products were women in 1940, and about 70 percent of the workers in tobacco manufacture were women. Just over half of the operatives in all types of textile production were women, as were about 45 percent of those in the footwear industries. The proportion of women was well below one-fourth of the operatives in the basic manufacturing industries, such as iron, steel, nonferrous metal products, and machinery; stone, clay, and glass; chemicals and petroleum and coal; lumber, furniture, and lumber products; and transportation equipment. Detailed data are as follows:

Manufacturing operatives and kindred workers, employed (except on emergency work) and seeking work (experienced)	
Apparel and other fabricated textile products	76 <b>.7</b>
Tobacco manufactures	
Textile-mill products <sup>1</sup>	50.7
Footwear industries, except rubber	44.9
Food and kindred products	37.0
Paper, paper products, and printing	
Leather and leather products, except footwear	
Rubber products	
Iron, steel, nonferrous metal products, and machinery	
Chemicals, and petroleum and coal products	
Stone, clay, and glass products	
Lumber, furniture, and lumber products	
Transportation equipment	
Other manufacturing industries	46.2
Includes cotton, silk and rayon, and woolen and worsted manufactures, k	

<sup>1</sup> Includes cotton, silk and rayon, and woolen and worsted manufactures, knit goods, and other textile-mill products.

#### DOMESTIC SERVICE WORKERS

Domestic service workers are engaged in personal service in private homes. They may be housekeepers, laundresses, cooks, chambermaids, children's nurses, day workers, general houseworkers, and so forth, in private families. In 1940, 93.1 percent of these workers were women, who numbered over 2 million.

# SERVICE WORKERS, EXCEPT DOMESTIC AND PROTECTIVE

In the total group of service workers were about 1 1/3 million women who were not employed in private homes or engaged in protecting life or property. These women, as waitresses, cooks, or practical nurses, for example, perform services for other persons, or they carry on cleaning and janitor services in stores, offices, factories, hotels, and other buildings. Among the women in this occupation group 29.6 percent were waitresses, most important numerically in this field for women and second most important for men. Beauticians and manicurists were 15.9 percent of all women service workers (except domestic and protective). The census-designated occupation of "servant, except private family," which includes maids, helpers, and similar workers in hotels, restaurants, and institutions, accounted for 13.8 percent of all women in the group.

Janitors and porters were most numerous among the men, comprising 32.0 percent of all men in service work, other than domestic and protective. In contrast only 5.8 percent of the women were charwomen, janitors, or porters. Other differences

# 24 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

and similarities between men and women can be seen from the following:

Service workers, except domestic			
and protective, employed (ex-	Wome	n	Men
cept on emergency work) and	Number	Percent	Percent
seeking work (experienced)	1,364,238	100.0	100.0
Waiters, waitresses, and bartenders	404,141	29.6	19.1
Barbers, beauticians, and manicurists_	$217,\!557$	15.9	13.0
Servants, except private family	188,108	13.8	9.6
Cooks, except private family	124,532	9.1	11.4
Practical nurses and midwives	103,661	7.6	0.3
Boarding house and lodginghouse			
keepers	100,895	7.4	0.6
Charwomen, janitors, and porters	79,167	5.8	32.0
Housekeepers, stewards, hostesses,	·		
except private family	65,249	4.8	1.1
Elevator operators	13,615	1.0	4.2
Other service workers, except domestic	•		
and protective	67,313	4.9	8.7

Whereas more than 9 out of 10 domestic service workers were women and all but a negligible proportion of protective service workers were men, both men and women had a substantial share in other service work. Of the group as a whole 44.8 percent were women, and 55.2 percent were men. Just half of those grouped as barbers, beauticians, and manicurists were women, and half were men. Proportions of women in nine specific occupation groups ranged from 12.9 percent in that of charwomen, janitors, and porters to 95.7 percent in that of practical nurses and midwives. Only in two of these nine did women constitute less than a fourth of the workers.

ourth of the workers.	
Service workers, except domestic and protective ployed (except on emergency work) and seeking	•
(experienced)	
Practical nurses and midwives	95.7
Boarding house and lodginghouse keepers	90.3
Housekeepers, stewards, hostesses, except private family	
Waiters, waitresses, and bartenders	55.7
Servants, except private family	53.8
Barbers, beauticians, and manicurists	50.0
Cooks, except private family	
Elevator operators	
Charwomen, janitors, and porters	
Other service workers, except domestic and protective	31.5

#### PROFESSIONAL AND SEMIPROFESSIONAL WORKERS

A professional worker, according to the census definition, is one who "performs advisory, administrative, or research work which is based upon the established principles of a profession or science, and which requires professional, scientific, or technical training equivalent to that represented by graduation from a college or university of recognized standing." Semiprofessional workers work in a restricted field of science or art and become qualified for this work on the basis of training, or experience, or both.

About  $1\frac{1}{2}$  million women were in professional or semiprofessional fields, but for most of these women opportunities are limited to two lines. Over three-fourths were teachers or nurses in 1940; teaching accounted for 52.1 percent and nursing for 23.8 percent of all women in professional and semiprofessional work. In no other occupation were as many as 10 percent of the professional and semiprofessional women engaged.

Professional and semiprofessional			
workers, employed (except on	VY OTHE	n	Men
emergency work) and seeking	Number	Percent	Percent
work (experienced)1	,519,646	100.0	100.0
Teachers (not elsewhere classified)	<u> </u>		
(including county agents)	792,375	52.1	13.3
Trained nurses and student nurses	361,215	23.8	0.4
Semiprofessional workers	105,609	6.9	19.8
Musicians and music teachers	63,723	4.2	4.3
Social and welfare workers	$46,\!559$	3.1	1.3
College presidents, professors, and			
instructors	20,097	1.3	2.8
Artists and art teachers	19,738	1.3	2.0
Authors, editors, and reporters	19,671	1.3	2.8
Librarians	33,302	$2.2$ $\rbrace$	<b>700</b>
All other professional workers	57,357	3.8 ∫	53.2

Certain types of work appear to be "women's occupations," and other types are dominated by men. The women in seven occupations (librarians omitted), each having more than 1 percent of all the women in professional and related work, constituted 87.1 percent of all such women. In contrast, only 26.9 percent of the men were in these fields. Only 6.9 percent of the women but 19.8 percent of the men were in semiprofessional work, and only 6.0 percent of the women but 53.2 percent of the men were among "all other professional workers" (librarians included). The traditional learned professions of law, medicine, and theology accounted for almost 24 percent of the men grouped as professional

747639° — 48 — 3

and semiprofessional workers, but the proportion of women in these fields was relatively so insignificant (all of them together less than 1 percent) that these are not shown separately on the preceding summary.

As noted previously, about 25 percent of all workers in all occupation groups in 1940 were women. Among professional and semiprofessional workers this proportion was exceeded in each of seven specific occupations having more than 1 percent of all the women in this group. In nursing, women dominated the field almost to the exclusion of men, and women also formed considerable proportions of the teaching and the social welfare groups. Details are as follows:

Professional and seminrofessional workers employed

(except on emergency work) and seeking work	
(experienced)	43.7
Trained nurses and student nurses	97.8
Teachers (not elsewhere classified) (including county agents	s)75.3
Social and welfare workers	64.2
Musicians and music teachers	42.8
Artists and art teachers	33.7
College presidents, professors, and instructors	26.6
Authors, editors, and reporters	26.2
Semiprofessional workers	21.4

of

# PRINCIPAL INDIVIDUAL OCCUPATIONS OF EMPLOYED WOMEN IN 19402

All other professional workers

Among 442 detailed occupations in each of which women were employed, by far the largest group was that of private family servants, who numbered 1,420,469. (See Table 2.) Stenographers, typists, and secretaries, with 988,081 women, were second in numerical importance, and in no other occupation did the number of employed women approach a million. In each of the 3 occupations next in numerical importance between 500,000 and 800,000 women were employed. These women were teachers, clerical and kindred workers,<sup>3</sup> and saleswomen.<sup>3</sup> These 5 occupations accounted for 38.8 percent, or nearly two-fifths, of the employed women.

Nearly three-fifths (56.2 percent) of all employed women were in the 10 occupations of greatest numerical importancethose with over 300,000 women each. In addition to the 5 just men-

<sup>&</sup>lt;sup>2</sup> The analysis in this section is based on the complete detailed occupational list of 451 titles, designated in the census as "detailed" occupations. The 1940 census presents detailed occupation data for 11,138,178 employed women. Because of greater refinement in classification, some of the occupational titles in the detailed list differ from those based on the intermediate list of 76 titles used in previous sections.

<sup>3</sup> Not elsewhere classified in census,

tioned, these included bookkeepers, accountants, and cashiers; operatives in apparel and accessories manufacturing; housekeepers, private family; waitresses, except private family; and trained nurses and student nurses.

Table 2.—Detailed Occupations With 50,000 or More Employed Women 14
Years Old and Over, Numbers Employed in Each, and Percent
Women of Total Employees, 1940

Rank	Occupation	Women employed	
		Number	Percent of total employed persons
1	Servants, private family	1,420,469	91.3
$\dot{\tilde{2}}$	Stenographers, typists, and secretaries	988,081	93.5
3	Teachers (not elsewhere classified)	772.044	75.7
4	Clerical and kindred workers (not elsewhere	2,011	
-	classified)	630.471	35.7
5	Salesmen and saleswomen (not elsewhere	001,1.1	0000
•	classified)	515.539	40.8
6	Bookkeepers, accountants, and cashiers	446,205	52.1
7	Operatives, apparel and accessories	425,534	77.5
8	Housekeepers, private family	362,431	99.2
9	Waiters and waitresses, except private family	356,036	67.6
10	Trained nurses and student nurses	348,277	97.9
11	Farm laborers (unpaid family workers)	223,279	19.2
12	Barbers, beauticians, and manicurists	206,592	49.7
13	"Clerks" in stores	201,281	42.5
14	Telephone operators	189,002	94.6
15	Launderers and laundresses, private family	186,183	98.2
16	Servants, except private family	174,724	55.3
17	Laundry operatives and laundresses, except	•	1
	private family	167,967	77.7
18	Operatives, cotton manufactures	167,155	47.0
19	Farmers (owners and tenants)	151,087	3.0
20	Dressmakers and seamstresses (not in factory)	133,627	98.3
21	Cooks, except private family	116,310	42.0
22	Operatives, knit goods	115,106	66.9
23	Boarding house and lodginghouse keepers	100,355	90.5
24	Farm laborers (wage workers)	96,491	5.1
25	Operatives, footwear industries, except rubber	91,251	46.1
26	Practical nurses and midwives	87,198	95.7
27	Proprietors, managers, and officials, food stores,		1
	except dairy products	65,860	13.9
28	Proprietors, managers, and officials, eating and		1
	drinking places	65,064	24.5
29	Operatives, electrical machinery and equipment.	63,600	46.1
30	Housekeepers, stewards, hostesses, except	20.054	
	private family	62,351	78.8
31	Musicians and music teachers	59,456	46.0
32	Operatives, miscellaneous manufacturing	F0.000	10.0
	industries	52,988	48.2
33	Operatives, tobacco manufactures	51,658	71.9
34	Operatives, woolen and worsted manufactures	51,538	49.7
35	Office machine operators	51,454	86.1

Source: U. S. Department of Commerce. Bureau of the Census. 16th census of the United States: 1940. Population. Vol. III, The labor force. Part I, United States summary, table 58. Washington, U. S. Government Printing Office, 1943.

Twenty-three occupations, comprising all those with over 100,000 women each, together accounted for 75 percent of all employed women. Thirty-five occupations, comprising all those with over 50,000 women each, together accounted for 83 percent of all employed women. Thus the rest of the employed women, 17

percent of all, were dispersed among the remaining 407 of the 442 occupations in which women were employed.

The concentration of women in a limited number of fields was thus considerable. It was more marked than among men. While the leading 10 occupations of women employed 56 percent of the women, the leading 10 men's occupations employed less than 40 percent of the men. Seventy-five percent of the women were employed in the 23 leading women's occupations, but only half the employed men were concentrated in the 23 leading men's occupations.

Rank of occupation for each sex	Proportion of all employed women	Proportion of all employed men
1 to 5	38.8	29.2
1 to 10	56.2	38.1
1 to 23	75.4	51.1
1 to 35	82.6	58.2

Not only was the degree of concentration less marked among men than among women, but the primary occupations of men were for the most part different from women's, though certain fields were important for both. Seven out of every ten men employed in 1940 were in occupations each of which had less than 1 percent of all employed women. Nearly three-fourths of the women employed in 1940 were engaged in occupations that were especially significant for women, in that each of these occupations had more than 1 percent of all employed women (111,138 women). A comparison of the 10 leading occupations for men with those for women reveals that only 2—clerical workers (not elsewhere classified) and salesmen and saleswomen (not elsewhere classified)—are on both lists. Most of the other foremost occupations of employed men appear well down the list for women.

The 10 leading individual occupations of employed men in 1940 were as follows:

	Men <b>e</b> mployed	Percent men of total per- sons employed
Farmers (owners and tenants)	4,955,624	97.0
Farm laborers (wage workers)	1,803,924	94.9
Clerical and kindred workers (not		
elsewhere classified)	1,134,933	64.3
Chauffeurs and drivers, bus, taxi,		
truck, and tractor	1,115,157	<b>99.5</b>
Farm laborers (unpaid family workers)	941,841	80.8
Salesmen (not elsewhere classified)	747,881	59.2
Mine operatives and laborers	649,226	99.7
Traveling salesmen and sales agents	579,423	97.8
Carpenters	556,918	99.8
Machinists	472,769	99.0

It may be noted also that in 8 of the 10 leading occupations for women a preponderance of the employees were women and that 8 of the leading occupations for men had a considerable majority of men workers. The exceptions are the 2 occupations just referred to that are among the leading fields for both men and women.

The degree to which employed women are concentrated in a limited number of occupations should not completely overshadow the fact that many women are engaged in a wide variety of other fields of work. Though over four-fifths of employed women were in the leading 35 occupations for women, women in the remaining occupations numbered nearly 2 million in 1940. Many of these women were doing interesting types of work. Among them were social and welfare workers, editors and reporters, librarians, laboratory technicians and assistants, store buyers and department heads, building managers and superintendents, attendants in physicians' and dentists' offices, insurance agents and brokers, real estate agents and brokers, elevator operators, attendants in hospitals and other institutions—to name some of those with over 10.000 women each. This indicates clearly that training opportunities for girls and young women should not be confined to the occupations of teacher, stenographer, nurse, beautician, and others of the leading fields, but should be much broader.

#### PRINCIPAL INDIVIDUAL OCCUPATIONS WITH WOMEN IN DEMAND<sup>4</sup>

In 11 individual occupations more than 90 percent of all persons employed were women. These included the two largest groups of women—servants in private families; and stenographers, typists, and secretaries. All except one of these occupations—attendants in physicians' and dentists' offices—employed more than 50,000 women. In 27 other occupations women were more than half of the persons employed.

On the basis of the actual 1940 distribution it thus appears that in only 38 occupations was women's labor more in demand than men's. These occupations, furthermore, fall within a relatively limited range. All 3 domestic service occupations were included among them, while 7 were in other personal service fields; 15 were in operatives' work in nondurable goods industries; 7 in clerical, sales, and kindred occupations; and 6 in professional and semiprofessional work. None of these 38 occupations was among those classified as craftsmen, foremen, and kindred workers; protective service workers; proprietors, managers, and officials;

<sup>4</sup> These occupations are based on the complete detailed list of 451 titles. See footnote 2, p. 26.

farmers and farm managers; or farm laborers. The occupations in which women predominated were as follows:

Percent women	Percent women
Housekeepers, private family 99.2	Operatives, miscellaneous
Dressmakers and seamstresses	fabricated textile products 75.7
(not in factory)98.3	Religious workers 74.6
Laundresses, private family 98.2	Operatives, tobacco manufactures 71.9
Trained nurses and student	Waiters and waitresses, except
nurses97.9	private family67.6
Practical nurses and midwives 95.7	Operatives, knit goods 66.9
Attendants, physicians' and	Operatives, confectionery 66.6
dentists' offices 95.3	Social and welfare workers 64.3
Telephone operators94.6	Operatives, canning and preserv-
Milliners (not in factory) 94.2	ing fruits, vegetables, and sea
Stenographers, typists, and	food63.7
secretaries93.5	Fruit and vegetable packers and
Servants, private family 91.3	graders, except cannery 57.8
Boarding house and lodging-	Operatives, miscellaneous paper
house keepers90.5	and pulp products 56.8
Librarians89.5	Attendants, professional and per-
Office machine operators 86.1	sonal services (not elsewhere
Demonstrators 82.6	classified)56.6
Dancers, dancing teachers, and	Operatives, silk and rayon
chorus girls 80.6	manufactures55.4
Housekeepers, stewards, hos-	Servants, except private family 55.3
tesses, except private family78.8	Charwomen and cleaners 54.4
Attendants and assistants, library 78.2	Bookkeepers, accountants, and
Laundry operatives and laun-	cashiers 52.1
dresses, except private family 77.7	Operatives, not specified textile
Operatives, apparel and	mills52.0
accessories77.5	Operatives, paper board con-
Teachers (not elsewhere	tainers and boxes 51.3
classified)75.7	Operatives, bakery products51.2

In 60 other occupations women were above the average of 24.7 percent of all employed persons but less than half of the total. These were for the most part in the same general occupation fields as those in which women were in the majority, though there were also a few occupations in the groups classified as proprietors, managers, and officials; craftsmen, foremen, and kindred workers; and laborers.

There were in all relatively few occupations in which women appear to be preferred or even in more than average demand. In fact, in nearly 4 out of every 5 (353) of the 451 individual occupations listed by the census, men outnumbered women by more than 3 to 1, and in over half of the occupations by more than 9 to 1.

Nearly 100 types of work were almost or entirely restricted to men. In addition to the 89 occupations in which more than 99

out of every 100 employed persons were men, there were 9 occupations in which no women at all were employed. These latter included railroad conductors, baggagemen, locomotive engineers, locomotive firemen, railroad and car shop mechanics and repairmen, railroad brakemen, railroad switchmen, firemen in fire departments, and soldiers, sailors, marines, and coast guards. During the war the barriers in all but 3 of these 9 were broken down. Various reports indicated that by 1943 at least some women were employed in these unusual types of work, except in the work of locomotive engineers, locomotive firemen, and firemen in fire departments.

## CHART II.—PROPORTION OF ALL WORKERS WHO WERE WOMEN, 1870-1940



Source: Table 3.

# II. GENERAL TRENDS IN NUMBERS AND CHARACTERISTICS OF WOMEN WORKERS

#### PROGRESS OF WOMEN IN THE LABOR FORCE

The preceding section has portrayed the nature of the activities in 1940 of the 13 million women workers—a number of about the same size as the entire work force of the country 70 years earlier, when there were 12,924,951 men and women gainfully occupied.<sup>1</sup>

Many factors have contributed to the great increase in the number of women in paid work. One of the most obvious is the growth in the female population, which tripled from 1870 to 1940. The increase among women workers greatly outstripped this, however, their number multiplying nearly seven-fold. In almost every decade the rate of growth among women workers exceeded that in the female population.

	Percent increa	se in—
	Women in the labor force or gainfully occupied1	Total female population of all ages
1870 to 1880	38.1	25.1
1880 to 1890	51.3	24.0
1890 to 1900	32.8	21.7
1900 to 1910	40.0	20.1
1910 to 1920	16.0	16.1
1920 to 1930	24.5	17.0
1930 to 1940	25.2	8.2

<sup>&</sup>lt;sup>1</sup> Decennial changes 1870-1930, 10 years old and over; 1930-1940, 14 years old and over.

At the close of the Civil War less than 10 percent of the total female population was gainfully occupied; by 1940 the proportion in the labor force was about one-fifth. (See Table 3.) At the 1870 rate, women workers would have numbered in 1940 only about 6,400,000, or less than half the actual number reported. Because the increasing tendency for women to work occurred along with less marked increases or with declines in the proportion among men who work, women have constituted an increasing proportion of all workers. From 14.8 percent in 1870, they advanced to nearly a fourth (24.4 percent) of the total labor force by 1940.

The rapid increase in the female population explains only partially the greater numbers of women at work. In addition, a small part of the increase is due to the aging of the female population. In 1870 the median age for the entire female population was

<sup>&</sup>lt;sup>1</sup> The "adjusted" labor force for women in 1940 was 13,015,000—170,000 larger than the number actually reported. This includes the net adjustments for persons for whom employment status was not reported and for emergency workers. Adjustments of gainful worker statistics to make them fully comparable with 1940 would probably reduce the 1870 figure given here. See pp. 12 and 13 for discussion of differences between the labor force and gainful workers.

20.1 years; by 1940 it had risen to 29.0 years. Various circumstances, such as the after-effects of immigration and the changing birth and death rates, have resulted in a population composed to a greater extent than ever before of women within the age range from which most of the workers are drawn. In 1940, 58.8 percent of the total female population was aged 20 to 64 years, but in 1870 only 47.2 percent was in this age range. If the 1940 female population had been of the same age group composition as in 1870, but with the same proportions of each age group at work as in 1940, the number of women in the 1940 labor force would have been about 1 1/3 million less than it actually was. The proportion of the total female population who were workers would have been 17.5 percent instead of the actual 19.6 percent.

To a major extent, however, the growth in the number of women in the labor force stems from increasing participation in gainful work of various age, racial, and marital groups rather than from shifts in the composition of the population. At the

	\_		Wo	omen	
Year	Total persons	Number	Percent of all persons in the labor force or gainfully occupied	Percent of all women of ages specified	Percent of the total female population of all ages
	P	ersons in the la	bor force 14 year	s old and over	
1940 <sup>1</sup>	53,299,000 47,404,000	13,015,000 10,396,000	24.4 21.9	25.7 23.6	19.8 17.1
	Gainful workers 14 years old and over				
1930	48,594,592 41,236,185 87,271,360 28,282,610	10,679,048 8,429,707 7,788,826 5,114,461	22.0 20.4 20.9 18.1	24.3 23.3 25.2 20.4	17.6 16.3 17.4 13.8
		Gainful wo	rkers 10 years ol	d and over <sup>2</sup>	
1930 1920 1910 1900 1890 1880 1870	48,829,920 42,438,535 37,370,794 29,073,233 23,318,183 17,392,099 12,924,951	10,752,116 8,636,512 7,444,787 5,319,397 4,005,532 2,647,157 1,917,446	22.0 20.4 19.9 18.3 17.2 15.2	22.0 21.4 21.5 18.8 17.4 14.7 13.3	17.7 16.7 16.7 14.3 13.1 10.7 9.7

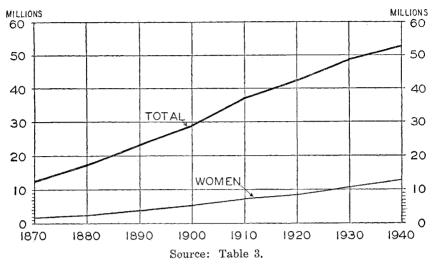
Table 3.- Trends in the Labor Force, 1870-1940

Source: U. S. Department of Commerce. Bureau of the Census. 16th census of the United States: 1940. Population. Vol. III, The labor force. Part I, United States summary, table 7; and Comparative occupation statistics for the United States, 1870 to 1940. By Alba M. Edwards. pp. 12, 91. Washington, U. S. Government Printing Office, 1943.

<sup>&</sup>lt;sup>1</sup>Labor force for 1940 adjusted and labor force for 1930 estimated so as to be comparable. Comparative occupation statistics for the United States, 1870 to 1940, p. 12. The unadjusted labor force for 1940 was 52,789,499, of whom 12,845,259 or 24.3 percent were women. The women in the labor force constituted 25.4 percent of all women 14 years old and over and 19.6 percent of the total female population.

<sup>&</sup>lt;sup>2</sup> Data used are adjusted figures from Comparative occupation statistics for the United States, 1870 to 1940, p. 91.

CHART III .-- NUMBER OF WOMEN WORKERS AND OF ALL WORKERS, 1870-1940



root of these trends are significant changes in social customs and modes of living.<sup>2</sup> As various types of productive activity—textile manufacture, the making of clothing, food processing, and so forth—were transferred from home to factory, women followed them. Many of these commodities are made better and more quickly in the factory, but the transfer means that families increasingly require money income to obtain goods and services formerly provided by unpaid labor in the home. The trends toward urbanization of population,<sup>3</sup> smaller families,<sup>4</sup> increased apartment-house living, higher education of women, as well as the rise in the commercial world of occupations for which women have special talent, have contributed to and are reflected in the growth in numbers of women workers.

<sup>&</sup>lt;sup>2</sup> Other studies point out that most of the changes in the composition of the population have operated to decrease the worker rate (such as increased proportions of whites and married women—groups which have low worker rates), and that social-economic forces are the primary cause of changing proportions in the labor force. A study of changes from 1890 to 1930 shows that, if women 15 years of age and over only are considered, even the shifting age distribution has tended toward lower proportions of women at work, since women's worker rates begin to fall after the 20-24 year age group. See Wolfbein, S. L. and Jaffe, A. J. Demographic factors in labor force growth. American sociological review II, No. 4, August 1946. For a comprehensive study of the factors in the expansion of the labor force, in which an improved technique, multiple standardization, is utilized, see Durand, John D. The labor force in the United States, 1890-1960, New York, Social Science Research Council, 1948. 302 pp.

<sup>&</sup>lt;sup>3</sup> See discussion on p. 38.

In an article on "Married Women in the Labor Force," in the American journal of sociology for November 1946, Dr. John D. Durand concludes that "declining fertility has probably had a substantial effect on the percentage of married women in the labor force, but the increase in that percentage has been the result mainly of other factors."

#### TRENDS AMONG AGE GROUPS

Data since 1900 show that the upward trend in the proportion of women at work took place in spite of declining proportions of certain age groups in the labor force. Young girls and women over 65 were less frequently in the labor force in 1940 than in 1900, apparently reflecting the tendency toward longer schooling and the advent of retirement schemes. The upward trend for women was in contrast to the situation for men, who showed a decline in the proportion in the labor force from 1900 to 1940 as well as among the youngest and oldest workers.

There are in general three broad groups of the population who are outside the labor force—young people still in school, retired and disabled persons, and women engaged in their own The divergent work experiences of men and home housework. women become apparent early in the ages after 14 years. For the bulk of workers entry into the labor market normally occurs between 14 and 24 years of age. It is during the same age period that attendance at school usually ceases. For both boys and girls the proportion who are neither in school nor in the labor market is small at 14 years. For boys the proportion neither at school nor at work in 1940 showed a small but steady rise to 29 percent at 19 years, and then the proportion declined, as most of them entered paid work. For girls, on the other hand, the proportion rose fairly rapidly to 50 percent at age 19 and then continued a steady rise to over 60 percent at 24 years. In the ages from 25 to 64 all men, by and large, are in the labor force; the numbers of women withdrawing from the labor force to take up home housework more than counterbalance those entering the labor force in the early twenties, and the general tendency is for women increasingly to be concerned with other activities as they advance in years. The proportion of women 20 to 24 years who were in the labor force in 1940 exceeded that among women 25 to 44, which in turn was larger than that among women 45 to 64 years.

Though the whole working-life pattern of men and women in paid occupations differs markedly, differences have been narrowing since 1900. It is more common for women aged 20-24 to be in the labor force than for those in any other age group. In 1900 the proportion of all women 20-24 who worked was 32.1 percent, and in 1940 it was 45.6 percent. The corresponding proportion for men in the same age group was 91.7 percent in 1900, nearly three times as large as that for women, and 88.5 percent in 1940, somewhat less than twice as large as that for women. For men, on the other hand, a larger proportion of those aged 25-44 than

of those in any other age group were in the labor force. The proportion among all men 25-44 who worked, approximately 96 percent in 1900 and in 1940, was over five times as large as that for women (18.1 percent) in 1900, but this proportion was only about three times as large as that for women (30.6 percent) in 1940.

		Percent in the labor force in—		nt gainf <b>ul</b> kers in <u> —</u>
	1940	11930	1930	1900
Women, 14 years and over	25.7	23.6	24.3	20.4
14 to 19 years	19.0	22.8	22.8	26.8
20 to 24 years	45.6	41.8	42.4	32.1
25 to 44 years	30.6	24.6	25.4	18.1
45 to 64 years	20.1	18.0	18.7	14.1
65 years and over		7.3	8.1	9.1
Men, 14 years and over	79,7	82.1	84.1	87.7
14 to 19 years	35.4	40.1	41.1	63.6
20 to 24 years	88.5	88.8	89.9	91.7
25 to 44 years	95.6	95.8	97.4	96.3
45 to 64 years	89.4	91.0	94.0	93.3
65 years and over	42.2	53.9	58.3	68.3
1 Fetimated				

Important shifts in the age distribution of women workers have resulted from both the changing age composition of the population and the increases in the proportions at work in certain age groups. Women workers certainly cannot be said to have constituted in 1940 a group of temporary workers who did not continue at work beyond the younger age group. Increasingly women were continuing to work beyond the younger age group and at those ages which would enable them to make a contribution in the world of work on the basis of experience and maturity.

Many of the rising occupational opportunities from 1910 to 1940 were in fields for which employers preferred the younger woman, as in some of the less exacting clerical jobs. The growing need, however, for employment opportunities for the increasing proportions of women workers from 25 to 44 years of age and from 45 to 64 years of age is sharply delineated in the following figures.

	Percent distribution of women in the labor force in—		Percent distribution of women gainful workers in—	
	1940	11930	1930	1900
14 years and over	_100.0	100.0	100.0	100.0
14 to 19 years	10.7	15.3	14.9	24.1
20 to 24 years	20.7	22.3	22.0	23.3
25 to 44 years	46.9	42.4	42.6	36.2
45 to 64 years	19.6	17.7	18.0	13.7
65 years and over	2.1	2.3	2.5	2.7
1 Estimated.				

#### WHITE AND NEGRO WOMEN WORKERS

The increases in recent decades in the proportion of women at work occurred despite a drop in the proportion among Negro women who were workers. In 1920 over 42 percent of the Negro women 14 years old and over were gainful workers. By 1940 the proportion had dropped to 38 percent. Among white women, in contrast, the proportion rose from 1920 to 1940.

	Perc an	ent of wom d over in the	en 14 years old labor force1°
		White	Negro
1940		24.1	37.8
1930		22.3	42.5
1920		21.2	42.4

<sup>&</sup>lt;sup>1</sup> Figures for 1920 and 1930 are for gainful workers. At the 1910 census, 21.4 percent of white women 14 years old and over were gainful workers, and 57.7 percent of Negro women. Because of differences in definition and enumerative procedures the figures for that date may tend to distort trends and consequently have been omitted from the table.

#### RESIDENCE OF WOMEN WORKERS

Seventy years ago only 25.7 percent of the total population were in urban areas, whereas in 1940, 56.5 percent of all persons and 58.0 percent of females were so classified. Women living in urban areas are much more likely to be in the labor force than are those living in nonurban areas. For one thing, urban living requires money income to a far greater extent than is demanded on the farm. Of the women 14 years and over in 1940 nearly one-third of those in urban areas were in the labor force, compared to significantly lower proportions in rural nonfarm areas or in farm areas.

	Percent of populat and over in the	Percent of population 14 years old and over in the labor force <sup>1</sup>	
	Women	Men	
1940:			
Urban	31.2	79.6	
Rural-nonfarm	20.7	74.9	
Rural-farm	12.1	81.3	
1930:			
Urban	29.7	84.7	
Rural-nonfarm	19.0	80.0	
Rural-farm	13.5	85.8	
1 Diamenta for 1020 and for reducted and and			

<sup>&</sup>lt;sup>1</sup> Figures for 1930 are for gainful workers.

The lack of opportunity for young women in rural areas to find employment has been remarked on by observers in the past.<sup>5</sup> Long term differences between urban and rural areas are not available. The accompanying data give evidence that from 1930 to

<sup>&</sup>lt;sup>5</sup> See, for example, Hatcher, O. Latham. Rural girls in the city for work. Richmond, Va., Garrett & Massie, Inc., 1930, pp. 41-44; also [U. S.] Works Progress Administration, Division of Social Research. Research Monograph XV. Rural youth: Their situation and prospects. By Bruce L. Melvin and Elna N. Smith. Washington, U. S. Government Printing Office, 1938, pp. 28-29; and Sorokin, Pitirim A., Zimmerman, Carle C. and Galpin, Charles J. A systematic source book in rural sociology. Minneapolis, Minn., The University of Minnesota Press, 1932. Vol. III. p. 484.

1940, at any rate, the extent of women's labor force activity in farm districts remained limited.

#### CHANGES AMONG MARRIED AND SINGLE WOMEN WORKERS

Even in 1900 it was fairly customary for the single woman to assume economic responsibility for herself. The proportion of all single women 14 years old and over who were gainfully occupied was 40.9 percent in 1900, compared to the proportion in the labor force of 45.6 percent in 1940. (See Table 4.) Undoubtedly the increase is the result of counteracting factors; the general trend of increasing gainful employment among women tended to raise the proportion of single women at work, while the trend of longer schooling (most of the girls still in school are single) tended to lower it.

Table 4.—Number and Proportion of Women 14 Years Old and Over in the Labor Force or Gainfully Occupied, by Marital Status, 1900 to 1940.

The second secon		Women	in the labor force	e, 1940, or
		gainful	ly occupied, 1910	-1930
Marital status	Total women	Number	Percent of total	Percent distribution
1940 Total	50,549,176	12,845,259	25.4	100.0
Single	13,935,866 30,090,488 6,522,822	6,349,474 4,560,835 1,934,950	45.6 15.2 29.7	49.4 35.5 15.1
1930 Total	44,013,048	10,679,048	24.3	100.0
Single and unknown Married Widowed and divorced.	12,534,937 26,170,756 5,307,355	5,781,646 3,071,302 1,826,100	46.1 11.7 34.4	54.1 28.8 17.1
1920 Total	<b>36,19</b> 0,483	8,429,707	23.3	100.0
Single, widowed, divorced, and unknown	14,871,550 21,318,933	6,509,426 1,920,281	43.8 9.0	77.2 2 <b>2.</b> 8
1910 Total	30,959,473	7,788,826	25.2	100.0
Single and unknown Married Widowed and divorced	9,913,490 17,684,687 3,361,296	4,751,100 1,890,661 1,147,065	47.9 10.7 34.1	61.0 24.3 14.7
1900 Total	25,024,415	5,114,461	20.4	100.0
Single and unknown	8,381,996 13,810,057 2,832,362	3,424,543 769,477 920,441	40.9 5.6 32.5	67.0 15.0 18.0

Source: U. S. Department of Commerce. Bureau of the Census. 16th census of the United States: 1940. Population. Vol. III, The labor force. Part I, United States summary, tables 7, 9; Vol. IV, Characteristics by age. Part I, United States Summary, tables 5, 8. Washington, U. S. Government Printing Office, 1943.

General report on occupations, p. 272. Washington, U. S. Government Printing Office, 1933.

<sup>&</sup>lt;sup>1</sup> Women 14 years old were included with single in 1900 to 1930.

### 40 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

During the colonial period of this country's history, domestic manufactures within the home supplied many of the family needs not only for cloth and clothing but also for hardware, tools and implements, furniture, shoes, and bedding. Production of some of these things had left the home long before the Civil War. Constant inroads were made into whatever home production continued, such as baking, preserving, and the making of clothing for the women and girls of the family. These changes constantly lessened the economic role within the home of the housewife.

Today the family, particularly in urban areas, typically lives in rented quarters, buys its clothing, its baked goods and many other prepared foods, its household furnishings and equipment, and pays for much of its recreation. The living standards of the contemporary family constitute the very basis of the present industrial mass-production system, since wide markets are essential to it. The well-being of the family, in turn, depends more and more on the money income it receives, rather than on the industry of the housewife and of other family members in directly providing for family needs within the four walls of the home. This situation, primarily, lies at the root of the changes among married women workers, whose numbers multiplied nearly six times from 1900 to 1940 and who rose from about one-seventh to over one-third of all women workers. About 6 percent of all married women worked in 1900, compared to over 15 percent in 1940.

These changes indicate the increasing extent to which the industry of the country has depended on married women for its supply of women workers. They likewise point to the importance of married women's employment both to the welfare of their families and to the operation of an economy so highly developed as ours. The growth in the numbers of married women workers compels their recognition as a permanent part of the labor force.

Nevertheless, it should not be overlooked that single women workers still outnumbered married women more than 1 1/3 to 1 in 1940. Nor should it be forgotten that in 1940 between 8 and 9 out of every 10 married women in the population made their con-

<sup>&</sup>lt;sup>6</sup> Clark, Victor S. History of manufactures in the United States. New York, N. Y., McGraw-Hill Book Co. Inc., 1929, Vol. I, p. 92.

tribution to the family and to the economy in the time-honored pursuits of household arts, the care of children, and the furthering of family welfare in other less tangible ways.

The pattern of married women's occupational activities, as 1940 census data show, tends to differ to a noticeable extent from that of single women workers. Of all married women workers who were employed or seeking work in 1940, about 55 percent were in more or less routine manual jobs working as operatives or as domestic and other service workers. Clerical, sales, and kindred occupations, with 34.4 percent of the single women workers, accounted for 23.8 percent of the married women. Professional and semiprofessional workers formed 17.3 percent of all single women workers but only 8.5 percent of the married group.

In no major occupation group did married women constitute as much as a third of all workers. Their proportion was greatest in domestic service, in which 3 out of every 10 workers were married women, 4 were single women, 2 were widowed or divorced women, and 1 was a man. In 4 other major occupation groups married women were as much as 10 to 20 percent of the total workers, both men and women. These 4 consisted of professional and semiprofessional workers; clerical, sales, and kindred workers; operatives and kindred workers; and service workers in other than domestic and protective service.

In none of 76 occupations reported for women by the 1940 census were married women the majority of the total workers. In 6, however, they were the dominant group, exceeding each of the other groups—the men, the single women, the widowed and divorced women. These 6 fields included two occupations frequently carried on at home—boarding house and lodginghouse keeping and dressmaking (not in factory)—and work as laundry operatives and laundresses. The other 3 were groups of manufacturing operatives, engaged in the production of tobacco manufactures, of knit goods, and of apparel and other fabricated textile products.

<sup>&</sup>lt;sup>7</sup> Occupation data by marital status of women were presented by the Census only for the 76 occupations on the intermediate list.

# 42 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

There are considerably more occupations in which married women have an important share of that phase of the field carried on by women. In 15 of the individual occupations for women in 1940 married women were more than half of the women workers employed or seeking work in the occupation, as the following summary shows.

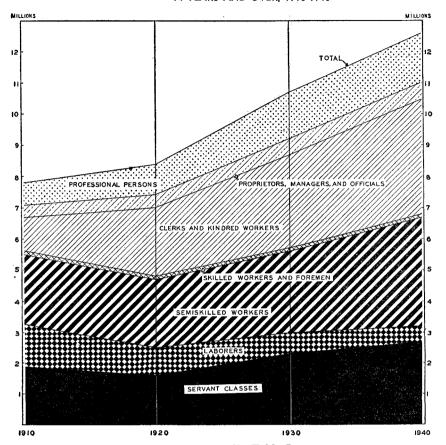
		were employed k (experienced)
	Total	Percent married
Operatives, cotton manufactures	176,826	65.7
Proprietors, managers, and officials, eating and	l	
drinking places	66,198	61.1
Operatives, tobacco manufactures	57,429	<b>58.4</b>
Operatives, woolen and worsted manufactures	59,016	57.0
Charwomen, janitors, and porters	79,167	56.4
Boarding house and lodginghouse keepers	100,895	54.6
Proprietors, managers, and officials,		
personal services	32,180	54.3
Proprietors, managers, and officials, other		
wholesale and retail trade	170,692	<b>54.0</b>
Cooks, except private family	124,532	52.9
Operatives, transportation equipment	29,947	52.7
Operatives, footwear industries (except rubber	)_ 97,217	52.3
Operatives, knit goods	122,491	51.9
Laundry operatives and laundresses	178,329	51.6
Operatives, other textile-mill products	50,332	51.5
Operatives, lumber, furniture, and lumber produc	ts 25,836	51.2

Numerically the leading individual occupation in 1940 for married women, as for single women, was that of domestic service worker. Second in importance for married women workers was the occupation of saleswoman. Married women also formed high proportions of all women workers in two groups of factory operatives (cotton and apparel), among waitresses, and among unpaid family workers on farms. In teaching and in three clerical occupations married women were numerous, though not a large percentage of all women in the field. In all, there were 10 occupations in 1940 each with over 100,000 married women workers. Together the married women in these 10 fields totaled nearly  $2\frac{1}{2}$  million, or 56.2 percent of all married women who were employed or who were experienced workers seeking work.

Number of married women who were employed or seek-ing work (experienced)

110 411	
Domestic service workers	739,195
"Clerks" in stores, demonstrators, and saleswomen	
(not elsewhere classified)	323,138
Stenographers, typists, and secretaries	255,988
Operatives, apparel and other fabricated textile products	229,787
Other clerical and kindred workers	203,808
Teachers (not elsewhere classified)	
(including county agents)	194,428
Waitresses and bartenders	159,979
Bookkeepers, accountants, cashiers, and ticket agents	153,150
Operatives, cotton manufactures	116,232
Farm laborers (unpaid family workers)	108,856

# CHART IV.—A SOCIAL-ECONOMIC GROUPING OF WOMEN WORKERS 14 YEARS AND OVER, 1910-1940



Source: Appendix Table I.

# III. TRENDS IN SOCIAL-ECONOMIC GROUPS, 1910 and 1940

To obtain a bird's-eye view of the general shifts in women's employment it is necessary to have a comparable series of figures for the major types of work over a period of years. Up through 1930 the Census had followed a procedure of grouping the occupations under a few major industrial groups, on the basis of the industry in which the occupation was usually followed. In 1940 a purely occupational arrangement was made, with the detailed occupations grouped in 11 major occupation groups. Approximate comparisons may be made between 1940 and earlier years of certain individual occupations. However, in numbers of instances exact comparisons between 1930 and 1940 occupations cannot be made, so that comparisons of major occupation groups in 1940 with earlier years is not possible. Nevertheless, indications of broad changes over the years do appear fairly clearly from comparisons of data for social-economic groups for 1910 to 1940.

#### SOCIAL-ECONOMIC GROUPS

Each of six social-economic groups into which the Census classified those in the 1940 labor force is a large, homogeneous group of workers who require similar qualifications for their work. Moreover, each of these is

"... a large population group with a somewhat distinct standard of life, economically, and, to a considerable extent, intellectually and socially. In some measure, also, each group has characteristic interests and convictions as to numerous public questions—social, economic, and political ..."<sup>2</sup>

Because the social and economic status of persons in a particular occupation are taken into account, the groups differ in composition from that of the major occupation groups of the census, used in other sections of this report, which are determined by the nature of the work performed. For example, hospital attendants, beauticians, and practical nurses are included in the social-

<sup>&</sup>lt;sup>1</sup> All 1940 data in this section apply to the occupations during the week of March 24-30, 1940, of persons at work or with a job, the usual occupations of experienced persons seeking work, and the usual occupations of public emergency workers. The usual occupation of persons seeking work and of public emergency workers is considered more suitable for comparison with previous censuses than the last occupation, which is the basis for the occupational classification in Part I. New workers, who had never held a job and consequently could not be classified by occupation, are not included; most of them were excluded from the figures on gainful workers reported in 1930 and earlier. See pp. 12 and 13 for discussion of the labor force concept.

<sup>&</sup>lt;sup>2</sup> U. S. Department of Commerce. Bureau of the Census. 16th census of the United States: 1940. Population. Comparative occupation statistics for the United States, 1870 to 1940. By Alba M. Edwards. Washington, U. S. Government Printing Office, 1943, p. 179.

economic group called "Semiskilled workers," while in the 1940 occupation classification they are grouped with "Service workers, except domestic and protective;" and advertising agents, store buyers and department heads, and purchasing agents are grouped, on a social-economic basis, with "Clerks and kindred workers," though the 1940 census occupation arrangement places them with "Proprietors, managers, and officials." In some instances economic factors, in others social characteristics, are decisive in the arrangement of the social-economic groups.

Two of the six broad social-economic groups have three subdivisions each, making a total of ten divisions in all. There are three groups of non-manual workers, including professional persons; proprietors, managers and officials; and clerks and kindred workers. The proprietor group is subdivided into farmers (owners and tenants); wholesale and retail dealers; and other proprietors, managers, and officials. The other three broad groups cover the manual workers, among whom three levels of skill are distinguished: skilled, semiskilled, and unskilled workers. Unskilled workers are subdivided into farm laborers, nonfarm laborers, and servant classes.

#### MAJOR SHIFTS IN WOMEN'S WORK

For women the primary change from 1910 to 1940, on the basis of the 10 social-economic groups, is the fact that the whitecollar group emerged to take a leading position in 1940. Women clerks and kindred workers, the fourth largest group in 1910, with 13.9 percent of all women workers, became the largest group in 1940, with 29.1 percent of all women workers. Those who were semiskilled formed about the same proportion of all women workers in 1910 as in 1940, but they dropped from first to second place. Also noticeable was the drop in the proportion who were among the servant classes (from 24.9 percent to 21.4 percent). The lessened importance of the servant groups among women workers doubtless reflects the trends away from the home of various activities and the tendency for women to seek jobs other than as servants. The proportion of women who were professional persons, a smaller group, showed a significant relative increase from 1910 to 1940. The declining importance of farm work among women is evidenced by the fact that smaller proportions of women were farmers and farm laborers in 1940 than in 1910. The drop among farm laborers is here exaggerated, however, because of an overcount in 1910 that affected the figures for women particularly. The broad trends are apparent from the following distributions:

wo	Percent distribut rkers 14 years ol	
	1940	1910
All social-economic groups	100.0	100.0
Clerks and kindred workers	29.1	13.9
Semiskilled workers	28.5	27.9
Servant classes	21.4	24.9
Professional persons	12.2	9.2
Farm laborers	2.7	16.4
Other proprietors, managers, and officials	1.6	0.7
Wholesale and retail dealers	1.4	0.9
Farmers (owners and tenants)	1.2	3.5
Laborers, except farm	1.0	1.4
Skilled workers and foremen	0.8	1.2

Noteworthy among the differences in the trends for men and women is the shift by women from manual to non-manual work, if the professional, clerical, and proprietor groups are considered non-manual workers, and the skilled, semiskilled, and unskilled groups are considered manual workers. Manual workers were almost three-fourths of all women workers in 1910, and non-manual workers were somewhat over one-fourth. In 1940 the two groups approached equal proportions, though the manual group were still a majority. Men, on the other hand, experienced no change in the proportions who were manual or non-manual workers, for about 60 percent of the men were manual workers at both dates:

Women:	$1940 \\ 100.0$	100.0
Non-manual workers	45.5	28.2
Manual workers		71.8
Men:	100.0	100.0
Non-manual workers	40.1	40.1
Manual workers	59.9	59.9

Among women declining proportions among manual workers arose largely from declining proportions among farm laborers and servant classes, while increasing proportions among non-manual workers represented increasing proportions in the clerical and professional groups. The division into but two groups conceals some significant shifts for men. The almost constant proportion of manual workers resulted from substantial decreases in the proportions of men who were unskilled workers (farm laborers or laborers except farm), offset by considerable increases in the proportion who were semiskilled and lesser increases in the proportion who were skilled. Likewise among the non-manual group the declining proportions who were proprietors, managers, and offi-

cials offset the growing proportions who were professional persons or clerks and kindred workers. (See Appendix Table I.) Farmers, the largest 1910 group for men, and farm laborers, the fourth largest, were no longer leading by 1940. The predominant social-economic classes of men, in order of size in 1940, were semiskilled workers, skilled workers (third largest in 1910), clerks and kindred workers, and nonfarm laborers (second largest in 1910).

#### RELATIVE GROWTH OF WOMEN WORKERS IN DIFFERENT FIELDS

The shifts from 1910 to 1940 in the distribution of women workers among social-economic groups make it evident that the new recruits flocked into certain fields, much more than into others. If agricultural workers are omitted from consideration,<sup>3</sup> there was a net addition to the country's work force of nearly 6 million women and over 11 million men, distributed among all non-agricultural social-economic groups. The relative increases in the various groups differed, as did the relative increases among women compared to those among men, indicating that some fields were particularly more favorable for women relative to others. (See Table 5.)

The largest proportion of the additional numbers of women workers (outside of agriculture) from 1910 to 1940 were clerks and kindred workers. This group showed a net increase of more than  $2\frac{1}{2}$  million women who formed just over half of the total net increase of 5 million men and women that poured in. The net effect was a rise in the proportion of the total workers who were women from 28.4 percent in 1910 to 41 percent in 1940. The rate of increase from 1910 to 1940 in the number of women clerks far exceeded that of women in the population. This was also true of men, but the field offered even more opportunities to women. For every 10,000 women in the population of 14 years and over, there were 374 more women clerks and kindred workers in 1940 than in 1910; for every 10,000 men the number was 226 higher in 1940 than in 1910.

The maturing of the industrial economy in the United States has increasingly required the services of many workers in specialized and technical types of work as well as in clerical and commercial fields. This is indicated not only by the increase in the number of clerical workers but also by the growth in the number of professional persons, whose numbers more than doubled from 1910 to 1940. The proportion of them who were women stood at

<sup>&</sup>lt;sup>3</sup> Farmers and farm laborers are omitted from subsequent discussion because the overcount of farm laborers in 1910 (estimated at 630,985 women 10 years old and over and 165,557 boys 10 to 15 years) tends to distort the picture.

about 45 percent at both dates, as there was a net increase of some 800,000 women and 900,000 men in this field in the interval.

Table 5.—Increase in Number of Nonagricultural Workers 1910-1940 and Percent Women of Total in 1910 and 1940, by Social-Economic Group

Increases in numbers 1910–1940		Percent increase 1910-1940		Percent women of total	
Women	Men	Women	Men	1940	1910
5,833,733	11,471,503	93.5	58.9	28.1	24.3
816,904	932,904	113.7	102.1	45.4	44.0
255,069	1,256,778	207.4	54.1	9.5	5.0
111,890	680,209	164.6	57.8	8.8	5.5
143.179	576,569	260.3	50.3	10.3	4.6
		238.1	93.5	41.0	28.4
7,079	1,733,922	7.3	40.6	1.7	2.2
1,406,948	4,022,049	64.7	121.4	32.8	39.6
773,640	980,478	37.8	16.5	28.9	25.6
24,257	80,279	23.0	1.5	2.3	1.9
749,383	900,199	38.6	152.0	64.3	76.6
10 500 500	15 101 000		-1-		48.1
	1910- Women  5,838,738 816,904  255,069 111,890 143,179 2,574,093 7,079 1,406,948 773,640 24,257	1910-1940  Women Men  5,833,733 11,471,503  816,904 932,904  255,069 1,256,778  111,890 680,209  143,179 576,569  2,574,093 2,545,372  7,079 1,733,922  1,406,948 4,022,049  773,640 980,478  24,257 80,279  749,383 900,199	1910-1940         1910-           Women         Men         Women           5,833,733         11,471,503         93.5           816,904         932,904         113.7           255,069         1,256,778         207.4           111,890         680,209         164.6           143,179         576,569         260.3           2,574,093         2,545,372         238.1           7,079         1,733,922         7.3           1,406,948         4,022,049         64.7           773,640         980,478         37.8           24,257         80,279         23.0           749,383         900,199         38.6	1910-1940         1910-1940           Women         Men         Women         Men           5,833,733         11,471,503         93.5         58.9           816,904         932,904         113.7         102.1           255,069         1,256,778         207.4         54.1           111,890         680,209         164.6         57.8           143,179         576,569         260.3         50.3           2,574,093         2,545,872         238.1         93.5           7,079         1,733,922         7.3         40.6           1,406,948         4,022,049         64.7         121.4           773,640         980,478         37.8         16.5           24,257         80,279         23.0         1.5           749,383         900,199         38.6         152.0	1910-1940         1910-1940         of te           Women         Men         Women         Men         1940           5,833,733         11,471,503         93.5         58.9         28.1           816,904         932,904         113.7         102.1         45.4           255,069         1,256,778         207.4         54.1         9.5           111,890         680,209         164.6         57.8         8.8           143,179         576,569         260.3         50.3         10.3           2,574,093         2,545,372         238.1         93.5         41.0           7,079         1,733,922         7.3         40.6         1.7           1,406,948         4,022,049         64.7         121.4         32.8           773,640         980,478         37.8         16.5         28.9           24,257         80,279         23.0         1.5         2.3           749,383         900,199         38.6         152.0         64.3

Source: Appendix Table I.

The economic developments of past decades have given rise not only to flourishing clerical and technical groups but also to a growing class of semiskilled workers. Technological advance tended to make semiskilled work more important relative to both highly skilled and extremely heavy types of work.<sup>4</sup>

In semiskilled fields women did not fare so well as men. While the largest part of the net addition of women to the non-agricultural work force from 1910 to 1940 were clerks and kindred workers, and the second largest part were semiskilled workers, most of the additional number of men were semiskilled workers, and the clerks were in second place. In 1910 two-fifths of the semiskilled workers were women. In the next 30 years the field was

<sup>&</sup>lt;sup>1</sup> U. S. Department of Commerce. Bureau of the Census. 16th census of the United States: 1940. Population. Vol. III, The labor force. Part I, United States summary, table 8. Washington, U. S. Government Printing Office, 1943.

<sup>&</sup>lt;sup>4</sup> See President's Research Committee on Social Trends. Recent social trends in the United States. New York, N. <sup>a</sup>Y., McGraw-Hill Book Co. Inc., 1933. Vol. I, Ch. XVI, Labor groups in the social structure, pp. 805-807. By Leo Wolman and Gustav Peck. For instances of the displacement of skilled workers and reference to the decline of the completely unskilled, see [U. S.] Works Progress Administration, National Research Project. Industrial instruments and changing technology. By George Perazich, Herbert Schimmel, and Benjamin Rosenberg. Report No. M-1. Philadelphia, Pa., October 1938, pp. 85-94; and [U. S.] Temporary National Economic Committee. Technology in our economy. By Lewis L. Lorwin and John M. Blair. Monograph No. 22. Washington, U. S. Government Printing Office, 1941, pp. 136-147.

entered by over 4 million additional men but under 1½ million women, causing the proportion of women to drop to one-third of the group. The percentage increase from 1910 to 1940 was larger for women in semiskilled work than in the other manual groups, but it still was below the increase for nonagricultural workers and only very slightly above the population increase for women. The number of men who were semiskilled workers grew at a rate over twice as fast as that of either the population or the nonagricultural workers.

Relative to the population and to other fields of work, skilled workers and foremen and nonfarm laborers were declining groups, even though both show absolute increases for men and for women. Women were but 7,000 of the 1,700,000 persons added to the group of skilled workers and foremen, dropping from 2.2 to 1.7 percent of the total. During the period as a whole from 1910 to 1940 the total net increase in the laborers' group was less than 105,000. Nearly one-fourth of these additional workers were women. Women thus rose slightly from 1.9 to 2.3 percent of the group.

The broad field of work in which women were losing out to men most markedly was that of servants. This group included not only private family servants but service workers in hotels, restaurants, and hospitals. Women were 64.3 percent of the servant classes in 1940, but 30 years earlier they had been 76.6 percent. Far from constituting three-fourths of the recruits, the nearly 750,000 additional women in this field from 1910 to 1940 were outrun by 900,000 additional men. For every 10,000 women in the population 14 years and over there were 627 servants in 1910, but only 532 in 1940, or 95 fewer. For every 10,000 men in the population 14 and over the number who were servants increased by 117.

Smallest of all the social-economic groups throughout the period from 1910 to 1940 were the wholesale and retail dealers and the other proprietors, managers, and officials. Each of these two groups grew from over 1 million to about 2 million. For women the dealer group grew from 2 to 3 times as fast as did women in the population 14 years old and over and considerably more rapidly than did all nonagricultural workers. The group of women classified as other proprietors, managers, and officials expanded four times as rapidly as women in the population and nearly three times as rapidly as women nonagricultural groups. The rapid growth in the number of women placed them in a more favorable position relative to men in both fields. Women dealers rose from 5.5 to 8.8 percent of all dealers from 1910 to 1940, and women who

were "other" proprietors, managers, and officials rose from 4.6 to 10.3 percent of the total.

In summary, four groups added women workers at a rate above the average increase in the total number of women nonagricultural workers—the two large fields of clerks and kindred workers and of professional persons, and the two small groups of wholesale and retail dealers and of "other" proprietors, managers, and officials. In all four of these groups women also had an increasing share of the field relative to men. The number of women in a fifth group, semiskilled workers, increased at a rate below average for all nonagricultural groups but slightly more than the population growth for women; the numbers of women grew much less rapidly than the numbers of men. Women in the servant classes and women skilled workers and foremen increased at a rate below that for all nonagricultural workers and for the woman population, and women became less important relative to men in these Nonfarm laborers were also a relatively declining group for women, though the slowing growth was even more marked for men than for women. Women semiskilled workers and women servant classes were declining groups in comparison with other social-economic groups and with men, but because of their large size these two groups still absorbed considerable numbers of women.

In some of the broad groups it appears that the trend in the labor force from 1910 to 1940 has been due to general underlying economic causes that have affected men and women alike, though to differing degrees. In other areas, the changes have apparently affected the women workers differently from the men, absorbing increasing proportions of the population of one sex and declining proportions of the other. The servant classes, for example, constitute a relatively expanding field for men in the population and a relatively declining one for women. The group designated as other proprietors, managers, and officials, on the other hand, has offered increasing opportunities to the women in the population. but it has afforded relatively dwindling outlets for men. This does not necessarily mean that one sex is now doing work formerly performed by the other, though undoubtedly there are many instances where technological and social changes have operated to bring this about. It may indicate rather that there has been a relative decline in the need for workers in that part of an occupational field usually undertaken by one sex, or a relative expansion in the demand for the products and services usually produced by the other.

# CHART V.—THE LEADING 10 OCCUPATIONS OF WOMEN WORKERS, 1870-1940 In order of size, and as reported in each census regardless of changes in definition

1940 1930 1920 1910 1900 1890 1880 1870 ; RANK I, 2. Teachers (school) Téachers (schlool) 3. Tenchers (no elsewhere classified) 4. 5. 6, 7. Bookkeeper accountant B coshiers 8. 9 Cooks 10. Source: Decennial Census, 1870-1940

### IV. THE OCCUPATIONAL PROGRESS OF WOMEN

### CENSUS TECHNIQUES AS A RECORD OF OCCUPATIONAL CHANGE

The arrangement of occupational data on a comparable basis from one census to the next is in general a primary need in tracing developments over the years. At each census a compromise must be made between the need for data comparable with the past and the desire to make improvements that will give better information about the population and its characteristics than had been previously obtained. Something can be learned, therefore, about the developing importance of women's work from the history of census plans and procedures. Something can be learned also about trends in occupations from changes in the occupational titles in the census, even without regard to differences in meaning and content of the titles from one census to another.

#### HISTORY OF CENSUS DATA ON WOMEN'S OCCUPATIONS

The year 1870 marks the beginning of published census reports on the number of women at work in the various occupations. This was not, however, the first time that women workers had been enumerated. In 1820 and in 1840 the number of persons of both sexes in each family engaged in certain classes of work was obtained in connection with the population census, and the total numbers in these groups were published but not separate numbers of men and of women. In 1850, when occupational data were first obtained on an individual rather than on a family basis, the questions were limited to free male inhabitants over 15 years of age. At the next census information was sought on the nature of the work done by both men and women over 15 years of age, but the published report did not give the data separately for each sex.

The census of 1870, milestone though it was, met with criticism in regard to certain errors and discrepancies and to its omission of the woman performing unpaid work in her own home, an individual who went unrecognized until the 1930 census reported numbers of "homemakers." After the 1870 census, officers of the Association for the Advancement of Women requested Congress, in legislating for the next census:

<sup>&</sup>lt;sup>1</sup> [U. S.] Department of the Interior. Census Office. [11th census of the United States: 1890.] Report on population of the United States at the eleventh census: 1890. Part II, pp. lxxv, lxxvi. Washington, [U. S.] Government Printing Office, 1897; and [U. S.] Department of Commerce and Labor. Bureau of the Census. [12th census of the United States: 1900.] Special reports. Occupations at the twelfth census, pp. xxix-xxxi. Washington, [U. S.] Government Printing Office, 1904.

"to make provision for the more careful and just enumeration of women as laborers and producers; for a record of the wages of men and women in all occupations; . . . and

"We further pray that you will enact such laws or amendments as may be requisite to secure the employment of a fair ratio of suitable women as collectors of the centennial census."

From 1870 to 1930 the general plan of the census was an occupational classification grouped into several broad industry groups, according to the industry in which an occupation was most commonly pursued. Throughout the early period, from 1870 through 1900, the arrangement was substantially on a comparable basis. In 1910, for the first time, separate spaces were arranged on the schedule for occupation and for industry. The resulting classification was the basis of reports from 1910 through 1930. Another fundamental change was made in 1940 when 11 major occupation groups were substituted for the industrial divisions which previously formed the framework of the classification. The total 451 occupational titles listed by the census in 1940 represented 221 distinct and separate occupations and 230 industrial subdivisions of 5 separate occupations. The major revisions necessitated considerable regrouping, and, even through the periods when occupation information was substantially comparable, it was necessary for the Census Bureau to do a certain amount of regrouping for any analysis of trends.3 With the increasing number of persons in the labor force it would be anticipated that more individual occupations would be distinguished as time went on.

	Total number of occupations1	Average number of women per occupation
1940	451	29,446
1930	<b>534</b>	21,334
1920	572	16,083
1910	428	19,337
1900	303	18,093
1890	<b> 21</b> 8	18,630
1880	265	12,143
1870	338	7,318
<sup>1</sup> Includes occupations in which no women were employed.		•

<sup>&</sup>lt;sup>2</sup> Senate Misc. Doc. 45th Congress, 2d Session, No. 84. Serial No. 1786, vol. 2.

<sup>&</sup>lt;sup>3</sup> Rather extensive shifting was required to bring data for 1870-1900 into conformity with the 1910 classification. For example, in 1910 several major groups were created that had not been separately classified in 1900 (mining, transportation and communication, trade, public service, and clerical occupations); individual titles belonging in these fields had to be brought together from almost every one of the previous major groups. Shifts to enable comparisons of 1920 and 1930 data, on the other hand, were minor in nature, such as the transfer to transportation and communication of aeronauts (from professional service) and of postmasters (from public service).

but the opposite has been true since 1920. At the same time, the average number of women in each occupation has become larger.

At every census there have been a number of fields of work in which no women were reported. Changes in the total number of such occupations cannot be taken, in themselves, as a measure of the expansion or contraction in the kinds of work women do. The nature of the occupational classification, the procedure followed during census enumeration, and the elimination of misclassifications during later stages of the tabulation affect the trends. From 1910 through 1930, for example, there appears to be a decreasing number of occupations in which no women at all were employed (43, 35, and 30, respectively). However, if the classification is placed on a comparable basis, the number of occupations not followed by any women declined from 39 in 1910 to 23 in 1920 and then rose to 30 in 1930.4 In 1940 only 9 occupations were so clearly closed to women that the Census Bureau reclassified those women who may have been erroneously reported as following these occupations. Undoubtedly there may have been other occupations with no women or fewer women than were actually reported. Census Bureau was of the opinion in 1940, however, that even had a detailed check been made of all questionable occupation returns for women, doubt would not have been eliminated on the occupation of some women, who either may have been actually engaged in an occupation unusual for women or may have been misclassified.<sup>5</sup> This opinion, in itself, reflects in part the relatively limited restrictions on the scope of women's activities in recent years, compared to 1870 when there were no women reported in over onefifth of the occupational designations then in use.

	Occupati	ions with n reported
	no women at specifi	n reported
1940	-···	Q CONSTRA
1930		30
1920		35
1910	A	43
1900		9
1890		3
1880		47
1870		76

<sup>&</sup>lt;sup>4</sup> U. S. Department of Labor. Women's Bureau. The occupational progress of women, 1910 to 1930. By Mary V. Dempsey. Bulletin 104. Washington, U. S. Government Printing Office, 1933, p. 38.

<sup>&</sup>lt;sup>5</sup> U. S. Department of Commerce. Bureau of the Census. 16th Census of the United States: 1940. Population. Vol. III, The labor force. Part I, United States summary, p. 9. Washington, U. S. Government Printing Office, 1943.

#### LEADING INDIVIDUAL OCCUPATIONS AT EACH CENSUS

A list of the ten occupations most important numerically for women in each census year from 1870 to 1940 gives some indication of the nature of women's work over this period, even though the (See Chart V.) Occupations fields are not entirely comparable. on these lists, taken from the census exactly as they are stated without regard to change in meaning and content, are indicative of changes in major fields of work arising from developments in technology and production methods. For example, tailoresses and dressmakers were important in the early years of the period, but then they disappeared from among the leading occupations. their place in 1940 were the mass production occupations of the clothing industry. Agricultural laborers occupied a prominent position at the start but gradually dropped in importance and finally no longer occurred among the leading ten occupations, reflecting the shift to an industrial and urban culture. Beginning in 1900, when saleswomen first appeared on the list of the ten leaders, there was a rise in importance of clerical and sales occupations. By 1940 four such occupations were in the top group, as business and commercial activities reached a highly developed stage. Only servants, teachers, and nurses were among the leading groups of women workers both in 1870 and 1940, illustrations of the fact that certain types of activity for women tend to persist even through periods of great development.

The changes in these lists do not necessarily reflect the decline or rise of an occupation field, though such may be true in some In general the lists indicate which occupations were instances. outstanding for women in the particular industrial milieu of the time, but the lists also may reflect the extent to which occupational development permitted specialized activities to be segregated from a general field or perhaps merely improvements in census methodology. The differences in classification may be consider-For example, before 1900 the classification called nurses comprised all those women in the nursing field—trained nurses, midwives, practical nurses, and probably even nursemaids to a considerable extent—while in 1930 and in 1940 this occupational title was restricted to those who were student and graduate nurses. Millinery, dress, and mantua makers were important in 1870, but this combination was not used at all in later censuses. attempt were made to obtain a comparable group in later years, it is very likely that such a group would have been prominent for some time following. The method of carrying out various censuses has also affected such lists. In 1910, for instance, the in

structions to enumerators concerning agricultural laborers were especially liberal and served to bring in a great many women who were not included at other periods. Consequently, agricultural laborers on home farms took first place among women workers in that year, owing to the fact that their numbers were much higher than they would have been on a comparable basis with other years. In this particular instance an exception was made to the general practice of considering occupations exactly as reported, and an adjusted figure was used in compiling the list for 1910.

The occupation of servants, by whatever title described, was first in point of numbers in every year. In 1930 and 1940 the occupational title was limited to household workers, in contrast to the more inclusive grouping in earlier years. Nevertheless this individual occupation still remained the most important numerically for women.

Other occupations rather closely related to the servant field appeared toward the bottom of the lists of leading fields of work at various dates. Cooks, who had previously been included with servants, were seventh in importance in 1910, ninth in 1920, and tenth in 1930. Women housekeepers and stewards were first shown as a group in 1890 and were ninth in size, both at that census and the following one. Previously stewards and stewardesses were reported separately in the census, but housekeepers were probably largely classified as servants. After being lost from among the leading fields, housekeepers and stewards (private family) reappeared in ninth place in 1940. In 1940 waitresses (except private family) were eighth on the list. waitresses are the employees of hotels and restaurants (not clerks), who were in tenth position in 1880. From 1870 to 1910 laundresses evidenced a rise in their relative position among the leading fields of work for women. The general group of laundresses was in seventh place in 1870. Laundresses (not in laundry), a group that excluded the growing numbers of laundry workers in commercial establishments, was in third place in 1910. The increased tendency for families to patronize commercial laundries or to do their own laundry at home with the aid of mechanical washing machines undoubtedly is related to the subsequent fall of this group to sixth place in 1920 and to eighth in 1930.

Women agricultural laborers were in second place from 1870 through 1910. This occurred even though in 1900 and in 1910 the classification was less comprehensive than at previous censuses. In 1900 and 1910 the classification included only farm laborers (members of family), that is, unpaid family workers on

747639° -- 48 -- 5

farms, whereas previously all agricultural laborers had been included in one group. The trend from 1910 on records the decline of agriculture in the national economy, greater mechanization on the farm, and the decrease in numbers of small, family-size farms. In 1920 unpaid farm family workers were the third largest group of women workers, in 1930 the sixth, and in 1940 they had dropped out of the picture of leading occupations. Women agricultural wage workers, who were in seventh place in 1900, rose to sixth in 1910, and after that were no longer among the first ten occupations of women. Women engaged as farmers and planters (and, in 1890, as overseers) grew in importance from 1870 through 1890, rising from ninth to fifth place. Then this group too receded, dropping to sixth place in 1900, ninth in 1910, tenth in 1920, and subsequently it no longer appeared among the leading fields. for the first time, in 1940 no agricultural occupation was among the largest fields for women.

Traditionally the weaving of textiles and the making of clothing has been women's work. Whether clothing was made by skilled craftsmen or whether, as now, it is produced in the factory, this work has always been important to women. From 1870 through 1910 the occupations shown variously in different census years as those of tailoresses and seamstresses, of milliners, dressmakers, and seamstresses, or of dressmakers and seamstresses (not in factory), and so forth ranked among the leading fields of women's work.

The shifts in designation, in themselves, indicate that the lines between the various groups of clothing workers were not clear cut and were gradually shifting. Up through 1910, however, one or more of the fields was among the top ranking occupations at each census. Then, owing to increasing use of ready-made clothing, the hand trades dwindled in importance and disappeared from the list. In 1940, however, operatives and kindred workers in apparel and accessory factories were brought together in one group. At that time they formed the sixth largest group.

Since 1890 no group of textile workers has been among the leading ten occupations for women, possibly owing to the use of rather detailed distinctions according to type of fiber involved. Both cotton operatives and wool operatives were among the first ten in 1870 and 1880, cotton in sixth place at both periods, and

<sup>&</sup>lt;sup>6</sup> See Baker, O. E. Agricultural and forest land, The trend in land utilization, in Recent social trends in the United States, Vol. I. New York, N. Y., McGraw-Hill Book Co. Inc., 1933, pp. 108-118.

wool dropping from eighth to ninth. In 1890 cotton mill operatives formed the eighth largest group of women workers and after that were surpassed by other types of workers.

The rising field of clerical work was heralded by the emergence, in 1890, of clerks and copyists in tenth place. The successive appearance, among the leading occupations, of saleswomen in 1900, of stenographers and "typewriters" in 1910, and of "other" clerks as well as of bookkeepers and cashiers in 1920 mark the onward advance of clerical and sales work. All of these occupations were still important at the latest census, when stenographers, typists, and secretaries formed the second largest group; clerical and kindred workers (not elsewhere classified) the fourth; saleswomen the fifth; and bookkeepers, accountants, and cashiers the seventh.

The teaching profession stands out as an occupation that has appeared among the first ten at every census, and one that is more important now than in the early period. In fifth place in 1870, it was consistently in fourth place for the next four decades. In 1920 and in 1930 it was second only to servants, and in 1940 it was third, with servants in the lead, followed by stenographers, typists, and secretaries.

Only one other professional field has been among the primary occupations of women. Nurses, including trained nurses, practical nurses, or nursemaids, formed the tenth largest group of women workers in 1870. In 1930 and 1940, after a long gap, they again appeared in ninth and tenth places, respectively, despite the fact that the occupation name was reserved for student and registered graduate nurses.

The number of women in the ten leading occupations as reported at each census increased from 1870 to 1940. At the same time the proportion the women in these leading fields constituted of all women workers showed a general downward trend. On the surface it would seem to indicate a lessening of the tendency for women workers to concentrate in a few large fields. Undoubtedly also it reflects greater refinement in census classifications and greater diversity in the economic enterprises of the Nation. The figures, which should be considered in the light of the fact that they are not derived from comparable classifications, are as follows:

	Number of women in 10 leading occupations at specified census	Percent of all women in the labor force or gainfully occupied
1940	6,964,547	53.5
1930	5,857,390	54.5
1920	4,543,630	52.6
1910	4,368,543	<b>58.7</b>
1900	3,630,549	68.3
1890	3,029,816	75.6
1880	2,285,268	86.3
1870	1,688,054	88.0

#### OCCUPATION NAMES THAT HAVE DISAPPEARED

Further indication of changes in the nature of work done by women may be found in the names of some occupations that were reported in early censuses but which are no longer important enough to appear in recent years. A considerable number of these appeared before 1900. Most of them are now parts of larger groups, and most can be traced by reference to the latest index to occupations used by the Census Bureau in coding individual jobs. Thus, though no longer identified separately, most of these occupations are no obsolete. Some, however, would be meaningless today if included in published lists. The mantua maker of 1870 is nonexistent today, though she may have modern counterparts. The hoop skirt makers and the daguerreotypist represent occupations whose products is no longer in demand.

Among the titles that have been merged are several having to do with agriculture; for example, apiarists, stock raisers, florists, gardeners, nurserymen and vine growers fruit growers milk farmers stock herders, and dairy women. Today these are included in general classifications of either farmers or farm laborers.

A number of other titles no longer published are parts of more inclusive occupational designations. For example, naturalists, once a separate occupation title, have become a part of a broader designation in the professional group. Bathhouse keepers, livery stable keepers, publishers of books, maps, and newspapers, intelligence-office keepers, and traders in provisions form parts of various occupations classed with proprietors, managers, and officials. Lathemakers, wheelwrights, gunsmiths, locksmiths, and bell hangers are no longer distinguishable from the more comprehensive craftsmen occupations of which they are a part. Card writers, and bundle and cash boys are parts of certain clerical and sales occupations. Woodchoppers, scavengers, whitewashers, steamboat women, canal-boat hands and boat-hands are now united with related types of work in the laborers' group.

The bulk of the occupations that no longer have separate designations are currently classified with operatives and kindred workers. Some of the workers whose occupations are no longer published were in various types of food production and are now

included with larger groups-macaroni and vermicelli makers, cheesemakers, oyster packers, brewers and maltsters, distillers and rectifiers, and bottlers and makers of mineral and soda water. Others were engaged in occupations now allocated to textile or apparel production—oil cloth makers; galoon, gimp, and tassel makers; and thread makers. At a period when textile products were more limited in variety and when clothing and furnishings were in general not ready-made, these occupations undoubtedly represented types of work sufficiently important or distinctive to be reported separately. Flax dressers, a separate group in 1870, now are lost among miscellaneous textile manufactures, evidencing the decline in relative importance of the linen industry in this country. The occupations of workers in various chemical industries-ink makers, glue makers, perfumers, shot, cartridge, and fuse makers, starch makers, salt makers, candle, soap and tallow makers, and charcoal burners—were individually reported before 1900. The chemical industry had not yet developed to the point where these were grouped together as a concerted activity.

Certain workers no longer receive special consideration due to the relative decreases in their numbers because of inventions and style changes. This may be true of umbrella and parasol makers and whip makers. Changes in transportation methods have eliminated carriage and wagon makers as a separate group; the use of many new and varied materials makes bone and ivory workers less important; and the widespread development of water systems makes the well-borer too rare to be classed separately at the present time.

For other workers the general title "operatives" replaced a more specialized designation, as factory methods replaced the hand work that set apart a group of workers in these early years. Representative of this trend are the basket makers, window shade makers, and wood turners and carvers, who gave way to operatives in wooden goods manufacturing; and the curriers, tanners, and leather finishers and morocco dressers of yesterday who became operatives in leather goods. The development of the metal and machinery industry has resulted in regrouping and combining women once reported separately as Brittania and japanned ware makers, nail makers, tool and cutlery makers, reed and shuttle makers, stove, furnace and grate makers. Other occupations that once seemed of significance but no longer receive special consideration include hair workers, gilders, mattress makers, comb mak-

ers, needle makers, screw makers, and mirror and picture frame makers.

#### OCCUPATIONAL POSITION OF WOMEN, 1910 and 19407

For 369 of the 451 occupational titles presented in the 1940 census, comparable 1910 data can be obtained for both the total number of workers and the women workers alone. In order to make the comparison some individual occupations had to be combined with others. When grouped as required for comparison, the number of occupations or occupation combinations is reduced to 252. In the 82 omitted occupations there were only 390,733 women in 1940, who constituted but 3.3 percent of the 12,161,333° women workers whose occupations were reported. Thus comparable data are available for almost all of the occupations and for practically all women.

#### OCCUPATIONS WITH NOTABLE GROWTH OR DECLINE

Among the 252 occupations or occupation combinations with comparable data for 1910 and 1940, were 14 in which the number of women increased in the 30-year period by more than 50,000. An examination of the 82 occupations listed in the 1940 census for which comparable 1910 data are not available indicates that probably there were no other fields among these 82 that could have increased by as many as 50,000 women. To only one of the omitted occupational titles were more than 50,000 women allocated in 1940—operatives in miscellaneous manufacturing industries, with 60,708 women—and this title did not represent a single industry. Undoubtedly the number of women in this field in 1910, had it been possible to obtain a comparable grouping, would have been large enough so that the increase from 1910 to 1940 would have fallen short of 50,000.

The occupations with exceptionally large increases fall into 6 major occupational groups. In the professional field were teachers (not elsewhere classified), nurses, and religious, social, and

<sup>&</sup>lt;sup>7</sup> All 1940 data in this section, except where otherwise specified, apply to the occupations during the week of March 24-30, 1940, of persons at work or with a job, the usual occupations of experienced persons seeking work, and the usual occupations of public emergency workers. The usual occupation of persons seeking work and of public emergency workers is considered more suitable for comparison with previous censuses than the last occupation, which is the basis for the occupational classification in Part I of this report. New workers, who had never held a job and consequently could not be classified by occupation, are not included; most of them were excluded from the figures on gainful workers reported in 1930 and earlier. Data for 1910 have been adjusted for comparability with 1940; see Appendix Tables IIA and IIB, footnote 3. See also pp. 12 and 13 for discussion of differences between the labor force and gainful workers.

<sup>&</sup>lt;sup>8</sup> From the 12,574,078 women in the experienced labor force, 441,245 with occupation not reported have been omitted, because such a group was not included in the 1910 census; in addition an estimated total of 28,500 girls 10 to 13 years of age were added to newsgirls, farm laborers (wage workers), and farm laborers (unpaid family workers) because these occupations were significantly affected by the 1940 limitation to those 14 years old and over.

welfare workers. In clerical, sales, and kindred occupations major increases occurred among stenographers, typists, and secretaries (whose numbers increased more than in any other occupation); saleswomen and related workers; bookkeepers, accountants, and cashiers; "clerks" in stores; and telephone operators. In the operative group large expansion for women took place in the apparel, the electrical machinery, and the knit goods industries. The managerial, the domestic, and the personal service fields each had 1 occupation among the 14 in which the number of women had increased by more than 50,000—proprietors, managers, and officials in eating and drinking places; cooks, waiters, and other servants; and barbers, beauticians, and manicurists.

These sizable increases in certain fields are signposts of some very significant trends in women's occupations. They are symbolic of the greatly expanded opportunities connected with record-keeping, communication, and other indirect aspects of industrial production, and with distribution; of the continuing transfer from the household of such functions as education, care of the sick, making of clothing, and the increased requirements for these services with continued population growth; and of the development of entirely new cultural traits due to style trends or new inventions, such as widespread use of cosmetics, of sheer full-fashioned hosiery, and of electrical machinery and appliances.

The occupations or occupation combinations in which more than 50,000 women were added from 1910 to 1940 were as follows:

Stenographers, typists, and secretaries; shipping and receiving clerks; clerical and kindred workers (not elsewhere classified); and office machine operators.  Cooks; housekeepers, stewards, and hostesses; servants; and waitresses.  Buyers and department heads, store; canvassers and solicitors; traveling salesmen and sales agents; attendants, filling station, parking lot, garage, and airport; and	1ncrease 1910–1940 1,476,389
saleswomen (not elsewhere classified)	372,756
Apparel and accessories, operatives	343,052
Teachers (not elsewhere classified)	325,400
Bookkeepers, accountants, and cashiers	286,658
Trained nurses and student nurses	286,389
Barbers, beauticians, and manicurists	195,834
"Clerks" in stores	108,843
Telephone operators	108,800
Religious, social, and welfare workers	65,800
Electrical machinery and equipment, operatives	58,940
Knit goods, operatives	58,341
Proprietors, managers, and officials:	/
Eating and drinking places	53,497

At the same time that some women's occupations were showing phenomenal growth, others declined by considerable numbers. It seems probable that all occupations that had declined by more than 10,000 appear among the 252 comparable occupations or occupation combinations. This is evidenced by the fact that practically all gainfully occupied women in 1910 are included in the 252 occupations or occupation combinations. Only 50.498 of all women gainful workers in 1910 could not be distributed among the 82 occupational titles of the 1940 list that had to be omitted from the comparison. Furthermore, an examination of the titles of these 82 occupations does not lead one to believe that any of them would have showed large declines. They include, for example, laboratory technicians, photographic process workers, operatives in rayon manufacturing and in scientific and photographic equipment factories, hospital attendants, and other fields known to have been undergoing rapid growth in recent years. They also include highly skilled or heavy occupations in which the use of women has never been customary, such as those of blacksmith, machinist, porter, automobile repair service operative, and operative or laborer in petroleum and coal, in nonmetallic mineral products, in ship and boat building. In fact the number of women in the whole group of omitted occupations was nearly eight times as large in 1940 as in 1910.

Among the 252 occupations of women included in the comparison, 11 declined by more than 10,000 from 1910 to 1940. The most significant trend is the decline in the hand trades, which represents a long-time trend in American economy and is demonstrated by the drop in numbers of women dressmakers and tailoresses; of women proprietors, managers, and officials, dealing with various items of clothing and general merchandise (most of whom were milliners); and of miscellaneous apprentices (most of whom, among the women, were apprentices to dressmakers, tailoresses, and milliners). The decrease among laundresses likewise reflects the replacement of hand by machine methods, both in the commercial laundry and in the rise of the home washing machine. Mechanization also played an important part in the drop among tobacco operatives.

The largest decrease for women occurred among farm laborers. This drop and that among women who were farmers evidence the trend toward urban living and the decline in agriculture.

The amounts of decrease in the foregoing and in other occupations that declined by more than 10,000 women from 1910 to 1940 were as follows:

	Decrease 1910–1940
Farm laborers	
Dressmakers and seamstresses (not in factory)	
Laundresses and laundry operatives	223,074
Farmers (owners and tenants)	119,895
Proprietors, managers, and officials: General merchandise, apparel and accessories, and shoe stores; milliners (not in	
factory)	81,293
Boarding house and lodginghouse keepers	40,141
Tailoresses	24,280
Musicians and music teachers	18,222
Tobacco manufactures, operatives	13,909
Machinists' apprentices; apprentices, specified trades (not	
elsewhere classified); apprentices, trades not specified	12,650
Practical nurses and midwives	11,608

#### OCCUPATIONAL CONCENTRATION OF WOMEN

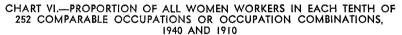
Whether the concentration of women workers in a limited number of occupations is diminishing and, if so, to what extent, are questions of considerable interest. It is certain that some specific types of work are more suitable for the average woman than others. Women's lesser physical strength, their special aptitudes for work requiring particular types of skill, and the continuing effects of traditions based on the division of labor between men and women from time immemorial have served to direct women's capabilities into some occupational lines rather than into others. In addition, theoretical ideas on what is proper for women to do, prejudices, and various artificial limitations have contributed to channeling them into particular fields of work. The lower wage level of women has led, in some areas of employment, to the extension of their opportunities because women were used as a cheap labor supply, and in other areas it has limited their progress, as men workers were able to prevent the introduction of women. At the same time, the competition among women within those fields open to them is thought to have kept their wages at a lower level.

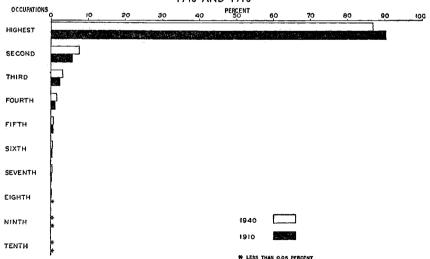
On the other hand, the growing numbers of women at work and the wider acceptance of the fact that many women need to work have tended to lessen to a marked degree the suspicion and doubt formerly evoked whenever a woman undertook a new type of work. Furthermore, the experience of two world wars has demonstrated conclusively the ability of women to perform a wide variety of jobs in a wholly competent manner.

The 252 occupations for which comparable data for 1910 and 1940 are available were arranged in numerical order according to the number of their women workers in each of these 2 years.

If the occupations as thus ranked in order of size are divided into 10 groups, each with an equal number of occupations, it will be seen that the top tenth of the occupations or occupation combinations in 1940 included 86.7 percent of the women reporting occupations. (See Chart VI.) In 1910 the first tenth of the occupations or occupation combinations, as ranked in that year, included 90.2 percent of the gainfully occupied women. The conclusion that can be drawn from this distribution is that women still were heavily concentrated in the largest women's occupational fields in 1940, though not quite so extremely as in 1910.

Furthermore, the spreading of women's employment has been within the first half of the occupations in which women were engaged, rather than into the lower-ranking occupations. The second through the fifth groups of ranked occupations, composed of those ranging in size from approximately 2,000 to 60,000 women in 1940, included 12.7 percent of the women workers. The corresponding groups in 1910, composed of occupations ranging in size from approximately 1,000 to 30,000 women, included 9.4 percent of the women workers in that year. Thus the decline in concentration in the highest tenth was made up by an intensified clustering of women in the remainder of the highest half of the ranked occupations in 1940.





Source: Appendix Table IIA.

In the smallest 126 occupations in 1910 there were only 0.4 percent of all women workers; by 1940 the 126 smallest women's occupations still had only 0.7 percent of the women. Though, in terms of aggregate numbers, the shift to these smallest fields appeared of slight consequence, the total number in these fields more than doubled in the 30-year period, a much greater rate of increase than in the highest half of the occupations, which increased by only a little over a half.

# WOMEN'S OCCUPATIONAL CONCENTRATION RELATIVE TO MEN

Another aspect of the question has to do with changes in degree of concentration among women relative to men. It might be that the slightly decreasing tendency for women to concentrate in the highest tenth of the occupations and their dispersion into some of the succeeding groups of occupations still left them segregated in "women's work" to the same extent in 1940 as in 1910. This might indicate merely that, although the economy has more diverse requirements now than formerly, the broadening opportunities were more numerous in fields in which women usually work. On the other hand, it might be that the somewhat lessened concentration of women involved a shifting of women into "men's occupations," and of men into "women's occupations," so that the occupational structure of the labor force of men and women showed greater similarity at the end of the period.

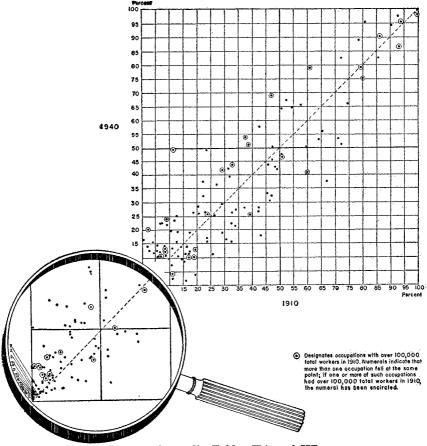
In Chart VII the proportion women constituted of the total workers in each of 246 comparable occupations or occupation combinations in 1910 has been correlated with the corresponding 1940 proportion. Occupations in which women were less than 0.5 percent of the workers, both in 1910 and in 1940, have been omitted. Each point on the chart represents one occupation or occupation combination, unless there is a figure beside the dot, indicating that it represents more than one. The proportion of women among all workers in 1940 is plotted along the vertical axis and the proportion in 1910 along the horizontal axis.

If the chart is considered to be divided by the intersection of the 50-percent lines into fourths, it will be observed that most of the points fall in the lower left quadrant of the chart; that is, in most of the occupations women were less than half of the workers both in 1910 and 1940. However, the grouping of a number of points in the upper right quadrant indicates that in an appreciable number of occupations more than half of the workers were women both in 1910 and in 1940. Few points appear in the upper left or the lower right quadrants, since it was seldom true that an occupation with women predominating in 1910 tended to have a minority of women in 1940, or vice versa.

If the proportion for each occupation or occupation combination were exactly the same in 1910 and in 1940, all the points would fall on the diagonal line shown on the chart. Instead, as was to be expected, the points scatter somewhat above and below the line. In general the points above the line are somewhat more numerous than those below. The proportion of women among all workers increased from 1910 to 1940. The chart indicates that this increase arose from an upward trend in the proportions of women in many of the occupations, rather than from exceptional increases in a few particularly large occupations.

The upward trend is not equally marked in all sections of the chart, however. Among the occupations in which more than three-fourths of the workers were women in 1910, the number of CHART VII.—PROPORTION OF ALL WORKERS WHO WERE WOMEN IN EACH OF 246 COMPARABLE OCCUPATIONS OR OCCUPATION COMBINATIONS

Proportion in 1940 related to corresponding proportion in 1910

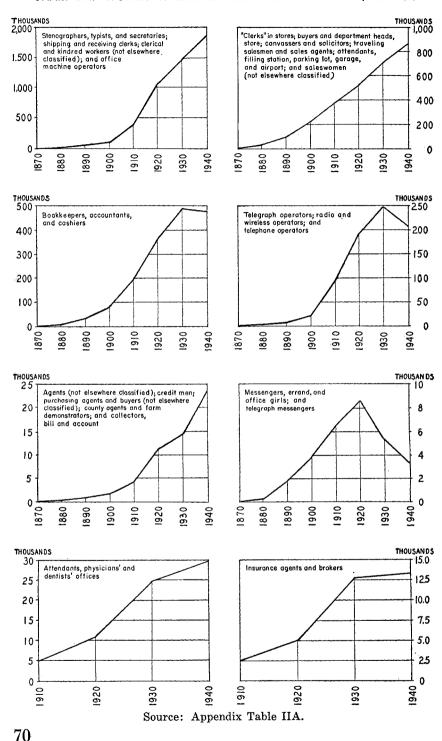


occupations showing advances in the proportion of women approximately balanced the number showing declines. Thus women may be said to have maintained their position in the fields that were overwhelmingly "women's work," though this conclusion is subject to the qualification that more of the occupations showing declines in proportion were among the very large occupational fields.

Among the occupations with 10 to 75 percent women in 1910 the proportion of women showed a drop in more fields than it showed an increase in the 30-year period from 1910 to 1940. These fields may be considered as being open to both sexes. (Since women were only about one-fifth of all workers in 1910, occupations with as low as 10 percent women may be included with those offering opportunities to women.) In this middle section of the chart, the fields in which men advanced outnumbered those in which women advanced. Even more significant is the fact that the broad band in which the points lie in this section of the chart is in general parallel with the line of no change, and that points representing fields of considerable total size also tend to be distributed both above and below the line, parallel with it. broad band shows no noticeable tendency to shift toward a position parallel with the horizontal axis of the chart, which would happen if women's occupational pattern in these fields, which tend to be the ones adapted to either sex, were becoming more like men's.

Still another pattern appears in the group of occupations in which less than 10 percent of the workers were women in 1910. In this group the points above the diagonal line considerably outnumber those below it, and more of the points representing large occupational fields are above the line. (Some of these points represent several separate occupations, as the small digits beside the dot indicate.)

Women thus showed a tendency (1) To infiltrate into the occupations that in 1910 had relatively few women; (2) To maintain, at the same time, their position in the fields where very large proportions of women had already been accepted in 1910, though to a greater extent in the small than the big fields; and (3) To exhibit little diminution of segregation in fields apparently adapted to workers of either sex. As a whole, there appears to have been a slight tendency among women workers toward an occupational distribution more like that of the entire labor force. What might be called the single-sex occupations appear to have offered somewhat greater opportunities to the minority sex, particularly when the size of the occupations is roughly taken into account.



# V. CHANGES IN INDIVIDUAL OCCUPATIONS OF WOMEN. 1870-1940<sup>1</sup>

The broad outlines of the developments in women's occupational history obscure many of the various tendencies in particular occupations. Usually, however, the need is for information on variations in a specific field: What are the past trends and the present position of women working, for example, as shoe operatives, as insurance agents, as bookkeepers, as nurses? The development of women's employment in almost every one of the hundreds of occupations listed in the 1940 census might well be the subject of a separate monograph, and many individual occupations have been.

In this section the discussion and analysis of the trends in particular occupation are given only briefly, and the relationship of the more significant changes to social and economic forces is suggested rather than described in detail. No attempt has been made to exhaust the various possible measures of changes in each occupation, as the plan followed has been to analyze the occupations important for women more fully than the smaller fields.

The individual occupations are discussed under several broad occupation groupings. However, a specific occupation may have combined with it certain minor occupations belonging in another general group, in order to achieve greatest possible comparability over the years. Separate discussion of a minor occupation thus grouped is presented in connection with the broader field with which it has been combined, rather than in the general group in which the census actually classified it in 1940. Comprehensive data for all occupations are shown in Appendix Tables II A and II B.

# THE ADVANCE OF WHITE-COLLAR WORKERS

Women in "white-collar" work in 1940 were both numerous and important in relation to those in other types of occupation. As discussed here, this group includes, with some minor exceptions, those classified by the Census as "clerical, sales, and kin-

<sup>&</sup>lt;sup>1</sup> All 1940 data in this section, except where otherwise specified, apply to the occupations during the week of March 24-30, 1940, of persons at work or with a job, the usual occupations of experienced persons seeking work, and the usual occupations of public emergency workers. The usual occupation of persons seeking work and of public emergency workers is considered more suitable for comparison with previous censuses than the last occupation, which is the basis for the occupational classification in Part I of this report. New workers, who had never held a job and consequently could not be classified by occupation, are not included; most of them were excluded from the gainful workers reported in 1930 and earlier. Data for 1870 to 1930 have been adjusted for comparability with 1940; see Appendix Tables IIA and IIB, footnote 3. See also pp. 12 and 13 for discussion of differences between the labor force and gainful workers.

dred" workers.<sup>2</sup> Professional and semiprofessional workers, sometimes included under the vague term "white-collar," are discussed later, pp. 155 to 179. The women in white-collar fields were distributed among several general types of work in 1940, in contrast to heavy concentration in a single field in 1870. This is due to the fact that 70 years ago clerical and sales work of the variety and extent general in more recent years did not exist. It arose with the need by business and industry for accurate record-keeping, with the development of large-scale business practices, and with modern methods used in distributing the output of a vastly expanded economy.<sup>3</sup>

It is significant that expansion in the white-collar field parallels the rise of the corporate system in the United States. Limited chiefly to railroads, banks, insurance companies, and public utilities before the Civil War, the corporate form came to dominate mining, quarrying, and manufacturing in the last years of the nineteenth century and in the twentieth century, even extending more recently into the mercantile, construction, personal service and amusement, and real estate fields. The critical need of these large scale enterprises was for coordination of their diversified and manifold activities. The invention of the typewriter and other office machines, in response to the growing needs of business, made it possible to carry out record keeping, communication, and related activities on a tremendous scale. The result was the creation of entirely new occupations, many of which women perform.

For certain clerical, sales, and kindred occupations there are approximately comparable data for both 1870 and 1940. (See Table 6.) The total figure for women in 1870 was but a fraction of the 1940 number. The number of women in the specified white-

<sup>&</sup>lt;sup>2</sup> The term "white-collar" has been applied with varying degrees of inclusiveness. In its broadest sense it may be used to designate "occupations of the class that is socially above manual labor," as in Horwill's Dictionary of modern American usage. An intermediate meaning is given in The Winston dictionary, college edition, which couples the term with "those who are employed in the better, but not the top, positions; clerks and subordinate executives." Here the term is used in the narrow sense suggested in Webster's New international dictionary, second edition, unabridged, which defines it as "the class of salaried workers, esp. office and mercantile workers, as clerks, salesmen, bookkeepers, etc., whose duties permit or require a well-groomed appearance," or synonomously with the census category "Clerical, sales, and kindred workers." For purposes of comparison certain occupations that belong with clerical, sales, and kindred workers had to be omitted, and certain others belonging in other occupational groups were included. See Appendix Tables IIA and IIB, footnote 47.

<sup>&</sup>lt;sup>3</sup> See Coyle, Grace L. Women in the clerical occupations. The annals of the American Academy of Political and Social Science 143: 181-2, May 1929.

<sup>&</sup>lt;sup>4</sup> Berle, Adolf A., Jr., and Means, Gardiner C. The modern corporation and private property. New York, N. Y., Macmillan Co., 1944. Ch. II, The appearance of the corporate system.

Table 6.—Number and Percent Distribution of Women Clerical, Sales, and Kindred Workers in Selected Occupations, 1870 and 1940 1

-	Number of women		Percent distribution	
Occupation	1940	1870	1940	1870
Total selected clerical, sales, and kindred workers	3,439,562	13,369	100.0	100.0
Stenographers, typists, and secretaries; shipping and receiving clerks; clerical and kindred workers (not elsewhere classified); and office machine operators ('Clerks'' in stores; buyers and department heads, store; canvassers and solicitors; traveling salesmen and sales agents; attendants, filling station, parking lot, garage, and airport; and saleswomen	1,863,154	930	54.2	<i>.</i> ≟
(not elsewhere classified)	853,870 475,685	9,027 893	24.8 13.8	67. 6.
Celegraph, telephone, and radio and wire- less operators	205,627	321	6.0	2.
and accountDemonstrators	23,429 8,703	17 568	0.7 0.3	0. 4.
Messengers, errand, and office girls; tele- graph messengers.  Hucksters and peddlers.  Newsboys.  Mail carriers.  Auctioneers.	3,272 2,498 1,597 1,544 183	46 1,548 7 5	0.1 0.1 (2) (2) (2) (2)	0. 11. 0. (² 0.

Source: Appendix Table IIA.

collar fields grew from 13,369 to 3,439,562, an increase of nearly 257 times. At the earlier date, nearly 7 out of 10 women in these selected occupations were in the field consisting primarily of saleswomen of various types. Another 1 in 10 was a huckster or peddler. Thus the sales occupations predominated, with clerical work in a minor position and employing only one woman in six of those in this group. In contrast, over half of the women in the selected white-collar fields in 1940 were stenographers, typists, secretaries, and clerks of various kinds. This group together with bookkeepers, accountants, and cashiers and with telephone, telegraph, and radio operators accounted for three out of four women in all these occupations in 1940, leaving selling jobs in the minority.

In 1870 the saleswomen group was almost ten times as numerous as the stenographic-clerical group. The 1910 census was the

747639° — 48 — 6

<sup>&</sup>lt;sup>1</sup> The clerical, sales, and kindred workers included in this distribution numbered 3,406,046 and constituted 97.9 percent of the total 3,479,182 women classified as clerical, sales, and kindred workers in 1940. In addition radio and wireless operators; credit men; purchasing agents and buyers (not elsewhere classified); county agents and farm demonstrators; buyers and department heads, store; and attendants, filling station, parking lot, garage, and airport, which were not classified with clerical, sales, and kindred workers in 1940, were included for comparability with 1870. These additional women numbered 33,516 and were 1.0 percent as large as the group classified as clerical, sales, and kindred workers in 1940.

<sup>2</sup> Less than 0.05 percent.

first at which women in the stenographic-clerical group outran the saleswomen in numbers. By 1940 the stenographic-clerical field had more than twice as many women as the saleswomen's occupations.

# THE WOMAN "OFFICE WORKER"

General trends.—To the average person the term "office worker" means a stenographer, typist, or clerk, who is in most instances a woman. This was far from true in 1870. At that time less than 1,000 women were estimated in the entire group that comprised stenographers, typists, and secretaries; shipping and receiving clerks; clerical and kindred workers (not elsewhere classified); and office machine operators. Women constituted only 3 percent of the total men and women in these four occupations.

The impetus to the tremendous growth in the number of women in office work arose from the invention of a practical typewriter, first marketed in the seventies. It was operated by women from the very first. Later it was followed by a great variety of other office machinery also operated to a considerable extent by women.

In the thirty years following 1870 the number of women in these office occupations grew by well over 100,000. In the 30 years just prior to 1940 nearly  $1\frac{1}{2}$  million women were added to these branches of work. The average decennial growth over the 70 years was 266,032, a figure exceeded in every census period following 1900. The greatest numerical growth in any 10-year interval occurred from 1910 to 1920 when 651,625 women were added to the group, with the result that the number of women in "office work" was nearly three times as large in 1920 as in 1910. This was a period characterized by a rapid expansion in the use of women during war. By 1940 the four fields combined had a total of 1,863,154 women, of whom 58.8 percent were stenographers, typists, and secretaries, and 37.7 percent were clerical workers (not elsewhere classified).

The greatest rate of increase for women "office workers" in any decade occurred from 1880 to 1890. Women in these selected office occupations multiplied nearly 20 times—a testament to the growing acceptance of the typewriter and of the trained woman typist. Since 1920 the rate of growth among women in these fields has shown a marked decline, as is typical in the later stages of a growth curve as it approaches a saturation point.

<sup>&</sup>lt;sup>5</sup> The story of the early days of the typewriter is told in Women in business: I. Fortune 12: 50, July 1935.

	Women "office workers"	
	Number	Percent increase over preceding census
1940	1,863,154	25.6
1930	1,482,947	42.8
1920	1,038,390	168.5
1910	386,765	270.3
1900	104,450	129.3
1890	45,553	1,867.7
1880	2,315	148.9
1870	930	<del>_</del>

<sup>&</sup>lt;sup>1</sup> Includes stenographers, typists, and secretaries; shipping and receiving clerks; clerical and kindred workers (not elsewhere classified); and office machine operators.

Changes relative to population and labor force growth.—Toward the close of the nineteenth century, increasing attention was given to the solution of problems of improved business efficiency and of distribution, activities which necessitated an evergrowing number of written communications and records in connection with business operations and with salesmen, customers, advertising, and so forth. The increasing number of larger business units and the expanding functions and requirements of government also contributed to greater and greater needs for office and clerical work. The growing place of women in this vast network of business and distributive activities is indicated by the fact that where in the four office occupations in 1870 there had been 1 woman to every 42,800 persons in the country, by 1940 the ratio was 1 to 71 people. These activities absorbed even greater proportions of women in the labor force. From a minute fraction of all women workers, the proportion in stenographic-clerical occupations rose to about one-seventh in 1940.

	lumber of persons in population for each man "office worker" 1	Women "office workers" as percent of all women in the labor force or gainfully occupied
1940	70.7	14,3
1930	82.8	13.8
1920	101.8	12.0
1910	237.8	5.2
1900	727.6	2.0
1890	1,374.7	1.1
1880	21,665.6	0.1
1870	42,815.5	(2)

<sup>&</sup>lt;sup>1</sup> Includes stenographers, typists, and secretaries; shipping and receiving clerks; clerical and kindred workers (not elsewhere classified); and office machine operators.

Changes relative to men.—In taking on the functions of clerical workers, women did not replace men. Rather they found entirely new opportunities. Over the same period that 1,862,224 women took up work as stenographers, typists, and other general

<sup>&</sup>lt;sup>2</sup> Less than 0.05 percent.

office workers, 1,550,526 men also did so. Women became relatively more important, rising from a minor fraction in 1870 to well over half of the entire group in 1940. The proportion women were of the total in the various general office occupations in 1940 ranged from 4 percent of the shipping and receiving clerks and 35.6 percent of the clerical workers, not elsewhere classified, to 85.8 percent of the office machine operators and 93.3 percent of the stenographers, typists, and secretaries. Trends over the years in the proportions of women among the workers in these four fields combined were as follows:

Wom	en as percent of office workers"
40.50	
1940	54.1
1930	53.1
1920	49.6
1910	37.4
1900	29.3
1890	20.8
1880	3.6
1870	3.1

<sup>&</sup>lt;sup>1</sup> Includes stenographers, typists, and secretaries; shipping and receiving clerks; clerical and kindred workers (not elsewhere classified); and office machine operators.

Shifts in particular occupations.—Clerical jobs, because of their high social status among the occupations, have had special preference among women. The recent rapid growth in the number of office machine operators indicates that in certain respects the character of these pursuits is changing, and the extent to which they are "mental" occupations is open to question. The figures for office machine operators are an index but not a complete measure of the trend. In the entire stenographic-clerical group being discussed, there is considerable use of machines, and there has been increasing break-down of the work into specialized repetitive jobs.

Office machine operators operate the addressograph, book-keeping, calculating, card punching, card sorting, check writing, computing, duplicating, mimeographing, tabulating, and various other machines used in offices. As a special group they became sufficiently important for separate listing in the census of 1930, when there were 32,064 women, who constituted 88.6 percent of the total men and women in the occupation. From 1930 to 1940, 23,010 women were added to the occupation, which brought them above the 55,000 mark. Women, however, lost out slightly to men, being 85.8 percent of total office machine operators in 1940.

<sup>&</sup>lt;sup>6</sup> The use of office machinery and its influence on conditions of work for staff. *International labour review 36*: 486-516, October 1937.

The distribution of women in "office work" in 1930 and 1940 was as follows:

	Percent distribution	
	1940	1930
Total women "office workers"	100.0	100.0
Stenographers, typists, and secretaries	58.8 <u>]</u>	<del></del>
Shipping and receiving clerks	0.5	07.0
Clerical and kindred workers	7	97.8
(not elsewhere classified)	37.7	
Office machine operators	3.0	2.2

Age groups.—Of 2,610,263 women clerical and kindred workers<sup>7</sup> in 1940 11.5 percent were over 45 years of age, compared with 22.2 percent among women workers in all occupations. The proportion of older women increased in recent decades, and the proportion under 20 years of age dropped sharply, as the following data show:

	Percent distribution		
Women clerical and kindred	1940	1930	1920
workers 14 years and over1	<b>.00.0</b>	100.0	100.0
14 to 19 years	8.5	17.4	26.6
20 to 44 years	80.0	<sup>1</sup> 76.0	<sup>1</sup> 69.4
· · ·	11.5	6.6	4.0

Marital groups.—In 1940, 27.9 percent of the women employed or seeking work in all clerical and kindred occupations were married. Women in clerical work are less likely to have either the more imperative financial incentive of industrial women workers to continue work after marriage or the desire of the professional woman for a career. Hiring and dismissal practices have also tended to limit opportunities for married women in this field. Consequently the proportion who were married tended to be below that for all women workers. This tendency has been characteristic of the clerical group since 1910, though the proportion married has been rising among clerical workers, as well as among all women workers.

<sup>&</sup>lt;sup>7</sup> Data by age group in 1940 are available for only the intermediate list of occupations. To match occupations of earlier years with those of 1940, practically all the 1940 clerical occupations had to be included. Consequently it seemed desirable to bring in the remaining occupations and discuss the whole group of clerical and kindred occupations.

<sup>&</sup>lt;sup>8</sup> Data by marital status in 1940 are available only for those who were employed (by current occupation) and who were seeking work (by last occupation) and for the intermediate list of occupations only. (See footnote 1, p. 71, for basis of data used in other sections on "white-collar" workers.) To match occupations of earlier years with those of 1940, practically all the 1940 clerical occupations had to be included. Consequently it seemed desirable to bring in the remaining occupations and discuss the whole group of clerical and kindred occupations.

	Proportion of women workers 14 years and over who were married <sup>1</sup>	
	Among clerical and kindred workers	Among all women worker <b>s</b>
1940	27.9	35.5
1930	18.8	28.8
1920	9.2	22.8
<sup>1</sup> In 1930 and 1920 women who were 14 years of age we	ere counted as single.	

#### BOOKKEEPERS, ACCOUNTANTS, AND CASHIERS

Bookkeepers, accountants, and cashiers were long the elite of the clerical group. Like the larger group of stenographers, typists, and miscellaneous clerical workers, few of those in bookkeeping and related fields were women in 1870 and 1880, but the proportion increased rapidly. The development of business into larger units, the need for accurate knowledge of costs and profits, the demand for data required by governmental authorities because of income tax and other needs, and similar factors stimulated the introduction of machinery into the accounting field. In turn, the use of machines has made it possible to perform work that would be prohibitive in cost if done by hand.

The largest numbers of women were added to the bookkeeper, accountant, and cashier group between 1910 and 1920, when the field increased by almost 174,000 women. The rate of growth, however, had been highest from 1880 to 1890 and lessened appreciably in each succeeding decade. The 1940 number was actually somewhat lower than in 1930. In 1870 there was one woman bookkeeper, accountant, or cashier to every 45,000 persons in the population; in 1940 the ratio was one to 277 in the population. The growth of day-to-day financial transactions in the economy and of the need for recording and analyzing them and the resulting opportunities for women in these activities has been considerable.

	1	Women bookkeepers, accountants, and cashiers	
	-	Number	Percent change from preceding census
1940		475,685	- 2.4
1930		487,538	+ 34.4
1920		362,715	+ 91.9
1910		189,027	+152.4
1900	78'-78'-78'-78'-78'-78'-78'-78'-78'-78'-	74,895	+167.0
1890		28,050	+553.1
1880		4,295	+381.0
1870		893	-

In accounting and bookkeeping, as in the more general clerical fields, the increasing specialization and the use of mechanical de-

<sup>&</sup>lt;sup>9</sup> The use of office machinery and its influence on conditions of work for staff. *International labour review* 36: 515, October 1937.

vices was accompanied by the increasing use of women to operate them. By 1940 women in the total group of bookkeepers, accountants, and cashiers slightly exceeded men, though in 1870 there had been over 40 times as many men as the 893 women in these occupations. Though separate data were not available in 1940, undoubtedly the highly skilled work of the accountant constituted but a minor section of this field, with opportunities for women in this specialized branch still relatively few. Trends in the proportion of women among bookkeepers, accountants, and cashiers from 1870 to 1940 appear from the following data:

bookkee‡	as percent of all ers, accountants, id cashiers
1940	51.1
1930	51.9
1920	48.9
1910	38 <b>.5</b>
1900	29.1
1890	
1880	5.7
1870	2.3

#### TELEGRAPH AND TELEPHONE OPERATORS

The development of the telegraph, dating from the 1840's, and of the telephone, beginning in the 1870's, opened new fields of work for men and women.<sup>10</sup> The number of women in these and related occupations grew from 321 in 1870 (all in the service of the telegraph companies) to 205,627 in 1940 (with nearly 96 percent in telephone operation).

	ı	Women telegraph, radio and wireless, and telephone operators	
	_	Number	Percent change from preceding census
1940		_ 205,627	-16.6
1930	***************************************	246,590	+29.7
1920	**************************************	_ 190,181	+102.3
1910		94,015	+361.2
1900		20,387	+167.3
1890	**************************************	7,627	+564.4
1880		1,148	+257.6
1870		321	<del></del>

The introduction of the common battery switchboard in telephone operation about the turn of the century cut down consider-

<sup>&</sup>lt;sup>10</sup> Developments in methods of communication are described in U. S. Department of Labor. Women's Bureau, Effects of applied research upon the employment opportunities of American women. Bulletin 50. Washington, U. S. Government Printing Office, 1926, pp. 37-42. A short discussion of trends since 1925 is given in U. S. Department of Labor. Women's Bureau. The woman telephone worker. By Ethel Erickson. Bulletin 207. Washington, U. S. Government Printing Office, 1946, pp. 36-37.

ably on the time required to put through individual calls. However, the increased use of the telephone service as a means of carrying on business activities led to the use of additional numbers of operators in spite of the higher output per worker. Separate data for telephone operators, available beginning in 1900, show that high rates of increase among telephone operators occurred before 1920. From 1920 to 1930 the rate of increase was very much smaller, but further expansion of the telephone service requiring additional workers occurred even though the dial system and other technological improvements were installed. The drop in the number of telephone customers during the depression years was countered by increased use of labor-saving devices, which resulted in the employment of fewer workers when business conditions improved.

	Women telephone operators	
	Number	Percent change from preceding census
1940	197,062	-16.2
1930	 235,259	+ 31.9
1920	 178,379	+102.1
1910	 88,262	+475.9
1900	 15,327	

Though at the start telephone switchboards had been operated by boys, it was soon found that women were better suited to the work.<sup>13</sup> By the time of the 1910 census women were 90.2 percent of the operators, rising to 94.6 by 1940.

	Women as percent of all telephone operators
1940	94.6
1930	94.5
1920	93.8
1910	90.2
1900	80.0

Women telegraph operators in 1940 were a minor proportion of women operating the three types of communication equipment being discussed. Like women telephone operators, their numbers declined from 1930 to 1940 and at an even greater rate. Separate data beginning in 1930 for women radio operators show them an insignificant part of the group.

<sup>&</sup>lt;sup>11</sup> U. S. Department of Labor. Women's Bureau. Effects of applied research upon the employment opportunities of American women. Bulletin 50. Washington, U. S. Government Printing Office, 1926, pp. 38-39.

<sup>&</sup>lt;sup>12</sup> Anderson, H. Dewey, and Davidson, Percy E. Occupational trends in the United States. Stanford University, Calif., Stanford University Press, 1940, p. 424.

<sup>&</sup>lt;sup>13</sup> See U. S. Department of Labor. Women's Bureau. The change from manual to dial operation in the telephone industry. By Ethel L. Best. Bulletin, 110, Washington, U. S. Government Printing Office, 1933, p. 1.

	Perc	Percent distribution of women		
	Telegraph, radio and wireless, and telephone operators	Telegraph operators	Ragio and wireless operators	Telephone operators
1940	100.0	4.1	0.1	95.8
1930	100.0	4.6	(1)	95.4
1920	100.0	<sup>2</sup> 6.2	( <sup>2</sup> )	93.8
1910	100.0	<sup>2</sup> 6.1	(2)	93.9
1900	100.0	<sup>2</sup> 24.8	(2)	75.2

<sup>1</sup> Less than 0.05 percent.

#### ATTENDANTS, PHYSICIANS' AND DENTISTS' OFFICES

The number of women who were attendants in physicians' and dentists' offices grew from less than 5,000 in 1910, when they were first reported separately, to nearly 30,000 in 1940, more than doubling from 1910 to 1920 and again from 1920 to 1930. The lower rate of growth in the decade after 1930 may indicate that doctors and dentists were less able to afford the services of an assistant in the depression period, though it is also true that nurses in doctors' offices were more apt in 1940 to be included with trained nurses than with attendants.

	Women attendants, physicians' and dentists' offices		
		Number	Percent increase over preceding census
1940		29,702	20.2
1930		24,720	131.7
1920		10,669	129.0
1910		4,658	:

The trend toward specialization, which appears in the practice among physicians and dentists of concentrating their abilities on particular types of cases, has reached down to the activities carried on within a single office. The attendant has taken over some of the duties formerly done by the physician or dentist himself, such as preparing the patients, keeping clerical records, and making appointments.<sup>14</sup> Women have been relied on increasingly for this specialized type of assistance, as the following data indicate:

	Women as percent of all attendants, physicians' and dentists' offices
1940	95.2
1930	95.8
1920	83.4
1910	80.9

<sup>&</sup>lt;sup>14</sup> For duties performed by these workers, see U. S. Department of Labor. Women's Bureau. *Physicians' and dentists' assistants*. By Marguerite Wykoff Zapoleon. Bulletin 203, No. 11. Washington, U. S. Government Printing Office, 1946, pp. 2-6, 10.

<sup>&</sup>lt;sup>2</sup> Radio and wireless operators included with telegraph operators.

# AGENTS, COLLECTORS, AND CREDIT MEN

The estimated 17 women occupied in 1870 as agents, collectors, or credit "men" were succeeded in 1940 by 23,429 women, classified as agents, credit men, purchasing agents and buyers, county agents and farm demonstrators, and collectors (bill and account). Most of the women entered this work after 1900. In terms of numbers the largest growth for women occurred from 1930 to 1940, though the rate of growth after 1920 was considerably below the rates before that date.

	Women agents, collectors, and credit men <sup>1</sup>	
	Number	Percent increase over preceding census
1940	23,429	65.8
1930	14,132	24.6
1920	11,339	174.4
1910	4,133	127.7
1900	1,815	116.6
1890	838	1,017.3
1880	75	341.2
1870	17	

<sup>&</sup>lt;sup>1</sup> Includes agents (not elsewhere classified), credit men, purchasing agents and buyers (not elsewhere classified), county agents and farm demonstrators, and collectors (bill and account).

The inclusion of county agents and farm demonstrators, a professional occupation of comparatively recent development, probably does not appreciably affect the proportions of women among the whole agent group. Women were 42.9 percent of all county agents and farm demonstrators in 1940 and 28.9 percent in 1930, but the number of workers in this occupation was small relative to all workers in the agent group. Though still a minority, women have been an increasing proportion of agents.

	Women as percent of all agents, collectors, and credit men <sup>1</sup>
1940	11.1
1930	7.8
1920	, 7.8
1910	<b>5.1</b>
1900	3.5
1890	2.2
1880	1.0
1870	0.4

<sup>&</sup>lt;sup>1</sup> Includes agents (not elsewhere classified), credit men, purchasing agents and buyers (not elsewhere classified), county agents and farm demonstrators, and collectors (bill and account).

# MESSENGERS, ERRAND, AND OFFICE BOYS

The number of messengers, errand, and office boys and girls reached its peak in 1920. Girls were never very numerous in the field and in 1940 constituted only about 4 percent of the total. (In 1920 the proportion had been nearly twice as great.) The con-

tinued decrease from 1930 to 1940 may be somewhat exaggerated, because girls 10 to 13 years were not included in the group in 1940, and furthermore differences in census processing may have affected the figures. The number of girls who were telegraph messengers was especially small, and they constituted less than 2 percent of those in the occupation in 1940. Undoubtedly the undesirability of having young girls work under the circumstances surrounding the delivery of telegraph messages was a limiting factor. Some States (Minnesota, New Mexico, New York, Ohio) prohibit the employment of girls under 21 years of age in the delivery of telegrams or personal messages. Changes in numbers and proportions of women were as follows:

	Women messengers, errand, and office girls	
	Number	Percent of all workers in this occupation
1940	3,272	4.2
1930	<b>5,280</b>	5.5
1920	8,559	7.9
1910	_ 6,512	6.2
1900	3,798	6.0
1890	1,658	3.6
1880	228	1.8
1870	. 46	0.6

Mail carriers.—In 1940, 1,544 women were returned as mail carriers, compared to an estimated 5 in 1870. Only one-third of the growth occurred from 1910 to 1940. Probably many of these women work as carriers in rural regions under more specialized circumstances than the majority of letter carriers. The proportion of women among all mail carriers never reached as much as 2 percent.

	Women mail carriers	
	Number	Percent of all workers in this occupation
1940	1,544	1.3
1930	1,106	0.9
1920	1,294	1.4
1910	991	1.2
1900	259	0.9
1890	111	0.5
1880	24	0.2
1870	5	0.1

#### SALES OCCUPATIONS

General trends.—In 1940 nearly 3 million persons were working as salesmen and saleswomen, buyers, sales agents, canvassers,

<sup>&</sup>lt;sup>15</sup> U. S. Department of Labor. Women's Bureau, State labor laws for women, with wartime modifications—explanation and appraisal. By Alice Angus. Bulletin 202-V. Washington, U. S. Government Printing Office, 1946, p. 59.

garage and filling station attendants, or as "clerks" in stores. Seventy years earlier there had been less than a quarter of a million in all the selling occupations. The tremendous increase in this one group of occupations is evidence of the growth in the distribution network required to get goods into the hands of the consumer. So significant has this trend been, that it has led to the expression "the Distribution Age." The number of women during the 70-year period increased from less than 10,000 to over 850,000 in the specified selling occupations. From 1870 to 1880 the number of women reported more than tripled. Each decade after that the rate of growth slackened. In terms of numbers of additional women in the field, the most flourishing period was from 1920 to 1930, when nearly 187,000 additional women swelled the ranks.

The effect of the depression years appears to have been noticeable in these fields. The number of women added had been larger in each successive decade until 1930, but from 1930 to 1940 the number fell off somewhat. The rate of increase from 1930 to 1940 was the smallest ever experienced since 1870, and for the first time fell below the rate of growth among all women of working age.

	Women	Women in sales occupations <sup>1</sup>	
	Number	Percent increase over preceding census	
1940	853,870	18.5	
1930	720,434	35.0	
1920	533,645	43.3	
1910	372,271	71.7	
1900	216,810	119.4	
1890	98,820	211.4	
1880	31,738	251.6	
1870	_ 9,027	****	

<sup>&</sup>lt;sup>1</sup> Includes saleswomen, "clerks" in stores, store buyers and department heads, canvassers and solicitors, traveling salesmen and sales agents, and attendants in filling stations, parking lots, garages, and airports.

Changes relative to population and labor force growth.—Intermediary between the producer and the consumer, the saleswoman has had a growing place in the economy as the distribution function expanded. Beginning shortly after the Civil War new demands fostered the successive introduction of the department store, the mail order house, and the chain store.<sup>17</sup> For each woman

<sup>&</sup>lt;sup>16</sup> Borsodi, Ralph. *The distribution age*. New York, N. Y., D. Appleton & Co., 1927. 321 pp. This author, in common with other writers, thinks that modern high pressure marketing has exceeded desirable limits.

<sup>&</sup>lt;sup>27</sup> Schaller, Dr. O. E. The retailing industry. In Glover, John George, and Cornell, William Bouck. *The development of American industry*. New York, N. Y., Prentice-Hall, Inc., 1941, pp. 865-881.

in selling occupations there were 4,411 persons in the general population in 1870. The expansion in numbers relative to the population continued over the years until in 1940 for each woman in sales work there were only 154 persons. The growing prevalence of the saleswoman, however, has lagged behind that of the clerical worker, of whom there was 1 for every 70 persons in the population.

Indicative of the trend toward better-developed organization in distribution is the contrast between the ratio of population to women in general selling fields and the ratio to those engaged as hucksters and peddlers (to be discussed subsequently). The latter decreased markedly relative to the population. The following data show the trends:

I	Number of persons in population for-	
	i woman in sales occupations <sup>1</sup>	Each woman huckster and peddler
1940	154	52,710
1930	170	68,589
1920	198	55,375
1910	247	24,299
1900	. 351	26,070
1890	. 634	27,721
1880	1,580	20,127
1870	4,411	25,806

<sup>&</sup>lt;sup>1</sup> Includes saleswomen, "clerks" in stores, store buyers and department heads, canvassers and solicitors, traveling salesmen and sales agents, and attendants in filling stations, parking lots, garages, and airports.

Up through 1930 selling occupations offered exceptional opportunities to women workers in providing jobs for a constantly larger section of the woman labor force. The proportion of all women workers in the various selling occupations was 12 times as great in 1940 as in 1870.

	women in sales occupations <sup>2</sup> as percent of all women in the labor force or gainfully occupied
1940	6.6
1930	6.7
1920	6.2
1910	5.0
1900	4.1
1890	2.5
1880	1.2
1870	0.5

<sup>&</sup>lt;sup>1</sup> Includes saleswomen, "clerks" in stores, store buyers and department heads, canvassers and solicitors, traveling salesmen and sales agents, and attendants in filling stations, parking lots, garages, and airports.

Changes relative to men.—In 1940, 94 percent of the women in the various selling occupations were saleswomen or "clerks" in stores. Among men, in contrast, only 54 percent were in these fields. After 1900 a program of national distribution was developed by manufacturers, a trend which led to new techniques in salesmanship and consequently shifted some of the employment opportunities from customary retail outlets to organizations formed for direct selling by producers. In 1940 traveling salesmen and sales agents constituted the second largest group in the selling field. Women participated to a small extent in this newer field, for they were but 2 percent of traveling salesmen and sales agents, compared to over two-fifths of salesmen and saleswomen and of "clerks" in stores. Continuing opportunities in those types of sales work more generally open to women have apparently enabled women to maintain an important position in sales occupations as a whole. In 1940 the proportion of women among all workers in the combined group of selling fields, though below the 1920 peak, was seven times greater than that in 1870.

of a	ien as percent ll workers in occupations <sup>1</sup>
1940	28.6
1930	26.9
1920	30.2
1910	25.2
1900	20.6
1890	14.8
1880	7.7
1870	3.7

<sup>&</sup>lt;sup>1</sup> Includes salesmen and saleswomen, "clerks" in stores, store buyers and department heads, canvassers and solicitors, traveling salesmen and sales agents, and attendants in filling stations, parking lots, garages, and airports.

Age groups and marital status.—Comparable data are not available to determine changes from one census to another in the age composition and marital status of those in any of the merchandising occupations or in all of them together. Data for women employed in 1940 as "clerks" in stores, saleswomen (not elsewhere classified), and demonstrators indicate that this group of occupations was somewhat more favorable to the older woman than was the clerical and kindred branch of white-collar occupations. In these three fields nearly one-fifth (18.4 percent) of the women were 45 years old and over, compared to 11.5 percent of women clerical and kindred workers. Married women, moreover, apparently had exceptionally good opportunities in merchandis-

<sup>&</sup>lt;sup>18</sup> See Salesmanship. Encyclopaedia of the social sciences. New York, N. Y., Macmillan Co., 1930-35.

ing. Among all saleswomen, "clerks" in stores, and demonstrators about 40 percent were married, while in clerical and kindred occupations only 28 percent were married.

Demonstrators.—Though many of the techniques of selling are of relatively recent origin, the work of the demonstrator was not unknown in 1870. This involves the explanation of the value and operation of a particular product to potential buyers. From less than an estimated 600 women in 1870 the numbers rose to 8,703 in 1940. The rate of increase has been steady and relatively large except from 1910 to 1920.

In the sales occupations previously discussed women were less than 3 out of every 10 workers. Among demonstrators, however, women were always a majority and by 1940 were 4 out of 5 in the group.

	Women demonstrators			
	Number	Percent increase over preceding census	Percent of all workers in this occupation	
1940	 8,703	45.8	82.7	
1930	 5,970	80.3	76.9	
1920	3,311	1.7	66.6	
1910	3,255	47.0	72.2	
1900	2,214	33.1	66.8	
1890	 1,663	<b>5</b> 9. <b>4</b>	63.8	
1880	1,043	83.6	60.4	
1870	 568		58.7	

# **HUCKSTERS AND PEDDLERS 19**

Hucksters and peddlers, in pioneer days the chief agents in distributing manufactured goods, have for some time been declining in relative importance in the economy. The 56,695 hucksters and peddlers in 1940 were not much more numerous than in 1880, and the 2,498 women were practically identical with the number of women in the group in 1880. A peak was reached in this occupation in 1910 followed by a sharp drop. For women there was nearly a 50 percent decrease from 1910 to 1920. A smaller rate of decrease occurred in the next decade. The marginal character of this occupation may well have caused the maintenance of employment levels in this field from 1930 to 1940, when the depression years made jobs hard to find. Proportions of women have fluctuated around 3 or 4 percent.

<sup>&</sup>lt;sup>10</sup> See p. 85 for number of persons in population for each woman huckster and peddler, 1870-1940.

	Women huck	esters and peddlers
	Number	Percent of all workers in this occupation
1940	2,498	4.4
1930	1,790	3.0
1920	1,909	3.6
1910	3,785	4.5
1900	2,915	3.6
1890	2,259	3.6
1880	2,492	4.4
1870	1,543	4.2

#### INSURANCE AGENTS AND BROKERS

The occupation of insurance selling has been a small but growing field for women, who numbered 13,321 in 1940 compared with less than 2,500 thirty years earlier, when census data were first available. From 1930 to 1940 the rate of increase among women was small in comparison with previous decades.

	Women insurance agents and brokers		
	Number	Percent increase over preceding census	
1940	13,321	4.9	
1930	12,694	154.8	
1920	4,981	100.4	
1910	2,486	-	

As an occupation in which maturity in age has advantages, insurance selling does not discriminate against older women of ability and enterprise.<sup>20</sup> The median age of women employed in this field in 1940 was 44.4 years, compared to a median of 32.3 years for all employed women.

The life insurance field has been expanding as the population increased, and such insurance has been put to new uses as this type of saving has become more attractive than certain other kinds. The advent of Social Security has possibly increased rather than lessened consciousness of the need for insurance. Automobile, fire, health, and accident insurance are other growing insurance fields. Women may have particular advantages as agents if they specialize in selling, for example, to business and professional women, to teachers, and to other women with independent incomes.<sup>21</sup> Women have a growing foothold in the occupation and have constituted a slightly increasing proportion of the total in each decade since 1910.

<sup>&</sup>lt;sup>20</sup> See National Association of Life Underwriters. Life underwriting. A career for women. Indianapolis Ind. The Insurance Research and Review Service, 1942, pp. 25-26.

<sup>&</sup>lt;sup>21</sup> For trends and opportunities in the insurance field, see National Association of Life Underwriters, op. cit., esp. pp. 20, 89; also Anderson and Davidson, op. cit., pp. 461-462.

Women as bereent

	of all i agents a	insurance nd brokers
1940		<b>5</b> .3
1930		5.0
1920		4.2
1910		2.8

#### REAL ESTATE SELLING

There were 43,108 women in real estate activities in 1940, working as agents, or managers, or building superintendents. This number was over 14 times that in 1910, the earliest date for which comparable data can be obtained. The figures thus give evidence of a considerable increase among women since 1910, with the largest number added from 1920 to 1930.

	Women real estate workers 1		
	Number	Percent increase over preceding census	
1940	43,108	30.4	
1930	33,058	245.2	
1920	9,576	214.6	
1910	3,044		

<sup>1</sup> Includes real estate agents and brokers; real estate proprietors, managers, and officials; and building managers and superintendents.

The number of families in the population for each woman in real estate activities was 6,654 in 1910, compared to 814 in 1940. As in the insurance field, enterprising women of maturity and judgment are particularly likely to succeed, as appears from a median age of 48.9 years for women employed as real estate agents and brokers. Women have been an increasing proportion of all workers in the field.

We	men as percent all real estate workers <sup>1</sup>
1940	20.2
1930	12.9
1920	6.0
1910	2.3

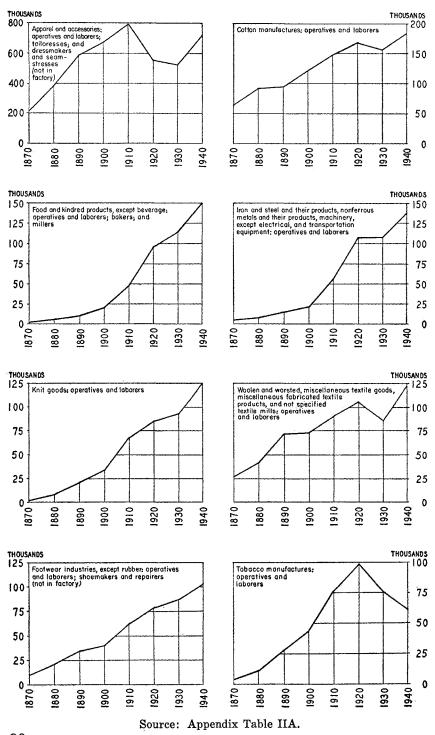
<sup>&</sup>lt;sup>1</sup> Includes real estate agents and brokers; real estate proprietors, managers, and officials; and building managers and superintendents.

# NEWSBOYS

The circumstances surrounding the occupation of newsboy, similar in many respects to the undesirable features in messenger work and in occupations in places of amusement, have undoubtedly kept the number of girls in this field small also. Prior to 1940 girls had never numbered as many as 500. In 1940 there were 1,597, who constituted 2.4 percent of the total. The increase is thought to have come partly from lack of comparability in the figures.

747639° --- 48 --- 7

# CHART IX.—WOMEN IN SELECTED OPERATIVE AND LABORER OCCUPATIONS, 1870-1940



# CHANGES AMONG OPERATIVES AND LABORERS

The routine manual work done by the operative or laborer is essentially typical of work in manufacturing, though jobs in manufacturing industries range from professional to service occupations and though operatives and laborers are found in non-manufacturing industries and services. Even before the Civil War women were engaged in work on a wide variety of manufactured products.¹ Some of it was in the nature of hand trades carried on at home, but other work was performed in larger establishments.

Census data covering a large part of the women operatives and kindred workers and the women laborers indicate that, as in other major groups, women were important in a wider variety of work in 1940 than 70 years earlier. (See Table 7.) In 1870 over three-fourths of the women in selected operatives' and laborers' occupations were either in the sewing trades group, which covered tailors, dressmakers and seamstresses working outside of factories, and operatives and laborers in apparel and accessory factories, or in cotton manufacturing. Only one other group in 1870 had more than 5 percent of all women operatives and laborers, and this also was a textile group—woolen and worsted manufactures. miscellaneous textile goods, miscellaneous fabricated products, and not specified textile mills. By 1940 the women in the two leading fields had dropped to 46 percent of the total. Four other industries—food, knit goods, footwear, and the metal group—each had more than 5 percent of all women operatives and laborers.

Nearly all women classified as manufacturing operatives and laborers in the 1940 census were included among the occupations for which comparable 1870 data were available. In contrast, such a comparison could be made for only a few of the women classified in 1940 as specified operatives and laborers or as operatives and laborers in nonmanufacturing industries and services. The latter constituted only about 2 percent of all women in comparable operative and laborer occupations both in 1870 and 1940.

<sup>&</sup>lt;sup>1</sup> Edith Abbott concluded that women were engaged in the production of more than 100 different products, on the basis of official reports between 1820 and 1840. Abbott, Edith. Women in industry. New York, N. Y., D. Appleton & Co., 1924, pp. 66-70. In 1850 "female hands" were reported in 45 of the 70 industries specified in the census of manufactures of that year. This was the first census of manufacturing establishments that gave at all complete data for the country as a whole, with information by sex. Abstract of the statistics of manufactures according to the returns of the seventh census. Senate, 35th Congress, 2d Session, Ex. Doc. No. 39.

<sup>&</sup>lt;sup>2</sup> Of the 1,921,840 women manufacturing operatives and laborers in 1940, 1,730,202 or 90 percent are included in Table 7. Certain additional occupations, not classified as manufacturing operatives and laborers in 1940, are included with them for purposes of comparison. These additional women numbered 205,842 and were 10.7 percent as large as the group classified as manufacturing operatives and laborers in 1940.

Table 7.—Number and Percent Distribution of Women Operatives and Kindred Workers and Laborers, Except Farm, in Selected Occupations, 1870 and 1940 <sup>1</sup>

Occupation	Number of women		Percent distribution		
	1940	1870	1940	1870	
Total selected operatives and kindred workers and laborers, except farm	1,970,294	369,442	100.0	100.0	
Manufacturing	1,936,044	361,669	98.3	97.9	
Nondurable goods manufacturing	1,740,740	855,551	88.3	96.2	
Apparel and accessories, operatives and laborers; tailoresses; dressmakers and seamstresses (not in factory)	727,552	216,616	86.9	58. <b>6</b>	
laborers. Food and kindred products, except bever-	183,538	65,486	9.3	17.7	
age, operatives and laborers; bakers; millers. Knit goods, operatives and laborers Woolen and worsted manufactures, miscellaneous textile goods, miscellaneous	150,028 124,696	2,460 1,971	7.6 6.3	0.7 0.5	
fabricated textile products, and not spec- ified textile mills, operatives and laborers. Footwear industries, except rubber, opera- tives and laborers; shoemakers and re-	121,530	27,163	6.2	7.4	
pairers (not in factory)	101,626	9,645	5.2	2.6	
laborers. Pulp, paper, and paperboard mills, paperboard containers and boxes, and miscellaneous paper and pulp products, opera-	61,245	4,290	3,1	1.2	
tives and laborers. Silk and rayon manufactures, operatives	56,047	6,242	2.8	1.7	
and laborers.  Compositors and typesetters; pressmen and plate printers, printing; electrotypers and stereotypers; engravers; photoengravers and lithographers; printing, publishing, and allied industries, operatives and laborers.	48,255	2,302	2.4	0.6	
	42,558	4,397	2.2	1.2	
Rubber products, operatives and laborers.  Miscellaneous chemical industries and pe-	26,191	1,832	1.3	0.5	
troleum refining, operatives and laborers. Leather products, except footwear, opera-	25,316	403	1.3 1.2	0.1	
tives and laborers Carpets, rugs, and other floor coverings,	24,510 13,107	744 5 <b>,9</b> 48	0.7	1.6	
operatives and laborers	10,834	0,948	0.7	1.0	
laborers. Beverage industries, operatives and labor-	7,587	19	0.4	(2)	
ers. Dyers; dyeing and finishing textiles, opera-	6,942	1,310	0.4	0.4	
tives and laborers.  Hats, except cloth and millinery, operatives		4,637	0.4	1.3	
and laborersLeather: tanned, curried and finished, operatives and laborers	4,735	4,037	0.2	(2)	
Durable goods manufacturing	4,448 195,304	6,118	9.9	1.7	
Iron and steel and not specified metal industries, nonferrous metals and their products, machinery (except electrical), and transportation equipment, operatives and laborers; jewelers, watchmakers, goldsmiths, and silversmiths; buffers and polishers, grinders, molders, heaters, and rollers and roll hands, metal; furnacemen, smeltermen, and pourers; tinsmiths, coppersmiths, and sheet metal workers.  Sawyers; furniture and store fixtures, saw-	136,882	5,217	6.9		
mills and planing mills, and miscellan- eous wooden goods, operatives and laborers	31,902	584	1.6	0.1	
laborers	14,213	180	0.7	(3)	

Table 7.—Number and Percent Distribution of Women Operatives and Kindred Workers and Laborers, Except Farm, in Selected Occupations, 1870 and 1940.—Continued

	Number	of women	Percent distribution		
Occupation	1940 1870		1940	1870	
Durable goods manufacturing— Continued					
Pottery and related products, operatives and laborers.	10,082	105	0.5		
Structural clay products, operatives and laborers. Stonecutters and stone carvers; cutstone	2,036	82	0.1		
and stone products, operatives and laborers	189		(2)		
Nonmanufacturing	34,250	7,773	1.7	2.1	
Construction, miscellaneous transportation, and industry not reported, laborers; longshoremen and stevedores	12,892 10,029	7,414 105	0.7	2.0 (2)	
(crossing) and bridge tenders; ticket, station, and express agents	5,739	162	0.3	(4)	
miningLinemen and servicemen, telegraph, tele-	2,608	³56	0.1	(2)	
phone, and power; foremen, operatives, and laborers in communication. Lumbermen, raftsmen, and woodchoppers. Automobile storage, rental, and repair service, laborers; garage laborers and car	1,510 567		0.1 (2)		
washers and greasers. Fishermen and oystermen	467 438	36	(2) (2)	(2)	

Source: Appendix Table IIA.

¹ The women operatives and kindred workers and laborers, except farm, included in this distribution numbered 1,927,966 and constituted 78.0 percent of the total 2,473,094 women classified as women operatives and kindred workers and laborers, except farm, in 1940. In addition baggagemen, transportation; conductors, railroad; inspectors, railroad; locomotive engineers; locomotive firemen; watchmen (crossing) and bridge tenders; ticket, station, and express agents; foremen, communication; foremen, mining; bakers; millers, grain, flour, feed, etc.; tailoresses; sawyers; compositors and typesetters; pressmen and plate printers, printing; electrotypers and stereotypers; engravers, except photoengravers; photoengravers and lithographers; shoemakers and repairers (not in factory); stonecutters and stone carvers; jewelers, watchmakers, goldsmiths, and silversmiths; molders, metal; rollers and roll hands, metal; and tinsmiths, coppersmiths, and sheet metal workers, which were not classified with operatives and kindred workers and laborers except farm in 1940, were included for comparability with 1870. These additional women numbered 42,328 and were 1.7 percent as large as the group classified as operatives and kindred workers and laborers, except farm, in 1940.

<sup>&</sup>lt;sup>2</sup> Less than 0.05 percent.

<sup>&</sup>lt;sup>8</sup> Figure not adjusted for comparability. See Appendix Tables IIA and IIB, footnote 5.

By 1940 more of the women in routine manufacturing jobs were working in the "heavy industries" than in 1870. This does not necessarily mean that more women than formerly are working on the same jobs as men. A single occupational classification may include numbers of specific jobs, some of which are done by men, others by women. Of all women operatives and laborers that can be compared for the two dates, 96 percent were manufacturing nondurable goods in 1870, with but 2 percent in durable goods production. By 1940 the proportion in nondurable goods had dropped to 88 percent, with 10 percent in durable goods production.

The discussion that follows presents the various groups of manufacturing operatives and laborers in the order in which they appear in Appendix Tables IIA and IIB, rather than according to their importance for women. Women operatives and laborers in nonmanufacturing industries and services were few in number. Moreover comparable data for previous census years frequently were not available. The trends in these occupations are not discussed, with one exception, "Fruit and vegetable graders and packers" (see p. 133). Such data, however, as are available are shown in Appendix Tables IIA and IIB.

#### FOOD MANUFACTURING

General trends.—In 1870 most of the workers of both sexes in the food industry were millers and bakers; a minor proportion of commercial preparation of food was concerned with confectionery, cheese, sugar refining, and meat packing. As a matter of fact, most of the food consumed on the tables of the country's families was prepared by the unpaid work of women in the home. Cooking, baking, and preserving were among the major activities of every household. Flour milling and baking, however, had forerunners as factory industries in the local grist mills, the merchant flour mills, and the ship's bread of the prerevolutionary period.<sup>3</sup>

The introduction during the seventies of the roller process and other improvements in flour milling as well as the development in the seventies and eighties of refrigeration and canning processes in meat packing and preserving gave an impetus to the development of commercial food production. Concurrently, increased urban living and various other social changes brought greater demand for and consumption of factory-produced foods. At the same time the availability of such foods was one of the

<sup>&</sup>lt;sup>3</sup> Clark, Victor S. History of manufactures in the United States. New York, N. Y., McGraw-Hill Book Co., 1929, Vol. I, pp. 174-179.

<sup>4</sup> Ibid., Vol. II, pp. 504, 506.

factors making it possible for women to take up paid work more easily.

As a result of the economic changes just discussed, the number of women operatives and laborers in food industries rose from less than 2,500 in 1870 to more than 150,000 in 1940. Their numbers multiplied more than 8 times from 1870 to 1900, compared with slightly more than three times in the 30 years just prior to 1940, indicating that the growth continued, though slackening in rate.<sup>5</sup>

	Women operativ	men operatives and laborers:		
	Number	Percent increase over preceding census		
1940	150,028	31.3		
1930	114,270	20.7		
1920	94,701	96.9		
1910	48,099	144.0		
1900	19,713	93.9		
1890	10,169	125.8		
1880	4,503	83.0		
1870	2,460	<del></del>		

<sup>&</sup>lt;sup>1</sup> Includes bakers; millers, grain, flour, feed, etc.; and operatives and laborers in the following: bakery products; canning and preserving fruits, vegetables, and sea food; confectionery; dairy products; meat products; grain-mill products; and miscellaneous food industries.

Changes relative to population and labor force growth.—With the increase in development of food industries, the number of persons in the population for each woman in food production dropped greatly between 1870 and 1940. It would be impossible to say how much change there has been in the aggregate time per person in the population, both the paid time in commercial undertakings and the unpaid time largely in the home, that has been put in by all women in food preparation. Some of the unpaid food production done by women at home became paid food production in the course of the 70 years. Commercial production of food is included in the total value of the national output, because it is possible to measure its value, but the unpaid portion of food preparation activities is not. This shift in itself does not represent an increase in the value of goods and services consumed, except in so far as it has resulted in greater efficiency. The drop in the number of persons in the population for each woman operative and laborer in the food industries was accompanied by a rise in the number of women in this occupation among all women workers.

<sup>&</sup>lt;sup>5</sup> The food industries tend to be seasonal in nature, but shifts in the census dates probably do not seriously affect comparability in the general long time trends in the group as a whole, though they cause the total size of the food group to be somewhat understated. Up to 1900 the census was taken in June of each year. Since then it has been taken in March in 1940, in April in 1930 and in 1910, and in January in 1920. Peak seasons in food industries usually occur in late summer or fall.

	Number of persons in population for each woman operative and laborer in food and kindred products <sup>1</sup>	Women operatives and laborers in food and kindred products¹ as percent of all women in the labor force or gainfully occupied
1940	878	1.2
1930	1,074	1.1
1920	1,116	1.1
1910	1,912	0.6
1900	3,855	0.4
1890	6,158	0.3
1880	11,138	0.2
1970	16 186	0.1

<sup>&</sup>lt;sup>1</sup> Includes bakers; millers, grain, flour, feed, etc.; and operatives and laborers in the following: bakery products; canning and preserving fruits, vegetables, and sea food; confectionery; dairy products; meat products; grain-mill products; and miscellaneous food industries.

Changes relative to men.—As the production of food moved into the factory, women followed it there, thus continuing in new surroundings a customary household activity. Among the food factory workers (operatives and laborers) the proportion of women has grown continually, rising from 2.8 in 1870 to 23.8 percent in 1940. The transfer of food-making from the home to the factory, however, undoubtedly means that more men are concerned with food preparation as a whole today than 70 years ago.

	of all operations of all operations are supported by the support of the support o	as percent eratives and in food and l products <sup>1</sup>
1940		23.8
1930		21.4
1920		19.4
1900		
1890		6.3
	**************************************	3.6
1870		2.8

<sup>&</sup>lt;sup>1</sup> Includes bakers; millers, grain, flour, feed, etc.; and operatives and laborers in the following: bakery products; canning and preserving fruits, vegetables, and sea food; confectionery; dairy products; meat products; grain-mill products; and miscellaneous food industries.

Shifts in particular food industries.—From 1910 through 1940 women food operatives and laborers in six major branches can be distinguished from census reports. The women workers in bakeries, canneries, candy factories, milk and butter companies, meat packing houses, and in grain mill and other food factories increased by 101,929 from 1910 to 1940. About 32,000 of the additional workers in the 30-year period went into canning, and about 20,000 into meat products manufacture.

For women, the leading branch of food manufacture in 1940 was canning and preserving, with confectionery nearly as large.

In 1910 women operatives and laborers in canning and preserving were outranked both by those in confectionery and by those in bakery products, on the basis of census figures. Even so, the relative importance of canning workers among all women food operatives and laborers is understated in 1940, for it should be remembered that canning is a highly seasonal industry. The census figures do not show the full size, since they relate to the slack period<sup>6</sup> and not to the period from May to September when the industry rises to a peak and employs about  $3\frac{1}{2}$  times as many workers as at the low period.<sup>7</sup> In general, between 1910 and 1940, a growing proportion of the women operatives and laborers in food production were workers in canning or in meat products, while a declining proportion worked in confectionery or in grainmill and miscellaneous food industries.

		Percent dis	tribution	
Total women operatives and laborers:	1940	1930	1920	1910
food and kindred products	100.0	100.0	100.0	100.0
Canning and preserving fruits, vegetables,	•			
and sea food, operatives and laborers	25.0	20.5	15.1	11.5
Confectionery, operatives and laborers	22.7	27.4	38.9	42.1
Meat products, operatives and laborers	16.0	11.9	12.8	8.0
Bakery products, operatives and laborers	15.2	15.6	14.5	14.7
Grain-mill products and miscellaneous food				
industries, operatives and laborers	9.7	12.8	10.2	13.0
Bakers	7.0	7.3	4.6	9.3
Dairy products, operatives and laborers	4.3	4.5	3.9	1.3
Millers, grain, flour, feed, etc.	0.1	(¹)	(¹)	0.1
<sup>1</sup> Less than 0.05 percent.				

Canning and preserving.—The canning and preserving industry, whether of fruits, vegetables, or sea food, is affected by limitations on time and place of production because the foods must be handled near the area of production and at the time when they are available. For this reason the industry has depended to a great extent on the labor of women who live in the locality and come into the factory at the canning season. The industry was very little developed before the Civil War, preservation of fish and oysters having been the main activity. By 1870 fish packing houses were alternating fish packing in the winter with preservation of fruits and vegetables in the summer. The introduction of machinery for the preparation of products to be canned and for the sealing of the cans, as well as improvements in canning

<sup>&</sup>lt;sup>6</sup> The 1940 census was taken in March, those of 1930 and 1910 in April, and the 1920 census in January.

<sup>&</sup>lt;sup>7</sup> Alderfer, E. B. and Michl, H. E. *Economics of American industry*. New York, N. Y., McGraw-Hill Book Co., 1942, p. 76.

<sup>8</sup> Clark, Victor S., op. cit., Vol. I, p. 485; Vol. II, p. 122.

methods and controls, formed the basis of expansion in this industry.9

Further changes that particularly affected women's work occurred after 1900, including the introduction of the sanitary can; the use of machines to vine and shell peas, to husk, cut, and silk corn, and to grade fruit and vegetables as to size; and the adoption of conveyor-belt systems. Though these changes have reduced the number of women needed for a given output, the great expansion of the industry has far more than compensated for any tendency toward reduced employment that might have arisen from increasing productivity. Census data available beginning in 1910, though underrepresenting the industry because of its seasonal nature, show a high rate of growth among women and an increasing proportion of women among all canning operatives and laborers.

		Women operatives and laborers: canning and preserving		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	************************	37,454	59.9	46.4
1930	***************************************	23,422	63.9	44.1
1920	数 成 数 水	14,292	159.1	37.2
1910	***	5,517	Name of the last o	30.3

Confectionery workers.—Women were a high proportion of operatives and laborers in plants manufacturing candy and confectionery in 1940. The proportion had been increasing slightly since 1910, when separate census data for this occupation were first available. Operations such as hand and fork dipping, decorating, hand and machine wrapping, and machine feeding and operating are particularly suited to women.<sup>12</sup> This is a seasonal industry, with peak operation in the fall, so that figures reported in the various censuses on women operatives undoubtedly somewhat understate the number of women in these operations.<sup>13</sup> Trends since 1910 were as follows:

<sup>&</sup>lt;sup>9</sup> [U. S.] Department of Commerce and Labor. Bureau of the Census. [12th census of the United States: 1900.] Vol. IX, Manufactures. Part III, Special reports on selected industries, p. 465. Washington, [U. S.] Government Printing Office, 1902.

<sup>&</sup>lt;sup>10</sup> See U. S. Department of Labor. Women's Bureau. Effects of applied research upon the employment opportunities of American women. Bulletin 50. Washington, U. S. Government Printing Office, 1926, pp. 33-34.

<sup>&</sup>lt;sup>11</sup> See footnote 6, p. 97.

<sup>&</sup>lt;sup>12</sup> For a survey of the confectionery industry, see U. S. Department of Labor. Women's Bureau. Labor conditions in the confectionery industry, 1941. June 1942. 66 pp. Mimeo.

<sup>13</sup> Census data for 1910 to 1940 relate to a month in the spring, except for 1920 data which apply to January.

		Women operatives and laborers: confectionery		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940	<del></del>	34,021	+ 8.9	60.9
1930		31,233	-15.2	58.4
1920		36,850	+81.9	58.6
1910		20,263	<u> </u>	56.1

Meat products.—In the meat packing industry the trend has been toward the development of by-products and specialties. Women have not worked to any great extent in the slaughtering and dressing of meat, which at one time was the chief activity carried on. For the most part they have been employed in the processing departments, where they perform trimming operations, tie sausage, weigh and pack meat products, package lard, and perform similar operations. As the production of by-products and specialties developed, and as higher standards of purity enabled consumers to use these products with assurance, the jobs for women increased. Between 1910 and 1940, 20,000 additional women entered the meat products industry as operatives and laborers, and the proportion of women relative to the total rose.

		Women operatives and laborers: meat products		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	***************************************	24,028	76.6	17.7
1930		13,605	11.9	14.0
1920		12,157	217.7	11.0
1910	*******************************	3,827		6.3

Bakery products.—Today bread is produced commercially, for the most part, whereas formerly it was almost universally baked in the home by women, except for the baked goods made for shipboard use or for travelers. Women work mostly in hand wrapping, packing, and finishing jobs, largely in the making of cookies and crackers. Women are less numerous in bread, cake, and pie production probably because of the heavy nature of much of the work, the considerable amount of night work, and the small number of workers in many establishments.<sup>15</sup>

The manufacture of crackers and biscuits, at first carried on by hand and after 1840 by machinery, received an impetus from the demand for hardtack during the Civil War. About the turn of the century the organization of a number of cracker factories

<sup>&</sup>lt;sup>14</sup> U. S. Department of Labor. Women's Bureau. The employment of women in slaughtering and meat packing. By Mary Elizabeth Pidgeon. Bulletin 88. Washington, U. S. Government Printing Office, 1932. 210 pp.

<sup>&</sup>lt;sup>15</sup> U. S. Employment Service. Job descriptions for the bakery products industry. Washington, U. S. Government Printing Office, 1939. pp. XII-XIV.

## 100 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

into one company paved the way for increased specialization and use of machinery and for the introduction of packaged products. Packing, wrapping, and labeling activities opened many new jobs for women.<sup>16</sup>

Women were a higher proportion of the operatives and laborers in the bakery products industry in 1940 than in 1910, when figures for these workers were first presented by the census. Their proportion had declined from 1910 to 1930, indicating that their not inconsiderable rate of increase in those years had been exceeded by men's.

		Women operatives and laborers: bakery products		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		22,829	28.4	44.5
1930	nagana ang dan manggalam nagana ang Sanghalangai Malah, Nanghalangkapalankan Malah da Makabilan Malah Sanghalan	17,782	29.4	32.9
1920		13,738	94.9	35.4
1910		7,050		39.4

Grain-mill products and miscellaneous food industries.—The transformation of the food industries from a type supplying rather incidental services for only exceptional needs (most of the food wants of the population having been met in the household) to their present vital place in American life, affecting the diet of every consumer in the Nation, is exemplified in the development of the miscellaneous food industries, especially in the first 30 years of the century, as well as in the development of the canning and specialized meat products industries just discussed. Much of the growth in commercial food production arose from the desire to utilize the advantages of mechanization and specialization in new fields of consumer goods manufacture, which could be done only by supplanting former household production.<sup>17</sup> Cereals and breakfast foods, baking powder, macaroni and potato chips are included in the group being discussed, as are flour and sugar. Census data available beginning in 1910 for this branch of the industry show fluctuating trends for women, who were, however, more numerous and a larger proportion of the total in 1940 than in 1910.

		Women operatives and laborers: grain-mill products and miscellaneous food industries		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940	4	14,597	- 0.4	15.6
1930		14,651	+52.6	17.7
1920		9,602	+53.8	11.0
1910		6,244		12.7

<sup>&</sup>lt;sup>16</sup> Report on condition of woman and child wage-earners in the United States. S. Doc. 645. Washington, U. S. Government Printing Office, 1910-1912, Vol. 18, pp. 163-164.

<sup>17</sup> Clark, Victor S., op. cit., Vol. I, p. 486.

Dairy products.—During the last half of the nineteenth century a considerable share of dairy farming activities moved from the farm to the factory, as creameries, condenseries, and cheese factories took over conversion processes that had formerly been done on the individual farm.<sup>18</sup> More recently the production of ice cream developed.

Data beginning in 1910 for operatives and laborers in the dairy products industries show a rapid expansion among women and increasing proportions of women among the total.

	Women operatives and laborers: dairy products		
	Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	 6,501	26.1	12.4
1930	 5,156	37.9	11.2
1920	 3,738	477.7	10.3
1910	647		3.7

#### BEVERAGE INDUSTRIES

Trends among women operatives and laborers engaged in the manufacture of liquors and beverages reflect the drastic changes in the work force resulting from the Prohibition Act (prior to the greater expansion of soft drink industries) and, subsequently, from its repeal. There was a drop in numbers of women operatives and laborers from 1910 to 1920; from 1930 to 1940 there was a sharp increase. The proportion of women among all workers was considerably higher in 1940 than it had been in 1930 and earlier.

		Women operatives and laborers: beverage industries		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		7,587	+679.8	11.5
1930		973	+ 7.0	4.9
1920	For \$6.000000000000000000000000000000000000	909	<b>—</b> 61.3	3.4
1910	***************************************	2,347	+117.9	4.6
1900		1,077	+75.7	3.1
1890	***********************	613	+354.1	2.0
1880		135	+610.5	0.6
1870		19		0.1

## TOBACCO MANUFACTURING

The total number of operatives and laborers in the tobacco industry reached a peak in 1920, the same year in which numbers of women in these occupations were at an all-time high. Increased mechanization and large-scale operation have occurred in

<sup>&</sup>lt;sup>18</sup> [U. S.] Department of Commerce and Labor. Bureau of the Census. [12th census of the United States: 1900.] Vol. IX, Manufactures. Part III, Special reports on selected industries, p. 433. Washington, [U. S.] Government Printing Office, 1902.

both the cigarette and cigar branches. In cigarette manufacture. present-day completely automatic machines are in marked contrast to the hand rolling practiced until the 1880's.19 In cigar manufacture, the machine-made cigar of 1940 contrasts with the all-hand-made, long-filler cigar required by the discriminating smoker in 1910.20 The shift to machinery in cigar-making, the union policies pursued in resisting its introduction, the growing preference for the cigarette, and other factors resulted in increasing proportions of women in the industry.<sup>21</sup> Women rose from 10.4 percent of all workers in 1870 to 62.6 percent in 1940. Though proportions of women continued to rise after 1920, the number of women employed has declined since then. This gives evidence that the growing market for cigarettes failed to compensate for increasing productivity in the tobacco industry, though the census does not afford data for separate comparisons of these two branches of the industry.

	и	Women operatives and laborers: tobacco manufactures		
	Number	Percent change from preceding census	Percent of all workers in this occupation	
1940	61,245	<del> 17.9</del>	62.6	
1930	74,599	<b></b> 24.5	59.6	
1920	98,784	+ 28.7	54.3	
1910	76,727	+ 76.4	45.4	
1900	43,497	+ 55.4	33.1	
1890	27,991	+157.6	25.1	
1880	10,868	+153.3	14.1	
1870	4,290	***************************************	10.4	

Tobacco manufacturing has had an exceptionally high proportion of Negro women workers. Jobs done by numbers of Negro women have included stemming and stripping as well as the heavy or dusty operations involved in preparing the tobacco for processing.<sup>22</sup> In 1940, 23.9 percent of the women operatives in this industry who were employed or were experienced workers seeking work were Negroes, compared with 2.7 percent among women manufacturing operatives and 14.2 percent among all women who were employed or were experienced workers seeking work. Census data in 1940 were not presented in sufficient detail to pre-

<sup>19</sup> Alderfer and Michl, op. cit., p. 494.

<sup>&</sup>lt;sup>20</sup> Baer, Willis N. The economic development of the cigar industry in the United States. Lancaster, Pa., Art Printing Co., 1933, p. 196.

<sup>&</sup>lt;sup>21</sup> For a study of women in the tobacco industry see U. S. Department of Labor. Women's Bureau. *The effects on women of changing conditions in the cigar and cigarette industries*. By Caroline Manning and Harriet A. Byrne. Bulletin 100. Washington, U. S. Government Printing Office, 1932. 187 pp. The history of women in cigar-making is described in Abbott, op. cit., Ch. IX, Cigar-making, pp. 186-214.

<sup>&</sup>lt;sup>22</sup> U. S. Department of Labor, Women's Bureau, Negro women in industry in 15 states. By Mary Elizabeth Pidgeon. Bulletin 70. Washington, U. S. Government Printing Office, 1929, pp. 15-17.

sent data by race for women laborers in tobacco manufacturing. This is unfortunate, since proportions of Negroes among women laborers are known to be considerably higher than among operatives. The proportion of Negroes among women tobacco operatives and laborers has been rising, as the available data show.

	Proport among o	ion of Negroes women tobacco peratives
1940		23.9
1930		22.0
1920	VP-VP-N-PO-VP-N-N-P-V-N-N-P-N-N-N-N-N-N-N-N-N-N-N-	16.0

#### TEXTILE MANUFACTURING

General trends.—Historically, the entrance of women into cotton manufacture led the way to the employment of women in manufacturing industries. If the production of automobiles, of chemicals, and of electrical machinery and equipment are looked upon as twentieth century industries, textile manufacture may be considered rather a nineteenth century industry. By the beginning of the nineteenth century the first cotton mills, with their revolutionary spinning machinery, had been established, and within the first quarter of that century the power loom had been introduced. Employment of women grew rapidly, a trend that received widespread approval as one which would keep women from idleness and enable them to add to the wealth of the country.<sup>23</sup> By 1870, 104,180 women textile operatives and laborers were recorded in the census.<sup>24</sup> By 1940 the number more than quadrupled, reaching 498,068.

	Wome	Women operatives and laborers: textiles		
		Number	Percent change from preceding census	
1940		498,068	+15.7	
1930		430,307	- 5.0	
1920		452,981	+17.0	
1910		387,062	+38.1	
1900		280,200	+26.4	
1890		221,711	+37.5	
1880		161,283	+54.8	
1870		104,180	<del></del>	

<sup>&</sup>lt;sup>1</sup> See footnote 24 for occupations included.

The decennial increase in the number of women textile operatives and laborers was between 50,000 and 70,000 in all decades except from 1900 to 1910, when it was considerably higher, and

<sup>23</sup> Abbott, op. cit., esp. Chs. IV, VI.

<sup>&</sup>lt;sup>24</sup> Operatives and laborers in some nine industries may be grouped together as textile workers: cotton; silk and rayon; knit goods; dyers, and dyeing and finishing textiles; carpets, rugs, and other floor coverings; woolen and worsted; miscellaneous textile goods; miscellaneous fabricated textile products; and not specified textile mills.

from 1920 to 1930, when there was a decrease. The excess capacity, interregional competition, and other difficulties of the textile industries in later decades<sup>25</sup> were reflected in the lessened rates of growth among women textile workers after 1910.

Changes relative to population and labor force growth.—The problems faced by the textile industry, in conjunction with growing opportunities for women in other occupational fields, resulted in a decline in the proportion of women textile operatives and laborers among all women workers from the high point in 1880. The number of persons in the population for each woman textile worker fluctuated somewhat, but it was lower in recent years than in 1870 and 1880.

	Number of persons in population for each woman oper- ative and laborer in textiles!	Women operatives and laborers in testiles as percent of all women in the labor force or gainfully occupied
1940	264	3.8
1930	285	4.1
1920	233	5.2
1910	238	5.2
1900	271	5.3
1890	282	5.5
1880	311	6.1
1870	382	5.4

<sup>&</sup>lt;sup>1</sup> See footnote 24, p. 103, for occupations included.

Changes relative to men.—Because the textile industries have required large numbers of workers who can learn the process in a short while and who do not need great physical strength, considerable proportions of the workers have always been women. In 1870, when only about 15 percent of all workers were women, the textile industries had 42.6 percent women. By 1940 about a fourth of all workers were women, while in textiles women were nearly one-half. Women have, however, declined slightly relative to the total in recent decades compared to 1910, when they were exactly half of the workers.

	Women as percent of all textile oper-
	atives and laborers1
1940	47.5
1930	46.7
1920	48.4
1910	50.0
1900	48.9
1890	
1880	45.4
1870	42.6
<sup>1</sup> See footnote 24, p. 103, for occupations included.	

<sup>25</sup> See Alderfer and Michl, op. cit., pp. 320-323.

Shifts in particular textile industries.—The distribution of women operatives and laborers among the various textile industries followed the same general pattern in 1940 as in 1910, when a similar break-down was first available. The distributions are approximate in nature, since the Census Bureau experiences considerable difficulty in allocating to the proper textile industry returns that are indefinite. In both years the largest proportion of women were in cotton manufacturing, followed by knit goods, and then by woolen and worsted and by silk and rayon manufactures. The major part of the shift from the use of cotton to a variety of other fabrics had already occurred between 1870 and 1910, when the proportion of all women textile operatives and laborers who were in cotton manufacturing dropped from 63 to 38 percent. Between 1910 and 1940, the proportion in knit goods steadily increased, and the proportion in silk and rayon, which reached a peak in 1930, dropped quite low in 1940. Percent distribution

	rercent distribution			
TD 1 3	1940	1930	1920	1910
Total women operatives and laborers:	100.0	100.0	100.0	100.0
Cotton manufactures, operatives and				**
laborers	36.8	36.3	36.9	38.2
Knit goods, operatives and laborers	25.0	21.5	18.9	17.7
Woolen and worsted manufactures,				
operatives and laborers	12.3	11.5	14.1	13.6
Silk and rayon manufactures, operatives and laborers	9.7	17.6	16.7	13.2
Carpets, rugs, and other floor coverings,				
operatives and laborers	2.6	3.2	2.6	5.6
Miscellaneous textile goods, operatives				
and laborers	2.2	3.0	4.9	5.4
Dyers; dyeing and finishing textiles,		1.6		
operatives and laborers	1.4	1.5	1.4	1.7
Miscellaneous fabricated textile products, and not specified textile mills, operatives			-	
and laborers	10.0	5.4	4.4	4.6

Cotton workers.—In all there were 183,538 women cotton operatives and laborers in 1940, nearly three times as many as in 1870. In five of the seven decades more than 19,000 additional women had come into cotton manufacture. The largest number was 27,914, entering between 1890 and 1900; the number was smaller in the next two decades. From 1920 to 1930 a decline occurred, but a recovery and advance was made from 1930 to 1940. The retarded rate of growth after 1900 occurred in a period when the introduction of improved machinery and later of scientific management methods were increasing the productivity of the

747639° --- 48 --- 8

# 106 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

workers, enabling a given number of workers to produce a greater total of goods.<sup>26</sup>

		Women operatives and laborers: cotton manufactures	
	Number	Percent change from preceding census	
1940	<b>183,5</b> 38	+17.6	
1930	156,129	- 6.6	
1920	167,179	+13.1	
1910	147,782	+21.3	
1900	121,809	+29.7	
1890	93,895	+ 1.6	
1880	92,394	+41.1	
1870	65,486		

Women were a considerable part of the work force from the early days of cotton manufacture. In the home, spinning had always been women's work. This was true also in the early mills, where ring spinning was the practice. The adoption of mule spinning, beginning in the 1840's, brought a growing replacement of women by men. Though in the period of hand production men generally did the weaving, with the introduction of spinning machinery and the increased demand for weavers women undertook power weaving, and through the middle of the nineteenth century weaving was considered a woman's job. By the time of the 1870 census factors causing the displacement of women were in active operation. The use of constantly heavier types of machinery and the increasing speed at which they were operated, together with the enlarging supply of male immigrants, affected the proportion of women in the industry.<sup>27</sup>

Each decade after 1870 saw a decreasing proportion of women among all cotton workers as well as a downward trend in the proportion of all women workers who were operatives and laborers in cotton manufacturing.

	Women operatives and laborers in cotton manufactures as percent of—	
	Women in the labor force or gainfully occupied	All workers in this occupation
1940	1.4	43.4
1930	<b> 1.5</b>	43.9
1920	1.9	44.5
1910	2.0	46.7
1900	2.3	49.4
1890	2.3	54.2
1880	3.5	54.4
1870	3.4	58.3

<sup>&</sup>lt;sup>28</sup> Lahne, Herbert J. The cotton mill worker. New York, N. Y., Farrar & Rinehart, Inc., 1944, pp. 153-154.

<sup>&</sup>lt;sup>27</sup> For a discussion of the effect of cotton manufacture on employment of women in the nineteenth century see Abbott, op. cit., Ch. VI, The cotton industry.

In the early days of cotton-mill machinery, it was thought advantageous to the community to have children taught its operation, and many of them were employed in the mills from the first. Even children under 10 were both "helpers" and regular employees on the pay rolls in southern mills as late as the turn of the century.28 As the disadvantages to children's health and welfare were understood, the heavy reliance of the cotton industry on child labor greatly diminished. This movement has been accelerated under the influence of child labor regulation, the increasing tendency toward longer schooling, the technological changes that made it more difficult to utilize child labor, and the developing minimum wage requirements that made it unprofitable to employ children when a supply of older workers was available.29 The first diminution in child labor affected the youngest children. In 1910 there were 5,130 girl cotton-mill operatives 10 to 13 years of age; by 1930 this number had shrunk to only 107. Gradually the age was raised; in 1910 nearly 30,000 girls under 18 were cotton mill operatives, but by 1940 less than 2,500 girls this young were so employed, and scarcely any of these were under 16.

Since 1920, accompanying the marked decrease in the proportion of younger workers, there has been a marked increase in the numbers and proportions who were 20 to 44 years of age as well as a rise in proportions 45 years and over.

	Percent distribution		
	11940	1930	1920
Women operatives and laborers in cotton			
manufactures, 14 years and over	100.0	100.0	100.0
14-15 years	( <sup>2</sup> )	3.7	6.7
16-17 years	1.4	11.1	13.2
18-19 years	5.9	11.6	11.8
20-44 years	79.3	³62.8	<sup>8</sup> 58.4
45 years and over	13.4	10.8	9.9

<sup>1</sup> Women who were employed or were experienced workers seeking work.

The decrease in the number of girls among women cotton operatives and laborers occurred simultaneously with an increase in the proportion of women in cotton who were married. Work in cotton mills has from the earliest days been to a considerable extent an occupation that employed whole families. The effect of this practice, largely peculiar to the cotton industry, appears in the fact that its 1940 work force contained a higher proportion of

<sup>&</sup>lt;sup>2</sup> Less than 0.05 percent.

<sup>&</sup>lt;sup>3</sup> Includes age unknown.

<sup>&</sup>lt;sup>28</sup> Report on the condition of woman and child wage-earners in the United States. S. Doc. 645. Vol. I, Cotton textile industry.

<sup>29</sup> See Lahne, op. cit., pp. 105-124.

married women than any other of the 76 occupations on the intermediate list.<sup>30</sup> Of all women cotton operatives 14 years old and over who were employed or seeking work in 1940, 65.7 percent were married. The proportion of married women among gainfully occupied women cotton-mill operatives 14 years old and over was 42.5 percent in 1930 and 34.6 percent in 1920.<sup>31</sup>

Part of the rise in the proportion of married women is due to lessened employment of the younger workers, who are more likely to be unmarried. If the age distribution in 1920 among women operatives in cotton manufactures had been like that in 1940, the proportion married would have been 46 instead of 35 percent in 1920. Part of the upward trend in the proportion of cotton operatives who were married reflects the general increase of married women among all women workers, and part of it may be due to factors peculiar to the cotton industry.

Knit goods production.—Women operatives and laborers in knit goods numbered 124,696 in 1940, nearly 65 times as many as in 1870. Improvements in machinery and growing demand following the Civil War caused a considerable expansion in the industry, a trend further advanced by the introduction of full-fashioned machinery in the eighties.<sup>32</sup> The great increase in output possible with the shift to machine methods<sup>33</sup> was accompanied by an expanding work force of women, whose rate of employment growth continued at a high level up through 1910.

The knitting of stockings continued to be a home industry, carried on in women's spare moments, considerably after cotton textiles had become a factory product, except in Pennsylvania. However, it remained largely women's work even after factory production began to supplant home output.<sup>34</sup> In addition to their work in hosiery factories, women workers were employed in knitted underwear and knitted outerwear plants. By 1900 the number of women approached three-fourths of all knit goods operatives and laborers. Then they began to lose out to men, though their numbers continued to rise, particularly after 1920, when the phenomenal increase in output of full-fashioned hosiery was

<sup>30</sup> See pp. 13 and 14 for discussion of occupational classification.

at Women 14 years old were assumed to be single in 1920 and 1930.

<sup>32</sup> Clark, Victor S., op. cit., Vol. II, pp. 443-445.

<sup>&</sup>lt;sup>83</sup> In a study in 1895-97, hand methods of producing hosiery and knit goods were found to require from 4 to 280 times as long as machine methods. Commissioner of Labor. *Thirteenth annual report*, 1898. Washington, U. S. Government Printing Office, 1899. Hand and machine labor, Vol. I, pp. 288-290.

<sup>&</sup>lt;sup>34</sup> Meyer, Annie Nathan, Editor. Woman's work in America. New York, N. Y., Henry Holt & Co., 1891. Ch. XI, Women in industry, p. 277.

taking place.<sup>35</sup> In the following figures the drop in the proportion of women after 1920 probably reflects the growth of the full-fashioned hosiery section of the knitting industry, which utilized considerable numbers of men in skilled occupations.

		Women operatives and laborers: knit goods		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		124,696	34.6	65.1
1930		92,609	8.3	65.1
1920		85,482	25.0	71.9
1910	*******************	68,402	100.3	72.0
1900		34,145	65.7	73.2
1890	***************************************	20,602	164.8	70.4
1880		7,781	294.8	64.5
1870		1,971	<del></del>	54.5

Wool and worsted manufactures.—As one of the older textile fibers, wool has been subject to production problems of long standing and to inroads by the newer types of textile materials. The readjustments that had to be made after 1920<sup>36</sup> showed effects on the number of women in the industry, which underwent a marked decline from 1920 to 1930.

Though new occupations for women arose (for example, that of drop-wire girl) the "modernization" of the woolen and worsted industry caused the number of workers needed for a given output to become smaller.<sup>37</sup> Data for woolen and worsted manufactures available beginning in 1910 show that the number of women operatives and laborers declined slightly relative to men from 1910 to 1920 and then remained at a stable level. Even in 1940, however, women in this field were more than 2 out of every 5 workers.

		Women operatives and laborers worsted manufacture	
	Number	Percent change from preceding census	Percent of all workers in this occupation
1940	 61,022	+23.4	43.9
1930	 49,458	-22.7	44.0
1920	 64,013	+21.6	44.0
1910	 52,621	-	46.2

Silk and rayon manufactures.—Silk and rayon have become increasingly important for use in clothing relative to wool and cotton, which alone were in general use as fabrics at one time. Before 1910 the silk and rayon industry was almost entirely a silk

<sup>25</sup> Taylor, George William. Significant postwar changes in the full-fashioned hosiery industry. Philadelphia, Pa., University of Pennsylvania Press, 1929, p. 12.

<sup>36</sup> Alderfer and Michl, op. cit., pp. 327-328.

<sup>&</sup>lt;sup>37</sup> Stern, Boris. Mechanical changes in the woolen and worsted industries, 1910 to 1936. *Monthly labor review* 46: 58-93, January 1938.

industry, as the census title of that period indicates. After 1920 improvement in the product brought rayon into wider acceptance. By 1940 so many mills were engaged in rayon weaving—either silk or cotton mills that had shifted to rayon weaving or new mills specially organized for rayon weaving<sup>38</sup>—that the industry became known as "silk and rayon manufactures."

As early as colonial times women played an important part both in the culture and weaving of silk. At that time bounties were given to stimulate the silk industry, and these were often paid to women, who were the mainstay of the industry.<sup>39</sup> Though the culture of silk never became important in the United States, silk spinning and weaving developed as a factory industry employing considerable proportions of women.

Developments in the silk industry caused considerable shifting of the operations between the sexes at various times. About 1870 the hand looms for weaving broad silk, operated by men, were gradually replaced by power looms, operated by women to a considerable extent. In warping, however, women had complete possession of the occupation at the time of the 1870 census, but before 1910 men usually were the exclusive operators of the horizontal warping mill. In ribbon weaving the high-speed looms, on which women were frequently employed, began about the turn of the century to supplant looms on which it had been customary to employ men.<sup>40</sup>

Beginning from a low level in 1870, numbers of women silk and rayon operatives and laborers reached a peak of 75,715 in 1930 but declined by more than a third in 1940. This decrease may represent in part a shift to other materials and products in response to changing consumer tastes, but it may also be due in part to the difficulty experienced by the Census in attempting to distinguish between persons working in silk and rayon manufactures and those engaged in the production of rayon and allied products, classified as a chemical industry. The proportion of women among all the operatives and laborers in the industry rose for several decades after 1880 but then showed a steady drop from 1910 to 1940.

<sup>88</sup> Alderfer and Michl, op. cit., pp. 357-358.

<sup>39</sup> Meyer, op. cit., p. 278.

<sup>&</sup>lt;sup>40</sup> Report on condition of woman and child wage-earners in the United States. S. Doc. 645. Vol. IV, The silk industry, pp. 31-42.

Wanner abandinas and laboranas silb and

			rayon manufactures	: sur ana
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940	-	48,255	- 36.3	50.4
1930		75,715	+ 0.2	55.7
1920		75,534	+47.3	60.4
1910		51,279	+ 58.1	62.4
1900		32,437	+ 57.0	60.2
1890	***************************************	20,663	+124.3	59.9
1880	*****	9,211	+300.1	51.5
1870	Manager	2,302	' 	71.4

Carpets and rugs.—The growth from 1870 to 1910 in the number of women operatives and laborers engaged in the production of carpets, rugs, and other floor coverings, at the same time that they increased in general relative to the total, occurred in a rapidly expanding industry. The greater demand for these products represented one aspect of the rising standard of living, made possible by technical improvements in carpet production and the complete replacement of hand by machine weaving in the United States.<sup>41</sup>

From 1910 to 1920 there was a sharp drop in the number and percentage of women in this work. Since then the trends among women have fluctuated.

	Women operatives and laborers: carpets, rugs, and other floor coverings		
	Number	Percent change from preceding census	Percent of all workers in this occupation
1940	13,107	- 5.7	37.1
1930	 13,904	+15.8	34.5
1920	 12,003	44.7	36.4
<b>1</b> 910	 21,722	+40.4	44.2
1900	15,476	+33.2	48.5
1890	 11,616	+51.4	43.4
1880	 7,674	+29.0	37.5
1870	 5,948		31.3

Dyeing and finishing textiles.—As a factory industry, textile finishing dates from colonial days, for even at that period "every community boasted three mills,—one for lumber, another for flour and a third for finishing wool cloth." However, much of the dyeing of home-produced cloth was done in the household by women, and it is of interest to note that indigo was introduced

<sup>41</sup> See Clark, Victor S., op. cit., Vol. II, pp. 438-442.

<sup>&</sup>lt;sup>42</sup> Keir, Malcolm. Manufacturing industries in America. New York, N. Y., Ronald Press Co., 1920, p. 38.

as a crop by a woman, Eliza Lucas Pinckney, manager of her father's South Carolina plantation.<sup>43</sup>

As textiles became factory products, the formerly limited colors and patterns became diversified, and dyeing, printing, bleaching, and other finishing operations constituted a well-established industry by 1870. Women constituted about one-seventh of the operatives and laborers at that date, and though their proportion fluctuated for a time, after 1910 it showed a small but steady decline. From 1870 to 1940 less than 6,000 women were added to the ranks of the workers.

Women dyers, and operatives and laborers: textile

			ayeing and imisting	
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940	######################################	6,942	+ 9.3	12.2
1930		6,350	<b>—</b> 1.5	13.6
1920		0.440	-2.7	14.3
1910		6,625	+123.5	15.8
1900	,	2,964	<b>— 11.3</b>	10.1
1890		3,343	+ 85.4	15.4
1880		1,803	+ 37.6	12.7
1870		1,310	<del></del>	14.6

#### CLOTHING WORKERS

General trends.—In the early years of the Nation's development, clothing the family members was an important activity of the women and girls of the family. Today, with nearly three-quarters of a million women operatives and laborers, it is still an important function for women, though no longer performed almost entirely in the home. Inroads into the making of home-produced and custom-made clothing were already considerable by 1870. The use of the sewing machine, invented in 1846, and the development of standard sizes for uniforms during the Civil War made possible great expansion in factory production of clothing.<sup>44</sup> From an industry limited in scope before 1830 to the needs of sailors in port, the men's clothing industry grew to such size that by 1870 "the mass of the male population of the United States was clad in ready-made clothing."<sup>45</sup> In the women's

<sup>&</sup>lt;sup>43</sup> Beard, Mary R., Editor. America through women's eyes. New York, N. Y., Macmillan Co., 1933, pp. 33-41.

<sup>&</sup>lt;sup>44</sup> Hickman, Mildred M. The clothing industry in Cleveland. Cleveland, Ohio, Board of Education, 1929, pp. 2-5.

<sup>&</sup>lt;sup>45</sup> Clark, Victor S., op. cit., Vol. II, p. 431; for a historical discussion of the clothing industry see Abbott, op. cit., Ch. X, The clothing industry, pp. 215-245; Report on condition of woman and child wage-earners in the United States, op. cit., Vol. 2, Men's ready-made clothing, pp. 483-512; [U. S.] Department of Commerce and Labor. Bureau of the Census. [12th census of the United States: 1900.] Vol. IX, Manufactures. Part III, Special reports on selected industries, pp. 296-302. Washington, [U. S.] Government Printing Office, 1902; Willett, Mabel Hurd. The employment of women in the clothing trade. New York, N. Y., Columbia University Press, 1902. 206 pp.

clothing industry, the garments of the "mantuamakers" of colonial days<sup>46</sup> may be considered predecessors of cloaks, which were the one such product generally manufactured in 1870. By 1900, however, the ready-made women's clothing industry extended to the manufacture of suits, lingerie, and shirtwaists.

Women operatives and laborers in apparel factories, together with dressmakers and tailoresses, constituted the largest single group of women in manufacturing in 1940, and their numbers were more than triple those in 1870. The 1870 and 1880 figures include milliners. If an allowance were made for them, the figures would change somewhat, though the general long-time trends would not be radically affected. The number of women operatives and laborers in apparel and accessories, together with tailoresses, dressmakers and seamstresses (not in factory), grew from 1870 through 1910, though at a declining rate. The drop in numbers from 1910 to 1930 was almost retrieved in 1940.

	Women clothing workers1	
	Number	Percent change from preceding census
1940	727,552	+ 38.0
1930	527,128	- 5.5
1920	557,610	-30.1
1910	797,665	+ 18.8
1900	671,240	+ 14.9
1890	584,408	+ 50.1
1880	389,231	+79.7
1000	<sup>2</sup> 353,156	+280.3
1870	216,616	
1870	²195,908	_

<sup>&</sup>lt;sup>1</sup> Includes apparel and accessories, operatives and laborers; failoresses; dressmakers and seam-stresses (not in factory).

Changes relative to population and labor force growth.—The numbers in the population for each woman clothing worker were at lower levels from 1890 to 1910 than before or afterwards. This was the period in which there were still many dressmakers, while at the same time factory-made clothing was rapidly expanding into new markets. Earlier a great deal of clothing, primarily women's and children's, still was made by the unpaid labor of women in the home. Later, custom-made clothing gave way to the almost universal use of ready-made apparel, produced under

<sup>&</sup>lt;sup>2</sup> Figure adjusted to exclude estimated number of women milliners: 1870, 20,708; 1880, 36,075.

<sup>&</sup>lt;sup>46</sup> Instances of women as proprietors of important mantuamaking and tailoring establishments, employing assistants and apprentices, are given in Spruill, Julia Cherry. Women's life and work in the southern colonies. Chapel Hill, N. C., University of North Carolina Press, 1938, pp. 284-286.

more efficient methods and also with the labor of relatively more men. Comparisons of hand and machine labor in the men's clothing industry before 1900 showed tremendous gains in output when hand work was supplanted by machines, particularly in the cheaper grade of product. Hand methods required anywhere from 2 to more than 10 times as long as machine methods.\*

Throughout the past 50 or 60 years the proportion of all women workers who were clothing workers declined.

	Number of persons in population for each woman clothing worker <sup>1</sup>	Women clothing workers <sup>1</sup> as percent of all women in the labor force or gainfully occupied
1940	181.0	5.6
1930	232.9	4.9
1920	189.6	6.5
1910	115.3	10.7
1900	113.2	12.6
1890	107.2	14.6
1880	$-\begin{cases} 128.9 \\ {}^{2}142.0 \end{cases}$	14.7 ²13.3
1870	$ \begin{array}{c} 183.8 \\ ^{2}203.3 \end{array} $	11.3 <sup>2</sup> 10.2

<sup>&</sup>lt;sup>1</sup> Includes apparel and accessories, operatives and laborers; tailoresses; dressmakers and seam-stresses (not in factory).

Changes relative to men.—The proportions of women relative to all clothing workers have always been high. The splitting up of what was formerly the work of the dressmaker, the tailoress, and the seamstress and the assigning of cutting, pressing, basting, and other jobs to male workers have tended to decrease the proportions of women. The plentiful supply both of inexperienced and of highly skilled male garment workers, available as a result of the various waves of immigration, has further contributed to this trend. On the other hand, many of the operations are better performed by women in this industry in which the deftness and skill needed to place and manipulate the garment is even more important than actual stitching operations.<sup>48</sup> Trends since 1870 have been as follows:

<sup>&</sup>lt;sup>2</sup> Figure adjusted to exclude estimated number of women milliners: 1870, 20,708; 1880, 36,075.

<sup>&</sup>lt;sup>47</sup> Commissioner of Labor. Thirteenth annual report, 1898, op. cit., Hand and machine labor, Vol. I, pp. 197-204.

<sup>&</sup>lt;sup>48</sup> In the cotton garment industry studies show that from 67 to 85 percent of the total time taken by workers to make the garment is spent in handling and manipulating. U. S. Department of Labor. Bureau of Labor Statistics. *Productivity of labor in cotton garment industry*. Bulletin 662. Washington, U. S. Government Printing Office, 1939, p. 36.

	Women as percent of all clothing workers <sup>1</sup>	
1940	74.0	
1930		
1920		
1910		
1900	79.2	
1890	81.8	
1880	$\begin{cases} 81.5 \\ {}^{2}80.1 \end{cases}$	
1870	75.8 274.0	
	(	

<sup>&</sup>lt;sup>1</sup> Includes apparel and accessories, operatives and laborers; tailoresses; dressmakers and seam-stresses (not in factory).

Shifts in particular occupations.—The widespread adoption after the Civil War of ready-made clothing for men and the subsequent use by women of ready-made clothing on an ever-increasing scale have had significant effects on the work done by women in the "needle trades." Women more or less competent to produce a custom-made garment from the first cut to the final button, making clothing with much hand work and outside of factory walls, constituted nearly 7 in every 10 women clothing workers in 1910, but only about 1 in 5 in 1940. The continuous shift to the factory product and the resulting decline of the hand trades, as specialized factory operations were substituted for skilled work, appear from the following data:

		Percent distribution of women clothing workers				
	Total	Operatives and laborers: apparel and accessories	Dressmakers and seamstresses (not in factory)	Tailoresse <b>s</b>		
1940	100.0	75.5	22.3	2.2		
1930	 100.0	59.0	36.9	4.1		
1920	100.0	42.5	51.9	5.6		
1910	 100.0	25.9	69.1	5.0		

Apparel workers.—Trends in the general clothing group, which includes both hand trades and factory operations, obscure changes within the various branches of the field. Separate data for each branch, available from 1910 to 1940, show that the number of women operatives and laborers in apparel and accessories has increased in each decade and at a successively greater rate. The change from 1930 to 1940 is exaggerated, however, because of the numbers of women public emergency workers who were assigned to sewing projects, and who returned it as their usual occupation, having had no other work experience. To this situation also is due probably the considerable increase from 1930

<sup>&</sup>lt;sup>2</sup> Figure adjusted to exclude estimated number of milliners: 1870, total, 20,908, women, 20,708; 1880, total, 36,330, women, 36,075.

# 116 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

to 1940 in the proportion of women among all apparel operatives and laborers; furthermore, it is indicative of the fact that only a few types of public emergency projects were available to women. There has, however, been some tendency for the proportion of women to increase in the 30-year period.

		Women operatives and laborers : apparel and accessories		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		549,588	76.4	78.5
1930		311,506	31.6	68.2
1920		236,731	14.4	62.5
1910	<u></u>	206,923		60.3

Dressmakers and seamstresses.—During much of the period from 1910 to 1940 increases among women workers in apparel factories were more than counterbalanced by large declines among women in the skilled sewing trades. The dressmaking operations were practically a monopoly of women. In garment factories, on the other hand, some of the operations that contribute to the completed article are done by men. Thus economic changes were pushing women out of a former "women's occupation" and obliging them to take up one in which both sexes were employed.

From 1910 to 1940 nearly 400,000 women left dressmaking occupations, at the same time that nearly 350,000 additional women entered apparel factories as operatives and laborers. The rate of decrease has lessened, indicating that the decline in the occupation has been tending to level off.

		Women dressmakers and seamstresses (not in factory)			
		Number	Percent decrease from preceding census	Percent of all workers in this occupation	
1940		162,247	-16.5	98.3	
1930		194,251	-32.9	99.7	
1920	**************************************	289,688	-47.4	99.9	
1910		550,745		99.6	

Tailoresses.—Like dressmakers, tailoresses were a group of waning importance in the period from 1910 to 1940. This occupation is considered even more skilled than that of the dressmaker, and the Census classifies it with craftsmen. Whereas the dressmaker group excludes all women working in factories, many of the tailoresses were performing their highly skilled operations in coat and suit factories, as well as in tailor shops and in clothing or department stores. The declines among tailoresses represent a lessening in importance of the occupation as a whole, with an even greater effect on women than on men tailors.

		Women tailoresses	
	Number	Percent decrease from preceding census	Percent of all workers in this occupation
1940	15,717	-26.5	13.2
1930	21,371	-31.5	12.8
1920	31,191	-22.0	16.4
1910	39,997		19.7

## HATS. EXCEPT CLOTH AND MILLINERY

This industry is concerned with the production of straw and felt hats. It is of interest to note that the method of bleaching and braiding meadow grass and making it into a bonnet was the discovery of a young Massachusetts girl, in 1789.<sup>49</sup> The felt hat industry is even older, dating back, in the form of hand-made beaver hats, to the very early days of the colonies, but it was not until the 1840's that machinery was adapted to it.<sup>50</sup> By 1870, 4,637 women were engaged in the hat industry and were nearly one-third of the total workers. Decreases among women after 1910 left the number of 1940 women operatives and laborers in hat manufacture at about the same level as in 1870, but their proportion relative to the total was lower.

		Women operatives and laborers: hats, except cloth and millinery		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		4,735	-50.9	27.3
1930	·	9,641	-24.2	<b>33.7</b>
1920		12,712	-10.6	35.7
1910		14,214	+38.9	35.8
1900		10,234	+15.7	39.7
1890		8,843	+39.1	32.9
1880		6,357	+37.1	31.1
1870	***	4,637	-	32.6

## WOODWORKING INDUSTRIES

Women workers classified as sawyers and as operatives and laborers in the production of furniture and store fixtures, in sawmills and planing mills, and in the manufacture of miscellaneous wooden goods constituted an extremely small number in 1870 but increased in every succeeding decade. The largest numbers of women added were in the decades 1900-1910 and 1910-1920, the latter probably having been affected by the tendency during wartime to resort to greater employment of women in many

<sup>49</sup> Meyer, op. cit., pp. 278-279.

<sup>&</sup>lt;sup>50</sup> [U. S.] Department of Commerce and Labor. Bureau of the Census. [12th census of the United States: 1900.] Vol. IX, Manufactures. Part III, Special reports on selected industries, pp. 109-111. Washington, [U. S.] Government Printing Office, 1902.

# 118 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

industries. In 1920 the proportion of women among the total reached 5.5 percent, compared to only 0.5 percent in 1870. The proportion was lower in 1930, but it rose again to 6.0 percent in 1940.

		Women operatives and laborers: woodworking industries <sup>1</sup>			
		Number	Percent increase over preceding census	Percent of all workers in this occupation	
1940		31,902	12.8	6.0	
1930	***************************************	28,307	3.6	5.3	
1920		27,326	50.6	5.5	
1910		18,142	129.7	3.5	
1900		7,898	14.2	2.9	
1890		6,918	507.9	2.7	
1880	***************************************	1,138	113.1	0.7	

<sup>&</sup>lt;sup>1</sup> Includes sawyers and operatives and laborers in furniture and store fixtures, sawmills and planing mills, and miscellaneous wooden goods.

534

0.5

1870

Of all women operatives and laborers in the woodworking industries (excluding sawyers) in 1940, well over a third were engaged in the manufacture of furniture and store fixtures, more than half were in miscellaneous wooden goods, and but 1 in 10 were in sawmills and planing mills, whereas 62.2 percent of men operatives and laborers in all woodworking industries were in the latter field. Miscellaneous wooden goods include clothespins, matches, baskets, wooden boxes, and similar items, articles which are small, lightweight, and standardized, so that both production operations and packing jobs are adapted for women. The distribution of women from 1910 to 1940 shows that a growing proportion of women in the woodworking industries have been engaged in the furniture and store fixtures branch.

	Percent distribution of women operatives and laborers: woodworking industries (excluding sawyers)		
	Total	Furniture and store fixtures	Sawmills and planing mills and miscellaneous wooden goods
1940	 100.0	37.9	62.1
1930	 100.0	36.9	63.1
1920	 100.0	34.7	65.3
1910	 100.0	22.9	77.1

Furniture.—Although, as has been stated, few women were employed in all of the woodworking industries combined in 1870, in furniture manufacture production had shifted from a shop to a factory basis beginning in 1840. With the growing mechanization and specialization in furniture manufacturing, more opportunities arose for women, in sewing machine operation in

upholstery departments, in assembling, and in sanding.<sup>51</sup> Data for women operatives and laborers in furniture and store fixtures manufacturing show that the number of women increased by more than 7,000 since 1910, and women have constituted approximately 1 out of every 10 workers since 1920.

	Women operatives and laborers: furniture and store fixtures		
	Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	 11,969	14.9	11.0
1930	10,416	10.0	9.5
1920	9,466	127.6	10.8
1910	 4,159		6.4

## PAPER MAKING

Machine production of paper was introduced in the United States about 1827. Forty years later a process of extracting cellulose from wood was discovered.<sup>52</sup> Together these methods made possible a low-priced product of widespread use.

In the period just prior to 1900 the paper box branch of the industry showed a great increase in importance. The growing custom of placing newly manufactured articles in individual boxes led to a demand for a greatly expanded supply of such containers at reasonable cost, which was met by the widespread introduction of machinery in box-making. Because the product was light in weight, and the machine operation required considerable dexterity, women and girls became an important part of the work force.53 The growth of paper making and of paper box production and the changing nature of the manufacturing process are reflected in the addition of an average of 7,000 women in each decade after 1870. Up through 1890 women were an increasing proportion of the operatives and laborers in paper and paper products industries—pulp, paper, and paperboard mills, paperboard containers and boxes and miscellaneous paper and pulp products. By 1920 the proportion of women had become stabilized at about one-fourth.

<sup>&</sup>lt;sup>51</sup> U. S. National Youth Administration of Illinois. Furniture industry. Occupational information research project No. 22 (Revised). Chicago, Ill., 1938, Mimeo., pp. 19, 37.

<sup>52</sup> Stevenson, Louis Tillotson. The background and economics of American paper making. New York, N. Y., Harper & Bros., 1940. Ch. I, History and development of paper.

<sup>&</sup>lt;sup>53</sup> Report on condition of woman and child wage-earners in the United States, op. cit., Vol. 18, pp. 242-243.

Women	operatives	and	laborers:	paper	and
	pape	r pro	ducts1	-	

			paper products	
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		56,047	+ 49.0	26.2
1930		37,614	- 6.8	24.8
1920		40,358	+ 20.8	27.5
1910		33,419	+ 22.6	34.1
1900	***************************************	27,261	+ 21.5	48.0
1890		22,444	+ 58.9	49.7
1880		14,126	+126.3	38.4
1870		6,242	·	33.9

<sup>&</sup>lt;sup>1</sup> Includes pulp, paper, and paperboard mills, paperboard containers and boxes, and miscellaneous paper and pulp products.

In 1940, women were about one out of every seven operatives and laborers in pulp, paper, and paperboard mills. In paper manufacture women do primarily the rag sorting, counting, and finishing.<sup>54</sup> Women were about one-half of those in the production of paperboard containers and boxes and of miscellaneous pulp and paper products. Data beginning in 1910 for the three branches of the industry separately show that the first two branches mentioned above usually were the largest fields for women operatives and laborers in this group of industries, and the manufacture of miscellaneous paper and pulp products, which includes the production of envelopes, cards, tags, paper bags, novelties, and similar items of paper, was the smallest, except in 1930. However, women did not show extreme concentration in any of the three branches.

	_	Percent distribution of women operatives and laborers: paper and paper products			
	_	Total	Pulp, paper, and paper- board mills	containers	Miscellaneous paper and pulp products
1940		100.0	33.9	39.9	26.3
1930		100.0	42.7	25.0	32.2
1920		100.0	38.7	36.7	24.6
1910	1	100.0	35.5	42.2	22.3

## PRINTING AND PUBLISHING

The jobs carried on by the 42,553 women in the various printing occupations in 1940 included work as operators of the linotype and monotype machines in the composing room; as job press feeders on the simple presses in some pressrooms; on some machines and at most table work in the bindery.<sup>55</sup> Up to 1910 the number of women in the printing and publishing occupations

<sup>&</sup>lt;sup>54</sup> Glover, John George and Cornell, William Bouck. The development of American industries. New York, N. Y., Prentice-Hall, Inc., 1941, p. 136.

<sup>&</sup>lt;sup>55</sup> Clark, Florence E. The printing trades and their workers. Scranton, Pa., International Textbook Co., 1939, pp. 91-92.

grew at a rapid rate, as the work of the all-round printer became subdivided into a number of separate skills. Women in the various printing occupations numbered less than 5,000, or 8.0 percent of all workers in these occupations in 1870. In 1910, the peak period of their employment relative to men, the 47,640 women constituted nearly one-fifth of the various groups of workers in printing and publishing. From 1910 to 1940 there was a net decrease of about 5,000 women, and women in printing occupations at the latter date were about one-eighth of the total.

		Women printing and publishing workers <sup>1</sup>			
		Number	Percent change from preceding census	Percent of all workers in this occupation	
1940		42,553	- 5.3	12.7	
1930		44,922	<b>—</b> 7.3	13.3	
1920		48,436	+ 1.7	18.2	
1910		47,640	+ 44.6	19.7	
1900		32,938	+ 33.7	16.7	
1890		24,640	+164.3	16.0	
1880	######################################	9,322	+112.0	10.0	
1870		4,397		8.0	

<sup>&</sup>lt;sup>1</sup> Includes operatives and laborers in printing, publishing, and allied industries, compositors and typesetters, pressmen and plate printers, electrotypers and stereotypers, engravers, and photoengravers and lithographers.

The chief work done by women in printing and publishing is not the skilled occupation of compositor and typesetter, with its 6-year apprenticeship, but rather it is the work of the operative, particularly that of the bindery worker, with an apprenticeship of 1 year. Data available for 1910 to 1940 show that more of the women in printing and publishing went into the semiskilled type of operation, while relatively fewer engaged in composition, and only a minor proportion entered the more specialized printing crafts.

	Percent distribution of women printing and publishing workers				
	Total	Operatives and laborers	Compositors and typesetters	Other printing craftsmen <sup>1</sup>	
1940	100.0	77.0	18.8	4.2	
1930	100.0	75.5	22.4	2.1	
1920	100.0	75.5	22.9	1.6	
1910	100.0	68.7	28.9	2.4	

<sup>&</sup>lt;sup>1</sup> Includes pressmen and plate printers, electrotypers and stereotypers, engravers, and photoengravers and lithographers.

Compositors and typesetters.—Between 1910 and 1940 the use of machine composition and various mechanized operations in pressroom work spread. Women had been employed in hand

<sup>&</sup>lt;sup>56</sup> Ibid., pp. 113-114.

<sup>747639° — 48 — 9</sup> 

composition but to a lesser extent in machine composition.<sup>57</sup> Despite the ever-growing volume of printed matter in the country, the total number of compositors and typesetters has dropped. The diminishing needs for these skills affected women alone at first. From 1930 to 1940 the numbers of both sexes declined, but women were affected even more than men, dropping to less than 5 percent of the total.

	Women compositors and typesetters		
	Number	Percent decrease from preceding census	Percent of all workers in this occupation
1940	 8,005	-20.5	4.6
1930	 10,064	- 9.2	5.6
1920	 11,080	-19.5	8.1
1910	 13,770	-	11.0

#### CHEMICAL MANUFACTURES

In 1940 most of the women operatives and laborers in the chemical, petroleum, and coal group were in the miscellaneous chemical industries, a classification that includes the manufacture of soap, candles, dyes, turpentine, celluloid, fireworks, fuses, cartridges, drugs, and numerous other products. Another large segment was engaged in the production of rayon and allied products. Only relatively small numbers of women were in paint and varnish manufacture, in petroleum refining, or in the production of miscellaneous petroleum and coal products.

Separate reporting of operatives and laborers in rayon manufacture dates from 1930, the few in 1920 having been classified with "Not specified textile mills." In 1940 women numbered 10,834 and constituted 30 percent of all rayon and allied products operatives and laborers; in 1930 the number of women had been practically identical, but they had been 43.6 percent of the total. Thus women did not appear to share proportionately in the expansion of this industry from 1930 to 1940, or else the classifications differed. It should be noted that the Census experienced considerable difficulty in distinguishing between those working in the rayon and allied products industry of the chemical group and those in silk and rayon manufactures in the textile group.

The only chemical group with figures that can be followed back to 1870 is that derived from combining figures for miscellaneous chemical industries with those for petroleum refining. Before the Civil War "the trying kettle, the ash-leach, and the candle-mold continued necessary features of every well-conducted

<sup>&</sup>lt;sup>57</sup> For a discussion of changes in technology and labor force, see Loft, Jacob. *The printing trades*. New York, N. Y., Farrar & Rinehart, Inc., 1944, pp. 37-71, 262-263.

farm,"<sup>58</sup> a fact indicating that women were closely concerned with chemical processes at that date. The most important industrial chemical before the Civil War had been the production of dyes for use in textiles, and here, too, women had played a part, in connection with the growing and marketing of indigo in the period before cotton became a profitable crop.<sup>59</sup> Up to the time of the Civil War, in fact, dyestuffs were the principal industrial chemicals in demand, though some acids and salts, painters' colors, and pharmaceutical preparations were also produced. In the two decades prior to World War I there was tremendous expansion in the chemical industries, as new processes were discovered and new by-products utilized.<sup>60</sup>

Nearly 25,000 additional women entered the miscellaneous chemical industries and petroleum refining from 1870 to 1940, all but 3,000 of them after 1900, including nearly 12,000 in the single decade from 1900 to 1910, when revolutionary developments were taking place in these fields. Women's opportunities have been in the lighter chemical lines, particularly in the finishing and packing operations. In a study of the drug, medicine, and toilet preparations industry, for example, it was found that filling containers, labeling, and packaging were usually done by women, while men usually performed the actual processing of the materials.<sup>61</sup> Trends among women in the miscellaneous chemical industries from 1870 to 1940 were as follows:

		chemical industries and petroleum refining			
		Number	Percent change from preceding census	Percent of all workers in this occupation	
1940		25,316	+ 27.2	11.8	
1930		19,907	- 8.5	10,6	
1920		21,758	+ 43.2	13.0	
1910	PP-1//2284	15,198	+343.5	17.3	
1900		3,427	+ 60.1	12.9	
1890	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	2,140	+148.3	11.8	
1880		862	+113.9	5.9	
1870		403	· ·	5.1	

#### RUBBER WORKERS

The 26,191 women operatives and laborers in rubber products manufacture in 1940 were in contrast to a mere 1,832 in 1870. The discovery of the vulcanization process paved the way for

<sup>58</sup> Clark, Victor S., op. cit., Vol I, p. 440.

<sup>&</sup>lt;sup>58</sup> See Ibid., Vol. I., p. 333. The introduction of indigo is referred to on pp. 111-112 of this bulletin.

<sup>40</sup> Ibid., Vol. II, p. 129; Vol. III, pp. 284-289.

<sup>&</sup>lt;sup>61</sup> U. S. Department of Labor. Women's Bureau. Wages and hours in drugs and medicines and in certain toilet preparations. By Arthur T. Sutherland. Bulletin 171. Washington, U. S. Government Printing Office, 1939. 19 pp.

the production of myriad rubber products and articles formerly unknown but today in such common use that they are regarded as necessities.

Up to the time of the automobile the chief use of rubber was in the manufacture of rubber footwear. 62 During this period. roughly before 1910, women constituted from one-third to nearly one-half of all rubber workers. The rapid growth in mechanization of the rubber industry after 192063 has apparently contributed to the advancing position of women in the industry. By 1940, women's employment was extensive in tube building, a highly mechanized branch of the industry, as well as in rubber footwear production. Women's dexterity was also in demand in connection with the smaller items in molded rubber goods manufacture. Finishing, inspecting, and packing jobs were commonly done by women in all branches of the rubber industry.64

In the single decade from 1910 to 1920 more additional women entered the rubber industry than during the entire 40 years before that date. Numbers of men added from 1910 to 1920 were so large, however, that the proportion of women in 1920 was the lowest at any census date, below 17 percent. The expanding opportunities for women in rubber manufacture appear in the fact that, though numbers of men declined subsequently, women workers continued to experience moderate gains.

		Women operatives and laborers: rubber products		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		26,191	8.2	24.7
1930	APAPAK	24,209	6.1	22.9
1920		22,823	96.9	16.9
1910	~	11,592	58.8	26.5
1900		7,300	14.2	34.4
1890	***************************************	6,391	213.7	40.8
1880		2,037	11.2	33.1
1870		1,832		48.6

#### FOOTWEAR MANUFACTURE

The shoe industry was a sizable one even in 1870, when 172,811 boot and shoe workers, including shoemakers and repairers, were reported in the census. At that time, however, less than 10,000 of them were women.

Women first became important in the shoe industry in the latter part of the eighteenth century, when it was the practice

<sup>62</sup> Clark, Victor S., op. cit., Vol. II, p. 479.

<sup>63</sup> Alderfer and Michl, op. cit., pp. 272-274.

<sup>64</sup> Ufford, Charles W. Occupations in rubber. Chicago, Ill., Science Research Associates, 1942, p. 48.

to give out the shoe uppers to be stitched and bound at home by women and children. Beginning in the mid-nineteenth century labor-saving machines were introduced into shoe manufacture in rapid succession. The use of the sewing machine in particular brought the work of women into the factory, and at first their work within the factory remained largely that of fitting and stitching shoe uppers. Even after 1900 this was the primary type of work done by women, though numbers of them also came to be engaged on other operations.<sup>65</sup>

The greatest number of additional women entered shoe manufacture from 1900 to 1910, at the end of its transition from a highly skilled handicraft to an industry mechanized in almost all operations. From 1910 to 1930 both the numbers of additional women entrants and the rates of increase became less at every census, but the trend reversed from 1930 to 1940. Both the total numbers of women in the industry and their proportion among all shoe workers have constantly risen.

	footu	footwear industries (except rubber)		
	Number	Percent increase over preceding census	Percent of all workers in this occupation	
1940	 101,626	17.1	34.0	
1930	86,788	9.9	28.5	
1920	 78,936	26.3	25.9	
1910	 62,481	58.2	24.0	
1900	 39,486	17.2	19.0	

33,677

9,645

Women shoemakers and repairers (not in factory) and operatives and laborers in

60.3

117.8

15.8

10.8

5.6

## LEATHER TANNING AND CURRYING

1890 .....

1870

1880 \_\_\_\_\_ 21,007

Up to 1890 the number of women workers in tanning, currying, and finishing leather had never reached 300. From 1890 to 1900 improved machinery in the tanning of leather resulted in the employment of women and girls in place of men. From 1890 to 1920 large and rather erratic rates of increase brought the number of women up to nearly 4,500. The numerical loss among women from 1920 to 1930 was regained by 1940. Continuing declines among men after 1920 resulted in gains for women relative to the total workers in the industry.

<sup>65</sup> For a history of women in shoe manufacture to about 1900, see Abbott, op. cit., pp. 148-185.

<sup>66</sup> Ibid., p. 177.

Women operatives and laborers: leather, tanned, curried, and finished

		tannea, curriea, ana jinishea		
	Nu	mber	Percent change from preceding census	Percent of all workers in this occupation
1940	4,	448	+ 6.5	9.8
1930	4,	178	<b>—</b> 6.2	9.1
1920	4,	452	+ 98.3	7.5
1910	2,	245	+ 27.2	4.1
1900	1,	765	+498.3	4.1
1890		295	+46.0	0.8
1880		202	+134.9	0.7
1870		86	-	0.3

## LEATHER PRODUCTS, EXCEPT FOOTWEAR

The manufacture of leather products, other than footwear, had only slightly more workers of both sexes than the tanning industry in 1940. Women in the former industry, however, outnumbered women in primary leather processing by more than 5 to 1. Articles produced in the leather products industry include not only pocketbooks and luggage but leather gloves and mittens, with the many stitching operations on which women almost exclusively are employed. The proportion of women in leather products relative to all workers rose steadily and rapidly from 2 percent in 1870 to nearly half (47.5 percent) in 1940.

	Women operatives and laborers: leather products, except footwear		
	Number	Percent change from preceding census	Percent of all workers in this occupation
1940	 24,510	+ 74.1	47.5
1930	 14,081	<b>—</b> 8.5	33.4
1920	15,381	+ 29.1	24.8
1910	 11,918	+ 94.8	22.1
1900	6,119	+73,5	11.4
1890	3,527	+ 20.2	6.6
1880	 2,935	+294.5	6.2
1870	744		2.0

## **GLASS WORKERS**

The 180 women operatives and laborers reported in the glass industry in the 1870 census were but 1.8 percent of all workers. Typical of the industry was the skilled glass blower, who remained prominent until the turn of the century. Though women had been employed at least as early as 1832 in "painting glass," their opportunities in the glass industry were still primarily of an auxiliary character by 1900. Finishing operations, inspecting, and packing were typical work done by women, whereas the fur-

<sup>&</sup>lt;sup>67</sup> See U. S. Department of Labor. Women's Bureau. Hours and earnings in the leather-glove industry. By Rebecca G. Smaltz and Arcadia N. Phillips. Bulletin 119. Washington, U. S. Government Printing Office, 1934, pp. 2-3.

nace room work, including pressing, molding, or blowing operations, was done by men.68 The introduction of a continuous process of manufacture and the increasing mechanization during World War I reduced the need for workers and made a change in the type of skill needed. After 1920 numbers of both men and women declined, in spite of increased use of the three chief types of products of the glass industry-containers, windows for buildings, automobiles, etc., and table and kitchen ware. Nevertheless the proportion of women among the total workers continued to increase, due to the shortage of male labor, the newer methods of production, and the introduction of optical and scientific glass manufacture. 69 The introduction of safety glass, in whose manufacture women are employed to a considerable extent, and after 1930 its compulsory use in automobiles helped to reverse the downward trend in numbers and raised the proportion of women from 12.8 percent of all workers in 1930 to 18.7 percent in 1940.70

		Women operatives and laborers: glass and glass products		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		14,213	+ 50.4	18.7
1930	**************************************	9,453	-6.7	12.8
1920		10,127	+ 96.5	11.9
1910		5,155	+ 89.1	6.1
1900		2,726	+ 53.3	<b>5.</b> 3
1890	***************************************	1,778	+202.9	5.0
1880		587	+226.1	3.2
1870		180		<b>1.</b> 8

## THE POTTERY INDUSTRY

The handful of women operatives and laborers in the pottery industry in 1870 had become 10,082 in 1940. This industry includes the production of tableware, sanitary ware, and other porcelain and pottery articles.

In general the heavy or disagreeable industries or those with exceptional danger to life and limb have not tended to employ large proportions of women. Pottery, with its dangers from the use of lead in glazes and its silicosis hazard, which are diseaserather than accident-producing, has employed women for many

<sup>&</sup>lt;sup>68</sup> Report on condition of woman and child wage-earners in the United States, op. cit., Vol. 3, Glass industry.

<sup>&</sup>lt;sup>60</sup> See U. S. Women's Bureau. Effects of applied research upon the employment opportunities of American women, op. cit., pp. 24-27.

<sup>&</sup>lt;sup>70</sup> For an outline of developments in the glass industry see Alderfer and Michl, op. cit., pp.202-215.

years.<sup>71</sup> In Europe as well as in this country women traditionally have worked in finishing operations, decorating, dipping, grinding and polishing, and other occupations in this industry, even to some extent on firing, particularly on the smaller ware.<sup>72</sup> However, considerable improvements in working conditions have taken place through the years in which the employment of women has advanced in pottery manufacture. The number of women has consistently shown a sizable rate of increase. The impetus given to the household china industry in the country by World War I gave women an established place in the industry.<sup>73</sup> By 1940 the proportion of women was approaching one-third of all operatives and laborers in the industry.

	Women operatives and laborers: pottery and related products		
	Number	Percent increase over preceding census	
1940	 10,082	41.2	30.9
1930	 7,141	25.1	22.4
1920	 5,707	20.3	21.4
1910	 4,744	71.6	20.3
1900	 2,764	47.8	18.6
1890	1,870	<b>2</b> 37. <b>5</b>	13.6
1880	 554	427.6	8.3
1870	 105	_	2.2

## STRUCTURAL CLAY PRODUCTS

Though more than 50,000 operatives and laborers have been concerned with the production of brick, tile, or terra cotta at every census since 1890, women in the industry never numbered more than slightly over 2,000. The heavy materials to be handled in this industry make it generally unsuitable for women.

In 1940 women operatives and laborers in structural clay products numbered 2,036 and constituted 3.8 percent of the total workers. Though still quite small, this number of women was 25 times as large as in 1870, and the proportion had multiplied 13 times.

<sup>&</sup>lt;sup>71</sup> See summary of U. S. Public Health study in U. S. Department of Labor. Women's Bureau. *The occurrence and prevention of occupational diseases among women.* By Margaret T. Mettert. Bulletin 184. Washington, U. S. Government Printing Office, 1941, pp. 37-39.

<sup>&</sup>lt;sup>72</sup> See the Report on condition of woman and child wage-earners in the United States, op. cit., Vol. 18, pp. 259-269, for occupations done by women about 1908-9. At that date conditions in the potteries visited were described as generally poor and in striking contrast to the carefully regulated conditions in English potteries.

<sup>&</sup>lt;sup>73</sup> U. S. Women's Bureau. Effects of applied research upon the employment opportunities of American women, op. cit., pp. 27-29.

Women	o peratives	and	laborers:
stru	ctural clay	bro	ducts

		structural clay products	
		Number	Percent of all workers in this occupation
1940		2,036	3.8
1930		2,224	3.0
1920		1,232	2.1
1910		1,457	1.6
1900		507	1.0
1890		<b>15</b> 3	0.2
1880		72	0.2
1870	**************************************	<b>82</b>	0.3

#### METAL TRADES WORKERS

In the metal, metal-products, and machinery industries (except electrical) women's activities in 1940 lay largely in the clock and watch industry, in miscellaneous iron and steel industries, in miscellaneous machinery, and in automobiles and automobile equipment. Though women still have but a small foothold in the manifold activities included in metal production, in spite of increases during war periods, whatever gains they have made are due in large part to changes that affected the industry generally. The introduction of special-purpose and combination machine tools, the use of alloys for cutting tools, the improvements in the form of machine tools, the improvements in accuracy of jigs and fixtures, automatic lubrication, break-down of assembly operations among individuals specializing in a particular operation, and so forth, were part of a general pattern of developments that made it possible to employ semiskilled rather than skilled workers to an increasing extent, a pattern which usually opens up opportunities for women.74

The proportion of women among metal manufacturing workers, always small, rose gradually from 3.1 percent of the total in 1870 to 7.7 percent in 1940. From 1910 to 1920, 50,347 additional women entered the metal industries as operatives and laborers, the greatest number in any one decade, probably due to a great extent to the accelerated activities of World War I. In the next 10 years (including the postwar period and early depression days) the number of women added was relatively insignificant. This trend affected men equally, since the proportion of women among the total showed no drop.

<sup>74</sup> See Alderfer and Michl, op. cit., pp. 107-123, for progress in methods of metal manufacture.

	Women operatives and laborers: metals, metal products, and machinery <sup>1</sup>		
	Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	136,882	27.7	7.7
1930	 107,200	0.6	6.2
1920	 106,555	89.6	6.2
1910	 56,208	163.5	4.8
1900	21,335	40.1	3.9
1890	 15,232	98.6	3.7
1880	 7,668	47.0	3.0
1870	5,217		3.1

<sup>&</sup>lt;sup>1</sup> Includes the occupations in Appendix Tables IIA and IIB from "Nonferrous metal primary products" through "Ship and boat building and repairing, laborers."

More detailed classifications available for 1910 to 1940 show that women metal workers were concentrated throughout the period in the group that included iron and steel and not specified metal industries, machinery (except electrical), and transportation equipment (except automobile). This group includes a great variety of products. At one extreme, there is primary iron and steel production, with less than 5 percent of all the women in metal products, who worked almost entirely at sorting and inspecting tinplate.<sup>75</sup> In contrast, there are also numerous small metal articles, such as tin cans, enameled ware, wire, cutlery and hardware, and other fabricated metal products, which offer more opportunities to women. The second largest group of women had been in the clock and watch industry in 1910, but by 1920 women in automobile production had already moved to second place. leaving women who worked in the manufacture of clocks, watches. jewelry, and silverware to continue as the third largest group up through 1940.

		Percent d	istribution	
Total women operatives and laborers:	1940	1930	1920	1910
metals and metal products	100.0	100.0	100.0	100.0
Nonferrous metals	7.4	11.1	10.7	12.4
Clocks, watches, jewelry, and silverware	10.0	12.2	14.2	20.4
Iron and steel and not specified metal in- dustries; machinery, except electrical; transportation equipment, except auto-				
mobile	55.8	52.0	56.5	56.2
Automobiles and automobile equipment	22.2	21.6	14.7	1.8
All other	4.6	3.1	4.0	9.2

Specified metal workers.—A tremendous stimulus to the employment of women in metal industries stemmed from the country's needs in World War I. Many women were hired to

<sup>&</sup>lt;sup>75</sup> For the work of women during World War II in steel, see U. S. Department of Labor. Women's Bureau. Women's employment in the making of steel. By Ethel Erickson. Bulletin 192, No. 5. Washington, U. S. Government Printing Office, 1944. 39 pp.

replace men and also to carry on new operations in the machine shops of the metal-working industries—operating machines, inspecting, or doing miscellaneous handwork—and in assembling departments.<sup>76</sup>

The number of women workers in the various metal industries specified below nearly doubled from 1910 to 1920. Though more than half of the women workers in all metal industries were connected with these particular fields, women were less than 1 in every 10 workers in the industry group.

Women operatives and laborers: iron and steel and not specified metal industries, machinery (except electrical), and transportation equipment (except automobile)

		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		76,446	+37.1	8.3
1930	*****************************	55,760	<b>- 7.4</b>	6.1
1920		60,190	+90.7	6.4
1910		31,569	·	4.4

Clocks, watches, jewelry, and silverware.—In the various metal and machinery industries, the use of women was limited generally to those branches and those occupations which required relatively light work. Such, for example, were the operations in clock and watch making. The application of mass production methods to the manufacture of small arms, beginning about 1820, was next introduced into the manufacture of clocks and watches. Consequently, by 1910, when comparable data were first available, women operatives and laborers already numbered 11,469 or 30.4 percent of all clock and watch operatives and laborers. Women's proportion advanced to 4 out of every 10 workers in the industry by 1940.

Women operatives and laborers: clocks, watches, jewelry, and silverware

	watches, jeweiry, and silverware		
	Number	Percent change from preceding census	Percent of all workers in this occupation
1940	13,711	+ 4.7	38.3
1930	13,101	-13.2	33.0
1920	15,087	+31.5	31.0
1910	11,469	-	30.4

Automobiles.—In the manufacture of automobiles and automobile equipment there were only about 1,000 women in 1910, and they were but a fraction of the total workers. The mushrooming of this industry appears in the tremendous increase in

<sup>&</sup>lt;sup>76</sup> For the effects of World War I on the employment of women during the war and afterwards, see U. S. Department of Labor. Women's Bureau. The new position of women in American industry. Bulletin 12. Washington, U. S. Government Printing Office, 1920. 158 pp.

 <sup>77</sup> Alderfer and Michl, op. cit., 1942, pp. 417, 120.

the next decade among women, many of them actually at work on such typical "women's work" as sewing in the upholstery departments rather than the heavier processes. Subsequently, as the industry was becoming stabilized after its first tremendous growth, rates of increase among women were lower, though they still exceeded rates of population growth. Proportions of women advanced steadily, reaching 10.6 percent in 1940.

	Women operatives and laborers: automobiles and automobile equipment		
	Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	30,445	31.3	10.6
1930	23,182	48.2	7.2
1920	15,644	1,442.8	6.8

1,014

2.4

## ELECTRICAL MACHINERY AND EQUIPMENT

Radio, phonograph, spark plug, and other types of electrical supply manufacturing had 74,185 women in 1940 who performed assembling, machining, winding, inspecting, and many other jobs as operatives or laborers. The effects of inventions in developing a whole new industry and, in fact, a new mode of living are well demonstrated by the history of the electrical industry. The telegraph in the 1830's, the telephone in the 1870's, the dynamo, arc lamp, and incandescent lamp in the 1870's and 1880's made possible the establishment of this industry. After 1900 the wireless, the radio, and the constant new applications of electricity along other lines brought further development and expansion.<sup>78</sup>

In the volumes of the census for 1900 and earlier one searches in vain for any mention of operatives in electrical machinery and supply manufacturing. The lamp-lighters are there in 1870, and the candle and tallow makers are there at each census from 1870 through 1900. "Employees of telegraph companies (not clerks)" are listed beginning in 1870, "officials and employes of telephone companies" in 1880, "electrical engineers" (along with the other groups of engineers) and "electric light and power company employes" (along with telegraph and telephone linemen) in 1890, while "electricians" appear for the first time in 1900.

Not until 1910 were the operatives in electrical supply factories presented by themselves. At that time there were 12,093 women who constituted 35.9 percent of the total. The invention and manufacture of incandescent lamps, electric fans, irons, heaters, washers, and many other appliances had been proceeding

<sup>&</sup>lt;sup>78</sup> Hickman, Mildred M. Electrical manufacturing in Cleveland. Cleveland, Ohio, Cleveland Board of Education Bureau of Educational Research, 1930, pp. 8-12.

during the period from 1880 to 1910, and constant improvement was made after that date.<sup>79</sup>

The use of electricity for light in particular opened a great number of opportunities to women, because of the small size of the parts and the delicacy of handling required.<sup>80</sup> Even as late as 1940 considerable numbers of women in the electrical industry, aside from those in radio and communication equipment, were in the branch manufacturing electric lamps. The beginning of the radio industry in the 1920's opened new jobs to women on a great variety of assembling and inspection operations.<sup>81</sup>

Though additions to the number of men caused the proportion of women to drop slightly in 1920 and 1930, by 1940 women were 40.7 percent of all the operatives and laborers in electrical machinery and equipment, almost as high as in such a traditional woman's industry as cotton.

Women	operatives and laborers: electrical	
	machinery and equipment	

		machinery and equipment		
	Num	ber	Percent increase over preceding census	Percent of all workers in this occupation
1940	74,1	85	56.4	40.7
1930	47,4	39	65.0	33.1
1920	28,7	51	137.7	33.7
1910	12,0	93		35.9

## FRUIT AND VEGETABLE GRADERS AND PACKERS

Today fresh fruits and vegetables are available to the consumer all year round, being shipped to the markets first from one area, then another, as they ripen. Because fresh produce often must be shipped long distances, it must be properly packed, and a growing number of women worked at grading and packing from 1910 to 1940. Since the peak season in agriculture is late summer, census figures tend to understate the number of workers in the occupation, and the figures may be affected by the weather variations and the consequent conditions of the crops during the census period in a particular year.<sup>52</sup> In addition, difficulties experienced by the Census in classifying workers in areas where growing, canning, and wholesale shipping are all represented and the more consistent inclusion in 1940 than previously of vegetable

<sup>79</sup> U. S. National Youth Administration of Illinois. Electrical appliances. Occupational information research report No. 29. Chicago, Ill., Revised, May 21, 1938, p. 2.

<sup>&</sup>lt;sup>80</sup> U. S. Women's Bureau. Effects of applied research upon employment opportunities of American women, op. cit., pp. 35-37.

<sup>&</sup>lt;sup>81</sup> See U. S. Department of Labor. Women's Bureau. Fluctuation of employment in the radio industry. By Caroline Manning. Bulletin 83, Washington, U. S. Government Printing Office, 1931, pp. 27-28.

<sup>82</sup> The various censuses were taken as follows: 1910, April; 1920, January; 1930, April; 1940, March.

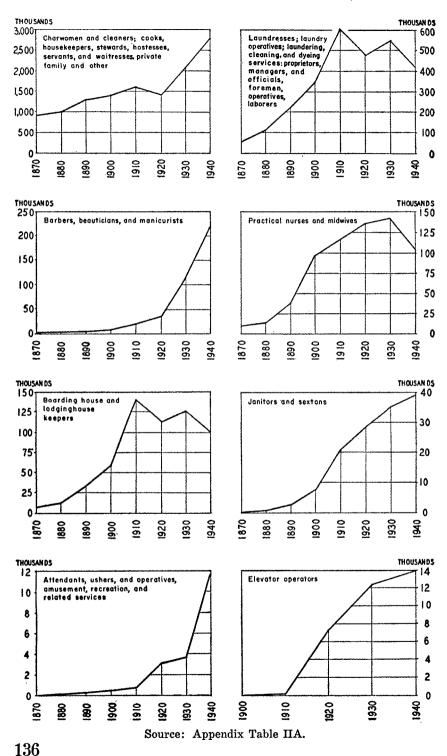
# 134 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

graders and packers in this occupational classification have affected the comparability of the figures. The need for quickness, dexterity, and careful handling as well as the fact that the occupation is seasonal, tending to draw local workers for a temporary period, have contributed to high proportions of women.<sup>83</sup>

Women	fruit a	nd veg	etable	graders	and
b	ackers.	exceb	t in ca	nnerv	

	packers, except in cannery		
	Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	 14,972	123.6	57.7
1930	 6,695	99.0	61.3
1920	 3,364	51.5	37.9
1910	2,221		42.8

<sup>&</sup>lt;sup>83</sup> For a description of jobs and conditions in apple and pear warehouses see U. S. Department of Labor. Women's Bureau. Women in the fruit growing and canning industries in the State of Washington. By Caroline Manning. Bulletin 47. Washington, U. S. Government Printing Office, 1926, pp. 145-159.



### TRENDS IN SERVICE OCCUPATIONS

Outstanding among women workers in the field of domestic and personal service work in 1940 were service workers in private families together with the women who performed activities similarly concerned with the preparation and serving of food, with cleaning, and with various other chores in public housekeeping fields, i. e., in hotels, restaurants, and other establishments.1 Concentration of service workers in these activities was less at the recent period than 70 years earlier. The proportion that household workers and service workers in public housekeeping formed of all women service workers dropped from 92.0 percent in 1870 to 76.1 percent in 1940. (See Table 8.) Indications are that workers in the service field had increasingly shifted to types of work of a specialized nature. Women laundresses, laundry operatives, and other women workers in laundering, cleaning, and dyeing services rose from 6.0 to 11.2 percent of the service group. The proportions of women service workers that were barbers. beauticians, and manicurists, or practical nurses and midwives, or boarding house and lodginghouse keepers were somewhat higher in 1940 than in 1870. Even within the group of workers in private households and in public housekeeping there has been a shift to increasingly differentiated types of work, performed more and more outside the home, as will be seen from the discussion that follows.

## SERVICE WORKERS IN PRIVATE HOUSEHOLDS AND IN PUBLIC HOUSEKEEPING

General trends.—From 1870 to 1940 the number of women who were service workers in private or public housekeeping more than tripled, growing from 901,954 to 2,831,874. The first published data for women showed "servants" largely as a sizable undifferentiated group, though 6,299 "Employees of hotels and restaurants (not clerks)" and 85 "Stewardesses" were distinguished. The instructions given to the enumerators in 1870 read, "The organization of domestic service has not proceeded so far as to render it worthwhile to make distinction in the character of work. Report all as 'domestic servants.'" However, the instructions went on to say, "Cooks, waiters, etc., in hotels and

<sup>&</sup>lt;sup>1</sup> Includes charwomen and cleaners, and the following workers, whether or not in private families: cooks, housekeepers, stewards, and hostesses; servants; and waitresses.

<sup>747639° --- 48 --- 10</sup> 

restaurants will be reported separately from domestic servants."<sup>2</sup> By 1940 domestic service in the home was still considered more or less unspecialized, except that the census report showed 393,031 private family housekeepers separately from the 1,600,169 private family "servants."<sup>3</sup> There was, however, a greater number of distinct occupations among service workers in public housekeeping, covering 406,096 waitresses, 191,344 servants, 132,630 cooks, 68,451 housekeepers, and 40,153 charwomen and cleaners.

Table 8.—Number and Percent Distribution of Women Service Workers, Except Protective, in Selected Occupations, 1870 and 1940

0	Number of	women	Percent dis	tribution
Occupation	1940	1870	1940	1870
Total selected service workers, except protective	3,722,991	979,921	100.0	100.0
Charwomen, cooks, housekeepers, servants, waitresses, etc., private family and other. Laundresses; laundry operatives; laundering, cleaning, and dyeing services: proprietors, managers, and officials, fore-	2,831,874	901,954	76.1	92.0
men, operatives, laborers	417,215	58,683	11.2	6.0
Barbers, beauticians, and manicurists Practical nurses and midwives	218,132 104,338	1,548 10,486	5.9 2.8	0.2 1.1
Boarding house and lodginghouse keepers.	100,835	7,052	2.7	0.7
Janitors and sextons	39,041	151	1.0	(2)
Attendants, ushers, and operatives, amusement, recreation, and related services	11,556	47	0.3	(2)

Source: Appendix Table IIA.

The number of women service workers in private and public housekeeping increased up through 1910. In 1920, following the shift of women workers into fields more vital to the industrial needs of World War I, the number of women in these occupations was at a subnormal level.<sup>4</sup> Accelerated rates of growth occurred in the succeeding 20-year period.

<sup>&</sup>lt;sup>1</sup> The service workers included in this distribution numbered 3,499,972 and constituted 97.7 percent of the total 3,584,021 women classified as service workers (except protective) in 1940. In addition, foremen, personal services; laborers, laundering, cleaning, and dyeing services; laundry operatives and laundresses, except private family; operatives, amusement, recreation, and related services; operatives, laundering, cleaning, and dyeing services; proprietors, managers, and officials, laundering, cleaning, and dyeing services, which were not classified with service workers (except protective) in 1940, were included for comparability with 1870. These additional women numbered 223,019 and were 6.2 percent as large as the group classified as service workers (except protective) in 1940.

<sup>&</sup>lt;sup>2</sup> Less than 0.05 percent.

<sup>&</sup>lt;sup>2</sup> [U. S.] Department of the Interior. Census Office. 9th census [of the United States: 1870]. The statistics of the population of the United States. Vol. I, p. xxxiii. Washington, [U. S.] Government Printing Office, 1872.

<sup>&</sup>lt;sup>8</sup> Laundresses, private family, are in general considered subsequently with laundry workers and are not discussed with service workers in private households and in public housekeeping, except in the sections on household workers, on age, and on race, pp. 142–144.

<sup>&</sup>lt;sup>4</sup> A similar shift occurred during World War II, when the number in domestic service declined by 20 percent from 1940 to 1944. U. S. Department of Labor. Women's Bureau. *Changes in women's employment during the war.* By Mary Elizabeth Pidgeon. Special Bulletin 20. Washington, U. S. Government Printing Office, 1944, p. 9.

Women service	workers	in	private	or
L. Llia 1	- arrahan	hin	01	

		рионе поизексерия	
	-	Number	Percent change from preceding census
1940		2,831,874	+32.0
1930		2,146,360	+58.2
1920		1,356,531	-14.9
1910	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,593,586	+11.4
1900		1,430,656	+ 9.8
1890		1,302,704	+34.3
1880	<b>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</b>	970,257	+ 7.6
1870	·	901,954	

<sup>&</sup>lt;sup>1</sup> Includes charwomen and cleaners, and the following workers, whether or not in private families: cooks; housekeepers, stewards, and hostesses; servants; and waitresses.

Changes relative to population and labor force growth.—At all periods only a minority of families have had household workers or have been able to substitute corresponding services available commercially. In 1870 there was 1 woman service worker in private or public housekeeping to every 8 families; by 1920 the ratio was 1 to 18, and in 1940, 1 to 12. Part of the change from 1870 to 1940, when the ratio of families per woman worker in these fields was half again as large, is due to the smaller size of families. The ratio of total population to each woman service worker in private or public housekeeping showed relatively less change over the period—44 to 1 in 1870 compared to 47 to 1 in 1940.

	Number of families for each woman service worker in private or public housekeeping <sup>1</sup>	Number of persons in population for each woman service worker in private or public house- keeping <sup>1</sup>	Women service workers in private or public house- keeping as percent of all women in the labor force or gainfully occupied
1940	12.4	46.5	21.8
1930	13.9	57.2	20.0
1920	18.0	77.9	15.7
1910	12.7	57.7	21.4
1900	11.2	<b>53.1</b>	26.9
1890	9.7	48.1	32.5
1880	10.3	51.7	36.7
1870	8.4	44.1	47.0

<sup>&</sup>lt;sup>1</sup> Includes charwomen and cleaners, and the following workers, whether or not in private families: cooks; housekeepers, stewards, and hostesses; servants; and waitresses.

The 50 years from 1870 to 1920 was a period during which service occupations both in private and public housekeeping appeared to be increasingly unpopular among women workers. From nearly one-half of all working women in 1870, women service workers in private or public housekeeping dropped to less

<sup>&</sup>lt;sup>5</sup> The growing "servant problem" of this period was no new development. Harriet Martineau, commenting on the American scene over 100 years ago stated, "Boarding-house life has been rendered compulsory by the scarcity of labour,—the difficulty of obtaining domestic service." Quoted in Salmon, Lucy Maynard. *Domestic service*. New York, N. Y., Macmillan Co., 1897, pp 55-56.

than one-third by 1890 and continued downward to less than onesixth in 1920. The trend was reversed after 1920, the relative importance among all women workers of the group under discussion returning approximately to the 1910 level by 1940.

Changes relative to men.—Through the years women's share of the private and public housekeeping occupations tended generally to decrease. Women were 86 percent of the workers in these occupations in 1870. After reaching a low point of 76 percent in 1920 they recovered their ground only slightly in the next 20 years.

	w	of all service orkers in private
	c c	r public house- keeping <sup>1</sup>
1940		78.5
1930		77.5
1920	***************************************	76.1
1910		79.0
1900		82.0
1890		82.7
1880		82.5
1870		<b></b> 85.6

Women as percent

The slight increase in the proportion of women relative to all service workers in public housekeeping and in private households from 1930 to 1940 represents divergent trends in particular occupations. Women's position remained about the same over the decade among housekeepers and servants in private families, among cooks not in private families, and among "servants" not in private families. Among charwomen and cleaners women's proportion of total workers dropped perceptibly, while among housekeepers and waitresses outside of private families the preponderance of women became greater.

	Women as percer	it of all workers
Total service workers in private	1940	1930
or public housekeeping	78.5	77.5
Charwomen and cleaners	<b>53.</b> 8	59.8
Housekeepers and servants, private family	92.7	93.0
Cooks, except private family	39.5	39.8
Housekeepers, stewards, and hostesses,		
except private family	77.5	71.6
Servants, except private family	54.2	54.0
Waitresses, except private family	67.1	56.9

Shifts in particular occupations.—From 1930 to 1940 there was a net addition of approximately 690,000 women to the service

<sup>&</sup>lt;sup>1</sup> Includes charwomen and cleaners, and the following workers, whether or not in private families: cooks, housekeepers, stewards, and hostesses; servants; and waitresses.

occupations in private and public housekeeping, an increase of nearly one-third. This gain came primarily from the swelling ranks among service workers in public housekeeping—"servants," housekeepers, and waitresses, except private family. Women in these three occupations increased at a rate far above that of service workers in private and public housekeeping as a whole. Consequently, the proportion of all women in service occupations who worked for private families, either as housekeepers or other domestic workers, fell. Waitresses not in private families rose to a more prominent place; other changes were minor. These shifts indicate that although the general group of household workers is still very large, there has been a tendency toward increased specialization and toward the replacement of the worker within the individual household by services provided commercially.

	in number	Percent d	istribution
	1930-1940	1940	1930
Total women service workers in private			
or public housekeeping	32.0	100.0	100.0
Charwomen and cleaners	5.3	1.4	1.8
Housekeepers and servants, private family	25.8	70.4	73.9
Cooks, except private family	15.4	4.7	5.4
Housekeepers, stewards, and hostesses,			
except private family	53.9	2.4	2.1
Servants, except private family	49.9	6.8	5.9
Waitresses, except private family	71.7	14.3	11.0

Such trends do not appear to be of recent origin. The general observer cannot fail to note the growing place of commercially supplied food, lodging, and similar services. At the same time there has undoubtedly been a relative decline among women in what have traditionally been known as "servant occupations," such as those of chambermaid, cook, maid, and general servant, most of whom worked in private families.

The long-term downward trend among women in these "servant occupations" relative to other occupations has been explained by the reluctance of workers, in the face of growing opportunities in factories and shops, to enter a field with low standards of work and wages and with inferior social status. Demand for such workers has become relatively lower as families have become accustomed to smaller dwelling units equipped with mechanical devices and have increasingly resorted to restaurant meals, commercial laundries, and other services. The situation from 1910 to 1920 was affected further by the smaller supply of such workers resulting from decreased immigration and from wartime shifts

142

to other occupations as well as by lowered demand because of higher standards of wages for this work.6

Household workers.—Numerically the most important group of women service workers comprises those who work in private families, commonly known as household workers. These include laundresses. housekeepers, and "servants" in private families which the Census grouped together in 1940 as "Domestic service workers." From 1930 to 1940 about 1/4 million women were added to domestic service workers, bringing the total number of women in the field to 2,187,983 in 1940. Comparable census data for earlier dates are not available. The figures for 1930-1940 are as follows:

	Nu	nber	Percent change
Women domestic service workers	1940 2,187,983	1930 1,927,527	+13.5
Housekeepers and servants, private family.  Laundresses, private family	1,993,200 194,783	1,584,589 342,938	+25.8 $-43.2$

Problems of long hours, low wages, and poor working conditions are particularly acute in the field of household employment. As a result women workers have tended, if at all possible, to undertake other occupations in preference. Under the depressed conditions from 1930 to 1940 doubtless many women had no choice, and though some families probably had to dispense with the household help to which they had formerly been accustomed, the figures show a rise over the decade in the numbers of women household workers. The number of persons in the population for each household worker was slightly smaller in 1940 than in 1930, indicating, furthermore, that numbers of household workers increased more rapidly than the population which they served. However, because of the smaller average size of families, there was little change in the number of families relative to each household worker. Even though conditions may have tended to force women into these occupations at this period, household workers declined in importance among all women workers.

The data on which these conclusions are based are the best available for measuring changes among household workers from 1930 to 1940. Nevertheless it should be remembered that despite adjustments for comparability, discrepancies in the figures remain

<sup>&</sup>lt;sup>6</sup> See U. S. Department of Commerce. Women in gainful occupations, 1870 to 1920. By Joseph A. Hill. Washington, U. S. Government Printing Office, 1929, pp. 36-39; and U. S. Department of Labor. Women's Bureau. The occupational progress of women. By Mary V. Dempsey. Bulletin 104. Washington, U. S. Government Printing Office, 1933, p. 28.

<sup>7</sup> Included in general in the discussion of laundry workers on pp. 144-146 rather than with service workers in private or public housekeeping.

due to the difficulty in distinguishing between "laundress, private family" and other laundresses, and due to the fact that some of the "housekeepers, private family," undoubtedly were in fact housekeepers in their own homes. However, the general trends indicated by the figures are probably valid. A summary of some of the figures follows:

1940	1930
60.2	63.7
16.0	15.5
16.8	17.9
93.1	94.1
	1940 60.2 16.0 16.8 93.1

Racial groups.—To a considerable extent "servant occupations" have depended for their recruits on the less-favored members of the labor force. This was particularly true of housekeepers, "servants," and laundresses in private families, 47.4 percent of whom were nonwhite in 1940. Proportions of nonwhites were lower in the public housekeeping occupations. In contrast to household workers, only 14.4 percent of women in all occupations in the experienced labor force were nonwhite. Data for both 1930 and 1940, which are only approximately comparable, indicate that the reliance on nonwhite labor in these service fields was even greater 10 years previously.

	Proportion nonwh	
Women service workers in public and	1940	1930
private housekeeping <sup>1</sup>	38.6	43.2
Domestic service workers <sup>2</sup>	47.4	48.9
Housekeepers, cooks, servants, waitresses,		
except private family	14.8	19.8
Cooks, except private family	22.8	30.4
Housekeepers, stewards, hostesses, except		
private family	5.8	5.4
Servants, except private family		37.8
Waitresses and bartenders <sup>3</sup>	5.1	8.3

<sup>&</sup>lt;sup>1</sup> Excludes charwomen and cleaners.

These occupations were likewise the chief employment outlet of the nonwhite group, and concentration of Negroes and other nonwhite persons in these fields increased from 1930 to 1940. Nearly two-thirds (64 percent) of all nonwhite women in the ex-

<sup>&</sup>lt;sup>2</sup> Includes laundresses and housekeepers and servants, private family.

<sup>&</sup>lt;sup>8</sup> Bartenders were included in 1940 but not in 1930.

<sup>&</sup>lt;sup>8</sup> In 1930 Mexicans were included with nonwhite, whereas in 1940 they were included with white workers; data for waitresses included bartenders in 1940 but not in 1930; and 1940 data apply to women 14 years and over whereas 1930 data were for women 10 years and over. It is believed, however, that these differences do not significantly affect the general conclusions.

perienced labor force in all occupations were in these fields in 1940; in 1930 the proportion had been 55 percent. In contrast only 17 percent of white women workers in all occupations in 1940 and 15.8 percent in 1930 were engaged in the group of occupations shown in the preceding table.

Age groups.—Older women workers, another group with special problems of employment, found relatively greater opportunities in "servant occupations" in 1940 but to a less extent than in 1930. In 1940 women in the special group of occupations under discussion who were 45 years and over constituted 28 percent of of all women of this age in the experienced labor force; in 1930 the comparable proportion had been 31 percent. These fields figured more prominently in 1940 than in 1930 among women workers under 25 years of age also, as the proportion of all women 14 to 24 years in occupations composed primarily of "servants" rose to 24 percent in 1940 from 18 percent in 1930. This was at a time when it was becoming increasingly difficult for the younger, less experienced workers to find work of any sort. The resulting shifts in the age distribution of all women in these fields are indicated by the following figures:

	Percent c	Percent distribution	
Women service workers in public and	1940	1930	
private housekeeping <sup>1</sup>	100.0	100.0	
14-24 years	30.6	29.3	
25-44 years	43.5	<sup>2</sup> 43.1	
45 years and over	25.9	27.7	

<sup>&</sup>lt;sup>1</sup> Includes laundresses and housekeepers and servants, private family, and housekeepers, cooks, servants, and waitresses, except private family. Excludes charwomen and cleaners. Bartenders were included in 1940 but not in 1930.

#### LAUNDRY WORKERS

General trends.—Just as women followed the transfer of production from the home to the factory, they have followed the transfer of services from the home to the commercial establishment. In laundry work two conflicting tendencies have occurred in recent years. On the one hand, those factors that have caused other household activities to shift from the home coupled with the development of a high type of commercial laundry work at lower prices have furthered the rise of laundry service. On the other hand, the availability of a practical type of home washing machine and prejudice against commercial laundries have served to keep this type of work in many homes.<sup>9</sup>

<sup>2</sup> Includes age unknown.

<sup>&</sup>lt;sup>9</sup> Encyclopaedia of the social sciences. Laundry and dry cleaning industry. New York, N. Y., Macmillan Co., 1930-35.

The number of laundresses and of women in laundering, cleaning, and dyeing establishments was over 10 times greater in 1910 than in 1870—606,409 compared with a mere 58,683. There was a drop in numbers in 1920 (possibly partly due to an exodus from this work to other fields during World War I), a recovery in 1930, and a further drop to 417,215 in these occupations in 1940. The decennial rates of change among women from 1870 to 1940 were as follows:

Wor	nen in laundr;	y and related work <sup>1</sup>
	Number	Percent change from preceding census
1940	417,215	- 24.0
1930	548,971	+ 14.8
1920	478,078	-21.2
1910	606,409	+ 79.1
1900	338,635	+ 54.8
1890	218,797	+100.2
1880	109,280	+ 86.2
1870	58,683	

<sup>&</sup>lt;sup>1</sup> Launderers and laundresses; laundry operatives; proprietors, managers, officials, foremen, operatives, and laborers in laundering, cleaning, and dyeing services.

Changes relative to population and labor force growth.—In the decades immediately following 1870 increases among women in laundry occupations far outstripped the female population growth. Up to 1910 the numbers grew every decade 50 to 100 percent. In 1870, there was 1 woman laundress or laundry, cleaning, and dyeing worker for every 679 persons in the population. By 1910 only 152 persons had to depend on 1 woman worker. The family wash thus came to be done by paid labor to a considerable extent. After 1910 the trend was reversed, and by 1940 the ratio of women workers to the population dropped to 1 to 316. The proportion of all women in the labor force engaged in laundry and related occupations was about 3 percent both in 1940 and 1870, having risen to over 8 percent in 1910.

	Number of persons in population for each woman in laundry and related work <sup>1</sup>	Women in laundry and related work! as percent of all women in the labor force or gainfully occupied
1940	315.6	3.2
1930	223.6	5.1
1920	221.1	5.5
1910	151.7	8.1
1900	224.4	6.4
1890	286,2	5.5
1880	459.0	4.1
1870	678.5	3.1

<sup>&</sup>lt;sup>1</sup> Launderers and laundresses; laundry operatives; proprietors, managers, officials, foremen, operatives, and laborers in laundering, cleaning, and dyeing services.

# 146 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

Changes relative to men.—While women were still a considerable proportion of all workers in the field in 1940, over the years they declined relative to the total. In 1940, 72 percent of laundresses and of personnel in laundry, cleaning, and dyeing work were women, compared to 92 percent in 1870. The most noticeable shift to the labor of men occurred following 1920, at a time when the volume of family-bundle laundry business was growing tremendously, and there was a concentration of work in the larger plants using labor-saving machinery. The home laundress was always a woman, but in a commercial laundry the machine washing and certain other processes require considerable strength.

The following data show trends among women in laundry, cleaning, and dyeing occupations relative to men in these fields:

	Wom of all rela	en as percent laundry and ed workers <sup>1</sup>
1940	**************************************	71.8
1930	WAR	78.6
1920		85.9
1910		. 88.6
1900		86.9
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
1880		88.7
1870		91.6

<sup>&</sup>lt;sup>1</sup> Launderers and laundresses; laundry operatives; proprietors, managers, officials, foremen, operatives, and laborers in laundering, cleaning, and dyeing services.

Shift to commercial laundry service.—More detailed figures for 1930 and 1940 indicate that there has been a shift from the use of the paid home laundress to the use of commercial laundry service. The number of private family laundresses decreased by nearly 150,000, while laundresses not in private families and laundry operatives rose slightly, from 219,790 to 233,763. At both periods, however, it was difficult to distinguish private family laundresses from others. Among women, private family laundresses dropped from two-thirds to about one-half of the two fields combined.

	Percent distribution	
	1940	1930
Total laundresses and women laundry		
operatives	100.0	100.0
Laundresses, private family  Laundry operatives and laundresses, except	52.0	67.0
private family	48.0	33.0

<sup>&</sup>lt;sup>10</sup> U. S. Department of Labor. Women's Bureau. A survey of laundries and their women workers in 23 cities. By Ethel L. Best and Ethel Erickson. Bulletin 78. Washington, U. S. Government Printing Office, 1930, pp. 1-6.

<sup>&</sup>lt;sup>11</sup> U. S. Employment Service. Job descriptions for the laundry industry. Washington, U. S. Government Printing Office, 1937.

#### BARBERS, BEAUTICIANS, AND MANICURISTS

Following World War I a tremendous development took place in the field of beauty culture work. The ranks of women barbers, beauticians, and manicurists were swelled by nearly 80,000 additional women from 1920 to 1930 and by nearly 105,000 from 1930 to 1940. Eighty-five percent of the growth since 1870 took place from 1920 to 1940. These occupations had a total of 218,132 women in 1940, over 140 times the mere 1,548 women in the same fields in 1870.

		Women barbers, beauticians, and manicurists	
	Number	Percent increase over preceding census	
1940	218,132	92.7	
1930	113,194	240.5	
1920	33,246	49.1	
1910	22,298	206.1	
1900	7,284	97.3	
1890	3,691	6.6	
1880	3,463	123.7	
1870	1,548	<del></del> '	

Until the turn of the century only a minor proportion, less than 8 percent, of workers in these fields were women. Beginning about 1920 the introduction of bobbed hair led more and more women to patronize at first barber shops for cutting and trimming and later the beauty parlor for hair waving and other beauty treatments.<sup>12</sup> Women workers, but 15 percent of the total in 1920, rose to over 30 percent in 1930 and to almost half in 1940. The continuing opportunity for women workers is further evidenced by the increasing proportion of all women workers who were in this field. Never more than 0.1 percent through 1900, the proportion rose subsequently in each decade, reaching 1.7 percent in 1940. The advancing position of women in this field appears from the following:

		Women barbers, beauticians, and manicurists as percent of—	
	All women in the labor force or gainfully occupied	All workers in this occupation	
1940	1.7	49.6	
1930	1.1	30.2	
1920	0.4	15.4	
1910	0.3	11.4	
1900	0.1	5.5	
1890	<b>0.1</b>	4.3	
1880	<b></b> 0.1	7.6	
1870	0.1	6.3	

<sup>&</sup>lt;sup>12</sup> U. S. Department of Labor. Women's Bureau. *Employment conditions in beauty shops*. By Ethel Erickson. Bulletin 133. Washington, U. S. Government Printing Office, 1935, p. 1.

In general, men work in barber shops patronized by men, and women work in beauty shops to which women go. A small number of men do some specialized work in beauty parlors, and some women work in barber shops, probably chiefly as manicurists. 13 By 1940, for the first time, the female population was almost as well served by the women in barber, beautician, and manicurist work as the male population was by the men in these fields.

	Number of females in population for each woman in barber, beautician, and manicurist occupations	Number of males in population for each man in barber, beautician, and manicurist occupations
1940	 300.8	297.6
1930	 535.7	238.0
1920	 1,558.4	294.6
1910	 2,002.0	273.6
1900	 5,104.1	309.2
1890	 8,278.1	390.3
1880	7,114.3	608.3
1870	 12,726.6	870.4

## PRACTICAL NURSES AND MIDWIVES

From an estimated 10,486 women in 1870, practical nurses and midwives expanded in numbers to a peak of 141,711 in 1930. From 1930 to 1940 the figures show a drop of over 37,000, but how much of this is a real decline in the field is open to question, Because of the wage and educational data on the 1940 census schedule, the return "nurse" was coded in many instances in 1940 as "Trained nurse" and included with professional workers. Similar information was not available in 1930.

Before 1900 the occupation increased at a rapid rate. In the 30 years from 1870 to 1900 the number of women engaged in practical nursing and midwifery increased by over 800 percent. Slowing rates of increase, which culminated in a decrease, caused a decline of 10 percent in the 30-year period from 1910 to 1940.

	Wo	Women practical nurses and midwives		
		Number	Percent change from preceding census	
1940		104,338	-26.4	
1930	W	141,711	+ 4.2	
1920		136,057	+ 17.3	
1910		115,946	+ 19.9	
1900		96,669	+162.6	
1890		36,818	+187.2	
1880		12,819	+ 22.2	
1870		10,486	<del></del>	

<sup>18</sup> U. S. Employment Service. Job descriptions for domestic service and personal service occupations. Washington, U. S. Government Printing Office, 1939, pp. 102-104.

The tremendous rise in the number of trained nurses relative to the population reflects the marked shift from home to hospital care of persons acutely or seriously ill and the concern with public health. Most of the practical nurses and midwives, however, were in private families, so that in a sense they represent a continuation of the care of the ill within the family. For every 10,000 of the population there were about 3 women practical nurses and midwives in 1870, compared to about 13 in 1920, and 8 in 1940. Corresponding figures for trained nurses, in contrast, were less than 1 in 1870, rising to 28 in 1940. Sick care in the home was done traditionally by the women of the family. Throughout the period from 1870 to 1940 over nine-tenths of all practical nurses and midwives were women. The following figures summarize these trends.

	Number of women practical nurses or midwives for each 10,000 persons in the population	Women as percent of all practical nurses and midwives
1940	7.9	95.5
1930	11.5	97.1
1920	12.9	93.3
1910	12.6	93.7
1900	12.7	95.2
1890	5.9	92.1
1880	2.6	98.0
1870	2.6	99.2

The occupation of practical nurse and midwife depends on the older woman to a very great extent. Only 12 percent of the women in this field were under 25 years of age in 1940, while 54 percent were 45 years or over. Corresponding proportions among women in the experienced labor force were, respectively, 30 and 22 percent. The proportion among practical nurses and midwives in the older group was even more marked in 1940 than in 1930.

	Percent d	istribution
Women practical nurses and midwives	1940	1930
14 years and over	100.0	100.0
14-24 years	12.0	12.5
25-44 years	34.3	<sup>1</sup> 35.9
45 years and over 1 Includes age unknown.	53.7	51.6

#### **ELEVATOR OPERATORS**

Women elevator operators, first reported in the 1900 census and negligible in number before 1920, totaled 13,986 by 1940.

<sup>14</sup> See discussion of trends among trained nurses, pp. 161-162.

The great impetus toward the use of women as elevator attendants came during World War I with the need for replacing men with women in various types of work.<sup>15</sup> As a result, the proportion of workers in this job who were women rose from 0.1 percent in 1910 to 18.0 percent in 1920. It remained at about this level in 1930, declining to 16.4 percent in 1940. The increase in women's numbers from 1920 to 1930 amounted to 68 percent, far outstripping the growth among all women in the labor force as a whole, but from 1930 to 1940 the 13 percent increase was considerably less than the rate for all women workers.

		Women elevator operators			
		Number	from pr	change eceding sus	Percent of all workers in this occupation
1940	~ <del></del>	13,986	+	13.2	16.4
1930		12,359	+	68.4	18.3
1920	##	7,337	+29	,248.0	18.0
1910	***************************************	25		16.7	0.1
1900		30			0.2

#### JANITORS AND SEXTONS

The 377,684 janitors and sextons reported in 1940, 39,041 of them women, reflect the pervasiveness of urban life with its many apartment houses and large office buildings. From 1870 through 1910 women in these occupations increased at a considerable though declining rate and after 1910 at a smaller but still declining rate. Women rose from about 5 percent of all janitors and sextons in 1870 to 19 percent in 1910 and then dropped back gradually to slightly over 10 percent in 1940. Trends in recent years thus indicate that openings in this work are more and more for men rather than for women.

		Women janitors and sextons		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		39,041	11.2	10.3
1930		35,104	23.4	11.5
1920		28,457	35.4	16.1
1910		21,023	167.1	18.8
1900		7,872	186.0	14.1
1890	**************************************	2,752	293.7	10.5
1880		699	362.9	7.7
1870		151	-	5.2

<sup>&</sup>lt;sup>16</sup> In reporting to the Women's Bureau on occupations in which women were substituted for men during the First World War, elevator operation was specified by employers in the manufacture of chemicals, furniture, and shoes and leather goods. U. S. Department of Labor. Women's Bureau. The new position of women in American industry. Bulletin 12. Washington, U. S. Government Printing Office, 1920, pp. 137-142.

In the Government service also examinations for the position of elevator conductor were opened to women for the period of the war. U. S. Civil Service Commission. Annual report, 1918, p. 57.

#### ATTENDANTS, USHERS, OPERATIVES, AMUSEMENT AND RECREATION

Few women have entered these fields of work, partly because certain of the occupations—such as that of stage hand or scene shifter—require considerable physical strength, and partly because certain ones in which boys are frequently employed are carried on in surroundings generally considered undesirable for young girls—such as that of pin boy in a bowling alley, golf caddy, or theater usher. However, a big relative increase took place from 1930 to 1940, no doubt due to a considerable extent to expansion in commercialized amusement; the 11,556 women in these fields in 1940 were over 3 times as many as the number in 1930. Up through 1910 women numbered below 1,000 and were less than 5 percent of the workers in these occupations, but since then they have been over 10 percent of the total.

		Women attendants, ushers, and operatives: amusement and recreation		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		11,556	218.3	13.6
1930		3,631	17.9	10.6
1920		3,081	330.9	13.7
1910	***************************************	715	103.1	4.3
1900		352	60.0	3.8
1890		220	103.7	3.5
1880		108	129.8	2.9
1870		47	******	2.2

### BOARDING HOUSE AND LODGINGHOUSE KEEPERS

Differences in definition account in part for the drop from 1930 to 1940 in the number of women who were boarding house and lodginghouse keepers. In 1940 only women with 5 or more boarders or lodgers were returned as being in this occupation, whereas in 1930 all women who depended on income from boarders or lodgers as their principal means of support were included. Sample studies indicate that, if the 1930 reports had been on the same basis as in 1940, the 1930 figure would have been 26.8 percent smaller. Among women, boarding house and lodginghouse keepers would then have been 92,236 in 1930, and there would have been an increase of 8,599 or 9.3 percent from 1930 to 1940. Instead, the 100,835 women boarding house and lodginghouse keepers in 1940 showed a decrease of one-fifth compared to the 1930 numbers actually reported.

Boarding and lodging houses provide a home at relatively reasonable prices for the worker without a family. Historically there was particularly great demand for temporary shelter at low rates when growth of urbanization and concentration of industrial activity detached numbers of workers from their homes.16 As urbanization progresses, boarding houses of the "small, intimate home type" give way to restaurant service and the commercial rooming house.<sup>17</sup> The high point in numbers of women boarding house and lodginghouse keepers occurred in 1910, when they were nearly 20 times as numerous as in 1870.

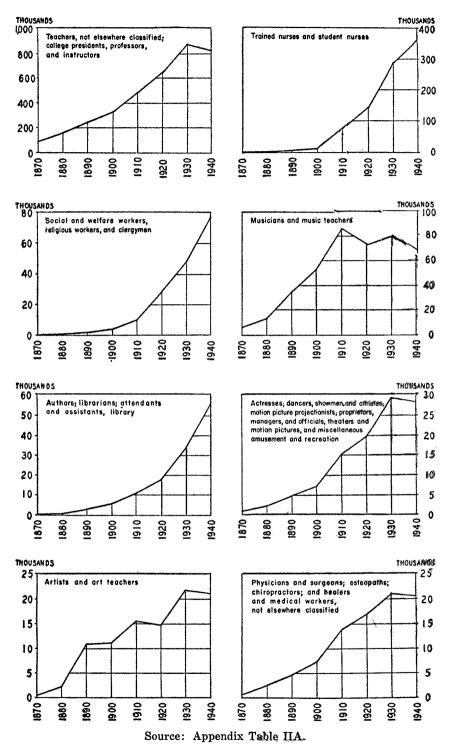
Women	Women boarding and lodginghouse keepers		
<del></del>	Number	Percent change from preceding census	
1940	100,835	-20.0	
1930	126,005	+ 10.9	
1920	113,593	<b>- 19.4</b>	
1910	140,976	+139.5	
1900	58,860	+ 82.4	
1890	32,267	+164.7	
1880	12,190	+ 72.9	
1870	7,052		

The general downward trend since 1910 reduced the number of women boarding and lodginghouse keepers by 1940 to the same proportion of all women workers as in 1890. The decrease did not represent a shift from women to men in the occupation, however, for the proportion of women has risen continuously from 55.2 percent in 1870 to 90.3 percent in 1940.

	Women boarding and lodginghouse keeper as percent of—	
	All women in the labor force or gainfully occupied	All workers in this occupation
1940	0.8	90.3
1930	1.2	88.2
1920	1,3	86.0
1910		86.1
1900	1.1	83.4
1890	0.8	<b>73.5</b>
1880	0.5	64.6
1870	0.4	55.2

<sup>16</sup> Shifts to war centers during World War II again brought acute demand for shelter of this type. See U. S. Department of Labor. Women's Bureau. Boarding homes for women war workers. Special Bulletin 11. [Washington], U. S. Government Printing Office, 1943. This publication suggested standards to be met by women operating boarding homes.

<sup>&</sup>lt;sup>17</sup> Encyclopaedia of the social sciences. Lodging houses. New York, N. Y., Macmillan Co., 1930-35.



#### OPENING DOORS IN PROFESSIONAL WORK

In the first census to report occupations of women in the United States, one of the major groups was designated as "Professional and personal services." Over four-fifths of the women in this group were classified as "Domestic servants." In 1940 women professional and semiprofessional workers were a separate group of considerable size and importance.

For 20 occupations or combinations that are primarily professional and semiprofessional in nature there are substantially comparable data for women for both 1870 and 1940. Of nearly 94,000 women in these selected fields in 1870, 9 in every 10 were teachers or college educators. (See Table 9.) Only two other fields had as much as 1 percent of the total—nurses, and musicians and music teachers. At that time there were listed no women chemists, technical engineers, veterinarians, library assistants, or, needless to say, aviators.

Seventy years later there was much less concentration of professional women in a restricted number of lines of work. In 1940 these same selected fields had almost 1,500,000 women. Teachers and college presidents, professors, and instructors had dropped relatively to 55 percent of the total (though their number had increased almost tenfold), nurses constituted almost one-fourth, while each of eight other occupations had 1 to 5 percent of the women in all these fields. In addition, new importance had come to certain occupations not included in the 20 that are comparable, such as that of technician and laboratory assistant, and those of the large and varied groups of miscellaneous professional and semiprofessional workers.

Women in these selected professional and semiprofessional occupations were over 15 times as numerous in 1940 as in 1870. To a major extent this phenomenal growth may be attributed to the opening of opportunities in higher education for women beginning about the middle of the nineteenth century, and to the subsequent development of these opportunities.

Among the distinguishing characteristics of a profession is the prolonged and special training required. The functions of passing on the cultural heritage to the next generation and of treating and caring for the sick have been carried out by women at other periods in history and in other societies. As the stand-

<sup>&</sup>lt;sup>1</sup> See Meyer, Annie Nathan, Editor. Woman's work in America. New York, N. Y., Henry Holt & Co., 1891. Chs. II-IV trace the history of the education of women.

# 156 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

Table 9.—Number and Percent Distribution of Women Professional and Semiprofessional Workers in Selected Occupations, 1870 and 1940<sup>1</sup>

	Number	of women	Percent di	stribution
Occupation	1940	1870	1940	1870
Total selected professional and semi- professional workers	1,493,247	93,712	100.0	100.0
professional workers	1,430,441	30,114	100.0	100.0
College presidents, professors, and instruc-				
tors; teachers (not elsewhere classified)	822,388	84,548	55.1	90.2
rained nurses and student nurses	362,897	1,154	24.3	1,2
Clergymen, religious workers, and social	•			
and welfare workers	77,731	65	5.2	0.1
Musicians and music teachers	66,256	5,806	4.4	6.2
Authors	4,606	115	0.3	0.1
ibrarians	34,546	43	2.3	(2)
Attendants and assistants, library	16,668		1.1	
Actresses, dancers, showmen, and athletes	•	1 7 1		
(including sports instructors); motion		i !		
picture projectionists; proprietors, man-		1 1		
agers, and officials of theaters and mo-		1		
tion pictures and of miscellaneous		1 1		
amusement and recreation	28.346	780	1.9	0.8
Artists and art teachers	21,147	418	1.4	0.4
Physicians and surgeons; osteopaths;	,			
chiropractors; healers and medical serv-				İ
ice workers (not elsewhere classified)	20,671	544	1.4	0.0
Editors and reporters	15,890	43	1.1	
Designers and draftsmen	10,425	13	0.7	(2 (2
Photographers	5,063	137	ŏ.3	o`.:
uneral directors and embalmers	2,174	20	0.1	(2
Chemists, assayers, and metallurgists	1,734		0.1	
Dentists.	1,067	25	0.1	(2)
Civil engineers; surveyors; electrical,	1,000	1 - 1	···	` '
mechanical, industrial, chemical, and		1 1		
mining and metallurgical engineers	991		0.1	
Architects	497	· · · · · · · · · i ·	(2)	(2
Veterinarians	799	1	(2)	
Aviators	51	1,	(2)	

Source: Appendix Table II A.

<sup>2</sup> Less than 0.05 percent.

ards for such work came to be more rigidly developed, women began to perform these services on the basis of specialized training, meeting standards of competence and conduct, with a responsibility to the community, and as members of professional associations. Women's entrance to the professional stratum thus took place by virtue of the development of some of their traditional activities into professions.<sup>2</sup> Furthermore, women's progress in teaching and in the newer types of professional work stemming from modern social and economic organization proceeded more

<sup>&</sup>lt;sup>1</sup> The professional and semiprofessional workers included in this distribution numbered 1,472,401 and constituted 95.2 percent of the total 1,545,841 women classified as professional and semi-professional workers in 1940. In addition, motion picture projectionists; proprietors, managers, and officials, theaters and motion pictures; proprietors, managers, and officials, miscellaneous amusement and recreation; and attendants and assistants, library, which were not classified with professional and semiprofessional workers in 1940, were included for comparability with 1870. These additional women numbered 20,846 and were 1.3 percent as large as the group classified as professional and semiprofessional workers in 1940.

<sup>&</sup>lt;sup>2</sup> The attributes of a profession are presented in Adams, Elizabeth Kemper. Women professional workers. New York, N. Y., Macmillan Co., 1921, pp. 1-17. For a discussion of the effect of the coming of science on the professions, see Carr-Saunders, A.M. and Wilson, P.A. The professions. Oxford, Clarendon Press, 1933, p. 297.

rapidly than their participation in the traditional professions of law, medicine, and theology.

#### THE TEACHING FIELD

General trends.—Teaching is and always has been the outstanding professional occupation for women. The number of women who were teachers or college presidents, professors, and instructors increased about tenfold from 1870 to 1940—from 84,548 to 822,388. It is notable that women teachers numbered in the tens of thousands in the first census publishing data for women's occupations.

By the time of the Civil War public education was coming to be generally accepted, and the increasing availability of educational opportunities for women in the normal schools, high schools, and seminaries produced a growing supply of women teachers.<sup>3</sup> The 1870 figures reflect these trends as well as the fact that women had made good in teaching when they were called upon to replace men during the Civil War.<sup>4</sup>

The Civil War heightened the effect of factors previously tending to make teaching a woman's profession, such as expanding educational opportunities for women, introduction of the graded system of education, and growing belief in the peculiar qualifications of women for teaching, including their superior character, their greater permanence in the profession, and, above all, economy in their employment.<sup>5</sup>

Women's subsequent numerical growth in the teaching profession averaged over 100,000 a decade, despite the drop from 1930 to 1940. The greatest addition occurred during the period 1920-1930, at the end of which a peak number of 873,897 women in this field was reached. The rate of growth, however, has slackened, the greatest rates of increase having occurred at the beginning of the census period. From 1930 to 1940 the number of women teachers declined.

<sup>&</sup>lt;sup>3</sup> The development of education for women in these schools and of training for the teaching profession is presented in detail in Woody, Thomas. A history of women's education in the United States. New York, N. Y., Science Press, 1929. Vol. I.

According to one writer, it was the occurrence of this war at the formative period of the public schools that placed teaching overwhelmingly in the hands of women. "The five years of the Civil War, which drained all the northern and western States of men, caused women teachers to be employed in the public and private schools in large numbers and, in the first reports of the national bureau of education, organized after the war, we see that there were already fewer men than women teaching in the public schools of the United States. "Thomas, M. Carey. Education of women. Monographs on education in the United States, 7. New York, N. Y., J. B. Lyon Co., 1904, p. 5.

<sup>&</sup>lt;sup>5</sup> See Elsbree, Willard S. *The American teacher. Evolution of a profession in a democracy.* New York, N. Y., American Book Co., 1939. Ch. XVII, The influx of women teachers in the American public schools.

Women teachers (not elsewhere classified) and college presidents, professors, and instructors

, , , , , , , , , , , , , , , , , , , ,	Number	Percent change from preceding census
1940	822,388	-5.9
1930	873,897	+35.4
1920	645,181	+34.5
1910	479,792	+47.4
1900	325,485	+33.1
1890	244,467	+59.4
1880	153,372	+81.4
1870	84,548	-

Changes relative to population and labor force growth.—The progress of women in professional work was closely dependent upon the spread of educational opportunities for women. In the teaching field educational developments played a double role; the extension of schooling among the population as a whole created more demand for teachers, and the increasing availability of training for women produced a growing supply of women teachers.

The teaching field, furthermore, is an illustration of growing opportunities for workers resulting, at least in part, from public policy implemented by legislation. Massachusetts adopted the first compulsory school law in 1852, and when such a law was passed in Mississippi in 1920, Nation-wide compulsory schooling was achieved. Various child labor laws likewise furthered the tendency for more and longer schooling. The effects of the extension of legal requirements along with the development of higher standards in educational practices appear in the changing ratio of the teaching force to the population of school age. Up until 1930 the number of women teachers for each 1,000 of the youth of the country increased.

Although in 1940 there was less concentration of professional women in the teaching field than in 1870, an increased proportion of all women workers were teachers. This indicates that despite the marked growth in professional fields outside of teaching, reducing the relative importance of teachers among all women professional workers, the growth in the number of women teachers was so great that the teaching field more than held its own relative to the entire female labor force. Trends among teachers relative to the population and to all women workers appear from the following:

<sup>&</sup>lt;sup>6</sup> Encyclopaedia of the social sciences. Education. New York, N. Y., Macmillan Co., 1930-35.

Women teachers (not elsewhere classified) and college presidents, professors, and instructors

conege presidents, projessors, and main actors	
Number for each 1,000 of the popu- lation aged 5 to 24 years	Percent of all women in the labor force or gainfully occupied
17.7	6.3
18.6	8.1
15.8	7.5
13.0	6.4
10.2	6.1
8.9	6.1
6.9	5.8
4.9	4.4
	Number for each 1,000 of the popu- lation aged 5 to 24 years 17.7 18.6 15.8 13.0 10.2 8.9 6.9

Changes relative to men.—Men have played the lesser role in teaching. With the spread of public schooling women have carried the major share of the responsibility in the field of education. About two-thirds of all persons in teaching were women in 1870, and women took over more and more of this growing field up through 1920, when four out of five teachers were women. From 1920 to 1930 the extraordinary influx of men into this work was relatively higher than the record increase for women, and from 1930 to 1940 the continued increase among men contrasted with the drop in numbers of women. As a result the proportion of women declined at the last two censuses.

Women as percent of all teachers (not elsewhere classified) and college presidents, professors, and instructors

1940		72.1
1930		79.0
1920		82.1
1910	### \$ ################################	78.5
1900		73.5
1890		70.9
1880		
1870		

Among college presidents, professors, and instructors the proportion of women reached a peak in 1930 and subsequently declined. This was due to the increasing numbers of men in these advanced teaching fields, while the numbers of women remained about the same. Less than 200 additional women entered the higher branches from 1930 to 1940, compared with the thousands in each of the previous two decades. Women were never as much as one-third of the persons in this smaller branch of the occupation, though they constituted the overwhelming majority of the general teaching group.

	W	Women as percent of-	
	All colle presidents, pr and instru	ofessors,	All teachers (not elsewhere classified)
1940	***************************************	26.5	75.3
1930		31.9	81.8
1920		29.6	84.5
1910		18.5	80.1

Shifts in particular occupations.—The entrance of women to advanced teaching fields is a part of the general extension of their activities into professional work. Opportunity for women to study in graduate departments provided women with the qualifications to teach at the college level, just as availability of the requisite legal and medical training enabled them to become lawyers and doctors. Women college presidents, professors, and instructors, first separately reported in 1910, constituted but an insignificant fraction of all women teachers, rising to 2.4 percent by 1940.

	Percent distribution of women in teaching occupations		
	Total	Teachers (not elsewhere classified)	College presidents, professors, and instructors
1940	 100.0	97.6	2.4
1930	 100.0	97.7	2.3
1920	100.0	98.5	1.5
1910	 100.0	99.4	0.6

Age and marital groups.—Available data indicate that women teachers are older than the group of 40 years ago, and that more of them are married. While under 9 percent of the group were 45 years old or more in 1910, nearly 23 percent were in this age class in 1940.

	Percent distribution			
	11940	1930	1920	1910
Women teachers (not elsewhere				
classified) 14 years and over	100.0	100.0	100.0	100.0
14-19 years	1.1	3.3	8.6	
20-44 years	76.2	<sup>2</sup> 81.6	<sup>2</sup> 80.0	<sup>2</sup> 91.5
45 years and over	22.8	15.1	11.4	8.5

<sup>&</sup>lt;sup>1</sup> Includes county agents and farm demonstrators, who constituted less than 1 percent of the total.
<sup>2</sup> Includes age unknown.

Apparently it has been a growing tendency for educational systems to take advantage of benefits that may derive from retaining teachers with years of training and experience in their vocation and with personal experience of marriage and mother-hood. Of women employed or seeking work as teachers in 1940 nearly a fourth were married, compared with 36.6 percent of all women workers who were married.

	of women
	(not else-
	assified)
who were	married

1940		124.5	1-
1930		17.9	l
1920		9.7	•
1910		2 6.4	:
1 Traludas	county agents and form demonstrators who constituted less than	1 n	ercent

<sup>&</sup>lt;sup>1</sup> Includes county agents and farm demonstrators, who constituted less than 1 percent of the total.

#### TRAINED NURSES

General trends.—The 362,897 women returned as trained nurses and student nurses in the 1940 census are in striking contrast with the 1.154 estimated in 1870. Census data over the years not only show the tremendous growth of this occupation but also reflect its evolution as a profession. Before 1900 nurses frequently failed to report to the census enumerator whether they were "trained" nurses or "practical" nurses. Since practical nurses were more numerous, all were lumped together under the title "nurses and midwives" and listed with domestic and personal service occupations. In 1900 trained nurses were classified separately, though still grouped with domestic and personal service. At that time there were nearly nine times as many nurses (not specified) and midwives as trained nurses. By 1940 trained nurses were nearly three and a half times as numerous as practical nurses and midwives. The wage income and education entries on the census schedules were used in 1940 to determine whether the return "nurse" should be coded "trained nurse." Thus this group is probably delimited more accurately in 1940 than at previous censuses.

The beginning of modern standards in nursing grew out of experiences with the U. S. Sanitary Commission during the Civil War. The opening of schools of nursing and the improvement in hospitals that occurred in the years following gave the impetus to the development of this field.<sup>7</sup>

Estimates for the period prior to 1900 indicate that the number of women engaged in trained nursing increased by an average of nearly 330 additional nurses a year from 1870 to 1900. From 1900 on, the growth was much larger, averaging nearly 9,000 a year, with a record annual addition of nearly 15,000 during the 10-year period from 1920 to 1930, following the accelerated demand for nurses' services during World War I and the further development of public health nursing and other public social

<sup>2</sup> Includes teachers (athletics, dancing, etc.) who constituted less than one-half of 1 percent of all women teachers in 1910. Women who were 14 years of age were counted as single.

<sup>7</sup> Encyclopaedia of the social sciences, op. cit. Nursing.

services. The largest rate of increase occurred from 1900 to 1910 when numbers of women in the occupation multiplied nearly seven times, but in all decades from 1880 to 1930 the rate of growth was remarkable.

		Women trained nurses	
		Number	Percent increase over preceding census
1940		362,897	25.7
1930	***************************************	288,737	101.0
1920	***************************************	143,664	87.8
1910		76,508	592.6
1900	***************************************	11,046	162.6
1890		4,206	187.3
1880		1,464	26.9
1870		1,154	ميستم

Changes relative to population.—The rise in the number of nurses serving the population marks the transfer of the care of the seriously ill from the woman in the home to the trained professional worker both in home and hospital. It also reflects a transition from the time when each family was responsible for the general health of its members and perhaps of others in the neighborhood, a responsibility that might or might not be met.

Social changes have taken place in many fields as problems arose out of the modern urban industrial economy. In the field of community and family health there has been a growing use of the service of the public health nurse; in industry, of the industrial nurse. At the same time the older branches of nursing have developed. From less than 1 woman trained nurse for each 10,000 persons in the population in 1870, the number rose successively at each census, reaching a figure of almost 28 in 1940. Authoritative observers of the nursing field have felt that failure to limit numbers trained can be partially attributed to the practice by hospitals of meeting their own nursing needs through the use of student nurses. Even after 1920, though the wartime shortage of nurses no longer existed, the stream of graduate nurses continued. The ratio rose from 14 women in nursing per 10,000 population in 1920 to 24 per 10,000 in 1930, until a condition of oversupply existed relative to demand that could be paid for. 8 At

<sup>8</sup> The demand and supply of nurses before 1940, and the fields of public health and industrial nursing are discussed in Brown, Esther Lucile. Nursing as a profession. New York, N. Y., Russell Sage Foundation, Second edition, 1940, pp. 89-104, 113-130. For the shortage since 1940 and the outlook for the postwar period, see U. S. Department of Labor. Women's Bureau. *Professional nurses*. By Marguerite Wykoff Zapoleon. Bulletin 203, No. 3. Washington, U. S. Government Printing Office, 1946. 65 pp.

the same time women nurses became more prominent among all women workers, rising to nearly 3 percent of the whole in 1940.

		Women trained nurses		
	10,000	ber for each ) persons in population	Percent of all women in the labor force or gainfully occupied	
1940		27.6	2.8	
1930		23.5	2.7	
1920		13.6	1.7	
1910		8.3	1.0	
1900		1.5	0.2	
1890		0.7	0.1	
1880	***************************************	0.3	0.1	
1870	***************************************	0.3	0.1	

Changes relative to men.—In the professional nursing field, the contribution made by men has been of negligible proportions. In fact, the services performed by male nurses may be considered as quite specialized and distinct. Men have never constituted as much as 10 percent of all trained nurses, while the 8,169 male trained nurses in 1940 were but 2.2 percent of the total. From 1920 on trained nursing was almost entirely a woman's job.

	Women all trai	as percent of ned nurses
1940	AP APARTE	97.8
1930	######################################	98.1
1920		96.3
1910		92,9
1900	***************************************	93.6
1890	***************************************	91.7
1880	***************************************	95.3
1870		95.8

Age groups.—Compared with all women workers, women nurses have had a somewhat smaller proportion in age groups below 19 years and 45 years and over. Just as among all women workers, the proportion of nurses in the age group of 45 and above has been increasing, though in 1940 it was still below the 22.2 percent for all women in the experienced labor force.

	Percent distribution			
	1940	1930	1920	1910
Total women trained nurses				
14 years and over	100.0	100.0	100.0	100.0
14-19 years	8.9	11.5	7.4	)
20-44 years	74.5	<sup>1</sup> 75.4	7.4 ¹81.8	189.9
45 years and over <sup>1</sup> Includes age unknown.	16.5	13.2	10.8	10.1

# 164 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

Marital status.—Married nurses were only about one-fifth of all nurses who were employed and seeking work in 1940, far below the 37 percent who were married among all employed and experienced unemployed women and below the 25 percent among employed and experienced unemployed women workers in professional and semiprofessional occupations. The fact that a great many nursing jobs are connected with hospitals and that the workers are expected to live in the quarters provided for them may make it less feasible for married nurses to continue in their occupation. In private-duty nursing the traditional long hours may have made it difficult for the woman with a home to continue a career in nursing. However, the proportion of married nurses has increased considerably since 1910.

		nrried nurses as per- cent of all women rained nurses and student nurses
50.00		19.5
1940		19.5
1930		12.5
1920		<b>7.5</b>
1910		······································
1 Women	14 years old were counted as single.	

## SOCIAL AND WELFARE WORKERS, RELIGIOUS WORKERS, AND CLERGYMEN

For social and welfare workers, as for trained nurses, the evolution of a census category may be said to reflect the development of a recognized profession. Social and welfare workers were included with religious workers in the semiprofessional group in 1910 and 1920, while in 1900 and earlier none of these were distinguished from clergymen. The combination of social workers with religious workers until a recent date doubtless stems from the traditional connection between charitable work and religion, or at least with the church organization, a tradition that still persists.<sup>9</sup>

In 1930 social and welfare workers were separately listed as professional workers, though not on a basis comparable with 1940. This distinction in the census marks the recognition of social work as a profession, a development furthered particularly by progress in the field of training.<sup>10</sup> The chief differences between 1930 and 1940 in the composition of the group classed as "Social and welfare

<sup>&</sup>lt;sup>9</sup> "As previously pointed out, a large amount of philanthropic work is undertaken with the idea of fulfilling a religious duty, thereby storing up personal grace and helping to elevate the soul." Walker, Sydnor H. Social work and the training of social workers. Chapel Hill, N. C., University of North Carolina Press, 1928, p. 177.

<sup>&</sup>lt;sup>10</sup> Brown, Esther Lucile. Social work as a profession. New York, N. Y., Russell Sage Foundation, 1936, pp. 19-23. Women in this field have apparently met higher training standards than men. In 1940, 55 percent of employed women social and welfare workers had completed 4 or more years of college, compared with 48 percent of the men employed in the field.

workers' lie in the inclusion in this group in 1940 of those social workers classed in 1930 with religious workers because they worked for a religious organization, or with teaching, because they were concerned with health education, and in the number of new titles arising out of the relief and welfare programs of the depression years. In addition all probation and truant officers, formerly shown separately, were included with social workers in 1940.

In the three fields together (those of social, welfare, and religious workers, including clergymen), the number of women rose from 65 in 1870 to 77,731 in 1940. Nearly nine-tenths of the total numerical increase among women occurred after 1910, during the period in which social work was coming into its own. The rate of growth has been declining since 1890, but by 1920 the occupation had already grown to such size that lower rates of increase represented large numerical additions.

	Women social an religious worke	men social and welfare workers, ligious workers, and clergymen		
	Number	Percent increase over preceding census		
1940	77,731	65.1		
1930	47,069	67.5		
1920	28,109	202.0		
1910	9,308	190.5		
1900	3,204	195.0		
1890	1,086	591.7		
1880	157	141.5		
1870	65			

In 1940 more than three-fifths of all the women in this group, compared with one-sixth of all the men, were in the social and welfare branch; nearly four-fifths of the men were clergymen. Details available from the census since 1910 show that few of the women were clergymen—less than 700 in 1910 and only about 3,300 in 1940. The distribution of women from 1910 to 1940 was as follows:

Total women social and welfare	Percent distribution			
workers, religious workers,	1940	1930	1920	1910
and clergymen	100.0	100.0	100.0	100.0
Clergymen	4.3	7.0	6.4	7.4
Social and welfare workers  Religious workers	62.2 33.5	93.0	93.6	92.6

The number of women in the combined group of social, welfare, and religious workers, excluding clergymen, increased over

760 percent from 1910 to 1940, rising from 8,623 to 74,423. Additional entrants thus averaged more than 2,000 a year for women alone. In 1940 women were 64.3 percent of all social and welfare workers and 74.1 percent of all religious workers. In the two fields together, their position relative to men became more favorable through 1930, but the large increase among women from 1930 to 1940 was matched by the growth among men, so that the proportions were similar at the last two censuses.

	Women social, welfare, and religious workers		
	Number	Percent of all workers in this occupation	
1940	74,423	67.4	
1930	43,793	67.6	
1920	26,322	62.0	
1910	8,623	52.3	

The growing opportunities for women in the social work field are indicated by the declining ratio relative to the total population. The number of persons for each woman social, welfare, and religious worker in the country was 6 times greater in 1910 than in 1940. At the latter date there was 1 woman social and welfare worker for every 2,722 persons in the population, and 1 woman religious worker for every 5,054 persons. Trends since 1910 for the combined fields are as follows:

	Number of persons in the total population for each woman social, welfare, and religious worker
1940	<u></u>
1930	2,804
1920	4,016
1910	10,666

The beginnings of professional social work arose out of efforts to meet conditions accompanying the Industrial Revolution. Because these conditions are intensified in urban areas and because in urban areas particularly impersonal assistance in meeting problems is required, opportunities for social workers are largely in urban localities, though recent years have seen notable increases in rural county welfare work as well. In 1940, 75 percent of all women in the labor force were located in urban areas, whereas 85 percent of women employed or seeking work as social and welfare workers were in urban sections.

### MUSIC, ART, AND ENTERTAINMENT

Because artists and musicians frequently combine teaching with the exercise of their professions, no distinction is made in the census between teaching and practicing in these two fields.

Actually a large proportion of women classed as musicians and music teachers were probably teachers, since 53 percent of women employed in this field in 1940 were reported as employers and own-account workers, indicating that many of them were private music teachers. Among men, in contrast, 60 percent of employed musicians and music teachers were private wage or salary work-Among artists and art teachers, women in the teaching group were more likely to be connected with the public school This appears from the fact that 17 percent of the women compared to 4 percent of the men were government workers in 1940. To some extent therefore, trends among men and women workers are likely to differ because differing factors have affected the teachers in these fields and those engaged in the more direct application of their talents. Acting and dancing, as well as music and art, have been affected by new modes of popular entertainment and by new applications of artistic techniques.

Musicians and music teachers.—Women musicians and music teachers rose in number from 5,806 in 1870 to a peak of 84,478 in 1910. After a resurgence in 1930 they dropped back to 66,256 in 1940. This evidences new trends in cultural and recreational activities that brought about a decline in private music teaching, which affected women particularly. The development of commercial entertainment and of radio, on the other hand, have expanded the field in which most of the men's activities lie. Consequently women, in 1910 three-fifths of all musicians and music teachers, were only two-fifths of the total by 1940.

	Women musicians and music teachers		
	Number	Percent change from preceding census	Percent of all workers in this occupation
1940	66,256	<b>— 16.8</b>	41.0
1930	 79,611	+ 9.5	47.7
1920	72,678	<b>— 14.0</b>	55.2
1910	 84,478	+ 61.3	60.0
1900	 52,359	+ 51.7	56.2
1890	 34,519	+161.9	55.0
1880	 13,182	+127.0	42.8
1870	 5,806	· <del></del>	35.5

Artists and art teachers.—Art and art teaching, with 21,147 women in 1940, had only about one-third as many women as the music field. Beginning with 418 women in 1870, their numbers expanded irregularly to a peak in 1930 and then leveled off. Growth since 1910 has been more sustained among men than among women, with the result that the proportion of those in the field who are women has been declining for the past 30 years.

		Women artists and art teachers			
		Number	Percent change from preceding census	Percent of all workers in this occupation	
1940	***************************************	21,147	<b>— 3.3</b>	33.8	
1930	***************************************	21,860	+48.1	38.2	
1920		14,763	<b>—</b> 5.3	41.7	
1910	**************************************	15,583	+40.0	45.7	
1900		11,131	+ 1.9	44.8	
1890		10,923	+424.6	48.6	
1880		2,082	+398.1	22.9	
1870		418		10.1	

Actresses and dancers.—Because of changes in census classifications over the years, comparable data for the actors' and dancers' group actually include eight 1940 occupations—actors and actresses; athletes; dancers, dancing teachers and chorus girls; showmen; sports instructors and officials; motion picture projectionists; proprietors, managers, and officials: theaters and motion pictures; and proprietors, managers, and officials: miscellaneous amusement and recreation. Of the women in these fields in 1940, 27 percent were actresses and 38 percent were in the dancer group, together accounting for nearly three-fourths of all. Of the men 90 percent were in fields other than dancing and acting.

Women in the entire entertainment field numbered 28,346 in 1940 compared to 780 in 1870. The rate of growth among women was much more rapid in the 30 years after 1870 than in the tricennial period ending in 1940, though there was a spurt from 1920 to 1930 as the period after World War I brought new impetus to the amusement field. In this field, as in music and art, a decline occurred among women but not among men from 1930 to 1940, a period marked by deep economic depression and subsequent efforts toward recovery.

		Women actresses, dancers, etc.1			
		Number	Percent change from preceding census	Percent of all workers in this occupation	
1940		28,346	<b> 2.8</b>	16.9	
1930		29,164	+ 46.5	18.6	
1920		19,904	+ 28.9	18.9	
1910		<b>15,4</b> 38	+117.7	18.4	
1900		7,093	+ 52.5	16.6	
1890		4,652	+129.5	14.8	
1880	<u></u>	2,027	+159.9	22.4	
1870		780		16.7	

<sup>&</sup>lt;sup>1</sup> Actors and actresses; dancers, showmen, and athletes; motion picture projectionists; and proprietors, managers, and officials of theaters and motion pictures and of miscellaneous amusement and recreation.

#### LITERARY OCCUPATIONS

Authors.—Well before 1870 a considerable list of women writers, including names still notable today, could be made. Women had been authors not only of cook books, novels, and poetry but of thoughtful religious and philosophical volumes, and they were among the contributors to the "great magazines" that date from the 1850's. Nevertheless, only 115 women were returned as authors in 1870. It is clear that creative writing formed a means of livelihood for few women, even as today the writer, unless among the relatively few highly successful ones, must often use for literary pursuits "leisure time" snatched from more sure means of support such as teaching, journalism, or other activities, or from household responsibilities.

Women were one-fourth (25.2 percent) of the authors reported in 1870. After 1910, when they approached half of the total, this proportion declined relatively to men's, even though the number of women rose by 2,569 from 1910 to 1940.

		Women authors		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		4,606	-14.6	32.6
1930	***************************************	5,393	+81.2	43.8
1920	*	2,976	<b>+46.1</b>	45.1
1910		2,037	·	47.1

Librarians and library attendants and assistants.—With but 43 women in 1870, who were one-fifth of the total, the occupation of librarian was of little significance for women workers. By 1940 numbers of women increased to 34,546. The growth of this field for women attests to the rising educational and cultural level of the population in the United States as well as to the increasing participation of women in training for and carrying on the work of the new occupations that resulted. Trends since 1910, when separate data for librarians were presented in the census for the first time since 1870, were as follows:

	Women librarians	
	Number	Percent increase over preceding census
1940	34,546	29.0
1930	. 26,785	100.4
1920	13,367	131.6
1910	5,771	

<sup>11</sup> See Meyer, op. cit., Ch. V.

<sup>747639° --- 48 --- 12</sup> 

## 170 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

A related occupation for women, though clerical rather than professional in nature, was that of the library attendant and assistant. Up to 1930 this was a small field and in fact was smaller in 1930 than in 1910. From 1930 to 1940 the number of women in this occupation jumped from but 1,486 to 16,668. The phenomenal rise evidences the effects of the public emergency work programs developed during the depression. Many emergency workers had never had any other occupation than the one provided by the project on which the government employed them. Consequently, some of the tremendous increase from 1930 to 1940 among library assistants and attendants may be considered abnormal rather than due to growth in demand for women in this work.

	Wom	en library attendants and assistants	
		Number	Percent change from preceding census
1940		16,668	+1,021.7
1930		1,486	+ 12.5
1920	***************************************	1,321	- 56.6
1910		3,043	Burrenton.

The proportion of women among library attendants and assistants has fluctuated since 1910, but among librarians the proportion grew steadily through 1930 and then declined, though the number of women continued to increase.

		Women as percent of-	
	A	ll librarians	All library attendants and assistants
1940		89.5	82.5
1930		91.4	73.8
1920		88.3	53.7
1910	Andrew Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the	78,5	85.4

Editors and reporters.—Among editors and reporters, as among librarians, the expansion of educational opportunities has played a dual role in trends affecting women. An educated population has developed an increasingly widespread demand for newspapers and journals, and advance in the requisite training facilities for women has enabled them to participate more fully in vocational opportunities in these fields. Women have experienced a rapid and steady growth, from only 43 in 1870 to 15,890 in 1940. Two-thirds of the additional women in the 70-year period entered the field after 1910. Except in the decade 1910 to 1920, the field has expanded for men, too, but women have advanced relatively even more.

		Women editors and reporters		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		15,890	7.5	25.0
1930		14,786	108.1	24.0
1920		7,105	<b>37.1</b> ,	17.5
1910		5,184	90.7	12.7
1900		2,719	147.0	7.6
1890	( <b></b>	1,101	208.4	4.2
1880		357	730.2	2.4
1870		43		0.7

### THE "LEARNED PROFESSIONS" AND RELATED FIELDS

Theology, law, and medicine are the three professions against which newer fields are customarily measured to determine whether the newer fields can be considered of professional status. Beginning about 1850, the developing educational opportunities for women were extended to the opening of training to women in these venerable fields. Opposition to women in these occupations, however, continued to be both determined and of considerable extent. Despite this opposition women have made considerable inroads into these fields. Today, with women's ability to do professional work clearly demonstrated, and with many new and challenging outlets for activity in a professional capacity beckoning, there is relatively less concentrated interest on the part of women in the learned professions as such.

Occupations in medicine and dentistry.—When the first woman received a medical diploma in America in 1849, it marked the effort of women to regain a field of work in which they had once been active, for in the Colonial period the care of the sick and the practice of midwifery had been almost exclusively woman's province. The latter half of the nineteenth century saw growing endeavors on the part of women to obtain a medical education, to work in hospitals, and to enter medical associations. By the time of the 1870 census there were 544 women physicians and surgeons of various types.

The most rapid growth among women physicians, surgeons, osteopaths, chiropractors, and healers and medical workers (not elsewhere classified) took place from 1900 to 1910. A total of 6,300 women was added in these fields in the single decade from 1900 to 1910, nearly as many as the 6,843 added from 1870 to 1900 and the 6,984 from 1910 to 1940, periods of 30 years each. By

<sup>12</sup> For a history of women in medicine in America before 1890, see Meyer, op. cit., pp. 139-205.

1940 there were 20,671 women in these several fields, nearly 38 times the number in 1870. Up through 1910 the decennial rate of growth was at least 3 or 4 times the increase in the female population, but after that it exceeded population growth only slightly, and from 1930 to 1940 there was a decline. Nevertheless the proportion of women advanced steadily up through 1930.

Women physicians, surgeons, osteopaths, chiropractors, and healers and medical workers (not elsewhere classified)

		(111, 111, 111, 111, 111, 111, 111, 111		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940	***************************************	20,671	<b>— 1.0</b>	10.2
1930		20,875	+ 24.4	11.0
1920	<b>PBR00000</b> 0000000000000000000000000000000	16,784	+ 22.6	10.2
1910		13,687	+ 85.3	8.7
1900		7,387	+ 62.1	5.6
1890		4,557	+ 87.4	4.3
1880	***************************************	2,432	+347.1	2.8
1870	***************************************	544		0.8

Among women the general picture in the medical occupations in the past 30 years is one of increasing domination of the field by the semiprofessional medical occupations such as those of masseur, therapist, chiropodist, and so forth, with a corresponding relative decline in the professional physician group. Among the former are certain occupations that supplement the physician's work, which have developed increasingly high standards in recent years, such as physical therapy. The tendency for advances in auxiliary medical fields has appeared in other occupations also, for example that of medical laboratory technician (included in the census category "Technicians and assistants, laboratory," discussed on pages 176-177). These workers have similarly carried on a growing segment of specialized medical duties on a basis of advancing qualifications.<sup>13</sup>

In 1940 women classified as semiprofessional workers in various types of healing and medical work (including chiropractors) numbered 11,861, over two and a half times as many as in 1910, while women physicians, surgeons, and osteopaths totaled 8,810 in 1940, somewhat fewer in number than in 1910. Within the professional physician group the number of women physicians and surgeons showed a slight increase from 1930 to 1940, which was more than offset by the continued decrease among

osteopaths. Of the women in the whole group of medical service occupations, doctors were almost two-thirds in 1910, but by 1940 the various other medical workers were in the majority.

		Percent distribution of women in medical occupations			
		Total	Physicians, surgeons, and osteopaths	Chiropractors, and healers and medical workers (not elsewhere classified)	
1940		100.0	42.6	57.4	
1930		100.0	40.2	<b>59.</b> 8	
1920	***************************************	100.0	52.9	47.1	
1910		100.0	65.9	34.1	

Relative to the population the total supply of doctors was less adequate in 1940 than in 1910. While those available were undoubtedly better trained and their qualifications based on higher standards, the total number of physicians, surgeons, or osteopaths for each 10,000 of the population dropped from 16.4 in 1910 to 13.0 in 1940. Of the total number of doctors a relatively small and decreasing proportion were women, even though there are opportunities for women. Among the smaller group of chiropractors and healers and other medical workers (only one-fifth as numerous as physicians, surgeons, and osteopaths) women shifted from a predominant position in 1910 to a substantially less important place in 1940.

	Women as	Women as percent of-	
	All physicians, surgeons, and osteopaths	All chiropractors, and healers and medical workers (not elsewhere classified)	
1940	5.1	37.7	
1930	5.2	41.5	
1920	<b> 5.9</b>	52.4	
1910	6.0	67.0	

In the profession of dentistry the number of women rose from 25 in 1870 to a peak of 1,902 in 1920, thereafter declining to 1,067 by 1940. Though this field presumably offers promising opportunities for women, 15 both the numbers of women and their proportion of the total have declined in recent decades.

<sup>&</sup>lt;sup>14</sup> See U. S. Department of Labor. Women's Bureau. Women physicians. By Marguerite Wykoff Zapoleon. Bulletin 203, No. 7. Washington, U. S. Government Printing Office, 1945. 28 pp.

<sup>&</sup>lt;sup>15</sup> See U. S. Department of Labor. Women's Bureau. Women dentists. By Marguerite Wykoff Zapoleon. Bulletin 203, No. 9. Washington, U. S. Government Printing Office, 1945. 21 pp.

	Wo	men dentists
	Number	Percent of all workers in this occupation
1940 .	1,067	1.5
1930	1,338	1.9
1920	 1,902	3.4
	1,304	3.3
1900	839	2.9
1890	350	2.0
1880	63	0.5
1870	25	0.3

The occupation of clergyman.—Resistance by men ministers and by congregations to the entrance of women into the ministry has kept this field a small one for women. 16. The first woman graduated from a theological school completed her course as long ago as 1851,17 but numerical advance has been slow.

Separate data for clergymen are not available from the census until 1910. Before that no distinction had been made between clergymen and all other religious and social and welfare workers. 18 In 1910 there were 685 women reported in the census as clergymen. Additions thereafter averaged about 85 a year, bringing the 1940 total to 3,308.

In general, few women students in divinity schools have prepared for active work as ministers. Rather they have entered related fields of work as teachers of religious education, or missionaries, or administrators19 and are not classified with clergymen. Growing opportunities in such related work have undoubtedly contributed to the declining rate of increase among women clergymen since 1910. Nevertheless the proportion of women, though small, has risen somewhat, indicating a slight tendency to advance.

		Women clergymen	
	Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	3,308	1.0	2.4
1930	3,276	83.3	2.2
1920	1,787	160.9	1.4
1910	685		0.6

<sup>16</sup> This attitude, common in many religious denominations, was expressed in a recent article in The Presbyterian by the Rev. Dr. Clarence E. McCartney, who says, "I am opposed to the ordination of women as ministers and elders, not merely because there is no precedent for such action, but also because it is inexpedient. . . . Of our 2,000,000 members only a handful are asking for women as ministers. The women themselves do not want it." Quoted in the New York Times, February 10,

<sup>&</sup>lt;sup>17</sup> Woody, op. cit., Vol. II, p. 368.

<sup>&</sup>lt;sup>18</sup> See section on social and welfare workers, and religious workers, for reference to trends in the combined groups from 1870 to 1940, pp. 164-167.

<sup>19</sup> Adams, op. cit., pp. 79-81.

The law.—It has been particularly difficult for women to break down barriers to the active practice of law. Before 1870 legal training was generally obtained by studying or "reading law" in a law office. The opening of law schools in the next 30 years made it possible for women to obtain a legal education. <sup>20</sup> The number of women lawyers and judges has remained small, though in recent decades the proportional growth has been remarkable. In 1910, 558 women were returned by the Census in this occupation. By 1940 there were 4,447, so that the number of additional entrants in each decade averaged about 1,300.

As in the field of the ministry, many women lawyers do not practice. Rather, they may use their legal training in work as editors of legal publications, in business, and in other professions. Consequently the census figures cannot be expected to indicate the number of women who have obtained law degrees or even those who are members of the bar. The rate of growth, though declining, has far exceeded the growth in the female population; the proportion of women, though small, shows a steady rise since 1910.

		Women lawyers and judges		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		4,447	31.4	2.5
1930	*******************************	3,385	94.8	2.1
1920		1,738	211.5	1.4
1910	***************************************	558	·	0.5

#### SOME PROFESSIONAL OCCUPATIONS RELATED TO SCIENCE AND INDUSTRY

Industrial developments have brought special importance to certain occupations that require scientific and technical knowledge in their performance. The development of new products whose manufacture is based on principles of chemistry or physics and the wide extension of mass production methods have made the services of technicians and scientists increasingly essential to industry. Chemical and physical tests are required at various stages of the manufacturing process in a growing number of industries. The complexities of large-scale production require the technical services of engineers and the assistance of designers, draftsmen, and technicians. Development of large-scale building has made the services of trained architects essential for safe and economic construction as much as for functional and artistic design. The introduction of scientific methods into agriculture has affected the veterinary's profession, first expanding it and

<sup>20</sup> Woody, op. cit., Vol II, pp. 373-380.

then, as mechanical means supplanted animal power, superseding it. In some of these fields women have made little contribution, while in others their numbers and proportions have expanded considerably.

Designers and draftsmen.—Women designers and draftsmen numbered only 13 in 1870. They experienced a rapid rate of growth up through 1910, though the total number added was not large. In fact, nearly half of the numerical increase from 1870 to 1940 occurred from 1910 to 1920, a period which included the war years when women replaced men in many industrial jobs representing new fields for women. In 1920 the proportion of women among the total was at a peak, and the trend since then has been slightly downward.

		Women designers and draftsmen			
		Number	Percent increase over preceding census	Percent of all workers in this occupation	
1940	***************************************	10,425	12.5	9.3	
1930		9,268	20.5	9.5	
1920	**************************************	7,694	157.0	11.5	
1910	**************************************	2,994	215.2	6.8	
1900		950	208.4	5,1	
1890		308	440.4	3.3	
1880		57	338.5	2.1	
1870	***************************************	13	accesses.	1.0	

The 8,871 women designers in 1940 were nearly 6 times as numerous as the 1,554 women draftsmen then reported. In contrast there were nearly 6 times as many men returned as draftsmen than as designers. Except immediately after World War I women have been less than 2 percent of all draftsmen, but for the last three decades they have been about 3 out of every 8 designers. The designing of clothing, accessories, and textiles has offered particular opportunities to women.

	W	Women as percent of—	
	AU	designers	All draftsmen
1940	######################################	37.6	1.8
1930		38.1	1.9
1920		37.0	3.9
1910		22.1	1.2

Laboratory technicians and chemists, assayers, and metallurgists.—The lack of comparable census figures for laboratory technicians before 1940 has great significance in indicating the meteoric rise of a new semiprofessional field of work with its own standards and characteristics. In 1910 and 1920 the work was so undifferentiated that most technicians were distributed among three groups—"Semiskilled operatives" in "Other chemical factories," "Other occupations" under "Semiprofessional pursuits," and "Other clerks" under "Clerical occupations." By 1930, 7,700 women were distinguished as technicians and laboratory assistants under the definition in use at that census. In 1940 others were brought together with the group—x-ray technicians; laboratory assistants in electric and steel manufacturing; testers in dairies, in radio, in rayon and silk mills, and in oil refineries; chemists' assistants; and other such workers. Engaged, by 1940, in a fairly well defined occupation field, the women laboratory technicians and assistants numbered 22,651, and women technicians other than those in laboratory 821. Women constituted 33.7 percent of all laboratory technicians and assistants and 10.2 percent of nonlaboratory technicians.

In the more highly professionalized and responsible occupation of chemist, assayer, and metallurgist, women have been much less important. In 1940 they numbered but 1,734. Nevertheless, they have made some strides in the field, for in 1870, under the contemporary limitations on the scientific training of women, not a single woman chemist was reported to the Census. The numbers of women showed a decline from 1930 to 1940, and the proportion of women has been dropping since the all-time peak in 1920.

	Wom assayers,	Women chemists, ssayers, and metallurgists	
	Number	Percent of all workers in this occupation	
1940	1,734	2.9	
1930	1,943	4.0	
1920	1,748	5.2	
1910	591	3.6	
1900	253	2.8	
1890	40	0.9	
1880	49	2.4	

Technical engineers and architects.—The small field of technical engineers is of interest because of the fact that even a few women have found a place in it. Women in these fields numbered 991 in 1940. Data for 1930 and preceding years have not been adjusted for comparability with 1940, and the 1940 returns were not examined so carefully as in 1930 and other years to detect errors in the classifications of women reported in unusual occupations, such as that of mining engineer. However, since in 1940 persons under 35 years of age returned as technical engineers were so coded only if they had at least 4 years of college education, the definition was stricter in this respect than in 1930. In 1940

nearly equal numbers of women were civil, electrical, and mechanical engineers (from 224 to 231). In none of the engineering fields were women as much as 1 percent of all workers.

In architecture women have shown somewhat more progress, probably in part because requirements call for artistic as well as technical abilities, and in part because some of the field is concerned with home building and landscape planning, appealing particularly to women. The number of women in the field was small in 1940, only 497, but the proportion of women, except in 1920, has been around 2 percent in recent decades.

		Women architects	
		Number	Percent of all workers in this occupation
1940		497	2.3
1930		455	2.0
1920		164	0.9
1910	***************************************	362	2.1
1900		. 120	1.1
1890		26	0.3
1880	#WhARM#dib.co/#WhAR#motomorphisMovehida.com.org.com.com.com.com.com.com.com.com.com.com	. 20	0.6
1870	######################################	. 1	(1)
<sup>1</sup> Less th	an 0.05 percent.		

Veterinarians.—The total number of veterinarians reached an all time high of 13,494 in 1920. In that year only 1 woman was reported in the census. In 1940, 99 out of 10,957 veterinarians were women, less than 1 percent of the total.

## OTHER PROFESSIONAL OCCUPATIONS

Photographers.—Women have entered many of the various branches of photographic work, and in fact almost have a monopoly of certain photographic processes, but in the professional occupation of photographer they are a minority. From 137 women in 1870 the number grew at a high rate up through 1900. A lower rate of expansion from 1900 to 1910 was followed by a spurt in the decade preceding 1920, probably the result of wartime demand for workers. In the past two decades the number of women photographers has grown at rates considerably below the rate of growth among women workers generally. From 1930 to 1940 the number of women grew less rapidly than that of men, so that women's proportion to the total declined.

			Women photographers	
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		5,063	0.9	13.5
1930	<u> </u>	5,020	17.5	15.3
1920		4,271	43.4	15.0
1910		2,978	38.6	11.3
1900		2,148	62,6	9.6
1890		1,321	387.5	7.9
1880		271	97.8	3.3
1870		137		2.2

Funeral directors and embalmers.—Funeral directors and embalmers were placed in the semiprofessional group for the first time in 1940. Previously entitled "undertakers," they were included with other occupations in trade. Women in the field numbered 2,174 in 1940 compared with 20 in 1870. Proportions of women have, in general, increased.

p		nen funeral directors and embalmers	
	Number	Percent of all workers in this occupation	
1940	2,174	5.5	
1930	1,940	5.7	
1920	1,127	4.6	
1910	813	3.9	
1900	323	2.0	
1890	83	0.8	
1880	55	1.1	
1870	20	1.0	

Aviators.—At the time of the 1910 census, significantly enough, aviators were included with showmen. The tremendous expansion of aviation over the succeeding decades has made it recognized as a separate occupation, and the technical knowledge required, such as navigation, meteorology, and physics, placed it in 1940, as in 1910, in professional service. Few women have been reported as aviators—only 8 in 1920, 66 in 1930, and 51 in 1940—in each census year not over 1 percent of all aviators. The figures do not of course represent numbers of women with pilot's licenses. Rather, they reflect the small demand for women to enter aviation as paid pilots.

#### BUSINESSWOMEN

The group of workers classified in the census as "Proprietors, managers, and officials" includes the entrepreneur who owns a business, often operating it also, the manager who conducts an enterprise for others, and the official who determines policies or who, with a large share of responsibility, carries out the policies. Such persons range from the captain of industry to the milliner operating her own establishment single-handed. Few women, however, have been captains of industry. Few, even, have held important positions in the managerial or official group. The term "businesswomen," denoting as it does women who engage in mercantile or commercial affairs, more aptly describes the women classed in this occupation group.

Such occupations had been undertaken by women well before 1870. Newspaper advertisements of the colonial period reveal that in those days women engaged in a wide variety of business enterprise. The wife of a shopkeeper or tradesman frequently worked as her husband's partner and in the event of his death continued as proprietor of such businesses as those of a tanner, printer, tailor, painter, shipwright, silversmith, or gunsmith. Other women undertook themselves the operation of a millinery or dry goods store, a pastry shop, a tavern, or an inn. Women are known to have conducted such industrial enterprises as a fulling mill, a grain mill, and a distillery.

From 1870 to 1940 the total number of businesswomen in eight selected comparable occupations increased from 8,095 to 318,647, or nearly 40 times, whereas the number of all women workers multiplied somewhat below 7 times. (See Table 10.) The considerable concentration of businesswomen in "Other trade" in 1870 is due largely to the fact that often the specific nature of the business was not reported. Many women classified in this group doubtless would have been included with other of the specified trade groups if their type of business had been known.

Though the numbers of women in each comparable category increased markedly from 1870 to 1940, some increased much more than others, resulting in a new distribution within the whole group. Women in all types of trade dropped from 71.7 percent of all businesswomen in 1870 to 58.7 percent in 1940. Over the same period the proportions of women engaged in operating

<sup>&</sup>lt;sup>1</sup> See Spruill, Julia Cherry. Women's life and work in the southern colonies. Chapel Hill, N. C., University of North Carolina Press, 1938, pp. 276-305; also, Abbott, Edith. Women in industry. New York, N. Y., Appleton & Co., 1924, pp. 13-17.

Table 10.—Number and Percent Distribution of Women Proprietors, Managers, and Officials, Except Farm, in Selected Occupations, 1870 and 1940<sup>1</sup>

0	Number of	women	Percent dist	ribution
Occupation	1940	1870	1940	1870
Total selected proprietors, managers, and officials, ex- cept farm	318,647	8,095	100.0	100.0
Proprietors, managers, and officials, trade.	187,125	5,808	58.7	71.7
Food and dairy products stores, and milk retailing: proprietors, managers, and officials; meat cutters, except slaughter and packing house  Other retail trade and wholesale trade: proprietors, managers, and officials  General merchandise, apparel and accessories, and shoe stores: proprietors, man	69,376 57,147	1,387 3,524	21.8 17.9	17.1 43.5
agers, and officials; milliners (not in factory).  Drug stores: proprietors, managers, and officials; pharmacists	54,767 5,835	864 33	17.2	10.7 0.4
Other proprietors, managers, and officials	181,522	2,287	41.3	28.3
Eating and drinking places: proprietors, managers, and officials	66,104	754	20.7	9.3
transportation, and communication: proprietors, managers, and officials Hotels and lodging places: proprietors,	26,878	261	8.4	3.2
managers, and officials	21,879 16,661	1,024 248	6.9 5.2	12.6 3.1

Source: Appendix Table II A.

<sup>1</sup> The women proprietors, managers, and officials, except farm, included in this distribution numbered 301,668 and constituted 70.0 percent of the total 431,080 women classified as women proprietors, managers, and officials, except farm, in 1940. In addition, inspectors, mining; inspectors, communication and utilities; meat cutters, except slaughter and packing house; milliners (not in factory); and pharmacists, which were not classified with proprietors, managers, and officials in 1940, were included for comparability with 1870. These additional women numbered 16,979 and were 3.9 percent as large as the group classified as proprietors, managers, and officials, except farm, in 1940.

hotels and lodging places decreased by nearly one-half. An increasing proportion of the total were postmasters or were proprietors, managers, and officials of eating and drinking places, and of establishments grouped under mining, construction, manufacturing, transportation, and communication. In addition there were significant numbers of women in 1940 in several managerial occupations for which comparable census data were not available prior to 1910. These include government inspectors and officials; officials: lodge, society, union, and so forth; proprietors, managers, and officials: banking and other finance; and proprietors, managers, and officials: insurance.

#### FOOD AND DAIRY PRODUCTS STORES

The number of women proprietors, managers, and officials in food retailing multiplied over 50 times from 1870 to 1940, more

rapidly than the group of proprietors, managers, and officials as a whole (on the basis of the comparable data available). The decennial rate of increase has been considerable, though fluctuating. The lowest rate of increase occurred from 1910 to 1920 when unusual opportunities for employment in industry and other fields may have diverted women from seeking their fortunes in this retail sphere. The great development of the chain stores has not apparently curtailed women's progress in food retailing, for the proportion of women rose fairly consistently from but 1 percent of the total in 1870 to over 10 percent by 1940.

Women proprietors, managers,	and officials:
------------------------------	----------------

		1000 310163-		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	*********************	69,376	57.5	10.5
1930		44,037	25.4	6.8
1920		35,123	16.0	7.1
1910		30,285	194.4	7.1
1900	************************************	10,287	65.5	3.5
1890	**	6,217	39.3	2.9
1880		4,464	221.8	2.0
1870		1,387	-	1.0

<sup>&</sup>lt;sup>1</sup> Includes proprietors, managers, and officials: food and dairy products stores and milk retailing; and meat cutters, except slaughter and packing house.

#### EATING AND DRINKING PLACES

It has been pointed out that the tendency for women to start a boarding house when faced with the need to earn a living "has spilled over into the restaurant business" and that the "unique American institution, the tea room, is almost as uniquely feminine." This development was particularly marked after 1900, when seven-eighths of all the women entering this field from 1870 to 1940 were added. As the practice of "eating out" became more prevalent, women with a talent for organizing and managing restaurants and making them pay found new opportunities. By 1940 women proprietors, managers, and officials of eating and drinking places numbered over 66,000 and were nearly one-fourth of the total.

<sup>&</sup>lt;sup>2</sup> Irwin, Inez Haynes. Angels and amazons. A hundred years of American women. New York, N. Y., Doubleday, Doran & Co., Inc., 1933, p. 305.

Women proprietors, managers, and officials:

		eating and arinking places		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		66,104	57.4	24.2
1930		42,008	147.5	23.5
1920		16,975	34.6	14.9
1910		12,607	81.3	9.0
1900	drant	6,954	44.8	5.9
1890		4,804	112.4	5.1
1880		2,262	200.0	2.6
1870		754	,	1.4

#### OTHER TRADE

In 1870 the classification "Other trade" included women traders and dealers in a variety of specialties, as well as a considerable number whose chief business was not specified. Among the more important given in detail were dealers in cigars and tobacco; in liquors and wines; in sewing machines; in crockery, china, and stoneware; in agricultural implements; in books and stationery; in iron, tin, and copper wares; in newspapers and periodicals; in gold and silverware and jewelry; and in musical instruments. Some of these appeared in 1940 also, but in addition there were women proprietors and managers of new types of business, such as limited price variety stores, motor vehicles and accessories retailing, and filling stations. Following a rapid expansion among women in these fields from 1870 to 1890 the data show a leveling off, with another period of expansion after 1910.

Women proprietors, managers, and officials:

			oiner iraue-	
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		57,147	71.7	5.8
1930		33,288	57.6	4.2
1920	************************	21,123	21.8	3.5
1910		17,342	0.7	3.5
1900	*******************************	17,216	3.6	3.5
1890		16,624	195.5	3.3
1880		5,626	59.6	2.3
1870		3,524		1.9

<sup>&</sup>lt;sup>1</sup> Includes limited price, variety, furniture and house furnishings, hardware and farm implement, jewelry, household appliance and radio, liquor, and miscellaneous retail stores; motor vehicles and accessories retailing; country buyers and shippers of livestock and other farm products; fuel and ice retailing; filling stations; lumber and building material retailing; retail florists; not specified retail trade; and wholesale trade.

## GENERAL MERCHANDISE, APPAREL, AND SHOES

Trends among women in this census group are very much affected by changes in the number of milliners as well as by the tendency toward the separation of the producing from the selling aspects of the millinery business. In 1940 milliners (not in factory) were classified with miscellaneous operatives, while millinery dealers were a part of the group designated as "Proprietors, managers, and officials, apparel and accessories stores, except shoes." Because milliners and millinery dealers were classified together in 1930 and earlier, the occupations had to be grouped together in 1940 to obtain a comparable series over a period of years. Still a third group concerned with millinery are the operatives in millinery factories; these were included in 1940 with operatives in apparel and accessories, the largest group of operatives at the time of the 1940 census.

Until fairly recently, therefore, the milliner was a skilled worker who was also a shopkeeper, a combination that was general as early as colonial times.<sup>3</sup> Changes in the census classifications thus reflect the impact of mass production and of the use of ready-made apparel on the occupation of the milliner.

Undoubtedly also the decreasing demand for the products of a skilled hand trade has caused the decline since the 1910 peak in the numbers of women proprietors, managers, and officials in general merchandise, apparel and accessories, and shoe stores, together with milliners (not in factory). Census data to demonstrate this are not available, but evidence exists in the notable declines in other hand trades of women (such as dressmakers and seamstresses) and in the numerical rise of women proprietors and managers in other types of trade. Trends in the combined group since 18904 have been as follows:

Women proprietors, managers, and officials: general merchandise, apparel and accessories, and shoe stores; and milliners (not in factory)

		and the stores, and minutes (not in justers)		
		Number	Percent change from preceding cens <b>u</b> s	Percent of all workers in this occupation
1940	######################################	54,767	-17.3	25.6
1930	***************************************	66,239	-23.0	22.5
1920	******************************	85,986	-36.8	28.8
1910		136,060	+50.9	39.5
1900	*********************	90,147	+44.8	45.5
1890	**************************************	62,265		60.4

<sup>&</sup>lt;sup>8</sup> Owners of millinery establishments in the colonial period frequently advertised for sale a wide variety of other articles. See Spruill, op. cit., pp. 282-284.

<sup>&</sup>lt;sup>4</sup> Before that date, milliners were combined with dressmakers and seamstresses. See pp. 113-115 for estimates of numbers of milliners in 1870 and 1880.

## PROPRIETORS, MANAGERS, AND OFFICIALS, PRIMARILY IN INDUSTRY

In 1940, nearly 70 percent of the women in this group were proprietors, managers, and officials in manufacturing. Since the group as a whole may include anyone from the proprietor of a small local bakery or the widow who continues as silent partner in her deceased husband's machine shop to the president of a thriving coal company or the active publisher of a large chain of newspapers, the degree of responsibility exercised varies extremely. Nevertheless there is evidence in the daily press and elsewhere that numbers of women have undertaken positions of great responsibility, with correspondingly remunerative returns.<sup>5</sup>

As increasing numbers of women have entered paid work and have taken up various occupations in the world of business and industry, they have also had growing, though still limited, opportunities to enter those positions that carry great prestige in our business-dominated economy. Major increases seem to be reported beginning about the turn of the century. Nearly 27,000 women were proprietors, managers, and officials in industry in 1940, over 100 times as many as were reported in the 1870 census. They were 3.5 percent of the total in 1940, a proportion nearly 10 times as great as in 1870.

Women proprietors, managers, and officials

			in incusiry-	
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		26,878	37.5	3.5
1930		19,544	43.3	2.3
1920		13,641	63.2	2.0
1910	F4448444444444444444444444444444444444	8,358	122.1	1.4
1900		3,763	606.0	1.3
1890	*	533	10.8	0.3
1880		481	84.3	0.6
1870		261	-	0.4

<sup>&</sup>lt;sup>1</sup> Includes mining; construction; manufacturing; automobile storage, rental, and repair services; railroads (includes railroad repair shops); miscellaneous transportation; street railways and bus lines; taxicab service; trucking service; and communications.

#### HOTELS AND LODGING PLACES

The traditional occupation of women in housekeeping has led numbers of them to turn to the keeping of a boarding house as a means of livelihood, and it has doubtless encouraged others to embark on the more pretentious venture of a hotel or tourist camp. The rapid rate of increase for women, typical in the occupation

<sup>&</sup>lt;sup>5</sup> For examples of women in such positions, see Leuck, Miriam Simons. Women in odd and unusual fields of work. The annals of the American Academy of Political and Social Science 143: 173-174, May 1929.

<sup>6</sup> See pp. 151-152.

<sup>747639° — 48 — 13</sup> 

before 1910, no longer occurred after that date. This may have been due to the growing dominance of the large hotel or lodging place with less opportunity for the small-scale operator. However, women have been a constantly greater proportion of the total, rising to nearly one-third by 1940.

Women proprietors,	managers,	and	officials:
hotels and	ladaina bl	2920	

		notets and toaging places		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		21,879	+ 9.0	32.7
1930		20,080	+ 22.5	30.7
1920	******************************	16,395	- 0.7	25.6
1910	~~~~~	16,513	+ 66.8	22.3
1900		9,898	+ 61.7	15.7
1890		6,120	+147.0	12.1
1880		2,478	+142.0	6.6
1870		1,024	·	3.3

#### GOVERNMENT OFFICIALS AND INSPECTORS

Data available beginning in 1910 show that nearly 15,000 women were added to officials and inspectors of the Federal, State, and local governments from 1910 to 1940. This increase is the result in part of the extension of government into fields where women have had special interests and qualifications, such as in factory inspection and health work, though this census occupation does not include officials of charitable, welfare, and educational institutions. It may also be due in part to the increasing tendency to consider women for appointment to the general run of official posts, as a result of women's fuller participation in civic and political life following the granting of suffrage. Furthermore, as women's employment has increased in government work, more of them have had opportunities to obtain the background and experience necessary for supervisory posts.

The number of women government inspectors and officials increased at a high and fairly constant rate from 1910 to 1940, and the proportion of women among the total rose steadily.

	Women	Women government inspectors and officials1		
	Number	Percent increase over preceding census	Percent of all workers in this occupation	
1940	18,295	65.6	9.1	
1930	11,046	78.1	8.0	
1920	6,203	76.1	5.7	
1910	3,522	·	4.4	
<sup>1</sup> Includes inspectors and offic	cials, United States, State	city, and county and	local.	

<sup>&</sup>lt;sup>7</sup> In the Federal service, for example, women showed definite advance into supervisory and administrative grades from 1925 to 1941. See U. S. Department of Labor. Women's Bureau. *Employment of women in the Federal Government, 1923 to 1939.* By Rachel Fesler Nyswander and Janet M. Hooks. Bulletin 182. Washington, U. S. Government Printing Office, 1941, pp. 53-56.

#### **POSTMASTERS**

The postal system has been a function of Federal Government from the time of the Articles of Confederation in 1777,<sup>8</sup> and the woman postmaster appeared on the scene simultaneously.<sup>9</sup> By 1870 women gainfully occupied as postmasters and assistants were a small but significant number that grew rapidly in the following 70 years. Census data for 1940 showed that women were 2 out of every 5 postmasters, though it should be noted that many of the women were fourth-class postmasters, in stations where full-time activity is not required.<sup>10</sup> Trends among women postmasters have been as follows:

			Women postmasters	
18		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		16,661	22.5	42.5
1930	attended and the second of the second of the second property by the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the seco	13,603	21.4	39.5
1920		11,208	28.5	35.1
1910		8,722	79.1	31.3
1900		4,871	66.5	28.0
1890		2,925	124.5	19.1
1880		1,303	425.4	10.8
1870		248	<u>.</u>	3.2

#### DRUGGISTS AND PHARMACISTS

The handbooks on domestic economy in vogue in the Colonies frequently included numerous recipes for salves, ointments, and potions, so that in addition to her other functions the housewife might act as apothecary to her family.<sup>11</sup> The National Pharmacopoeia, which sets standards for the drugs and medicines listed therein, first appeared in the United States as late as 1820.<sup>12</sup> By 1870 the compounding of medicines and other curative preparations was almost entirely in the hands of men, few women traders and dealers in drugs and medicines having been reported in the census. Undoubtedly, however, women continued to prepare and administer home remedies.

The occupations of druggist and pharmacist, with their mounting requirements as to standards, together have constituted throughout the period a small but growing field for women,

<sup>&</sup>lt;sup>8</sup> U. S. Government Information Service. *United States Government manual, 1947.* Washington, U. S. Government Printing Office, 1947, p. 211.

<sup>&</sup>lt;sup>9</sup> Mary Katharine Goddard was a postmistress at Annapolis during the Revolutionary War, as well as a newspaper publisher, job printer, and bookstore proprietor. Spruill, op. cit., pp 266-267.

<sup>&</sup>lt;sup>10</sup> U. S. Women's Bureau. Employment of women in the Federal Government, 1923 to 1939. op. cit., p. 33.

<sup>&</sup>lt;sup>11</sup> See Spruill, op. cit., pp. 75, 210-212.

<sup>&</sup>lt;sup>12</sup> Encyclopaedia of the social sciences. Medical materials industry. New York, N. Y., Macmillan Co., 1930-1935.

though in more recent decades numbers have increased at a less rapid rate than formerly. The Census places pharmacists with professional workers, but in this analysis they have been combined with proprietors, managers, and officials of drug stores to obtain comparable data with earlier years. In 1940, 57 percent of the women in this group were pharmacists. Relative to all druggists and pharmacists, the proportion of women, though still small, has risen steadily over the 70 years.

Women pro	prietors,	managers,	and office	ials:
		and bharn		

		arug stores, and pharmacists		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940		5,835	29.3	5.6
1930	*	4,512	45.6	4.3
1920		. 3,099	46.3	3.9
1910		2,118	83.7	3.1
1900		1,153	60.4	2.0
1890		. 719	509.3	1.6
1880		. 118	257.6	0.4
1870		. 33	-	0.2

#### BANKING AND OTHER FINANCE

During World War I women frequently replaced men in banks in jobs other than routine clerical work, a fact undoubtedly contributing to the exceptional rate of increase from 1910 to 1920 among women proprietors, managers, officials, and salesmen in banking and other finance institutions. The further increase in the decade after 1920 was followed in the succeeding decade by a decline in numbers with the curtailment of financial services in the depression period. By 1940 women continued to be less than 5 percent of the total, so that it remained true of the banking field, as it had been in 1921, that for women "its opportunities to advance beyond a limited point are still problematical." Their small foothold, however, has been steadily enlarged.

Women proprietors, managers, and officials:

		banking and other finance1			
		Number	Percent change from preceding census	Percent of all workers in this occupation	
1940		6,782	<b>— 22.3</b>	4.7	
1930		8,728	+ 74.3	4.5	
1920	***************************************	5,008	+120.7	3.8	
1910		2,269		2.8	

<sup>&</sup>lt;sup>1</sup> Includes proprietors, managers, and officials: banking and other finance; and salesmen: finance, brokerage, and commission firms.

<sup>&</sup>lt;sup>13</sup> Adams, Elizabeth Kemper. Women professional workers. New York, N. Y., Macmillan Co., 1921, p. 254.

## OFFICIALS, LODGE, SOCIETY, UNION, ETC.

Dating from as early as the 1850's, the development of women's clubs has been a significant movement in American life. Membership of some clubs was drawn from among women in the home who sought to enlarge the horizons of a life immersed in a daily round of household activities. As more and more women became gainful workers, the number of organizations catering to women's occupational interests grew.<sup>14</sup> These organizations as well as the trade unions and the various associations formed for social, civic, or philanthropic purposes have offered to women small but growing opportunities for careers as officials, managers, agents, and representatives, though the proportion of women among all such officials was lower in 1940 than in 1910.

		Women officials: lodge, society, union, etc.		
		Number	Percent increase over preceding census	Percent of all workers in this occupation
1940	######################################	4,405	43.9	17.1
1930		3,062	38.9	20.7
1920	<u></u>	2,205	9.8	18.4
1910	***************************************	2,009		24.0

#### **INSURANCE**

The growth since 1910 among women proprietors, managers, and officials in the insurance field, with its highest rate from 1920 to 1930 and its lowest rate from 1930 to 1940, follows a pattern similar to that among women insurance agents and workers. <sup>15</sup> Undoubtedly as women have entered insurance selling in increasing numbers, more of them have found opportunities to undertake positions of responsibility in this branch of the work, in addition to growing numbers in supervisory posts in clerical and other departments where women's employment was no novelty. In 1910 the proportion of women among all insurance agents was slightly higher than among all insurance officials was 7.1 percent, compared to 5.3 percent among agents and brokers.

	Women	Women proprietors, managers, and officials: insurance		
	Number	Percent increase over preceding census	Percent of all workers in this occupation	
1940	2,832	44.3	7.1	
1930	1,962	472.0	5.8	
1920	343	145.0	2.0	
1910	140		1.3	

<sup>&</sup>lt;sup>14</sup> For a history of women's organizations see Breckinridge, Sophonisba P. Women in the twentieth century. New York, N. Y., McGraw-Hill Book Co., 1933, pp. 11-95.

<sup>15</sup> See pp. 88-89.

## AGRICULTURAL WORKERS

One of the most significant trends in American life has been the shift to urban living and industrial employments and the corresponding decline in the population living in rural areas and engaged in agricultural pursuits. In 1870 there were somewhat under 7 million persons in agriculture, including both farmers and farm laborers, but they constituted over half of all occupied workers of the country. Total numbers in agriculture continued to rise until 1910, but the growth was not as rapid as the expansion in the entire labor force. After 1910 the numbers declined decade by decade. The 9 million persons in farm work in 1940 were only 17 percent of all persons in the labor force.

In recent years the number of very large farms has been growing, but to a considerable extent farming has remained an enterprise carried on chiefly by the farm operator and his family. Of the 8,923,324 persons reported in farming activities in 1940, 5,328,049 were farmers or farm managers and foremen, and another 1,273,240 were unpaid family workers. In all there were only 2,322,035 farm wage workers in 1940, reflecting the fact that a majority of farms are operated without hired farm labor.

In this picture the place of women, on the basis of official census data, is small, for only slightly more than one-half million were reported in all agricultural capacities in 1940. The bulk of farm wives, whose contributions are vital to the success of the farm enterprise, are generally omitted. Even so, the women included in agriculture under the census definition constitute a significant group among all women in the labor force, and the changes in their numbers and the character of their work are important to a consideration of women's occupational patterns.

Among women in agriculture in 1940, 5 out of every 10 were unpaid family workers, 3 were farmers, and 2 were wage laborers. Available data show that the proportion of women farm workers who were farmers grew from 1910 to 1940, whereas the proportion working as farm laborers declined. Further details in 1930 and 1940 indicate that the drop has been entirely among the unpaid family workers, and that the proportion of women doing farm labor as wage workers grew.

190

	Percent distribution			
	1940	1930	1920	1910
Total women in agriculture	100.0	100.0	100.0	100.0
Farmers (owners and tenants)	29.4	28.9	22.7	23.2
Farm managers and foremen	0.2	0.1	1.3	0.7
Farm laborers (wage workers)	22.3	18.7	76.0	76.1
Farm laborers (unpaid family workers)	48.1	52.3	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	70.1

In the pioneer type of farming, with its self-sufficient character, its hand-labor methods, and its all-inclusive activities, women played an important part. From colonial days to the Civil War the wife of the farmer cared, to a considerable extent, for the dairy, the poultry yard, and the garden in addition to her multitude of other tasks. Some women made an independent living as planters or small farmers, while others were hired to care for the dairy or poultry on the farm of another person. Though women of the farm family as well as those in the service of others did rather rough work such as cutting wood, milking, and so forth, it was only in the more exceptional instances that they were "put into the ground," or employed in field labor.

Shortly after the Civil War the homestead movement gave rise to greatly increased farming activities. By that time, the hand labor formerly universal in agriculture in the United States had given way to the widespread use of horse-drawn machinery, thus changing the character of farm work.<sup>3</sup> In the years following, the number of women farmers and agricultural laborers grew fairly rapidly, a trend that continued almost until the beginning of World War I. Subsequently the numbers of women in these activities began to shrink more and more.

1	omen farmers, farm managers and foremen		
	Number	Percent change from preceding census	
1940	154,374	-41.5	
1930	263,695	-6.2	
1920	281,208	<b>— 0.1</b>	
1910,	281,617	<b>—</b> 9.6	
1900	311,695	+ 36.0	
1890	229,270	+290.7	
1880	58,680	+136.1	
1870	24,859		

<sup>&</sup>lt;sup>1</sup> See Spruill, Julia Cherry. Women's life and work in the southern colonies. Chapel Hill, N. C., University of North Carolina Press, 1938, pp. 80, 305-312.

<sup>&</sup>lt;sup>2</sup> Abbott, Edith. Women in industry. New York, N. Y., D. Appleton & Co., 1924, pp. 12-13.

<sup>&</sup>lt;sup>3</sup> President's Conference on Unemployment. Recent economic changes in the United States. New York, N. Y., McGraw-Hill Book Co. Inc., 1929, Vol. II, p. 556.

Women classified as farm owners and tenants or as farm managers and foremen rose in number from less than 25,000 in 1870 to over 300,000 in 1900, increasing in each decade at rates considerably above the rate of population growth. After 1900 the numbers of women in the farm operator group dropped, showing a particularly large decrease from 1930 to 1940.

Census data for women agricultural laborers provide only a rough indication of the trends. Agriculture is a seasonal industry, rising to a high level of activity at the time crops are planted and to an even greater peak at harvest time, so that the figures are affected by the particular time of the year at which the census is taken.4 Moreover, even if a census is taken in the same month as the census of the previous decade, weather conditions may vary at the two periods, and the condition of the crops and consequent needs for labor differ. The farm operator undoubtedly reports himself as such, whatever the extent of his farm activities under way at the census date. Women working as unpaid laborers on the family farm, however, may do very little outside work in the winter or at a time when the season is delayed, whereas at the peak of farming operations they may spend all their time at this occupation. In addition many women constantly perform a certain amount of farm work, such as caring for poultry and dairy operations, and there is the question of whether a particular woman will consider these activities as part of her housework or as a contribution to the family farm enterprise.5

The number of women farm laborers, both wage workers and unpaid family workers, more than doubled from 1870 to 1910, despite a break in their growth from 1880 to 1890. After 1910 the advance of power farming, the cityward movement of the rural population, and the gradual increase in large farming operations at the expense of the small family-operated farm affected the numbers of farm workers, women as well as men. The numerical decline among women agricultural laborers became so great and so rapid that by 1940 there were fewer women farm laborers than there had been in 1870.

<sup>&</sup>lt;sup>4</sup> Census dates were as follows: 1870 to 1900, June; 1910, April; 1920, January; 1930, April; 1940, March. Data from the U. S. Census *Monthly report on the labor force* showed that the number of women in agricultural employment in June 1947 was almost 134 million above that in the preceding January.

<sup>&</sup>lt;sup>5</sup> However, adjustment has been made for the overcount of farm laborers in 1910 due to differences in instructions to enumerators that resulted in the inclusion of an excessive number of such women (compared with other censuses).

<sup>&</sup>lt;sup>6</sup> These trends are discussed in President's Conference on Unemployment. Recent economic changes in the United States, op. cit., Vol II, pp. 547-602.

TV - ... - .. frum Inhanana (anaga and

Number         from preceding census           1940         367,370         -43.0           1930         644,618         -27.6           1920         890,230         - 0.5           1910         894,722         +28.4           1900         696,670         +22.9		w.	un paid family workers)		
1930       644,618       -27.6         1920       890,230       - 0.5         1910       894,722       +28.4         1900       696,670       +22.9		_	Number	Percent change from preceding census	
1920       890,230       - 0.5         1910       894,722       +28.4         1900       696,670       +22.9	1940		367,370	-43.0	
1910 894,722 +28.4 1900 696,670 +22.9	1930		644,618	-27.6	
1900 696,670 +22.9	1920		890,230	- 0.5	
1000	1910		894,722	+28.4	
1000 = 0.1	1900		`696,670	+22.9	
1890 500,709 0.1	1890		566,709	- 0.1	
1880 +31.9	1880		567,169	+31.9	

430,085

Changes relative to population and labor force growth.—The dwindling farm population, already referred to, has continued to provide the basic agricultural necessities for a total population that continued to grow. Increasing productivity of farm labor, changes in consumer habits, and lessened export demands have been among the economic factors that made this possible. The number of persons in the population for each person in farm work was nearly three times as great in 1940 as in 1870, and a similar change was true in relation to the number of women in farm work. However, the number of persons for each woman in farm work had at first declined slightly (from 1870 to 1900), whereas relative to farm workers of both sexes the numbers in the population were without exception higher at each census after 1870 than at the preceding one.

<u>i</u>	Number of persons in population for-		
	Each agr	person in iculture <sup>1</sup>	Each woman in agriculture <sup>1</sup>
1940		14.8	252.4
1930		11.8	135.2
1920		9.3	90.2
1910		8.0	78.2
1900		7.0	75.4
1890		6.4	78.7
1880		5.9	80.1
1870		5.9	87.5

<sup>&</sup>lt;sup>1</sup> Farmers (owners and tenants), farm managers and foremen, and farm laborers (wage and unpaid family workers).

In 1870 work as unpaid or wage labor on farms was an important occupation for the woman worker, over one-fifth of all gainfully occupied women having been in this occupation. At each subsequent census the proportion declined, indicating the growing opportunities in other fields of work. Even those women

<sup>&</sup>lt;sup>7</sup> See Hopkins, John A. Changing technology and employment in agriculture. National research project on reemployment opportunities and recent changes in industrial techniques. Washington, U. S. Gevernment Printing Office, 1941. 189 pp.

## 194 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

who did not join the migration to the city with its variety of employment opportunities became less concerned with farm work. In 1910 it was stated that "Farmers' wives and daughters no longer milk the cows and work in the field and care for the livestock as of yore; they do not work in the kitchen and garden as before; nor assist in the fruit and berry harvest. They are making less butter, and cheese making on the farm has become a lost art. They may care for the poultry and the bees, do housework and gather vegetables for the table, and cook and keep the dwelling in order. This is substantially the limit. Of course Negro women do much labor in the cotton field, but this diminishes year by year."

By 1940 the proportion of women workers who were farm laborers was only about one-tenth as large as it had been in 1870. Women farm operators, however, constituted approximately the same proportion in 1870 and in 1940, slightly over 1 percent, having risen to a maximum of about 6 percent in 1900.

	Percent of all women in the labor force or gainfully occupied who were—	
	Farmers (owners and tenants), farm managers and foremen	Farm laborers (wage and un paid family workers)
1940	1.2	2.8
1930	2.5	6.0
1920	3.3	10.3
1910	3.8	12.0
1900	5.9	13.1
1890	5.7	14.1
1880	2.2	21.4
1870		22.4

Changes relative to men.—The need for money income to achieve a given level of living has affected the farm family less than urban groups. To a considerable degree the well-being of the farm family depends on the unpaid labor of the wife of the farmer as well as on the cash which the joint family enterprise brings in. Supplements to the family diet through the efforts of the housewife in connection with the kitchen garden, the poultry flock, and canning and preserving activities contribute considerably to the family health and well-being. In addition the farm wife carries on numerous activities for which the urban family may secure commercial substitutes. Where the cash returns do not cover the family needs, not only are the growing,

<sup>&</sup>lt;sup>8</sup> U. S. Department of Agriculture. Yearbook of the Department of Agriculture, 1910. Washington, U. S. Government Printing Office, 1911, pp. 192-193. For a later discussion of conditions and outlook of farm women see Atkeson, Mary Meek. Women in farm life and rural economy. The annals of the American Academy of Political and Social Science 143: 188-194, May 1929.

canning, and storing of food done at home, but activities may extend to the making and care of clothing, the production of soap, furniture polish, and hand lotion, and the fabrication of bedding and mattresses. Because of her duties, the farmer's wife generally has not worked on the cash crop of the farm. A study of cotton farming in Texas, for example, reveals that by and large it is the unmarried woman on the farm who does field work. 10

The proportion of women in agricultural labor has thus been understandably small. The largest proportion of women among the total was reported in 1920, following a period when considerable effort had been made to encourage women to participate in the greatly needed agricultural expansion accompanying World War I.<sup>11</sup> The proportion of women in 1940 declined to a point below that of 1870. Among farmers and farm managers and foremen the proportion of women in 1940 was likewise below the peak, though somewhat higher than it had been in 1870 and 1880.

	Women as percent of—		
	All farmers (owners and tenants); farm managers and foremen	All farm laborers (wage and unpaid family workers)	
1940	2.9	10.2	
1930	4.3	15.0	
1920	4.3	18.3	
1910	4.6	16.9	
1900	<b>5.4</b>	13.8	
1890	4.3	12.7	
1880	1.4	13.5	
1870	<b>0.8</b>	11.8	

<sup>&</sup>lt;sup>9</sup> U. S. Department of Agriculture. *Yearbook of Agriculture*, 1933. Washington, U. S. Government Printing Office, 1933, pp. 385-397.

<sup>&</sup>lt;sup>10</sup> Allen, Ruth. The labor of women in the production of cotton. The University of Texas Bulletin, No. 3134. Texas, University Publications, September 8, 1931, p. 79.

<sup>&</sup>lt;sup>11</sup> See, for example, Women on the farm. An address before the Woman's Committee, Council of National Defense. May 13. 1918, Washington, D. C., by Clarence Ousley, Assistant Secretary of Agriculture. Washington, U. S. Department of Agriculture, 1918. 12 pp.

### WOMEN IN TRADES AND CRAFTS

For few of the 121.650 women classified as craftsmen, foremen, and kindred workers in 1940 can comparable data be obtained for 1870. Consequently it is impossible to determine, on the basis of census data, what shifts have occurred among women in this group. One fact is fairly clear—throughout the 70-year period, right up through 1940, the skilled work of the craftsman, with its long apprenticeship, frequently with its requirements of physical strength, and often with its restrictive union regulations, was a field not open to women on a very wide scale. Even the small numbers of women reported in specific trades and crafts at various censuses are suspect. Census experts have stated that while there undoubtedly have been women in certain of these occupations investigation might have shown that the woman reported as a "blacksmith" was an owner of a blacksmith shop left her by her husband rather than a worker actively on the job. Also, it seemed probable that many of the women reported as "machinists" were in fact machine operators. Furthermore, less rechecking was done by the Census in 1940 on unusual occupations for women, so that any considerable increases from 1930 to 1940 may have been due to differences in methodology rather than to real gains.

#### **FOREMEN**

Data for foremen are likely to be more authentic than for some other craft occupations, but the over-all term includes many types of work, some much less responsible than others. Since 1910 the number of women acting as foremen has increased. As shown by census data, changes in numbers and in the proportion women constituted of the total have not been consistent in direction. Throughout the three decades women have been a rather unvarying proportion of all foremen—somewhat below 10 percent.

		Women foremen <sup>1</sup>		
		Number	Percent change from preceding census	Percent of all workers in this occupation
1940		38,492	+14.1	7.8
1930		33,737	-2.7	7.0
1920	********************************	34,670	+48.9	8.0
1910		23,277	· <del></del>	8.2

<sup>&</sup>lt;sup>1</sup> Excludes foremen in personal service, communication, mining, street railways and bus lines, government, and "other industries and services." Includes floormen and floor managers, store.

For women, manufacturing provided all but a relatively few of the jobs at the foreman level in 1940. A comparison of the

distribution of women manufacturing foremen in 1930 with 1940 indicates a fairly similar pattern, with three exceptions. In 1940 about half the 31,606 women manufacturing foremen were in textile, textile product, and apparel industries, a higher proportion than formerly, while a lower proportion of them were in metal industries and in manufacturing industries (not elsewhere classified). This shift is due to the fact that the 3,500 additional women who were manufacturing foremen in 1940 represented chiefly an increase of 5,000 women textile and apparel foremen, and a decline of about 2,000 in metals together with manufacturing (not elsewhere classified).

_	Percent d	listribution
Total women foremen in manufacturing	1940 <b>100.0</b>	1930 100.0
Textile, textile products, and apparel	51.2	39.8
Food and kindred products	11.1	11.8
Metal industries	8.5	11.2
Paper, paper products, and printing	6.9	7.7
Chemicals, and petroleum and coal products	4.1	4.3
Lumber, furniture, and lumber products	1.6	1.5
Manufacturing industries (not		
elsewhere classified)	16.5	23.7

#### DECORATORS AND WINDOW DRESSERS

Data available since 1900 for decorators and window dressers indicate that this has been a rapidly rising though small field for women. Doubtless there has been an increasing concern on the part of homemakers with the less tangible aspects of family welfare, at the same time that stores have been interested to encourage trade by furnishing advice on interior decorating. Furthermore this is a type of occupation which women well may follow from the home into the commercial world.

Rates of increase among women decorators and window dressers were high through 1930, and the proportion of women among the total in 1930 was over 3 times that in 1910. From 1930 to 1940 the occupation apparently succumbed to the retrenchment of the depression period. In that decade, though the number of women in this field increased somewhat, their rate of increase was nominal. The proportion of women among all decorators and window dressers fell, indicating that in what might come close to a luxury occupation women may have suffered from depression conditions more than men.

		Women decorators and window dressers						
	Numb	Percent increase er over preceding census	Percent of all workers in this occupation					
1940	6,73	3,8	22.6					
1930	6,48	8 440.2	26.4					
1920	1,20	1 162.8	11.1					
1910	45	7 48.4	7.0					
1900	30	8	8.3					

#### **PAINTERS**

Because of the small numbers involved, rates of increase among women painters tend to give an exaggerated picture of the growth of this field. New opportunities for women in this occupation have appeared, however, particularly in spray painting in factories and shops. Of the 10,000 women painters in 1940, two-thirds were in work other than construction and maintenance. In this branch of the field, which the 1940 census classifies with operatives, women constituted nearly 7 percent of the total. In order to obtain data over the entire period the two branches have been recombined. In the occupation as a whole women have risen steadily relative to the total workers, but in 1940 women were still less than 2 percent of all painters.

		Women painters						
		Number	Percent increase over preceding census	Percent of all workers in this occupation				
1940		10,189	96.1	1.9				
1930		5,196	42.9	1.0				
1920	***************************************	3,635	31.2	1.1				
1910		2,770	45.5	0.8				
1900		1,904	38.0	0.7				
1890	P-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	1,380	288.7	0.6				
1880		355	269.8	0.3				
1870		96		0.1				

#### **PAPERHANGERS**

Paperhanging does not seem to be an occupation likely to attract many women. Nevertheless almost 2,000 women were reported in 1940, constituting nearly 6 percent of the total. Trends in numbers of women and their proportions among all paperhangers showed a generally upward course from 1870 to 1940.

	Wome	n upholsterers
	Number	Percent of all workers in this occupation
1940	1,717	5.7
1930	1,456	5.1
1920	 408	2.1
1910	 797	3.1
1900	236	1.1
1890	54	0.4
1880	 . 154	3.1
1870	. 19	0.8

#### **UPHOLSTERERS**

The number of women occupied as upholsterers was considerably higher in 1940 than in 1870. This is a type of occupation closely allied with women's work in the home and a venerable one for them, since the upholstery business had been carried on by women in pre-revolutionary days. It is an occupation in which difficulties may arise in distinguishing between operatives in upholstery departments of furniture and automobile plants and those women carrying on the work of a skilled craftsman. Differences of this nature may be responsible for some of the variations in the figures. The last two censuses showed that women were slightly less than 5 percent of all upholsterers, which may have been due to the finer classification allocations just noted.

	Women	ı upholsterers
	Number	Percent of all workers in this occupation
1940	2,014	4.7
1930	1,860	4.4
1920	1,791	7.4
1910	1,021	6.2
1900	 1,705	6.7
1890	1,381	6.6
1880	 428	5.0
1870	141	3.0

<sup>&</sup>lt;sup>1</sup> Spruill, Julia Cherry. Women's life and work in the southern colonies. Chapel Hill, N. C., University of North Carolina Press, 1938, p. 288.

## PROTECTIVE SERVICE WORKERS

The historical role of the male as fighter and protector of the community appears under modern occupational conditions in the overwhelming preponderance of men in protective service work. Up to 1940 no women had been firemen or in the military services, though the latter field saw the innovation of women soldiers and sailors in World War II. In other protective service work women have had a growing part, as the value of preventive work in problems of crime and social disorganization has been realized. The growth of women's divisions in police departments and the use of women for such specialized jobs as store detectives are reflected in generally increasing numbers of women in police, detective, and guard work, though women never constituted more than about 1 percent of the total.

		Women protective service workers <sup>1</sup>	
	Number	Percent change from preceding cens <b>us</b>	Percent of all workers in this occupation
1940	 4,207	+111.7	1.1
1930	 3,766	+149.1	1.2
1920	 1,512	+266.1	0.7
1910	413	<b>—</b> 66.7	0.3
1900	 1,239	+215.3	1.0
1890	 393	+297.0	0.5
1880	99	+395.0	0.3
1870	 20	·	0.1

 $<sup>^{1}</sup>$  Includes guards, watchmen, and doorkeepers; policemen and detectives, government and other; and marshals and constables.

<sup>&</sup>lt;sup>1</sup> See Pigeon, Helen D. Woman's era in the police department. The annals of the American Academy of Political and Social Science 143: 249-254, May 1929.

# SELECTED REFERENCES ON WOMEN'S OCCUPATIONAL TRENDS

# I. GENERAL TRENDS IN THE LABOR FORCE AND OCCUPATIONS OF WOMEN

- Abbott, Edith and Breckinridge, Sophonisba P. Employment of women in industries: twelfth census statistics. *Journal of political economy* 14: 14-40, January 1906.
- Academy of Political Science. The economic position of women. *Proceedings*, Vol. 1, No. 1. New York, N. Y., October 1910. 193 pp.
- Anderson, H. Dewey and Davidson, Percy E. Occupational trends in the United States. Stanford University, Calif., Stanford University Press, 1940. 618 pp.
- Breckinridge, Sophonisba P. Women in the twentieth century. New York, N. Y., McGraw-Hill Book Co., Inc., 1933. 364 pp.
- ——— The activities of women outside the home. In *Recent social trends* in the United States. Report of the President's research committee on social trends. New York, N. Y., McGraw-Hill Book Co., Inc., 1933. Vol. I, Ch. XIV, pp. 709-750.
- Encyclopaedia of the social sciences. New York, N. Y., Macmillan Co., 1930-35. Occupation, Vol. 11, pp. 424-435; and Women in industry, Vol. 15, pp. 451-459.
- Hurlin, Ralph G. and Givens, Meredith B. Shifting occupational patterns. In *Recent social trends in the United States*. Report of the President's research committee on social trends. New York, N. Y., McGraw-Hill Book Co., Inc., 1933. Vol. 1, Ch. VI, pp. 268-324.
- Millis, Harry A. and Montgomery, Royal E. Labor's progress and some basic labor problems. New York, N. Y., McGraw-Hill Book Co., Inc., 1938. Ch. VII, Women in industry, pp. 376-415.
- Palmer, Gladys L. Occupational trends in women's employment. Woman's press 28:465, 480, October 1934.
- Parrish, John Bishop. Women in the Nation's labor market. Quarterly journal of economics 54: 527-534, May 1940.
- Pidgeon, Mary Elizabeth. Recent changes in occupations of women. Personnel journal 11: 289-294, February 1933.
- Thibert, Marguerite. The economic depression and the employment of women. International labour review 27: 443-470, 620-630, April and May 1933.
- U. S. Department of Commerce and Labor. Bureau of the Census. Statistics of women at work. Washington, U. S. Government Printing Office, 1907. 399 pp.
- U. S. Department of Commerce. Bureau of the Census. Women in gainful occupations, 1870 to 1920. By Joseph A. Hill. Washington, U. S. Government Printing Office, 1929. 416 pp.
- parative occupation statistics for the United States: 1940. Population. Comparative occupation statistics for the United States, 1870 to 1940. By Alba M. Edwards. Washington, U. S. Government Printing Office, 1943. 206 pp.

747639° --- 48 --- 14

- U. S. Department of Commerce. Bureau of the Census. 16th census of the United States: 1940. Population. Vol III, The labor force. Part I, United States summary. Washington, U. S. Government Printing Office, 1943. 301 pp.
- U. S. Department of Labor. Women's Bureau. The occupational progress of women. By Mary V. Dempsey. Bulletin 27. Washington, U. S. Government Printing Office, 1922. 37 pp.
- The occupational progress of women, 1910 to 1930. By Mary V. Dempsey. Bulletin 104. Washington, U. S. Government Printing Office, 1933. 90 pp.
- Women in the modern world. The annals of the American Academy of Political and Social Science. Vol. 143, No. 232, May 1929. 396 pp.

# II. SOCIAL CHANGES AND ECONOMIC DEVELOPMENTS RELATED TO WOMEN'S OCCUPATIONAL TRENDS

- Abbott, Grace. The changing position of women in industry. In *A century of progress*. Beard, Charles A., editor. New York, N. Y., Harper & Bros., 1933. Ch. 10, pp. 253-290.
- Groves, Ernest Rutherford. The American woman, the feminine side of a masculine civilization. New York, N. Y., Emerson Books, Inc., Second and enlarged edition, 1944, 465 pp.
- Irwin, Inez Haynes. Angels and amazons. A hundred years of American women. New York, N. Y., Doubleday Doran & Co., Inc., 1933. 531 pp.
- Ogburn, W. F. The influences of invention and discovery. In *Recent social* trends in the United States. Report of the President's research committee on social trends. New York, N. Y., McGraw-Hill Book Co., Inc., 1933. Vol. I, Ch. III, pp. 122-166.
- Reuter, Edward Byron and Runner, Jessie Ridgway. The family. Source materials for the study of family and personality. New York, N. Y., McGraw-Hill Book Co., Inc., 1931. Ch. XIV, The Status of women, pp. 434-477.
- U. S. Department of Labor. Women's Bureau. Effects of applied research upon the employment opportunities of American women. Bulletin 50.
   Washington, U. S. Government Printing Office, 1926. 54 pp.
- By Ethel L. Best. Bulletin 107. Washington, U. S. Government Printing Office, 1935. 39 pp.

## III. TRENDS IN SPECIFIC OCCUPATIONAL FIELDS

#### WHITE COLLAR OCCUPATIONS

- Adams, Elizabeth Kemper. Women professional workers. New York, N. Y., Macmillan Co., 1921. Ch. XIII, Commercial services, office and mercantile. What is a professional secretary? pp.223-253.
- Anderson, Mary. The clerical worker and industrial change. American federationist 39: 1024-28, September 1932.
- Coyle, Grace L. Women in the clerical occupations. The annals of the American Academy of Political and Social Science 143: 180-197, May 1929.

- Encyclopaedia of the social sciences. New York, N. Y., Macmillan Co., 1930-35. Clerical occupations, Vol. 3, pp. 550-554; and Salesmanship, Vol. 13, pp. 519-521.
- The mechanization of office work. International labour review 38: 411-415, September 1938.
- The use of office machinery and its influence on conditions of work for staff.

  International labour review 36: 486-516, October 1937.
- Women in business. Fortune. Vol. 12, nos. 1-3. July, August, September 1935.

#### INDUSTRIAL OCCUPATIONS

- Abbott, Edith. Women in industry; a study in American economic history. New York, N. Y., D. Appleton & Co., 1910. 409 pp.
- Alderfer, E. B. and Michl, H. E. Economics of American industry. New York, N. Y., McGraw-Hill Book Co., Inc., 1942. 566 pp.
- Clark, Victor S. History of manufactures in the United States. New York, N. Y., McGraw-Hill Book Co., Inc., 1929 edition. 3 Vols.
- Glover, John George and Cornell, William Bouck. The development of American industries. New York, N. Y., Prentice-Hall, Inc., 1941. 1005 pp.
- Rhine, Alice Hyneman. Woman in industry. In Woman's work in America.
  Meyer, Annie Nathan, editor. New York, N. Y., Henry Holt & Co., 1891.
  Ch. XI, pp. 276-322.
- [U. S.] Department of Commerce and Labor. Bureau of the Census. [12th census of the United States: 1900.] Vols. IX and X. Manufactures. Parts III and IV. Washington, [U. S.] Government Printing Office, 1902.
- Bureau of Labor. Report on condition of woman and child wage-earners in the United States. 61st Congress, 2d session, S. Doc. No. 645. Washington, [U. S.] Government Printing Office, 1910. 19 Vols.
- U. S. Department of Labor. Women's Bureau. The new position of women in American industry. Bulletin 12. Washington, U. S. Government Printing Office, 1920. 158 pp.

#### SERVICE WORKERS

- Encyclopaedia of the social sciences. New York, N. Y., Macmillan Co., 1930-35. Domestic service, Vol. 5. pp. 198-206.
- Laughlin, Gail. Domestic service. In Report of the [United States] industrial commission. Washington, [U. S.] Government Printing Office, 1901. Vol. XIV, pp. 743-767.
- Needleman, Rae L. Domestic workers in private homes. Social security bulletin 2: 10-20, March 1939.
- Rubinow, I. M. The problem of domestic service. Journal of political economy 14: 502-519, May 1906.
- Salmon, Lucy Maynard. Domestic service. New York, N. Y., Macmillan Co., 1897. 307 pp.
- Stigler, George J. Domestic servants in the United States, 1900-1940. New York, N. Y., National Bureau of Economic Research, 1946. 44 pp.

## 204 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

#### PROFESSIONAL FIELDS

- Adams, Elizabeth Kemper. Women professional workers. New York, N. Y., Macmillan Co., 1921. 467 pp.
- Brown, Esther Lucile. Nursing as a profession. New York, N. Y., Russell Sage Foundation, Second edition, 1940. 157 pp.
- ——— Social work as a profession. New York, N. Y., Russell Sage Foundation, 1942. 232 pp.
- Elsbree, Willard S. The American teacher. Evolution of a profession in a democracy. New York, N. Y., American Book Co., 1939. 566 pp.
- Encyclopaedia of the social sciences. New York, N. Y., Macmillan Co., 1930-35. See Education, Vol. 5, pp. 403-432; Professions, Vol. 12, pp. 476-480; Nursing, Vol. 11, pp. 405-412; Social work, Vol. 14, pp. 165-187; Teaching profession, Vol. 14, pp. 543-553; and titles of other individual professional fields.
- Meyer, Annie Nathan, editor. Woman's work in America. New York, N. Y., Henry Holt & Co., 1891. 457 pp.
- Woody, Thomas. A history of woman's education in the United States. New York, N. Y., The Science Press, 1929. 2 Vols.

# **APPENDIX**

**Table I.** Persons 14 years old and over in the labor force (except new workers) in 1940, and gainful workers 14 years old and over in 1930, in 1920, and in 1910, classified into social economic groups, by sex, for the United States.

Table IIA. Occupations of women workers, 1870 to 1940.

Table IIB. Occupations of all workers, 1870 to 1940.

Table I.—Persons 14 Years Old and Over in the Labor Force (Except New Workers) in 1940, and Gainful Workers 14 Years Old and Over in 1930, in 1920, and in 1910, Classified Into Social Economic Groups, by Sex, for the United States

[Reproduced from 16th Census of the United States: 1940. Population. Comparative occupation statistics for the United States, 1870 to 1940, table XXVII, p. 187]
[1940 figures include a complete count of present occupations of employed workers and figures based on a 5-percent cross-section sample count of the usual occupations of experienced workers seeking work and of persons on public emergency work]

		Number				Percent distribution			
	Sex and group	Labor force (except new	Gainful workers			1940	1930	1920	1910
		workers), 1940 <sup>1</sup>	1930	1920	1910	1010			
	Total	52,020,023	48,594,592	41,236,185	37,271,360	100.0	100.0	100.0	100.0
1.	Professional persons	3,381,993	2,945,605	2,049,919	1,632,185	6.5	6.1	5.0	4.4
2.	Proprietors, managers, and officials.  2-a. Farmers (owners and tenants).  2-b. Wholesale and retail dealers.  2-c. Other proprietors, managers, and officials.	9,233,643 5,274,706 2,037,900 1,921,037	9,665,489 6,012,012 1,786,996 1,866,481	9,180,483 6,387,358 1,401,751 1,391,374	8,579,458 6,132,368 1,245,801 1,201,289	17.8 10.1 3.9 3.7	19.9 12.4 3.7 3.8	22.3 15.5 3.4 3.4	23.0 16.5 3.3 3.2
3.	Clerks and kindred workers	8,923,939	7,936,285	5,682,150	3,804,474	17.2	16.3	13.8	10.2
4.	Skilled workers and foremen	6,104,985	6,282,665	5,570,533	4,363,984	11.7	12.9	13.5	11.7
5.	Semiskilled workers. 5-a. Semiskilled workers in manufacturing. 5-b. Other semiskilled workers.	10,918,312 (2) (2)	7,972,711 4,555,905 <b>3,416</b> ,806	6,631,733 4,352,329 2,279,404	5,489,315 3,653,808 1,835,507	$21.0 \ \stackrel{(2)}{\stackrel{(2)}{(2)}}$	16.4 9.4 7.0	16.1 10.6 5.5	$14.7 \\ 9.8 \\ 4.9$
6.	Unskilled workers 6-a. Farm laborers. 6-b, c. Laborers, except farm. 6-b. Factory and bldg. const. laborers. 6-c. Other laborers. 6-d. Servant classes.	13,457,151 3,708,191 5,566,493 (2) (2) 4,182,467	13,791,837 4,187,201 6,272,700 3,371,492 2,901,208 3,331,936	12,121,367 3,857,833 6,018,944 3,131,734 2,887,210 2,244,590	13,401,944 5,407,102 5,461,957 2,647,096 2,814,861 2,532,885	25.9 7.1 10.7 (2) (2) 8.0	28.4 8.6 12.9 6.9 6.0 6.9	29.4 9.4 14.6 7.6 7.0 5.4	36.0 14.5 14.7 7.1 7.6 6.8
	Male	39,445,945	37,915,544	32,806,478	29,482,534	100.0	100.0	100.0	100.0
1.	Professional persons	1,846,541	1,497,830	1,061,664	913,637	4.7	4.0	3.2	3.1
2.	Proprietors, managers, and officials.  2-a. Farmers (owners and tenants).  2-b. Wholesale and retail dealers.  2-c. Other proprietors, managers, and officials.	1.858.017	9,159,849 5,749,367 1,675,146 1,735,336	8,757,526 6,121,781 1,321,989 1,313,756	8,183,312 5,859,228 1,177,808 1,146,276	22.1 13.0 4.7 4.4	24.2 15.2 4.4 4.6	26.7 18.7 4.0 4.0	27.8 19.9 4.0 3.9

➣
J
D.
Ŋ
PPFUDIX
Ž
4
>
ΑRI
Z.
ń

5.	Semiskilled workers 5-a. Semiskilled workers in manufacturing 5-b. Other semiskilled workers	7,336,107 (2) (2)	5,444,413 2,879,861 2,564,552	4,371,477 2,686,138 1,685,339	3,314,058 2,021,605 1,292,453	18.6 (2) (2)	14.4 7.6 6.8	13.3 8.2 5.1	11.2 6.9 4.4
6.	Unskilled workers 6-a. Farm laborers 6-b. c. Laborers except farm 6-b. Factory and bldg. const. laborers 6-c. Other laborers 6-d. Servant classes	5,436,743 (2) (2)	10,747,154 3,606,736 6,116,299 3,246,312 2,869,987 1,024,119	9,656,104 3,162,121 5,819,078 2,963,036 2,856,037 674,910	10,080,983 4,132,237 5,356,464 2,559,451 2,797,013 592,282	26.1 8.5 13.8 (2) (2) (2) 3.8	28.8 9.5 16.1 8.6 7.6 2.7	29.4 9.6 17.7 9.0 8.7 2.1	84.2 14.0 18.2 8.7 9.5 2.0
	Female	12,574,078	10,679,048	8,429,707	7,788,826	100.0	100.0	100.0	100.0
1.	Professional persons	1,535,452	1,447,775	988,255	718,548	12.2	13.6	11.7	9.2
2.	Proprietors, managers, and officials.  2-a. Farmers (owners and tenants).  2-b. Wholesale and retail dealers  2-c. Other proprietors, managers, and officials	531,838 153,763 179,883 198,192	505,640 262,645 111,850 131,145	422,957 265,577 79,762 77,618	396,146 273,140 67,993 55,013	4.2 1.2 1.4 1.6	4.7 2.5 1.0 1.2	5.0 3.2 0.9 0.9	5.1 3.5 0.9 0.7
3.	Clerks and kindred workers	8,655,274	3,071,507	2,191,422	1,081,181	29.1	28.8	26.0	13.9
4.	Skilled workers and foremen	103,812	81,145	101,554	96,733	0.8	0.8	1.2	1.2
5.	Semiskilled workers 5-a. Semiskilled workers in manufacturing 5-b. Other semiskilled workers.	3,582,205 (2) (2)	2,528,298 1,676,044 852,254	2,260,256 1,666,191 594,065	2,175,257 1,632,203 543,054	28.5 (²) (²)	23.7 15.7 8.0	26.8 19.8 7.0	27.9 21.0 7.0
6.	6-a. Farm laborers. 6-b, c. Laborers, except farm. 6-b. Factory and bldg. const. laborers. 6-c. Other laborers. 6-d. Servant classes.	2,689,986	3,044,683 580,465 156,401 125,180 31,221 2,307,817	2,465,263 695,712 199,871 168,698 31,173 1,569,680	3,320,961 1,274,865 105,493 87,645 17,848 1,940,603	25.2 2.7 1.0 (2) (2) 21.4	28.5 5.4 1.5 1.2 0.3 21.6	29.2 8.3 2.4 2.0 0.4 18.6	42.6 16.4 1.4 1.1 0.2 24.9
	1 1940 figures include the distribution of 402,270 we	orkers deducte	d from the ser	miskilled group	) <b>.</b>				

4,864,778

6,201,520

3,490,728

5,468,979

2,723,293

4,267,251

13.4

15.2

12.8

16.4

10.6

16.7

9.2

14.5

5,268,665

6,001,173

8. Clerks and kindred workers.....

4. Skilled workers and foremen.....

<sup>&</sup>lt;sup>2</sup> Comparable figures for 1940 not available.

Table IIA.—Occupations of Women Workers, 1870 to 1940 <sup>1</sup>
[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 <sup>2</sup>]

Occupations, 1940 classification	Adjustment factor 3	1940 4	1930 5	1920 5	1910 6	1900 5	1890 5 6	1880 5	1870 5
PROFESSIONAL AND SEMI- PROFESSIONAL WORKERS 7									
Actresses Athletes Dancers, dancing teachers, and chorus girls Showmen Sports instructors and officials Motion picture projectionists	0.99	7,621 292 10,833 1,040 4,382 256	26,825	18,204	14,120	8 7,093	<sup>8</sup> 4,652	<sup>8</sup> 2,027	<sup>9</sup> 780
Proprietors, managers, and officials, theaters and motion pictures.  Proprietors, managers, and officials, miscellaneous amusement and recreation.	1.01	1,411	1,078	1,270	298				
	0.98	2,511 497	1,261 455	430 164	1,020 362	120	0.0		-
ArchitectsArtists and art teachers	1.20 1.01	21,147	21,860	14,763	15,583	11,131	26 10,923	20 2,082	10 418
Authors	0.99 0.99 1.09	4,606 34,546 16,668	5,393 26,785 1,486	2,976 13,367 1,321	2,037 5,771 3,043	3,184	12 2,752	18 323	14 115 43
Aviators Chemists, assayers, and metallurgists	1.00 1.02	51 1,734	66 1,943	1,748	(16) 591	253	40	49	
Civil engineers <sup>17</sup> Surveyors		{ 231 101	29	18	5	51	1		
Electrical engineers <sup>17</sup> . Mechanical engineers <sup>17</sup> . Industrial engineers <sup>17</sup> . Chemical engineers <sup>17</sup> .		224 { 228 74	62 18	12 11	<sup>18</sup> 6	30	19 21		
Chemical engineers <sup>17</sup>	}	{ 59 74	} 4			3			
Clergymen Religious workers Social and welfare workers	1.00 0.95	3,308 26,054 48,369	<b>3,</b> 276 <b>43,</b> 793	1,787 26,322	685 8,623	20 3,204	<sup>20</sup> 1,086	<sup>20</sup> 157	21 65
College presidents, professors, and instructors <sup>22</sup> Teachers (n.e.c. <sup>26</sup> )	0.99 1.00	20,124 802,264	19,930 853,967	9,974 635,207	2,928 476,864	} 23 325,485	23 244,467	<sup>24</sup> 153,372	<sup>25</sup> 84,548
Dentists	1.04	1,067	1,338	1,902	1,304	839	350	63	25

Designers Draftsmen	1.01	8,871 1,554	7,805 1,463	5,709 1,985	2,603 391	27 950	<sup>27</sup> <b>30</b> 8	27 57	13
Editors and reporters. Funeral directors and embalmers. Lawyers and judges. Musicians and music teachers. Optometrists. Photographers.	1.24 1.00 1.00 1.00 1.00	15,890 2,174 4,447 66,256 475 5,063	14,786 1,940 3,385 79,611 ( <sup>28</sup> ) 5,020	7,105 1,127 1,738 72,678 ( <sup>28</sup> ) 4,271	5,184 813 558 84,478 ( <sup>28</sup> ) 2,978	$egin{array}{c} 2,719 \\ 323 \\ (^{28}) \\ 52,359 \\ (^{28}) \\ 2,148 \end{array}$	$egin{array}{c} 1,101 \\ 83 \\ (^{28}) \\ 34,519 \\ (^{28}) \\ 1,321 \end{array}$	357 55 (28) 13,182 (28) 271	43 20 ( <sup>28</sup> ) <sup>29</sup> 5,806 ( <sup>28</sup> ) <sup>18</sup> 137
Physicians and surgeons Osteopaths Chiropraetors Healers and medical service workers (n.e.c.)	1.00 1.00 1.00 1.00	7,708 1,102 1,911 9,950	6,825 1,563 2,718 9,774	7,219 1,663 7,902	9,015, 4,672.	7,387	4,557	2,432	³º 544
Technicians and assistants, laboratory Technicians, except laboratory Trained nurses and student nurses. Veterinarians. Professional workers (n.e.c.) Semiprofessional workers (n.e.c.)	1.00	22,651 821 362,897 99 26,670 10,327	(28) (28) (28) 288,737 11 (28) (28)	(28) $(28)$ $143,664$ $1$ $(28)$ $(28)$	(28) (28) (28) 76,508	(28) $(28)$ $11,046$ $14$ $(28)$	(28) (28) 31 <b>4,206</b> 2 (28)	(28) (28) 81 1,464	(28) (28) 31 1,154
PROPRIETORS, MANAGERS, AND OFFICIALS, EXCEPT FARM <sup>32</sup>		10,827	(20)	(.20)	(28)	(28)	(28)	(28)	(28)
Inspectors, United States.  Inspectors, State Inspectors, city. Inspectors, county and local Officials, United States Officials, United States Officials, State Officials, city Officials, county and local	(33)	\$85 473 266 34 3,654 1,756 3,658 8,069	33 11,046	38 <b>6,</b> 203	³³ <b>3,</b> 522.	(28)	(28)	(29)	<sup>28</sup> )
Postmasters	1.00	16,661 3,742 4,405	13,603 ( <sup>28</sup> ) 3,062	11,208 ( <sup>28</sup> ) 2,205	8,722 ( <sup>28</sup> ) 2,009	<sup>34</sup> 4,871 ( <sup>28</sup> ) ( <sup>28</sup> )	<sup>34</sup> 2,925 ( <sup>28</sup> ) ( <sup>28</sup> )	34 1,803 (28) (28)	34 248 (28) (28)
Proprietors, managers, and officials (n.e.c.), by industry: Mining Inspectors, mining Construction. Manufacturing. Automobile storage, rental, and repair services. Railroads (includes railroad repair shops). Miscellaneous transportation.	1.00 0.93 0.94 0.91	394 19 1,258 18,282 910 281 512	138 550 13,684 490 27	3512,546	³⁵ 6 <b>,</b> 636	a6 3,763	<sup>86</sup> 533	<sup>86</sup> 481	<sup>36</sup> 261

Table IIA.—Occupations of Women Workers, 1870 to 1940 —Continued

[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 2]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
PROPRIETORS, MANAGERS, AND OF- FICIALS, EXCEPT FARM 32—Cont'd									
Proprietors, managers, and officials (n.e.c.), by industry—Cont'd									
Street railways and bus lines Taxicab service	} 0.95	164 133	552	262	219				
Trucking service	0.98 0.91	839 3,251 835	2,992 1,031	533 300	1,381 122	,			
Utilities Warehousing and storage Eating and drinking places	1.32	597 185 66,104	(28) 82 37 42,008	(28) 57 87 <b>16,9</b> 75	(28) 33 37 12,607	(28) (28) 87 <b>6,954</b>	(28) (28) 37 4,804	(28) (28) 38 2,262	(28) (28) 39 754
Food stores, except dairy products Dairy products stores and milk retailing. Meat cutters, except slaughter and packing house	0.96	66,400 1,872 1,104	44,037	35,123	30,285	10,287	6,217	4,464	40 1,387
General merchandise stores	1	13,635	)						
shoes. Shoe stores. Milliners (not in factory)	11 .	28,526 921 11,685	66,239	85,986	136,060	90,147	62,265	41 4,532	42 864
Drug stores	0.98	2,499 3,336	} 4,512	3,099	2,118	1,153	719	118	33
Limited price variety stores	1.05	2,905 2,503	1,400 1,958 614	1,048 727 1 <b>6</b> 9	1,016 584 62				
Motor vehicles and accessories retailing Hardware and farm implement stores Jewelry stores	1.19 0.97 1.00	1,244 1,582 1,300	894 888	698 781	767 559				
Country buyers and shippers of livestock and other farm products Fuel and ice retailing. Filling stations.	2.71 1.00 0.76	549 1,300 4,838	285 727 1,592	43 220 536	43 837 665	17,216	16,624	5,626	44 3,524
Household appliance and radio stores. Lumber and building material retailing. Liquor stores. Retail florists. Miscellaneous retail stores.		920 1,504 1,225 4,112 16,689	24,930	16,944	12,852				

(28) (24) (28) (28) (28) (28)	
( <sup>28</sup> ) 893 <sup>18</sup> 5	APPENDIX
46	DIX
930	TABLES
321	ES
17	
( <sup>28</sup> ) 5 <b>43</b> 7	

Not specified retail trade	]	9,454 7,072	]	]			<b>.</b>		
Banking and other finance	0.98	6,362 420	8,728	5,008	2,269	(28)	(28)	(28)	(28)
Insurance Business services	1,12	2,832 3,196	1,962 ( <sup>28</sup> )	343 ( <sup>25</sup> )	140 ( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	(28) (28)
trades. Hotels and lodging places. Miscellaneous personal services. Other industries and services. Industry not reported.	1.16	257 21,879 1,276 12,831 2,823	(28) 20,080 (28) (28) (28) (28)	(28) 16,395 (28) (28) (28)	(28) 16,513 (28) (28) (28)	(28) 9,898 (28) (28) (28)	(28) 6,120 (28) (28) (28) (28)	2,478 (28) (28) (28) (28) (28)	(28) 46 1,024 (28) (28) (28) (28)
CLERICAL, SALES, AND KINDRED WORKERS 47									
Express messengers and railway mail clerks Bookkeepers, accountants, and cashiers Mail carriers	1.01 0.98	137 475,685 1,544	8 487,538 1,106	9 362,715 1,294	189,027 991	(28) 74,895 259	28,050 48 111	(28) 48 <b>4,</b> 295 48 2 <b>4</b>	(28) 49 893 48 5
Messengers, errand, and office girls Telegraph messengers	0.57 1.00	2,964 308	5,101 179	8,125 434	6,434 78	3,798	1,658	228	46
Stenographers, typists, and secretaries. Shipping and receiving clerks. Clerical and kindred workers (n.e.c.). Office machine operators.	1.00 0.98	$\left\{\begin{array}{c} 1,096,421\\ 9,128\\ 702,531\\ 55,074\end{array}\right.$	1,450,883 32,064	1,038,390	386,765	50 104,450	<sup>50</sup> 45,553	<sup>50</sup> 2,315	51 930
Telegraph operators	0.70 1.00 1.00	8,448 117 197,062	11,285 46 235,259	} 11,802 178,379	5,753 88,262	5,060 15,327	7,627	<sup>52</sup> 1,148	63 321
Agents (n.e.c.). Credit men. Purchasing agents and buyers (n.e.c.). County agents and farm demonstrators. Collectors, bill and account	0.89 1.00 1.00 1.21 1.02	8,881 3,723 2,733 4,596 3,496	5,877 1,894 2,039 1,327 2,995	} 54 8,554 2,785	54 2,198 1,935	48 1,815	48 838	48 75	48 17
Attendants, physicians' and dentists' offices Hucksters and peddlers Newsboys Insurance agents and brokers	0.94 1.00 1.00 0.98	29,702 2,498 <sup>56</sup> 1,597 13,321	24,720 1,790 417 12,694	10,669 1,909 326 4,981	4,658 3,785 273 2,486	(28) 2,915 69 (28)	$\overset{(28)}{2,259}$	2,492 $76$ $(28)$	(28) 55 1,543 7 (28)
Real estate agents and brokers <sup>57</sup> Proprietors, managers, and officials, real estate <sup>57</sup> Managers and superintendents, building	1.04	10,674 3,226 29,208	33,058	9,576	3,044	( <sup>28</sup> )	(28)	( <sup>28</sup> )	(28)

Table IIA.—Occupations of Women Workers, 1870 to 1940<sup>1</sup>—Continued
[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 <sup>2</sup>]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
CLERICAL SALES AND KINDRED WORKERS 47—Continued				٠					
Auctioneers	1.04	183 8,703	5,970	3,311	3,255	3 48 2,214	48 1,663	48 1,043	12 48 568
"Clerks" in stores 58.  Buyers and department heads, store	0.99	219,321 ( 18,321	161,516	168,693	110,478				
Canvassers and solicitors. Traveling salesmen and sales agents. Attendants, filling station, parking lot, garage, and airport.	1.00	18,099 14,064 4,026	558,918	364,952	261,793	59 216,810	<sup>59</sup> 98,820	59 31,738	60 9,027
Saleswomen (n.e.c.) §5.		580,039	<b> </b> 	•		}			
CRAFTSMEN, FOREMEN, AND KINDRED WORKERS 61									
Blacksmiths, forgemen, and hammermen		272 73	(28)	(28)	(28)	( <sup>28</sup> ) 8	( <sup>28</sup> ) 6	(28)	(28) 62 5
Brickmasons, stonemasons, and tile setters		50 <b>6</b> 148	7	7	} 15	155	40		.,
Cabinetmakers <sup>68</sup>	1.04	481 2,335 6,732	7 50 6,488	171 1,201	8 38 457	64 67 531 308	24 65 189 (28)	(28)	62 712
Electricians		816 620	} 38	19	48 86	409	<sup>48</sup> 103		
Foremen (n.e.c.), by industry:		389	54	}					
Manufacturing: Food and kindred products	1.01	3,516	3,291						
Textiles, textile products, and apparel	1.00	16,195	11,116	67 34,670	67 23,277	(28)	(28)	( <sup>28</sup> )	<sup>28</sup> )
uctsPaper, paper products, and printing.	1.00 1.01	498 2,188	406 2,160						

Chemicals, and petroleum and coal products. 1.16 Metal industries. 0.98 Manufacturing industries (n.e.c.) 0.98 Railroads (includes railroad repair shops) 1.00 Utilities. Business and repair services Miscellaneous transportation Wholesale and retail trade. 1.08 Floormen and floor managers, store. 1.08 Industry not reported 1.03	212	1,199 3,129 6,625 77 68 120 37 88 5,111 374	67 34,670	67 23,277	( <sup>28</sup> )	(28)	(28)	
Street railways and bus lines. 1.00 Government. 0ther industries and services.	20 598 . 1,913	5 (28) (28)	12 ( <sup>28</sup> ) ( <sup>28</sup> )	18 (28) (28)	2 (28) (28)	(28) (28) (28)	(28) (28) (28)	(28) (28) (28)
Furriers Glaziers Heat treaters, annealers, and temperers Inspectors, scalers, and graders, log and lumber	101	(28) (28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28)
Inspectors (n.e.c.), by industry: Construction. Transportation, except railroad	1,918 1,767	(28) 95 (28) (28) (28) 35	(28) (28) (28) (28) (28)	(28) (28) (28) (28) (28)	(28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28)
Machinists 70. Toolmakers, and die makers and setters	. \begin{cases} 5,084 & 414 & 117 & 1,529 & \\ & & & & & & & & & & & & & & & & &	77	(28)	(28)	(28)	(28)	(28)	28)
Millwrights Opticians and lens grinders and polishers	169 1,011	6 (28)	(28)	(28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)
Painters, construction and maintenance 71 Painters, except construction and maintenance 71 nance 71 Paperhangers 1.09	3,311 6,878 1,717	169 5,027 1,456	3,635	2,770 797	1,904 236	<b>1,3</b> 80	355 154	<sup>62</sup> 96
Pattern and model makers, except paper Piano and organ tuners. 1.00 Plasterers. Plumbers and gas and steam fitters. Roofers and slaters.	710	39 24 3 1	57 40 6 3	553 105 6	204 44 44 123 2	141 ( <sup>28</sup> ) 15 44 3	(28)	

Table IIA.—Occupations of Women Workers, 1870 to 1940<sup>1</sup>—Continued [Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 <sup>2</sup>]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
CRAFTSMEN, FOREMEN, AND KINDRED WORKERS 61—Continued Stationary engineers. Granemen, hoistmen, and construction machinery operators. Firemen, except locomotive and fire department. Oilers, machinery.		636 397 563 235	} 21	<sup>7</sup> 2 43 13 44	73 g	74 1777	74 47		
Structural and ornamental metal workers Upholsterers	0.79	262 2,014	( <sup>28</sup> ) 1,860	( <sup>28</sup> ) 1,791	1,021	( <sup>28</sup> ) 1,705	( <sup>28</sup> ) <b>1,</b> 381	( <sup>28</sup> ) 428	( <sup>28</sup> ) 141
OPERATIVES AND KINDRED WORK- ERS; LABORERS, EXCEPT FARM 75									
Apprentices: 79 Carpenters' apprentices Electricians' apprentices. Plumbers' apprentices. Building and hand trades apprentices (n.e.c.). Apprentices, printing trades. Machinists' apprentices 79 Apprentices, specified trades (n.e.c.). Apprentices, trades not specified	1.00	63 24 133 77 240 73 1,609 374	10 353 6 3,714	28 1,287 15 80 8,221	77 8 77 1 77 4 77 19 77 941 }	78 14 (28) 78 3 78 42 87 78 63 78 6,667	(28) 2 13 152 12 7,892	3,896	62)
Asbestos and insulation workers		75 33	(28) (28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)
Brakemen, railroad. Baggagemen, transportation. Conductors, railroad. Conductors, bus and street railway. Inspectors, railroads (includes railroad repair shops). Laborers, railroads (includes railroad repair shops). Laborers, street railways and bus lines. Laborers, trucking service. Teamsters <sup>81</sup> Locomotive engineers.	0.97	174 75 1,717 { 171 216	17 13 3,219 } 285	<b>3</b>	136 3,337 82 284	ss 2.130	83 1.52 <b>6</b>	s4 <b>43</b> 7	ss 1 <b>6</b> 2

Matainan atmost unknown and alarmeted	1	1	1	1	1 [			
Motormen, street, subway, and elevated railway	2	28 5	20					
Operatives, railroads (includes railroad repair shops)	1	93 828	1,297	524				
Operatives, street railways and bus lines	0.00	97 ()	86 194	86 53				
Operatives, trucking service	13	03			] ]	. 1	i	
Switchmen, railroad		31   280	545	50				
Ticket, station, and express agents	1.05 2,2	14 1,974	2,507	1,348	] ]			
Chainmen, rodmen, and axmen, surveying		79 (28)	(28)	(28)	(28)	(28)	(28)	( <sup>28</sup> )
Chauffeurs and drivers, bus, taxi, truck, and				}				
tractor <sup>87</sup>	1.09 $\left\{\begin{array}{c} 7,1\\2,8 \end{array}\right.$	$\left.\begin{array}{c c} 71 \\ 58 \end{array}\right\}$ 82 1,780	82 1,248	82 199	48 482	<sup>48</sup> 124		48 105
	1.	'		400	(00)	(28)	(38)	(28)
Filers, metal Fishermen and oystermen		$\begin{pmatrix} 65 & (^{28}) \\ 38 & 209 \end{pmatrix}$	(28) 379	(28) 476	(28) 462	263	65	14 36
Fruit and vegetable graders and packers, ex-	7				(09)	(28)	(28)	(28)
cept in cannery <sup>88</sup>	1.09 14,9 1,8	72 6,695 52 (28)	3,364	2,221	(28) (28)	(28)	(28)	(28)
		-		, ,	, ,	, ,	1	
Linemen and servicemen, telegraph, telephone, and power	1.0	15 52	351	179	[]			
Foremen, communication		21 60	25	404	303	669		
Laborers, communicationOperatives, communication	0.65	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		61 144		İ	1	
- '				1	89 225	89 61	ļ	
Lumbermen, raftsmen, and woodchoppers	5	67 93	279	76	** 225			• • •
Mine operatives and laborers	2,5		2,196	644	1 91 1.066	91.398	91 84	92 56
Foremen, mining		61 3	(90)	(90)	)		]	· ·
Motormen (vehicle), mine, factory, logging			(28)	(28)	(28)	(28)	(28)	(28)
camp, etc		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		(28)	(28)	(28)	(28)	(28)
Sailors and deck hands, except U. S. Navy	2	17 8	32	12	(28)	(28)	(28)	(28)
Boatmen, canalmen, and lock keepers Officers, pilots, pursers, and engineers, ship		91 (28) 17 4	(28) 93 g	(28) 93 1	(28)	(28)	(28)	28
Welders and flame-cutters			(28)	(28)	(28)	(28)	(28)	(28)
		}	1	1	ļ	İ	1	İ
Operatives and kindred workers (n.e.c.), non-			}	1				l
manufacturing industries and services: Agriculture, forestry, and fishery	3,6	04 (28)	(28)	(28)	(28)	(28)	(28)	(28)
Automobile storage, rental, and repair		`	1	, ,	(28)	(28)	(28)	(28)
services		95 (28) 76 (28)	(28)	(28) (28)	28)	(28)	28	(28)
Construction	3	42 (28)	28)	(28)	(28)	(28)	(28)	(28)
Finance, insurance, and real estate Government.	3	06 (28) 00 (28)	(28)	(28)	(28)	(28)	(28)	(28)
Government		· (···)	1 (-)	1 ()	, ,	' '	, ,	

Table IIA.—Occupations of Women Workers, 1870 to 1940<sup>1</sup>—Continued [Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 <sup>2</sup>]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
OPERATIVES AND KINDRED WORKERS; LABORERS, EXCEPT FARM 75—Continued									
Operatives and kindred workers (n.e.c.), non- manufacturing industries and services—Continued	'								
Hotels and miscellaneous personal services. Miscellaneous transportation. Professional and related services. Utilities. Warehousing and storage. Wholesale and retail trade. Industry not reported.	1.17 1.04	1,726 256 5,367 441 1,158 49,490 6,102	(28) 167 (28) (28) (27) 1,797 (28) (28)	(25) (28) (28) (28) (28) (28) (28) (28)	(28) (28) (29) (28) (28) (28) (26) (28)	(28) (28) (26) (22) (28) (22) (28)	(28) (28) (28) (28) (28) (28) (29)	(28) (28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)
Laborers (n.e.c.), nonmanufacturing industries and services: Agriculture, forestry, and fishery Amusement, recreation, and related services		2,402 229	( <sup>28</sup> )	( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	(28) (28)	( <sup>28</sup> )
Automobile storage, rental, and repair services. Garage laborers and car washers and greasers.	1.57	{ 19 448	303	94 174	94 9			••••	
Business and miscellaneous repair services.		259	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Construction 15 Industry not reported. Longshoremen and stevedores. Miscellaneous transportation.	1.01	6,846 5,441 422 183	173 11,522 10 23	323 98 124	16,039 44 98 137	95 74,756	<sup>95</sup> 23,422	<sup>96</sup> 27,658	97 7,414
Finance, insurance, and real estate. Government. Hotels and miscellaneous personal services. Professional and related services. Utilities. Warehousing and storage. Wholesale and retail trade.	1.02 0.95	149 511 451 1,030 419 344 8,513	(28) (28) (28) (28) 1,653 (28) 469 7,492	(28) (28) (28) (28) (29) (28) 675 6,764	(28) (22) (28) (28) (26) (28) 606 3,312	(28) (28) (28) (28) (29) (28) (28) (28)	(28) (25) (28) (29) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)

19 191 4,290	APPENDI
02 65,486	X TAB
2,302	LES
<sup>14</sup> 1,310	
104 5,948	
	217

Operatives and kindred workers (n.e.c.) and laborers (n.e.c.), manufacturing:  Bakers.	0.04	10.515	0.901			,			
Bakery products, operatives Bakery products, laborers Canning and preserving fruits, vegetables	0.94 1.05 1.09	10,517 21,854 975	8,381 16,064 1,718	4,317 12,162 1,576	4,492 6,227 823				747639°
and sea food, operatives. Canning and preserving fruits, vegetables,	1.02	31,299	16,982	9,720	4,236	ļ l	[		
and sea food, laborers. Confectionery, operatives. Confectionery, laborers. Dairy products, operatives. Dairy products, laborers. Meat products, operatives. Meat products, laborers. Grain-mill products, operatives. Miscellaneous food industries, operatives. Grain-mill products, laborers. Miscellaneous food industries, operatives. Miscellaneous food industries, laborers. Milers, grain, flour, feed, etc.	1.05 1.08 1.36 0.94 1.14 0.99 1.01  } 0.78  1.00	6,155 32,990 1,931 5,739 762 19,704 4,324 2,512 10,567 414 1,104	6,440 29,231 2,002 4,113 1,043 9,907 3,698 11,244 } 3,407	4,572 33,877 2,973 2,580 1,158 8,004 4,153 7,092 2,510	1,281 18,722 1,541 501 146 2,381 1,446 4,870 1,374	19,713	10,169	4,508	100 2,460 51
Beverage industries, operatives	0.97 1.00	6,625 962	751 222	674 235	1,784 563	) } 1,077	613	135	19
Tobacco manufactures, operatives Tobacco manufactures, laborers	0.99 1.13	57,218 4,027	67,269 7,330	83,120 15,664	71,127 5,600	33,497	27,991	10,868	101 4,290
Cotton manufactures, operatives Cotton manufactures, laborers	1.01 0.99	179,015 4,523	147,140 8,989	150,677 16,502	142,073 5,709	121,809	93,895	92,394	102 65,486
Silk and rayon manufactures, operatives 103 Silk and rayon manufactures, laborers 103	$0.99 \\ 1.28$	47,118 1,137	72,953 2,762	72,040 3,494	49,856 1,423	32,437	20,663	9,211	2,302
Knit goods, operatives	0.99 1.05	123,026 1,670	88,905 3,704	79,875 5,607	64,685 3,717	34,145	20,602	7,781	<sup>10</sup> 1,971
Dyers Dyeing and finishing textiles, operatives Dyeing and finishing textiles, laborers	1.29 1.00 0.97	764 5,965 213	379 5,666 305	169 5,582 698	844 5,203 578	2,964	3,343	1,803	<sup>14</sup> 1,310
Carpets, rugs, and other floor coverings, operatives. Carpets, rugs, and other floor coverings, laborers.	1.08 1.37	12,380 727	13,093 811	11,215 788	21,267 455	15,476	11,616	7,674	<sup>104</sup> 5,948
Woolen and worsted manufactures, operatives.	0.97	59,818	47,588	59,864	50,494	<u></u>			
Woolen and worsted manufactures, laborers	1.04	1,204	1,870	4,149	2,127		,		'

Table IIA.—Occupations of Women Workers, 1870 to 19401—Continued
[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 2]

Occupations, 1940 classification	Adjustment factor <sup>8</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
OPERATIVES AND KINDRED WORKERS: LABORERS, EXCEPT FARM 76—Continued									
Operatives and kindred workers (n.e.c.), and laborers (n.e.c.), manufacturing—Continued							:		
Miscellaneous textile goods, operatives Miscellaneous textile goods, laborers Miscellaneous fabricated textile products,	1.02 1.14	10,273 597	12,268 584	21,081 1,104	19,463 1,515	73,369	71,592	42,420	105 27,163
operatives.  Not specified textile mills, operatives.  Miscellaneous fabricated textile products,	0.49	30,277 18,286	21,657	106 18,316	107 16,440				ŕ
laborers Not specified textile mills, laborers	0.92	674 401	1,633	108 1,820	109 1,213				
Apparel and accessories, operatives <sup>110</sup> Apparel and accessories, laborers <sup>111</sup> Tailoresses <sup>114</sup>	0.92 1.04 0.98	545,414 4,174 15,717	305,001 6,505 21,371	230,731 6,000 31,191	202,362 4,561 39,997	671,240	584,408	112 389,231	<sup>113</sup> 216,616
Dressmakers and seamstresses (not in factory) 115	1.23	162,247	194,251	289,688	550,745	]			
Hats, except cloth and millinery, operatives <sup>111</sup>		4,684	9,513	12,557	14,002	10,234	8,843	6,357	4,637
laborers <sup>111</sup>		51	128	155	212	J.			
Sawyers.  Furniture and store fixtures, operatives.  Furniture and store fixtures, laborers.	1.00 0.97 1.07	311 11,011 958	80 8,831 1,585	9 6,607 2,859	19 8,593 566	7 000		1 100	
Sawmills and planing mills, operatives <sup>99</sup> . Miscellaneous wooden goods, operatives <sup>99</sup>	1.30	{ 1,467 14,076	12,805	116 11,610	116 11,306	116 7,898	116 6,918	1,138	117 534
Sawmills and planing mills, laborers <sup>99</sup> Miscellaneous wooden goods, laborers <sup>99</sup>	0.85	1,610 2,469	5,006	6,241	2,658			:	
Pulp, paper, and paperboard mills,						1		;	
operativesPulp, paper, and paperboard mills,	0.99	17,243	13,781	13,215	10,474				
laborers	0.97	1,730	2,290	2,403	1,386				
operatives 118.  Paperboard containers and boxes,	1.03	20,625	8,773	13,776	13,447	27,261	22,444	119 14,126	120 6.242
laborers 118	1.07	1,715	643	1,052	655				,

APPENDIX	
X TABLES	
•	

Miscellaneous paper and pulp products, operatives.  Miscellaneous paper and pulp products, laborers.	1.05 1.12	13,832 902	11,171 956	9,006 906	6,941 516				
Printing, publishing, and allied industries, operatives Printing, publishing, and allied industries,	1.06	31,721	32,239	<b>34,49</b> 8 <b>2.089</b>	31,089 1,636				
laborers	1.20 0.98	1,059 8,005 528	1,658 10,064	11,080	13,770	32,938	24,640	9,322	121 4,397
Electrotypers and stereotypers Engravers, except photoengravers	<u> </u> ;	78 669	19	10	100				
Photoengravers and lithographers	1.03	493	942	759	1,045	)			
Paints, varnishes, and colors, operatives. Paints, varnishes, and colors, laborers	1.00 1.06	1,738 168	1,031 163	835 174	628 124	} (28)	(28)	(28)	(28)
Rayon and allied products, operatives <sup>103</sup> Rayon and allied products, laborers <sup>103</sup>	0.95 1.05	10,407 427	10,310 537	(122) (122)	(122) (122)				
Miscellaneous chemical industries, operatives.	0.99	22,214	16,686	17,733	13,119	]			
Miscellaneous chemical industries, laborers Petroleum refining, operatives	1.02 0.90	2,457 486	2,602 445	3,194 123 597	1,951 123 63	3,427	2,140	862	403
Petroleum refining, laborers	1.02	159	174	234	65	J			
Miscellaneous petroleum and coal products, operatives	,	116	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Miscellaneous petroleum and coal products, laborers		55	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Rubber products, operatives	0.96 1.20	23,691 2,500	20,437 3,772	18,081 4,742	10,006 1,586	7,300	6,391	2,037	1,832
Shoemakers and repairers (not in factory). Footwear industries, except rubber,	0.99	646	258	257	774	)			
operatives	1.00	97,891	81,551	73,412	59,266	39,486	33,677	21,007	124 9,645
laborers	1.05	3,089	4,979	5,267	2,441	J			
Leather: tanned, curried, and finished, operatives	1.03	4,036	3,706	3,737	1,963	1,765	295	202	
Leather: tanned, curried, and finished, laborers	0.92	412	472	715	282	]			
Leather products, except footwear, operativesLeather products, except footwear,	1.00	23,729	13,356	14,140	11,328	6,119	3,527	2,935	744
laborers	1.12	781	725	1,241	590	J	1	1	

Table IIA.—Occupations of Women Workers, 1870 to 1940<sup>1</sup>—Continued [Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930<sup>2</sup>]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 \$ 6	1880 5	1870 5
OPERATIVES AND KINDRED WORKERS: LABORERS, EXCEPT FARM 75—Continued Operatives and kindred workers (n.e.c.), and laborers (n.e.c.), manufacturing—Continued									
Cement, and concrete, gypsum, and plaster products, operatives.  Cement, and concrete, gypsum, and plaster products, laborers.		245 120	372. 140	236 147	147 134	(28)	(28)	(28)	28)
Stonecutters and stone carvers		81 87 21	1 10 5	3 68 23	5 150 68	]	<b>5</b> 8		
Glass and glass products, operatives <sup>99</sup> Glass and glass products, laborers <sup>99</sup>	1.04 1.04	12,899 1,314	7,637 1,816	125 7,552 <b>2,</b> 575	<sup>125</sup> 4,169 986	2,726	1,778	587	180
Pottery and related products, operatives Pottery and related products, laborers	0.96 0.75	9,318 764	6,459 682	<b>4,</b> 8 <b>6</b> 2 <b>84</b> 5	4,295 449	} 2,764	1,870	554	105
Structural clay products, operatives Structural clay products, laborers	1.07 1.04	1,509 527	1,443 781	674 558	811 646	} 507	153	72	126 82
Miscellaneous nonmetallic mineral products, operatives Miscellaneous nonmetallic mineral products, laborers		2,515 380	( <sup>28</sup> )	( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	(28) (28)	( <sup>28</sup> )
Nonferrous metal primary products, operatives. Miscellaneous nonferrous metal products, operatives.	1.33	2,353 6,705	10,615	9,460	5,793		, ,		
Nonferrous metal primary products, laborers. Miscellaneous nonferrous metal products, laborers.	1.39	804 794	1,277	1,933	1,151				
Clocks, watches, jewelry, and silverware, operatives 127	0.84	12,923	12,417	13,562	10,555				
laborers <sup>127</sup>	0.98	788	684	1,525	914	İ		,	

Jewelers, watchmakers, goldsmiths, and silversmiths Buffers and polishers, metal Grinders, metal		1,495 2,126 636	1,179 1,581 452	1,577 2,027 328	2,885 2,305 325				
Furnacemen, smeltermen, and pourers Molders, metal		287 445	1 18	}	133				
Heaters, metal		156 148		2	9 2 <b>3</b>				
workers	]	412	6	11	24				
Blast furnaces, steel works, and rolling mills, operatives. Tin cans and other tinware, operatives. Miscellaneous iron and steel industries, operatives. Not specified metal industries, operatives. Agricultural machinery and tractors, operatives. Office and store machines, equipment, and supplies, operatives. Miscellaneous machinery, operatives. Aircraft and parts, operatives. Railroad and miscellaneous transportation equipment operatives	1.00	5,285 6,472 31,934 1,936 801 6,801 14,116 1,152 626	49,266	94 50,843	94 26,238	128 21,335	<sup>128</sup> 15,232	<sup>128</sup> 7,668	<sup>128</sup> 5,217
Blast furnaces, steel works, and rolling mills, laborers.  Tin cans and other tinware, laborers. Miscellaneous iron and steel industries, laborers. Not specified metal industries, laborers. Agricultural machinery and tractors, laborers. Office and store machines, equipment, and supplies, laborers. Miscellaneous machinery, laborers. Aircraft and parts, laborers. Railroad and miscellaneous transportation equipment, laborers.	0.80	1,301 667 3,404 146 106 277 1,252 78 92	6,494	94 9,847	94 5,331				
Automobiles and automobile equipment, operatives	1.04	27.766	19,793	13,300	882				
Automobiles and automobile equipment,	0.95	2,679	3,389	2,344	132			I	1
laborers. Ship and boat building and repairing,	0.95	2,079	(28)	(28)	(28)				\
operatives. Ship and boat building and repairing,			, ,	l ' '.	8				
laborers	1	143	27	279	1 8	')			

Table IIA.—Occupations of Women Workers, 1870 to 1940<sup>1</sup>—Continued [Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 <sup>2</sup>]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
OPERATIVES AND KINDRED WORKERS LABORERS, EXCEPT FARM <sup>78</sup> —Continued									
Operatives and kindred workers (n.e.c.) and laborers (n.e.c.), manufacturing—Continued	i								
Electrical machinery and equipment, operatives <sup>99</sup>	0.97-	69,680	43,970	<sup>129</sup> 26,589	129 10,740	(28)	(28)	(28)	(28)
laborers <sup>99</sup>	0.98	4,505	3,469	3,162	1,353	}			, ,
Scientific and photographic equipment and supplies, operatives		11,112	(28)	(28)	(28)	(28)	(28)	(28)	( <sup>28</sup> )
Scientific and photographic equipment and supplies, laborers		568	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Miscellaneous manufacturing industries (n.e.c.), operatives.		60,708	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Miscellaneous manufacturing industries (n.e.c.), laborers.		2,966	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Not specified manufacturing industries, operatives		32,693	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Not specified manufacturing industries, laborers		4,069	(28)	(28)	(28)	(28)	(28)	(28)	(28)
FARMERS AND FARM MANAGERS, FARM LABORERS AND FOREMEN									
Farmers (owners and tenants) 130	1.00	158,247	262,645	265,577	273,142	011.005	000.070	50.400	04 050
Farmers (owners and tenants) 130	1.09	832 295	1,050	15,631	8,475	311,695	229,270	58,680	181 24,859
Farm laborers (wage workers) <sup>130</sup>	0.99 1.00	132 116,231 137 251,139	169,610 475,008	} 133 890,230	134 894,722	<sup>135</sup> <b>696,67</b> 0	135 566,709	185 567,169	<sup>186</sup> 430,085
PROTECTIVE SERVICE WORKERS188									
Firemen, fire department			,						• • •
Guards, watchmen, and doorkeepers	2.17	2,364	2,170	866	224	)			
Policemen and detectives, government Policemen and detectives, except government.	1.00	} 981 732	1,534	629	187	139 1,239	189 393	140 99	140 20

Marshals and constables 141	1.00	130	62	17	2	J			
Sheriffs and bailiffs	1.00	383	274	56	3	(28)	(28)	(28)	(28)
SERVICE WORKERS, EXCEPT PROTECTIVE 143									
Attendants, hospital and other institution Attendants, professional and personal service		44,702	(28)	(28)	(28)	(28)	(28)	(28)	(28)
(n.e.c.)		19,658	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Attendants, recreation and amusement Ushers, amusement place or assembly Operatives, amusement, recreation, and re-	} 1.04	6,604 4,365	3,405	144 2,531	144 209	145 352	145 220	145 108	145 47
lated services	1.29	587	226	550	506	J			
Barbers, beauticians, and manicurists Bartenders	ì	218,132 3,220	113,194	33,246 109	22,298 250	146 <b>7,284</b> 440	146 3,691 146	146 <b>3,463</b> (28)	147 <b>1,</b> 548 (28)
Boarding house and lodginghouse keepers <sup>148</sup> Bootblacks	0.99	100,835 372	126,005 37	113,593 33	140,976 20	58,860 <i>85</i>	32,267 ( <sup>28</sup> )	12,190 ( <sup>28</sup> )	149 <b>7,</b> 052 (28)
Charwomen and cleaners		40,153 132,630	38,120 114,921	23,208	24,960				
Housekeepers, private family 150. Servants, private family 150. Housekeepers, stewards, and hostesses, except	0.98	393,031 1,600,169	1,584,589	1511,333,323	1511.568.626	}1521,430,656	<sup>152</sup> 1.302.704	152970,257	153 901,954
private family.  Servants, except private family.  Waitresses, except private family.	1.05 1.17 1.07	68,451 191,344 406,096	44,481 127,675 236,574		<b>-,.</b> ,		_,,.	,	ŕ
Elevator operators	1.00 0.98	13,986 39,041	12,359 35,104	7,337 28,457	25 21,023	7,872	2,752	( <sup>28</sup> ) 699	(28) 14 151
Laundresses, private familyLaundry operatives and laundresses, except	0.97	194,783	342,938	463,134	597,524	)			
private family	1.11 1.02	179,667 2,806	169,095 3,165	400,104	051,024		010 707	.r. 100 000	155 58,683
services. Operatives, laundering, cleaning, and dyeing	1.00	4,957	8,931	14,944	8,885	154 338,635	154 218,797	154 109,280	100 90,000
services.  Proprietors, managers, and officials, launder-	1,13	25,862	20,703	12,022	,,,,,,				
ing, cleaning, and dyeing services	0.95	9,140	4,139	)		]			
Porters Practical nurses and midwives <sup>156</sup>	0.99	2,111 104,338	( <sup>28</sup> ) 141,711	(28) 136,057	( <sup>28</sup> ) 115,946	96,669	157 36,818	(28) 157 <b>12,819</b>	(28) 158 <b>10,</b> 486

Table IIB.—Occupations of All Workers, 1870 to 1940 <sup>1</sup>
[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 <sup>2</sup>]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
PROFESSIONAL AND SEMI- PROFESSIONAL WORKERS <sup>7</sup>	•							į	
Actors and actresses. Athletes. Dancers, dancing teachers, and chorus girls Showmen Showmen Motion picture projectionists	1.01	19,232 9,162 13,773 6,773 24,546 23,875	94,834	58,462	52,847	159 42,746	<sup>159</sup> <b>31,</b> 508	159 9,049	<sup>180</sup> <b>4,66</b> 6
Proprietors, managers, and officials, theaters and motion pictures	1.04	26,841	22,512	19,131	11,775				
Proprietors, managers, and officials, miscellaneous amusement and recreation	0.99	44,003	39,449	27,974	19,493				
ArchitectsArtists and art teachers 15	1.05 1.00	21,976 62,485	23,100 57,265	19,094 35,402	17,444 34,104	11,110 24,873	8,474 22,496	3,544 9,104	161 2,141 105 4,120
Authors	0.99 0.99 1.08	14,126 38,607 20,203	12,325 29,317 2,014	6,601 15,144 2,461	4,324 7,349 3,563	11 5,759 4,264	} 12 6,781	<sup>18</sup> 1,142	126 456 14 212
AviatorsChemists, assayers, and metallurgists	1.08 1.02	6,299 60,005	6,585 48,009	1,417 33,600	16,598	9,024	4,593	2,008	
Civil engineers 182	} 1.00	89,042 16,444	102,086	64,660	52,033	26,017			
CIVII engineers **2 Surveyore : Electrical engineers <sup>162</sup> Mechanical engineers <sup>162</sup> Industriai engineers <sup>162</sup> Chemical engineers <sup>162</sup> Mining and metallurgica l engineers <sup>162</sup>	0.99 1.06	55,667 { 85,543 9,803	57,259 } 57,617	26,806 39,950	<sup>18</sup> 15,125 15,385	14,621	19 28,521	<sup>19</sup> 7,132	168 7,165
Industrial engineers.**.  Chemical engineers.**  Mining and metallurgical engineers.**	1.00	11,600 9,773	11,970	6,695	<b>6,9</b> 30	2,888	<u> </u>		
Clergymen	0.98	$ \begin{cases} 140,077 \\ 35,172 \\ 75,197 \end{cases} $	145,871 } 64,797	124,725 42,444	115,658 16,503	20 109,405	<sup>20</sup> 86,439	<sup>20</sup> 63,404	<sup>164</sup> 44,035
College presidents, professors, and instructors <sup>22</sup> Teachers (n.e.c.) <sup>25</sup>	1.01 1.00	75,847 1,065,280	62,524 1,044,016	33,741 752,055	15,825 595,306	} 23 442,914	23 344,813	<sup>24</sup> 226,032	165 128,265
Dentists	0.99	70,601	70,344	55,590	39,597	29,368	17,323	12,191	166 7,908
Designers	1.00 0.97	23,614 88,191	20,508 77,524	15,410 51,279	11,788 32,315	} 27 18,564	27 9,203	27 2,764	<sup>167</sup> 1,265

Editors and reporters. Funeral directors and embalmers. Lawyers and judges. Musicians and music teachers. Optometrists. Photographers.  Physicians and surgeons. Osteopaths. Chiropractors. Healers and medical service workers (n.e.c.).	1.19 1.00 1.00 1.01 0.83 1.00 1.00	63,493 39,590 180,483 161,536 10,357 37,641 165,629 6,067	61,694 34,132 160,605 166,779 (25) 32,809 153,803 6,117 11,916	40,694 24,469 122,519 131,568 28,435 144,977 5,030 15,069	40,915 20,734 114,704 140,703 26,373 26,373 } 151,132 6,971	35,745 16,189 (28) 93,096 (28) 22,361	26,000 9,891 (28) 62,777 (29) 16,633	14,647 5,113 (28) 30,782 (28) 8,292	168 6,396 46 2,014 (23) 169 16,332 74763 170 6,351 99
Technicians and assistants, laboratory. Technicians, except laboratory Trained nurses and student nurses. Veterinarians. Professional workers (n.e.c.) Semiprofessional workers (n.e.c.)	1.00 1.00	20,575 67,158 8,088 371,066 10,957 90,492 80,131	18,169 (28) (28) 294,189 11,863 (28) (28)	(28) (28) 149,128 13,494 (28) (28)	(28) (28) 82,327 11,652 (28) (28)	(28) (28) 11,804 8,163 (28) (28)	(28) (28) 31 4,589 6,494 (28) (28)	(28) (28) 31 1,537 2,130 (28) (28)	(28) (28) (28) 31 1,204 172 1,171 (28) (28)
PROPRIETORS, MANAGERS, AND OFFICIALS, EXCEPT FARM <sup>32</sup> Inspectors, United States. Inspectors, State. Inspectors, city. Inspectors, county and local Officials, United States. Officials, State. Officials, city. Officials, county and local.	(88)	17,386 13,929 12,284 1,254 61,594 20,767 28,754 44,685	32 138,638	<sup>35</sup> 108,074	<sup>33</sup> 80, <u>4</u> 86	(28)	(28)	(28)	[26]
Postmasters	1.00	39,160 35,692 25,764	34,421 ( <sup>28</sup> ) 14,805	31,935 ( <sup>28</sup> ) 11,971	27,849 ( <sup>28</sup> ) 8,879	<sup>24</sup> 17,398 ( <sup>28</sup> ) ( <sup>28</sup> )	<sup>34</sup> 15,328 ( <sup>28</sup> ) ( <sup>28</sup> )	34 12,077 (28) (28)	<sup>34</sup> 7,688 ( <sup>28</sup> ) ( <sup>28</sup> )
Proprietors, managers, and officials (n.e.c.), by industry:    Mining	1.14 0.98 0.94 0.97 0.98 0.97	82,001 7,313 125,696 428,328 61,712 32,242 13,303 5,827 2,892 27,163	31,241 6,995 191,064 428,630 87,460 34,132 10,560 43,352	26,143	<sup>174</sup> 58 <b>6,133</b>	175 298,286	175 197,192	175 87,355	176 67,567
Trucking service. Communication		23,361	20,153	11,255	9,786	<b>I)</b> .		•	

Table IIB.—Occupations of All Workers, 1870 to 1940 <sup>1</sup>—Continued [Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 <sup>2</sup>]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
PROPRIETORS, MANAGERS, AND OFFICIALS, EXCEPT FARM **—Continued Proprietors, managers, and officials (n.e.c.), by industry—Continued									
Inspectors, communication and utilities Utilities Warehousing and storage Eating and drinking places	1.08	8,249 29,747 7,599 273,163	(28) (28) 7,980 37 178,638	(28) (28) 6,861 37 114,288	(28) (28) 4,744 27 139,371	(28) (23) (28) (28) 37 118,829	(28) (28) (28) (28) 37 94,235	(28) (28) (28) (28) 38 88,058	(28) (23) (28) 177 53,787
Food stores, except dairy products Dairy products stores and milk retailing Meat cutters, except slaughter and pack- ing house	0.98	484,157 22,082 156,892	646,643	494,562	427,415	297,770	216,044	218,012	<sup>178</sup> 141,114
General merchandise stores	li i	96,040 84,730 20,824 12,375	294,333	298,139	344,837	198,011	103,009	4 70,706	<sup>179</sup> 60,200
Drug storesPharmacists	} 1.00	20,330 83,167	104,727	80,157	67,575	57,271	46,375	27,700	<sup>180</sup> 17,654
Limited price variety stores. Furniture and house furnishings stores. Motor vehicles and accessories retailing. Hardware and farm implement stores. Jewelry stores. Country buyers and shippers of livestock	0.98 0.96 1.06 0.94 0.99	18,214 37,214 80,996 47,087 19,207	10,225 34,449 65,197 49,010 23,625	5,849 26,059 30,494 45,997 21,219	4,244 22,509 4,873 45,290 29,662				
and other farm products  Fuel and ice retailing  Filling stations.  Household appliance and radio stores  Lumber and building material retailing.	0.96	40,416 45,706 183,655 21,953 50,713	45,307 49,524 85,622	43 49,758 84,759	48 52,442 31,827	497,763	507,513	243,213	<sup>181</sup> 190,442
Liquor stores. Retail florists Miscellaneous retail stores. Not specified retail trade. Wholesale trade 45	1.05	17,555 15,114 106,712 61,473 240,686	436,796	384,291	298,706				

Banking and other finance	0.98	125,109 20,307	193,909	131,380	80,159	(28)	(28)	(28)	(28)
Insurance. Business services Miscellaneous repair services and hand	1.16	39,735 20,797	33,997 ( <sup>28</sup> )	17,470 (28)	11,021	(28) (28)	(28) (28)	(28) (28)	(28) (28)
trades. Hotels and lodging places Miscellaneous personal services. Other industries and services Industry not reported.	1.15	5,722 66,935 5,758 41,399 21,623	(28) 65,375 (28) (28) (28) (28)	(28) 63,920 (28) (28) (28)	74,180 (28) (28) (28) (28)	63,017 (28) (28) (28) (28)	50,687 (28) (28) (28) (28)	37,321 (28) (28) (28) (23)	(28) 182 30,666 (28) (28) (28)
CLERICAL, SALES, AND KINDRED WORKERS <sup>47</sup>	1.00	20.207	مة من	<b>97.00</b> 7	00.004	(-0)	(40)	(10)	(400)
Express messengers and railway mail clerks Bookkeepers, accountants, and cashiers Mail carriers	1.00 1.01 0.99	22,337 931,308 122,910	25,608 939,954 120,120	25,005 742,035 90,536	22,021 491,567 79,871	257,429 28,052	160,968 48 22,180	(28) 48 75,668 48 <b>14,10</b> 5	(28) 183 <b>39,164</b> 48 7,152
Messengers, errand, and office boys and girls Telegraph messengers	0.88 1.00	60,740 16,616	79,534 16,176	99,459 9,403	95,071 9,152	63,744	45,706	12,447	184 7,820
Stenographers, typists, and secretaries. Shipping and receiving clerks. Clerical and kindred workers (n.e.c.). Office machine operators.	6.99	$\left\{\begin{array}{c} \textbf{1,174,886} \\ 229,737 \\ \textbf{1,973,604} \\ \textbf{64,178} \end{array}\right.$	2,754,030 36,193	2,091,999	1,034,190	<sup>50</sup> 357,080	<sup>50</sup> 219,173	<sup>50</sup> 64,151	<sup>185</sup> 29,655
Telegraph operators	0.79 1.00	42,562 208,319	53,579 248,884	186 62,753 190,160	<sup>186</sup> 55,263 97,893	44,101 19,158	43,860	* 52 19,459	<sup>187</sup> 7,061
Radio and wireless operators		11,573	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Agents (n.e.c.). Credit men Purchasing agents and buyers (n.e.c.). County agents and farm demonstrators. Collectors, bill and account.	0.81 1.00 1.06 0.82 1.01	92,841 31,110 33,359 10,721 43,990	82,256 22,490 28,124 4,590 43,764	54 114,697 31,036	54 44,691 36,104	48 51,996	<sup>48</sup> 37,797	<sup>48</sup> 7 <b>,</b> 388	<sup>188</sup> 4,503
Attendants, physicians' and dentists' offices Hucksters and peddlers Newsboys Insurance agents and brokers	0.93 1.05 1.00 0.99	31,209 56,695 190 66,730 249,322	25,814 59,440 38,993 254,358	12,796 52,922 27,961 118,719	5,755 84,436 29,708 87,578	(28) 80,481 6,893 (28)	(28) 62,037 5,288 (28)	(28) 56,166 3,374 (28)	189 36,519 191 2,029 ( <sup>28</sup> )
Real estate agents and brokers <sup>57</sup> . Proprietors, managers, and officials, real estate <sup>57</sup> . Managers and superintendents, building	1.07	116,990 25,764 70,942	256,832	159,574	134,672	(28)	(28)	(28)	(28)
Auctioneers	0.88 1.03	3,537 $10,521$	3,767 7,759	4,442 4,968	3,511 4,511	2,471 48 3,316	2,820 48 2,607	2,051 48 1,728	<sup>192</sup> 2,035 <sup>48</sup> 968

## Table IIB—Occupations of All Workers 1870 to 1940 —Continued [Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 2]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
CLERICAL, SALES, AND KINDRED WORKERS47—Continued									
"Clerks" in stores <sup>58</sup> .  Buyers and department heads, store.  Canvassers and solicitors.	0.98	525,591 72,436 96,394	393,951	405,640	379,439			,	
Traveling salesmen and sales agents. Attendants, filling station, parking lot, garage, and airport. Salesmen and saleswomen (n.e.c.) <sup>18</sup> CRAFTSMEN, FOREMEN, AND	1.00	632,667 234,095 1,420,100	2,280,921	1,361,648	1,094,975	<sup>59</sup> 1,052,642	59 666,707	59 409,742	193 245,627
KINDREĎ WORKERŚ 61 Blacksmiths, forgemen, and hammermen Boilermakers	0.85	87,166 32,982	(28) 42,435	(28) 62,975	(28) 38,047	(28) 26,478	( <sup>28</sup> ) 18,138	( <sup>28</sup> ) 10,855	(28) 194 5,970
Brickmasons, stonemasons, and tile setters Cement and concrete finishers	1.00 1,02	141,690 26,682	170,903 15,736	<sup>195</sup> 135,076 <sup>197</sup> 7,804	} 169,402	149,103	158,918	102,473	196 90,775
Cabinetmakers <sup>68</sup>	1.01 0.99 1.22	58,837 766,213 29,818	58,476 920,132 24,582	45,966 878,505 10,801	42,311 808,949 6,516	54 35,975 590,917 3,723	36,274 65 605,367 ( <sup>28</sup> )	51,161 199 886,689 (28)	198 43,740 200 362,143 (28)
Electricians Power station operators	0.99	$\left\{\begin{array}{c} 227,102 \\ 22,345 \end{array}\right.$	277,514	210,834	48 119,039	50,210	<sup>48</sup> 14,850	48 1,188	48 396
Foremen (n.e.c.), by industry: Construction	1.03	74,663	45,326	) }		,	i		
Food and kindred products  Textiles, textile products, and apparel Lumber, furniture, and lumber	1.02 0.97	30,355 49,073	23,119 43,570						
products	1.00 1.19	23,473 19,469	25,521 19,027						
products.  Metal industries.  Manufacturing industries (n.e.c.).  Railroads (includes railroad repair shops). Business and repair services.	1.00 0.96 0.99	22,485 112,939 44,663 49,573 6,164	19,867 109,868 54,403 80,394 8,925	201 433,895	202 282,961	(28)	( <sup>28</sup> )	( <sup>28</sup> )	(28)

APPI	
PPENDIX	
K TAB	
BLES	

1		ł		İ					
Miscellaneous transportation. Wholesale and retail trade. Floormen and floor managers, store. Industry not reported.	0.87 1.11 1.05	11,498 31,951 7,178 7,324	11,566 37,658 4,130				!		747639°
Street railways and bus lines. Utilities. Government. Other industries and services.		4,203 21,931 10,829 11,493	6,177 (28) (28) (28)	6,623 (28) (28) (28)	4,953 (28) (28) (28)	1,084 (28) (28) (28)	(28) (28) (25) (25) (28)	(28) (28) (28) (25) (28)	(28) 58 (28) 6 (28) 6 (28) 4 (28) 44
Furriers Glaziers Heat treaters, annealers, and temperers Inspectors, scalers, and graders, log and lumber		17,155 -7,648 10,877 16,558	(28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28)	(28) (28) (28) (28) (28)	(28) -1 8 (28) (28) (28)
Inspectors (n.e.c.), by industry: Construction Transportation, except railroad Wholesale and retail trade. Miscellaneous industries and services Loom fixers	0.93	5,190 5,226 5,300 13,560 24,694	(28) 5,616 (28) (28) (28) 18,639	(28) (28) (28) (28) (28) 15,482	(28) (28) (28) (28) (28) 12,856	(28) (28) (28) (28) (28)	(28) (28) (28) (28) (28)	(28) (28) (28) (28) (28)	(28) (28) (28) (28) (28)
Machinists <sup>70</sup> . Tool makers, and die makers and setters Mechanics and repairmen, airplane Mechanics and repairmen, automobile Mechanics and repairmen, railroad and car shop Mechanics and repairmen (n.e.c.)	1.02	521,093 96,885 28,384 441,845 43,998 435,431	1,384,483	(28)	(28)	(28)	(28)	(25)	( <sup>28</sup> );
Millwrights Opticians and lens grinders and polishers	1.00	43,595 12,198	42,012 ( <sup>28</sup> )	37,669 ( <sup>28</sup> )	17,442 ( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	(28) (28)
Painters, construction and maintenance <sup>71</sup> Painters, except construction and maintenance <sup>71</sup>	0.99 1.09	442,659 100,726	441,390 90,560	203 328,751	340,729	278,770	222,111	131,622	204 88,354
Paperhangers Pattern and model makers, except paper Piano and organ tuners Plasterers Plumbers and gas and steam fitters Reofers and slaters.	1.06	29,994 33,033 5,219 52,878 210,815 32,720	28,328 31,535 6,823 70,053 235,436 23,636	205 19,390 29,383 7,047 208 38,406 204,651 211 11,648	25,577 24,973 6,633 47,682 146,821 14,078	21,794 15,977 4,298 35,334 91,294 8,931	12,369 10,918 (28) 39,002 56,041 7,043	5,013 6,171 (28) 22,083 19,189 4,026	206 2,507 207 4,241 (28) 209 23,853 210 11,090 212 2,774
Stationary engineers Cranemen, hoistmen, and construction machinery operators. Firemen, except locomotive and fire depart- ment.	1.03	200,095 120,190 127,455	302,469	<sup>213</sup> 266,028 151,069	<sup>214</sup> 217,153	74 232,435	<sup>74</sup> 145,356	74 82,813	215 36,041
Oilers, machinery	1.11	39,498	34,643	27,319	15,554	[]		!	l ,

Table IIB.—Occupations of All Workers, 1870 to 1940 —Continued
[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 ]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 8	1910 5	1900 5	1890 5 6	1880 5	1870 5
CRAFTSMEN, FOREMEN AND KINDRED WORKERS61—Continued Structural and ornamental metal workers Upholsterers	0.82	38,631 42,585	42,191	( <sup>28</sup> ) 24,276	( <sup>28</sup> ) 16,581	( <sup>28</sup> ) 25,273	( <sup>28</sup> ) 21,046	(28) 8,563	( <sup>28</sup> ) <sup>216</sup> 4,707
OPERATIVES AND KINDRED WORK- ERS; LABORERS, EXCEPT FARM <sup>75</sup>							:		
Apprentices: <sup>76</sup> Carpenters' apprentices	0.95 0.95 0.96	7,428 3,430 5,311	3,931 4,380 5,700	4,565 9,084 7,091	77 5,766 77 2,528 77 9,507	78 <b>3,19</b> 8 ( <sup>28</sup> ) 78 <b>5,346</b>	6,422 ( <sup>28</sup> ) 4,439		
Apprentices, printing trades.  Apprentices, printing trades.  Apprentices, specified trades (n.e.c.)  Apprentices, trades not specified.	0.80	14,161 10,020 14,198 26,334 11,478	12,078 9,944 10,885 38,135	12,992 10,559 31,570 80 59,780	77 9,586 77 11,279	78 16,526 3,186 78 13,264 78 41,594	10,740 4,218 7,790 50,826	45,058	217)
Asbestos and insulation workers		6,399 6,938	(28) (28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)
Brakemen, railroad Baggagemen, transportation Conductors, railroad Conductors, bus and street railway	1.01 1.01 1.00 1.00	68,392 6,099 47,465 17,785	89,079 9,306 78,332 86,699	115,248 11,997 74,539 63,760	93,498 12,396 65,604 56,932				
Inspectors, railroads (includes railroad repair shops)	1.01	29,496	39,470	43,148	<b>27,93</b> 8				
shops)	1.00	255,537	466,839	515,313	583,824				
Laborers, street railways and bus lines Laborers, trucking service	1.12	{ 10,505 40,204	79,427	82 461,739	82 485,030	81 000 005	4.0 777 701	440 071 000	*** *** ***
Teamsters <sup>81</sup> . Locomotive engineers <sup>221</sup> . Locomotive firemen <sup>221</sup> .	0.91 1.10 1.00	31,643 72,396 48,851	82 109,625 114,351 67,096	124,805 91,345	108,588 76,381	2181,023,325	218 755,534	219 371,093	220 248,032
Motormen, street, subway, and elevated railway.  Operatives, railroads (includes railroad repair	1.00	38,380	57,969	62,959	56,218				
shops)	0.97	67,589	94,372	107,690	62,672	} {			

Operatives, street railways and bus lines		9,375			1	1			
Operatives, trucking service	0.00	2.166	16,621	86 12,659	86 6,710	1 .			•
Switchmen, railroad Watchmen (crossing) and bridge tenders	1.01	48,340 16,862	95,773	105,461	76,328				
Ticket, station, and express agents	1.07	40,377	41,194	39,396	37,207	J		·	
Chainmen, rodmen, and axmen, surveying		10,572	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Chauffeurs and drivers, bus, taxi, truck, and tractor <sup>87</sup> Deliverymen <sup>87</sup>	1.02	1,339,888 428,153	82 1,175,484	82 <b>464,</b> 386	82 280,912	48 170,011	18 114,864	48 55,323	<sup>48</sup> 37 <b>,4</b> 86
Filers, metal. Fishermen and oystermen <sup>222</sup> . Fruit and vegetable graders and packers,	0.95	10,952 62,574	( <sup>28</sup> ) 69,616	( <sup>28</sup> ) 50 <b>,194</b>	(28) <b>64,861</b>	(28) 65,493	( <sup>28</sup> ) 57 <b>,154</b>	39,284	<sup>(28)</sup> <sup>223</sup> 26,477
Fruit and vegetable graders and packers, except in cannery <sup>88</sup>	1.10	25,965 174,507	10,919 ( <sup>28</sup> )	8,881 ( <sup>28</sup> )	5,186 ( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	(28) (28)
Linemen and servicemen, telegraph, telephone, and power. Foremen, communication. Laborers, communication. Operatives, communication.	0.89 0.93 0.91 0.80	110,816 8,474 3,159 2,060	107,596 10,407 11,599 3,757	47,941 6,344 4,630 1,465	33,135 3,574 4,834 970	18,613	9,909		, , ,
Lumbermen, raftsmen, and woodchoppers 15	1.03	164,264	151,303	185,168	143,502	224 130,905	224 112,976	224 52,014	225 29,966
Mine operatives and laborersForemen, mining	0.97 1.08	824,093 28,244	88 <b>7,</b> 566 30,073	983,090 <sup>226</sup> 29,912	884,865 <sup>227</sup> 23,675	228 654,965	228 420,418	228 285,778	229 178,786
Motormen (vehicle), mine, factory, logging camp, etc. Photographic process workers. Sailors and deck hands, except U. S. Navy Boatmen, canalmen, and lock keepers. Officers, pilots, pursers, and engineers, ship Welders and flame-cutters.	0.95	17,988 15,102 46,078 7,395 85,155 139,281	(28) (28) 61,465 (28) 46,834 (28)	(28) (29) 52,090 (28) 230 47,064 (28)	(28) (29) 44,184 (28) 231 43,566 (28)	(28) (28) (28) (28) (28) (28)	(28) (28) (29) (28) (28) (28)	(28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28)
Operatives and kindred workers (n.e.c.), non- manufacturing industries and services:     Agriculture, forestry, and fishery.     Automobile storage, rental, and repair     services.     Business and miscellaneous repair services.     Construction.     Finance, insurance, and real estate.     Government.     Hotels and miscellaneous personal services     Miscellaneous transportation.     Professional and related services.     Utilities.	0.90	4,866 13,065 7,643 8,348 12,317	(28) (28) (28) (28) (28) (28) (28) (5,844 (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (26) (28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)	(28) (28) (28) (28) (28) (28) (28) (28)

Table IIB.—Occupations of All Workers, 1870 to 1940 <sup>1</sup>—Continued [Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930<sup>2</sup>]

Occupations, 1940 classification	Adjustment factor 3	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
OPERATIVE AND KINDRED WORKERS; LABORERS, EXCEPT FARM*5—Continued Operatives and kindred workers (n.e.c.), non- manufacturing industries and services— Continued Warehousing and storage. Wholesale and retail trade Industry not reported.	1.06	6,042 152,094 22,197	5,563 (28) (28)	(23) (23) (23)	(28) (28) (28)	(28) (28) (29)	(28) (28) (28)	(23) (23) (28)	(23) (26) (28)
Laborers (n.e.c.), nonmanufacturing industries and services: Agriculture, forestry, and fishery Amusement, recreation, and related services.		65,899 16,441	(28) (28)	( <sup>28</sup> ) ( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	(28) (28)	(28) (28)
Automobile storage, rental, and repair services	0.88	2,862 59,444	69,824	<sup>94</sup> 27,676	94 3,932				• •
Business and miscellaneous repair services.		6,771	(29)	(28)	(28)	(28)	(28)	(28)	(28)
Construction <sup>15</sup> Industry not reported Longshoremen and stevedores Miscellaneous transportation	1.03 1.00 1.00 0.77	1,243,534 367,551 75,103 26,432	731,461 695,865 73,954 38,637	35,928 236 53,606	1,138,574 62,857 <sup>237</sup> 69,318	2331,429,120	<sup>238</sup> 786,528	234 706,521	<sup>235</sup> 328,483
Finance, insurance, and real estate	1.03	7,046 52,695 9,799 19,082 93,004 25,656 242,049	(28) (28) (28) (28) 26,144 (28) 22,813 273,664	(28) (28) (28) (28) (28) (28) 27,897 192,570	(28) (25) (28) (29) (29) (28) (28) 10,636 152,616	(28) (26) (28) (28) (28) (29) (29) (28)	(28) (26) (28) (29) (29) (29) (28) (28)	(28) (26) (28) (28) (29) (28) (28) (28)	(28) (29) (28) (28) (28) (23) (28)
Operatives and kindred workers (n.e.c.) and laborers (n.e.c.), manufacturing: Bakers. Bakery products, operatives. Bakery products, laborers. Canning and preserving fruits, vegetables, and sea food, operatives.	0,98 1.47 1.05	144,296 43,507 7,822 48,732	130,944 41,014 12,980 26,566	91,084 30,048 8,731 18,502	83,264 13,139 4,736 8,389				

Canning and preserving fruits, vegetables, and sea food, laborers. Confectionery, operatives. Confectionery, laborers. Dairy products, operatives. Dairy products, laborers? Meat products, laborers. Meat products, laborers. Miscellaneous food industries, operatives. Miscellaneous food industries, negrain-mill products, laborers. Miscellaneous food industries, laborers. Miscellaneous food industries, laborers. Miscellaneous food industries, laborers.	1.08 1.05 1.22 1.06 1.07 1.01 1.01 1.01 2.84 1.23 0.99	31,938 49,014 6,848 36,872 15,507 89,736 46,083 16,295 28,087 20,546 28,442 15,608	26,487 46,694 6,773 27,249 18,653 53,590 43,475 30,700 51,983 15,787	19,939 54,895 8,032 19,971 16,253 50,491 60,143 24,823 62,164 23,039	9,826 32,490 3,633 12,294 5,153 26,156 34,242 16,666 32,310 22,920	202,932	160,370	124,067	<sup>238</sup> 88 <b>,445</b>
Beverage industries, operatives Beverage industries, laborers	1.00 1.04	44,345 21,506	11,187 8,856	15,655 10,951	31,503 19,611	34,971	31,215	21,820	289 14,843
Tobacco manufactures, operatives Tobacco manufactures, laborers	1.00 1.04	82,563 15,322	103,715 21,404	145,222 36,563	151,801 17,048	31,452	111,625	77,045	<sup>240</sup> 41,387
Cotton manufactures, operatives Cotton manufactures, laborers	1.00 0.96	383,250 39,727	302,501 53,298	302,454 73,262	280,149 36,292	246,391	173,142	169,771	241 112,381
Silk and rayon manufactures, operatives 108 Silk and rayon manufactures, laborers 108	0.98 1.15	88,463 7,376	123,255 12,740	113,407 11,592	77,791 <b>4,36</b> 8	53,915	34,506	17,890	3,223
Knit goods, operatives Knit goods, laborers	0.99 1.03	186,093 5,427	132,666 9,694	106,528 12,301	86,987 8,038	46,649	29,259	12,072	10 3,618
Dyers	1.10 0.98 1.06	24,898 26,111 5,884	19,491 19,221 8,025	16,620 17,381 11,241	15,455 16,044 10,555	29,467	21,747	14,187	242 8,999
Carpets, rugs, and other floor coverings, operatives. Carpets, rugs, and other floor coverings, laborers.	1.18 1.35	28,815 6,541	33,759 6,518	27,597 5,337	<b>44,</b> 069 5,088	31,940	26,762	20,482	169 18,995
Woolen and worsted manufactures, operatives.  Woolen and worsted manufactures, laborers.  Miscellaneous textile goods, operatives. Miscellaneous fabricated textile products, operatives.  Not specified textile mills, operatives. Miscellaneous fabricated textile products, laborers. Not specified textile mills, laborors.	0.95 1.14 1.12 1.33 0.55	125,124 18,727 20,554 5,173 { 38,377 36,409 { 2,940 3631	96,730 15,678 23,956 5,920 46,014	120,097 25,339 38,392 9,209 106 35,639	99,927 14,011 32,647 8,914 107 29,758	164,248	172,855	120,874	248 97,251

Table IIB.—Occupations of All Workers, 1870 to 1940 1—Continued

[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 2]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 <sup>5</sup> .	1900 5	1890 5 6	1880 5	1870 5
OPERATIVES AND KINDRED WORKERS; LABORERS, EXCEPT FARM75—Continued									
Operatives and kindred workers (n.e.c.) and laborers (n.e.c.), manufacturing—Continued									
Apparel and accessories, operatives <sup>110</sup> Apparel and accessories, laborers <sup>111</sup> Tailors and tailoresses <sup>114</sup> Dressmakers and seamstresses (not in factory) <sup>115</sup>	0.97 1.24 0.99	690,466 9,507 118,797 165,031	439,626 16,829 167,590 194,807	365,210 13,527 190,310 290,102	333,144 9,977 202,562 552,691	847,185	714,447	112 477,307	<sup>244</sup> 285 <b>,6</b> 04
Hats, except cloth and millinery, operatives <sup>111</sup> Hats, except cloth and millinery, laborers <sup>111</sup>	0.97 0.91	16,650 681	27,424 1,174	34,222 1,425	37,767 1,977	25,774	26,849	20,456	<sup>10</sup> 14,216
Sawyers. Furniture and store fixtures, operatives <sup>99</sup> . Furniture and store fixtures, laborers <sup>99</sup> . Sawmills and planing mills, operatives <sup>99</sup> . Miscellaneous wooden goods, operatives <sup>99</sup> . Sawmills and planing mills, laborers <sup>99</sup> . Miscellaneous wooden goods, laborers <sup>99</sup> .	1.04 0.93 1.01 1.09 0.94	$ \begin{array}{c} 46,915 \\ 78,062 \\ 31,041 \\ 62,429 \\ 55,487 \\ 224,293 \\ 36,625 \end{array} $	37,507 69,969 40,200 109,871 274,549	35,161 51,817 35,625 <sup>245</sup> 114,625 263,219	45,007 41,515 23,854 <sup>245</sup> 132,107 271,817	245 274,457	<sup>245</sup> <b>2</b> 52,832	<sup>245</sup> 154,555	<sup>246</sup> 115,972
Pulp, paper, and paperboard mills, oper- atives Pulp, paper, and paperboard mills, laborers	0,98	91,040 43,893	62,356 49,956	53,576 50,172	35,655 30,132				
Paperboard containers and boxes, oper- atives <sup>118</sup> Paperboard containers and boxes, laborers <sup>118</sup>	1.04 1.08	40,160 9,658	14,855 2,794	21,270 3,655	18,634 1,515	56,852	45,118	119 36,820	<sup>247</sup> 18,412
Miscellaneous paper and pulp products, operatives Miscellaneous paper and pulp products, laborers.	1.06 0.97	24,655 4,167	18,155 3,808	14,516 3,351	10,634 1,510				
Printing, publishing, and allied industries, operatives.	1.08	75,383	76,541	72,046	63,459	]			

Printing, publishing, and allied industries, laborers. Compositors and typesetters. Pressmen and plate printers, printing. Electrotypers and stereotypers. Engravers, except photoengravers. Photoengravers and lithographers.	1.16 0.98 1.05 0.99 0.99	$ \begin{array}{c} 9,125 \\ 174,312 \\ 35,777 \\ 8,251 \\ 8,571 \\ 22,541 \end{array} $	12,554 179,959 32,776 7,746 28,022	9,258 137,362 19,617 5,439 23,042	6,361 125,087 21,088 4,324 21,884	196,986	153,614	92,959	248 55,298
Paints, varnishes, and colors, operatives Paints, varnishes, and colors, laborers	0.99 1.00	12,338 5,666	8,214 6,171	5,466 4,841	3,881 2,959	28)	(28)	(28)	(28)
Rayon and allied products, operatives $^{103}$ . Rayon and allied products, laborers $^{103}$	0.95 1.01	80,663 5,369	19,893 5,012	(122) (122)	(122) (122)				
Miscellaneous chemical industries, operatives Miscellaneous chemical industries, laborers Petroleum refining, operatives Petroleum refining, laborers	1.00 1.11 0.81 1.01	82,322 75,280 29,237 27,562	51,597 73,581 21,962 41,224	50,292 77,087 250 8,292 32,113	31,150 43,048 251 2,206 11,327	26,626	18,197	14,673	<sup>249</sup> 7,838
Miscellaneous petroleum and coal products, operatives		4,429 7,571	(28) (28)	( <sup>28</sup> ) ( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	( <sup>28</sup> )	( <sup>28</sup> ) ( <sup>28</sup> )
Rubber products, operatives	0.92 1.08	86,109 20,139	74,368 31,453	79,308 55,584	29,066 14,630	21,210	15,677	6,160	3,769
Shoemakers and repairers (not in factory). Footwear industries, except rubber, operatives. Footwear industries, except rubber, laborers.	0.99 1.00 1.04	65,675 221,815 11,619	75,624 209,928 19,125	78,070 206,225 19,978	68,874 181,010 10,688	208,318	213,544	194,079	252 172,811
Leather: tanned, curried, and finished, operatives. Leather: tanned, curried, and finished, laborers.	1.05 0.92	32,276 13,273	30,443 15,464	33,837 25,282	35,335 19,134	42,608	39,332	29,842	253 30,918
Leather products, except footwear, operatives Leather products, except footwear, laborers	1.00	48,296 3,330	37,829 4,340	52,458 9,621	48,816 5,042	53,820	53,497	47,091	254 36,917
Cement, and concrete, gypsum, and plaster products, operatives. Cement, and concrete, gypsum, and plaster products, laborers.	1.01	13,867 26,181	11,509 35,548	7,709 27,647	8,695 33,196	(28)	(28)	(28)	(28)

Table IIB.—Occupations of All Workers, 1870 to 1940 1—Continued
[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 2]

Occupations, 1940 classification	Adjustment factor <sup>8</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 5	1880 5	1870 5
OPERATIVES AND KINDRED WORKERS: LABORERS, EXCEPT FARM 16—Continued									
Operatives and kindred workers (n.e.c.) and laborers (n.e.c.), manufacturing—Continued									
Stonecutters and stone carvers Cut-stone and stone products, operatives. Cut-stone and stone products, laborers	0.91 1.16 0.98	14,286 5,594 3,805	20,828 9,237 7,940	<sup>255</sup> 21,350 6,433 4,982	32,515 9,905 6,777	52,282	58,627	<b>31,52</b> 8	<sup>176</sup> 24,888
Glass and glass products, operatives <sup>99</sup> Glass and glass products, laborers <sup>99</sup>	1.03 1.02	57,133 18,965	45,178 28,670	<sup>256</sup> 55,432 29,516	<sup>257</sup> 59,064 25,127	<b>51,49</b> 8	35,310	18,472	258 9,860
Pottery and related products, operatives Pottery and related products, laborers	0.98 0.81	25,417 7,207	22,782 9,135	17,088 9,587	15,934 7,484	} 14,849	13,734	6,654	259 4,693
Structural clay products, operatives Structural clay products, laborers	0.95 1.03	12,629 41,278	12,240 61,329	9,488 50,095	12,737 80,293	50,932	61,418	36,773	<sup>260</sup> 26,894
Miscellaneous nonmetallic mineral products, operativesMiscellaneous nonmetallic mineral products, laborers.		10,978 8,961	(28) (28)	(28)	(28)	(28) (28)	(28) (28)	(28) (28)	( <sup>28</sup> ) ( <sup>28</sup> )
Nonferrous metal primary products, operatives. Miscellaneous nonferrous metal products, operatives.	1.25	19,011 28,773	42,056	40,461	33,639			. ,	,
Nonferrous metal primary products, laborers. Miscellaneous nonferrous metal products, laborers	1.17	25,992 16,110	45,718	50,873	39,034				
Clocks, watches, jewelry, and silverware, operatives 127	1.03	32,766	35,965	40,753	33,262				
Clocks, watches, jewelry, and silverware, laborers <sup>127</sup>	1.17	3,016	3,676	7,957	4,474				
Jewelers, watchmakers, goldsmiths, and silversmiths. Buffers and polishers, metal. Grinders, metal.	0.95 1.00 0.96	36,332 45,035 45,902	36,729 35,206 25,729	37,612 30,511 17,582	30,945 30,496 8,441				

Furnacemen, smeltermen, and pourers Molders, metal	1.02 0.90	33,932 87,624	20,855 94,442	36,176	135,269			ļ	
Heaters, metal	0.95 0.95	11,081 30,447	14,195 29,227	15,646 23,808	9,614 17,487				
Tinsmiths, coppersmiths, and sheet metal workers	1.01	91,595	84,261	75,718	60,431				
Blast furnaces, steel works, and rolling mills, operatives.  Tin cans and other tinware, operatives.  Miscellaneous iron and steel industries, operatives.  Not specified metal industries, operatives.  Agricultural machinery and tractors, operatives.  Office and store machines, equipment, and supplies, operatives.  Miscellaneous machinery, operatives.  Aircraft and parts, operatives.  Railroad and miscellaneous transportation equipment, operatives.	0.99	117,959 13,598 197,738 11,454 20,311 22,681 112,977 26,390 11,259	420,040	94 397,526	94 297,637	261 545,092	<sup>261</sup> 406,286	<sup>261</sup> 258,878	202 167,976
Blast furnaces, steel works, and rolling mills, laborers. Tin cans and other tinware, laborers. Miscellaneous iron and steel industries, laborers. Not specified metal industries, laborers. Agricultural machinery and tractors, laborers. Office and store machines, equipment, and supplies, laborers. Miscellaneous machinery, laborers. Aircraft and parts, laborers. Railroad and miscellaneous transportation equipment, laborers.	0.99	188,280 5,217 124,589 5,897 10,528 1,947 38,890 3,841 8,129	489,835	94 540,518	<sup>94</sup> 414,678				
Automobiles and automobile equipment, operatives	1.25	219,029	202,446	151,455	26,364				
Automobiles and automobile equipment,	0.96	69,541	118,768	80,007	15,152				
Ship and boat building and repairing, operatives.		27,327	(28)	(28)	(28)				-
Ship and boat building and repairing, laborers	0.97	21,175	16,831	67,120	11,624	[]			
Electrical machinery and equipment, operatives <sup>93</sup> Electrical machinery and equipment,	0.92	152,472	108,179	263 59,799	264 22,792	(28)	(28)	(28)	(98)
laborers <sup>99</sup>	0.95	29,787	35,041	25,450	10,862	}	į	1	1

Table IIB.—Occupations of All Workers, 1870 to 1940 1—Continued
[Persons 14 years old and over in the labor force in 1940 and gainful workers 10 years old and over in 1870 to 1930 2]

Occupations, 1940 classification	Adjustment factor <sup>3</sup>	1940 4	1930 5	1920 5	1910 5	1900 5	1890 5 6	1880 5	1870 5
OPERATIVES AND KINDRED WORKERS; LABORERS, EXCEPT FARM 75—Continued					·				
Operatives and kindred workers (n.e.c.) and laborers (n.e.c.), manufacturing—Continued									
Scientific and photographic equipment and supplies, operatives		28,587	(28)	(28)	(28)	(28)	(28)	(28)	(28)
and supplies, laborers	1	3,092	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Miscellaneous manufacturing industries (n.e.c.), operatives.	1	126,221	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Miscellaneous manufacturing industries (n.e.c.), laborers		16,270	(28)	(28)	(28)	(28)	(28)	(28)	(28)
operatives		70,643	(28)	(28)	(28)	(28)	(28)	(28)	(28)
Not specified manufacturing industries, laborers	1	41,563	(28)	(28)	(28)	(28)	(28)	(28)	(28)
FARMERS AND FARM MANAGERS, FARM LABORERS, AND FOREMEN							:		
Farmers (owners and tenants) <sup>180</sup> Farm managers <sup>180</sup> Farm foremen <sup>180</sup>	1) +05	$ \begin{cases} 5,265,271 \\ 37,503 \\ 25,275 \end{cases} $	6,012,012 70,583	6,387,360 96,940	6,132, <b>3</b> 80 52,811	5,772,610	5,382,037	4,301,412	<sup>265</sup> 3,127,715
Farm laborers (wage workers) <sup>130</sup> Farm laborers (unpaid family workers) <sup>130</sup>	0.96 1.00	<sup>266</sup> 2,322,035 <sup>271</sup> 1,273,240	2,623,653 1,659,792	}2674,869,704	2685,300,909	<sup>269</sup> 5,036,600	<sup>269</sup> 4,465,209	<sup>269</sup> 4,197,730	<sup>270</sup> 3,647,616
PROTECTIVE SERVICE WORKERS 188									
Firemen, fire department	0.98	78,822	71,548	49,756	34,894	14,243	48 3,561	48 890	48 222
Guards, watchmen, and doorkeepers		219,437	159,964	124,797	84,533	h			
Policemen and detectives, government Policemen and detectives, except government	1.00	130,958 20,879	144,552	94,075	68,329	139 120,698	139 77,614	140 38,735	140 13,546
Marshals and constables 141	1.00	8,987	9,350	6,897	9,073	Į			
Sheriffs and bailiffs	1.00	16,164 222,485	15,338 ( <sup>28</sup> )	10,683	7,134 ( <sup>28</sup> )	(28) (28)	(28) (28)	(28) (28)	(28 (28

SERVICE WORKERS, EXCEPT PROTECTIVE***  Attendants, hospital and other institution. Attendants, professional and personal service (n.e.c.) 33,005 (29) (29) (29) (29) (29) (29) (29) (29)											
Attendants, professional and personal service (n.e.c.)	SERVICE WORKERS, EXCEPT PROTECTIVE 143										
Attendants, recreation and amusement that the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the properties of the pr	Attendants, professional and personal service		102,189	(28)	(28)	(28)	(28)	(28)	(28)	(28)	
Ushers, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, amusement place or assembly. Operatives, and officials, laundering, cleaning, and dyeing services. Operatives, amusement place of the day of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the place of the plac	(n.e.c.)		83,005	(28)	(28)	(28)	(28)	(28)	(28)	(28)	
Barbers, beauticians, and manicurists. 1.00 440.111 374.290 216.211 195.275 1sc 132.826 Bartenders. 123.342 (2s) 216.211 195.275 1sc 132.826 88.317 70.568 8.317 70.568 8.317 70.568 8.320 (2s) 274.12.765 (2s) 276.085 101.284 88.317 70.568 8.230 (2s) 274.12.765 (2s) 274.085 101.284 88.317 70.568 8.230 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (2s) 274.12.765 (	Ushers, amusement place or assembly  Operatives, amusement, recreation, and related	} 1.06		30,347	144 16,960	144 10,032	272 9,305	<sup>272</sup> 6.303	272 3.735	272 2.149	
Bartenders   128,342   230   24,005   101,224   83,517   55,606   (38)   51,001   11,609   111,609   142,927   132,058   163,797   70,568   43,906   18,867   55,606   (38)   51,005   10,001   16,377   18,784   15,175   14,020   8,230   (28)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,606   (38)   274,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765   275,12,765	services	0.95	7,221	4,060	5,513	6,494	)	,,,,,,	0,.00	2,110	
Charwomen and cleaners	Bartenders.  Boarding house and lodginghouse keepers 148	1	128,342	(28)	26,085	101,234	88,817	55,806	(28)	(28)	
Cooks except private family   10.94   335,806   288,880   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,408   1,704,		1.00									
Housekeepers, stewards, and hostesses, except private family	Cooks, except private family	0.99	335,806 396,160	288,880	37,907	35,055					
Danitors and sextons	private family Servants, except private family	1.22	88,375 353,213	236,259	2751,744,979	2751,981,457	2761,745,805	<sup>276</sup> 1,574,506	<sup>276</sup> 1,176,286	<sup>277</sup> 1,053,809	•
Laundry operatives and laundresses, except private family	Elevator operators	1.00 0.99		67,614 306,529						(28) 278 <b>2,9</b> 20	
private family	Laundresses, private family	0.96	198,392	343,224	FOF 701	242.445	)				
services. 0.99 13,007 23,604 51,035 43,865	private family  Foremen, personal services				805,761	640,445				<u> </u>  -	
services. 0.91 74,847 55,177 Proprietors, managers, and officials, laundering, cleaning, and dyeing services. 1.06 53,694 49,461 Porters. 178,370 (28) (28) (28) (28) (28) (28) (28) (28)	services	0.99	13,007	23,604	71.007	49.045	154 389,825	154 250,947	154 123,161	<sup>279</sup> 64,080	
ing, cleaning, and dyeing services	services	0.91	74,847	55,177	51,035	43,865					
	ing, cleaning, and dyeing services	1.06	53,694	49,461	}		]				
			109,287		(28) 145,795	(28) 123,730				(28) 280 10,569	

- <sup>1</sup> Sources: U. S. Department of Commerce, Bureau of the Census. 16th Census of the United States, 1940, Population. Comparative Occupation Statistics for the United States, 1870 to 1940. By Alba M. Edwards. Washington, D. C., U. S. Government Printing Office, 1943. Supplemented by occupation statistics in decennial census reports, and by U. S. Census, 1940, Population, Series P-14, No. 13. October 29, 1943.
- <sup>2</sup> For practically all occupations the figures in 1940 for total persons or for women would not have been increased significantly had persons 10 to 13 years been included. Estimates have been made for 1940 of the numbers that would have been enumerated in three occupations substantially affected by the change in the ages included.
- <sup>3</sup> Factor developed by the Bureau of the Census which was applied to published census figures for 1870 to 1930 inclusive to obtain figures comparable with the corresponding 1940 occupational classification. See footnote 5.
- <sup>4</sup> Data in this column represent a combination of the figures for the occupations during the census week of employed persons and the usual occupations of experienced workers seeking work and of public emergency workers.
- <sup>5</sup> Figures for 1870 to 1930 inclusive differ somewhat from those published in Comparative Occupation Statistics for the United States, 1870 to 1940. For most occupations an adjustment factor or comparability index was applied to the published figure to obtain a figure adjusted for differences between the 1940 occupational classification and the occupational classification used in 1930 and earlier years. The adjusted figures shown here are for persons 10 years old and over. In cases where occupations are combined in an earlier census a combined index was applied, obtained by dividing the sum of the adjusted figures by the sum of the published figures in the next later census for which separate occupations are given. The adjustment factor was applied after all other changes to arrive at comparable data from 1870 to 1930 were made, such as corrections for undercount or additions of estimated numbers from other occupations. Figures in italics denote unadjusted numbers, shown as published in census reports. No adjustment index was developed for these occupations because of the small numbers involved.
- <sup>6</sup> Figures for 1890 are exclusive of persons in Indian Territory and on Indian reservations, areas specially enumerated at that census, but for which occupation statistics are not available. Figures for the remaining areas are the corrected figures; for explanation, see Occupation Report for 1900, pp. lxvi-lxxiii.
- $^7$  The following occupations which were classified in "Professional and semi-professional workers" in 1940 have been included in other major occupation groups  $^{\land}$

in this table, as shown below, in order to list them next to occupations with which they were combined in earlier censuses.

County agents and farm demonstrators....Clerical, sales, and kindred workers Pharmacists.......Proprietors, managers, and officials, except farm Radio and wireless operators............Clerical, sales, and kindred workers

The following occupations which were classified in other major occupation groups in 1940, as shown below, were included in "Professional and semiprofessional workers" in this table for the same reason.

Attendants and assistants, library......Clerical, sales, and kindred workers Motion picture projectionists.......Operatives and kindred workers Proprietors, managers, and officials, miscellaneous amusement and

recreation......Proprietors, managers, and officials, except farm Proprietors, managers, and officials, theaters and

- motion pictures......Proprietors, managers, and officials, except farm
- <sup>8</sup> Teachers (athletics, dancing, etc.) were included in the group "Teachers" in 1880 to 1900. Estimated number of billiard room, dance hall, skating rink, etc., keepers included as follows: 1900, 308; 1890, 116; 1880, 44.
- <sup>9</sup> Figures include 8 "Teachers of dancing," 5 added because of undercount in 13 Southern States, and 3 estimated as the number of billiard room, dance hall, skating rink, etc. keepers.
  - 10 2 added because of undercount in 13 Southern States,
- <sup>11</sup> Figures include "Scientists," classified in "Professional workers (n.e.c.)" in 1940.
- <sup>12</sup> Includes "Literary and scientific persons," less "Chemists, assayers, and metallurgists."
- <sup>13</sup> Includes "Literary persons," less "Chemists, assayers, and metallurgists"; scientific persons were combined with teachers in 1880.
  - 14 1 added because of undercount in 13 Southern States.
- <sup>15</sup> For some of the occupations in which large numbers of public emergency workers were employed the increase from 1930 to 1940 resulted in considerable measure from workers who never had other regular employment having returned their assigned emergency occupations as their usual occupations.
  - <sup>16</sup> Aviators, designated "Aeronauts," were included with "Showmen" in 1910.
- <sup>17</sup> At the 1940 census, persons under 35 years old returned as technical engineers were not coded as technical engineers unless they had had at least 4 years of college education.

- 18 Estimated number of electrical engineers.
- 19 Enumerated figures, less estimated number of electricians.
- 26 "Probation and truant officers," classified in "Social and welfare workers" in 1940, were included in the group "Watchmen, policemen, etc.," in 1880 to 1900.
- <sup>21</sup>1 added because of undercount in 13 Southern States. "Probation and truant officers," classified in "Social and welfare workers" in 1940, were included in "Watchmen, policemen, etc," in the group "Other domestic and personal service" in 1870.
  - 22 Probably includes some teachers in schools below collegiate rank.
- <sup>23</sup> Estimated number of demonstrators deducted from census figures. Includes "Teachers (athletics, dancing, etc.)," classified in "Dancers, showmen, and athletes" in 1940.
- <sup>24</sup> Scientific persons combined in 1880 with teachers; estimated number of demonstrators deducted from census figures. Includes "Teachers (athletic, dancing, etc.)," classified in "Dancers, showmen, and athletes" in 1940.
- <sup>25</sup> Estimated number of demonstrators deducted from census figures, and 1,047 added because of undercount in 13 Southern States.
  - 26 Wherever used in this table, "n.e.c." means "not elsewhere classified."
- <sup>27</sup> Figures include "Inventors," classified in "Professional workers (n.e.c.)" in 1940.
  - <sup>28</sup> Comparable data not available.
  - 29 53 added because of undercount in 13 Southern States.
  - 30 17 added because of undercount in 13 Southern States.
- <sup>31</sup> Estimated on the basis of the proportion trained nurses formed of "Nurses and midwives" in 1900.
- .82 The following occupations which were classified in "Proprietors, managers, and officials, except farm" in 1940 have been included in other major occupation groups in this table, as shown below, in order to list them next to occupations with which they were combined in earlier censuses.

and recreation...........Professional and semiprofessional workers Proprietors, managers, and officials,

motion pictures.............Professional and semiprofessional workers
Purchasing agents and buyers (n.e.c.)....Clerical, sales, and kindred workers
The following occupations which were classified in other major occupation
groups in 1940, as shown below, were included in "Proprietors, managers, and
officials, except farm" in this table, for the same reason.

Inspectors, communication and

<sup>38</sup> The adjustment factor for the combined group of postmasters and miscellaneous government officials was 1.03 for the total, and 1.01 for women. Adjusted figures for government officials and inspectors were obtained by subtracting the figures for postmasters from the adjusted figures for the combined group of postmasters and government officials and inspectors. Figures in 1910 and 1920 do not include "Managers and officials, postal service" and "Inspectors, postal service."

<sup>34</sup> Estimated on the basis of the proportion "Postmasters" formed of "Officials (government)" in 1910.

<sup>35</sup>Figures include "Managers and officials, postal service," classified in "Officials, United States" in 1940 and "Inspectors, salt wells and works," classified in "Operatives and kindred workers, miscellaneous chemical industries" in 1940. From census figures for 1910 were deducted the number of "Owners, operators, and proprietors" and "Managers and officials" returned in "Gas works" (7), "Electric light and power plants" (13), "Turpentine farms" (3), and "Not specified industries and services" (269); from census figures for 1920 were deducted the number of "Owners, operators and proprietors" and "Managers and officials," estimated on the basis of 1910 and 1930 data, in "Gas works" (25) "Electric light and power

plants" (47), and "Not specified industries and services" (482). No "Proprietors, managers, and officials, stockyards" were returned in 1910, and none were estimated for 1920.

38 Partly estimated. Includes "Agents, express companies," classified in "Ticket, station, and express agents" in 1940; "Express messengers," classified in "Express messengers and railway mail clerks" in 1940; "Managers and officials, postal service," classified in "Officials, United States" in 1940; "Inspectors, salt wells and works," classified in "Operatives and kindred workers, miscellaneous chemical industries" in 1940; and "Owners, operators, and proprietors" and "Managers and officials" in each of the following industries: "Gas works" and "Electric light and power plants," classified in "Utilities" in 1940; and "Not specified industries and services," classified in "Industry not reported" in 1940. Does not include "Proprietors, managers and officials, stockyards," or "Owners and managers of log and timber camps." On the basis of 1930 data, correct classification of these items would reduce the total by 5.5 percent.

<sup>37</sup> In 1940 "Saloon keepers" were classified in "Proprietors, managers, and officials, eating and drinking places"; consequently, in 1920 and in 1910 the number of "Saloon keepers" and in 1900 and in 1890 the estimated number of "Saloon keepers" were added to the number of "Restaurant, cafe, and lunchroom keepers." In 1930 no figure for "Saloon keepers" was published.

- 38 Includes bartenders, not shown separately from saloon keepers,
- 39 Includes bartenders, not shown separately from saloon keepers, and 5 added because of undercount in 13 Southern States.
  - 40 38 added because of undercount in 13 Southern States.
  - 41 "Milliners" were included with "Dressmakers and seamstresses."
- 42 5 added because of undercount in 13 Southern States. "Milliners" were included with "Dressmakers and seamstresses."
- 48."Purchasing agents, grain elevators," classified in "Country buyers and shippers of livestock and other farm products" in 1940, were classified in "Agents" in 1910 and in 1920.
  - 44 28 added because of undercount in 13 Southern States.
- <sup>45</sup> Considerable difficulty was experienced in classifying the occupations for retail merchants and wholesale merchants.
  - 46 18 added because of undercount in 13 Southern States.
- <sup>47</sup> The following occupations which were classified in "Clerical, sales, and kindred workers" in 1940 have been included in other major occupation groups in

this table, as shown below, in order to list them next to occupations with which they were combined in earlier censuses,

Attendants and assistants, library...Professional and semiprofessional workers Baggagemen, transportation.........Operatives and kindred workers Salesmen, finance, brokerage, and

commission firms......Proprietors, managers, and officials, except farm Ticket, station, and express agents........Operatives and kindred workers The following occupations which were classified in other major occupation groups in 1940, as shown below, were included in "Clerical, sales, and kindred workers" in this table for the same reason.

Attendants, filling station, parking lot, garage,

store......Proprietors, managers, and officials, except farm County agents and farm

demonstrators..........Professional and semiprofessional workers Credit men......Proprietors, managers, and officials, except farm Managers and superintendents,

building.......Proprietors, managers, and officials, except farm Proprietors, managers, and officials, real

estate.......Proprietors, managers, and officials, except farm Purchasing agents and

buyers (n.e.c) ..........Proprietors, managers, and officials, except farm Radio and wireless operators......Professional and semiprofessional workers 48 Estimated.

- <sup>40</sup> Census figures estimated, and 2 added because of undercount in 13 Southern States.
- <sup>50</sup> 1890 and 1900 data partly estimated, and 1880 data entirely estimated. Figures do not include "Abstractors, notaries, and justices of peace," classified in 1940 in the group "Clerical workers (n.e.c.)."
- <sup>51</sup> Partly estimated, and 6 added because of undercount in 13 Southern States. Figures do not include "Abstractors, notaries, and justices of peace," classified in 1940 in the group "Clerical workers (n.e.c)."
  - 52 Partly estimated.
- <sup>53</sup> Census figures include telegraph operators only; 2 added because of undercount in 13 Southern States.
- 54 "Advertising agents," classified in "Proprietors, managers, and officials" and "Purchasing agents, grain elevators," classified in "Country buyers and ship-

pers of livestock" in 1940, were classified in the group "Agents" in 1910 and in 1920.

- 55 50 added because of undercount in 13 Southern States.
- <sup>50</sup> Includes approximately 500 girls estimated on the basis of past trends as the number of newsboys 10 to 13 years of age who would have been enumerated in 1940. The great increase in the number of newsboys may have come in part from an undervaluation of classification changes.
- <sup>57</sup> The attempt of the occupation coders to distinguish between real estate agents and proprietors of real estate firms probably was not very successful.
- <sup>58</sup> Many enumerators failed to distinguish between office clerks and salespersons employed in stores. The group "'Clerks' in stores" was more strictly confined in 1940 and in 1930 than in 1920 or in 1910 to persons specifically returned as "clerks" in stores. It is believed that a majority, if not most of those included in the group "'Clerks' in stores" were salespersons.
- <sup>59</sup> Figures do not include "Canvassers" and "Sales agents." Data for 1890 and 1900 partly estimated.
- 60 Figures do not include "Canvassers" and "Sales agents"; 26 added because of undercount in 13 Southern States.
- <sup>61</sup> The following occupations which were classified in "Craftsmen, foremen, and kindred workers" in 1940 have been included in other major occupation groups in this table, as shown below, in order to list them next to occupations with which they were combined in earlier censuses.

Bakers	Operatives and kindred workers
Compositors and typesetters	
Electrotypers and stereotypers	Operatives and kindred workers
Engravers, except photoengravers	Operatives and kindred workers
Foremen, communication	Operatives and kindred workers
Foremen, mining	Operatives and kindred workers
Foremen, personal services	Service workers, except protective
Inspectors, communication and	

utilities.......Proprietors, managers, and officials, except farm Inspectors, mining......Proprietors, managers, and officials except farm Inspectors, railroads (includes railroad

repair shops)......Operatives and kindred workers Jewelers, watchmakers, goldsmiths, and

silversmiths ......Operatives and kindred workers

Locomotive engineers .....Operatives and kindred workers

Locomotive firemen	Operatives and kindred workers
	-
Millers, grain, flour, feed, etc	· · ·
Molders, metal	Operatives and kindred workers
Photoengravers and lithographers	.Operatives and kindred workers
Pressmen and plate printers, printing	.Operatives and kindred workers
Rollers and roll hands, metal	.Operatives and kindred workers
Sawyers	.Operatives and kindred workers
Shoemakers and repairers (not in factory)	.Operatives and kindred workers
Stonecutters and stone carvers	.Operatives and kindred workers
Tailors and tailoresses	.Operatives and kindred workers
Tinsmiths, coppersmiths, and sheet	

metal workers...............Operatives and kindred workers.

The following occupations which were classified in other major occupation groups in 1940, as shown below, were included in "Craftsmen, foremen, and kindred workers" in this table, for the same reason.

Firemen, except locomotive and

fire department.......Operatives and kindred workers

Floormen and floor managers,
store......Proprietors, managers, and officials, except farm

<sup>62</sup> All apprentices to manual trades whose trades were specified on the schedules were included in 1870 with the journeymen of their respective crafts. In addition there were 200 "Apprentices (not specified)."

<sup>63</sup> The number of cabinetmakers returned in 1940 probably was excessive, because there was a tendency for the operatives in furniture factories to give the old trade names as their occupations, rather than the names of the specific processes they were performing.

- 64 Figures include cabinet shop employees.
- $^{65}\,\mathrm{Does}$  not include ship carpenters, classified in 1890 with ship and boat builders.
- 68 Frequently, it was difficult to determine definitely whether the return "decorator" should be allocated to "Decorators and window dressers" or to "Painters, construction and maintenance."
- 67 In 1910 and in 1920 figures include "Foremen and overseers, postal service," classified in the group "Foremen, government" in 1940. To census figures were

added 9 women returned as "Foremen and overseers, salt wells and works" in 1910, and an estimated 6 women "Foremen and overseers, salt wells and works" in 1920. In 1910, 1 woman returned in "Turpentine farm foremen" was deducted. Figures do not include data for water and sanitary services.

68 "Foremen and overseers, electric light and power plants" and "Foremen and overseers, gas works" only. Data for water and sanitary services were not available, but it is believed the number of women foremen in these industries was insignificant.

<sup>69</sup> Most inspectors in manufacturing industries are classified as operatives.

70 It is quite probable that many who were returned and classified as machinists were, in fact, only machine tenders.

<sup>71</sup> Frequently, it was difficult to determine definitely whether the return "decorator" should be allocated to "Decorators and window dressers" or to "Painters, construction and maintenance"; and it was difficult to determine definitely whether the return "painter" should be allocated to "Painters, construction and maintenance" or to "Painters, except construction and maintenance."

<sup>72</sup> 1 deducted as the estimated number of women "Stationary engineers, water transportation," classified in the group "Officers, pilots, pursers, and engineers, ship," in 1940.

<sup>78</sup> In 1910 most of the "Cranemen, derrickmen, hoistmen, etc." were classified with the semiskilled operatives of the respective industries. From census figures was deducted 1 woman returned in "Stationary engineers, water transportation," classified in the group "Officers, pilots, pursers and engineers, ship" in 1940.

74 Does not include "Cranemen, derrickmen, hoistmen, etc."

The following occupations which were classified in "Operatives and kindred workers" or in "Laborers, except farm" in 1940 have been included in other major occupation groups in this table, as shown below, in order to list them next to occupations with which they were combined in earlier censuses.

packing house...........Proprietors, managers, and officials, except farm

Milliners (not in factory)....Proprietors, managers, and officials, except farm Motion picture projectionists......Professional and semiprofessional workers Oilers, machinery............Craftsmen, foremen, and kindred workers Operatives, amusement, recreation, and

and silversmiths	.Craftsmen, foremen, and kindred workers
Locomotive engineers	.Craftsmen, foremen, and kindred workers
Locomotive firemen	.Craftsmen, foremen, and kindred workers
Millers, grain, flour, feed, etc	.Craftsmen, foremen, and kindred workers
Molders, metal	.Craftsmen, foremen, and kindred workers
Officers, pilots, pursers, and	

engineers, ship.......Proprietors, managers, and officials, except farm Photoengravers and lithographers....Craftsmen, foremen, and kindred workers Pressmen and plate printers.

 <sup>76</sup> The 1930 figures for apprentices are only approximately comparable with the 1940 figures because of differences in the methods of adjusting for children erroneously returned as pursuing skilled trades.

- 77 Figures approximate only.
- 78 Figures include helpers.
- 79 Many of the machinists' apprentices probably are machine tenders.
- <sup>80</sup> Includes "Apprentices to other professional persons," classified in "Semiprofessional workers (n.e.c.)" in 1940.
- <sup>81</sup> Teamsters in agriculture and the extraction of minerals are classified with the other workers in those industries respectively; drivers for bakeries, laundries, and stores are classified as "Deliverymen."
- <sup>82</sup> Neither in 1910, in 1920, nor in 1930 was the attempt to distinguish chauffeurs, motor truck drivers, and deliverymen from draymen, teamsters, and carriage drivers very successful. Some deliverymen probably were returned and classified, in 1930, 1920, and 1910, as teamsters.
- 83 Does not include "Agents, express companies," "Operatives, car and railroad shops," or "Laborers, car and railroad shops," On the basis of 1930 data, correct classification of these items would increase the total by 10.7 percent. Estimated deliverymen for bakeries and stores were deducted from "Teamsters."
- 84 Partly estimated. Does not include "Agents, express companies," "Operatives, car and railroad shops," or "Laborers, car and railroad shops," On the basis of 1930 data, correct classification of these items would increase the total by 10.7 percent.
  - 85 4 added because of undercount in 13 Southern States. See, also, footnote 83.
  - 86 Does not include "Operatives, truck, transfer, and cab companies."
- <sup>87</sup> Drivers for bakeries, laundries, dry cleaners, stores, etc., are included in "Deliverymen."
- <sup>88</sup> It is believed that the marked increase from 1930 to 1940 in the number of fruit graders and packers may be accounted for in considerable measure by the fact that the 1930 index used by the occupation coding clerks did not show clearly

that the 1930 group "Fruit graders and packers" included vegetable graders and packers. At each census, proper classification of indefinite returns was difficult where canneries were operated close to where there was fruit and vegetable grading and packing in the fields and orchards.

- <sup>89</sup> Includes addition to account for workers classified as "Laborers (not specified)": 12 in 1900 and 1 in 1890. Figures include "Owners and managers of log and timber camps,"
- <sup>90</sup> In 1910 all women in "Foremen, mining" were returned as, and in 1920 were assumed to be, "Foremen and overseers, salt wells and works," classified in "Foremen, manufacturing" in 1940.
- <sup>91</sup> Includes addition to account for operatives classified as "Laborers (not specified)": 67 in 1900; 12 in 1890; and 5 in 1880.
- 92 1 added to account for workers classified as "Laborers (not specified)," and 8 added because of undercount in 13 Southern States.
- 93 Includes 1 woman returned in "Stationary engineers, water transportation" in 1910 and 1 woman estimated as the number of "Stationary engineers, water transportation" in 1920.
- <sup>94</sup> In 1920 and in 1910 automobile repair shops were classified in the group "Other iron and steel factories."
- <sup>95</sup> Largely estimated. Figure consists of "Hostlers," "Well borers," "White-washers," and "Laborers (not specified)" allocated to manufacturing and to transportation. Estimate includes "Foremen, road and street building," classified in "Foremen, construction" in 1940, "Laborers, street cleaning," classified in "Laborers, utilities" in 1940, and probably "Laborers, postal service," classified in "Laborers, government" in 1940, but does not include "Laborers, stockyards." On the basis of 1930 data, correct classification of these items would reduce the total by 0.1 percent.
- <sup>56</sup> Largely estimated. Figure consists of "Whitewashers" and "Laborers (not specified)" allocated to manufacturing and to transportation. Estimate includes "Foremen, road and street building," classified in "Foremen, construction" in 1940, "Laborers, street cleaning," classified in "Laborers, utilities" in 1940, and probably "Laborers, postal service," classified in "Laborers, government" in 1940, but does not include. "Laborers, stockyards." On the basis of 1930 data, correct classification of these items would reduce the total by 0.1 percent.
- <sup>97</sup> Largely estimated, and 99 added because of undercount in 13 Southern States. Figure consists of "Whitewashers," "Hostlers," and "Laborers (not

specified)" allocated to manufacturing and to transportation. Estimate includes "Foremen, road and street building," classified in "Foremen, construction in 1940, "Laborers, street cleaning," classified in "Laborers, utilities" in 1940, and probably "Laborers, postal service," classified in "Laborers, government" in 1940, but does not include "Laborers, stockyards." On the basis of 1930 data, correct classification of these items would reduce the total by 0.1 percent.

<sup>98</sup> From census figures for 1910 were deducted 70 returned as "Laborers, postal service," and from census figures for 1920 were deducted 34 "Laborers, postal service," estimated on the basis of 1910 and 1930 data,

90 The figures for operatives and laborers combined may be more nearly accurate than are the figures for either operatives or laborers.

100 13 added because of undercount in 13 Southern States.

101 156 added because of undercount in 13 Southern States.

102 440 added because of undercount in 13 Southern States.

103 Frequently, it was difficult to determine from the enumerators' returns whether a person was working in the "Silk and rayon manufactures" industry or in the "Rayon and allied products" industry.

104 130 added because of undercount in 13 Southern States.

105 39 added because of undercount in 13 Southern States.

<sup>106</sup> Includes the few operatives reported in rayon factories in 1920. See, also, footnote 107.

<sup>107</sup> Operatives in bedding and quilt factories, hat and cap materials factories, and millinery factories, all included in the group "Other miscellaneous industries" in 1920 and in 1910, and operatives in white goods factories, included in the group "Other clothing factories" in 1920 and in 1910, were classified in the group "Other and not specified textile mills" in 1930; in 1940, operatives in bedding and quilt factories were classified in "Miscellaneous fabricated textile products," operatives in hat and cap materials factories and millinery factories were classified in "Apparel and accessories" and operatives in white goods factories were classified in "Cotton manufactures."

<sup>108</sup> Includes the few laborers reported in rayon factories in 1920. See, also, footnote 109.

100 Laborers in bedding and quilt factories, hat and cap materials factories, and millinery factories, all included in the group "Other miscellaneous industries" in 1920 and in 1910, and laborers in white goods factories, included in the group "Other clothing factories" in 1920 and in 1910, were classified in the group

"Other and not specified textile mills" in 1930; in 1940, laborers in bedding and quilt factories were classified in "Miscellaneous fabricated textile products," laborers in hat and cap materials factories and millinery factories were classified in "Apparel and accessories," and laborers in white goods factories were classified in "Cotton manufactures."

110 The attempt of the occupation coders, in 1930, and again in 1940, to distinguish, from the enumerators' returns, the workers in hat factories (except cloth and millinery) from the workers in apparel and accessories factories was not very successful. The increase from 1930 to 1940 may have resulted in considerable measure from public emergency workers who had never had other regular work having returned their assigned emergency occupations as their usual occupations.

<sup>111</sup> The attempt of the occupation coders, in 1930, and again in 1940, to distinguish, from the enumerators' returns, the workers in hat factories (except cloth and millinery) from the workers in apparel and accessories factories was not very successful.

112 Includes milliners and millinery dealers.

<sup>118</sup> 2,299 added because of undercount in 13 Southern States. Includes milliners and millinery dealers, milliners' apprentices, tailoresses' apprentices, and dress-makers' apprentices.

<sup>114</sup> At each census, it frequently was difficult, from the enumerators' returns, to distinguish tailors working at their trade from proprietors of clothing factories on the one hand and from operatives in clothing factories on the other.

<sup>115</sup> When the enumerators did not return the industry or place of work, it was difficult to distinguish dressmakers and seamstresses in factories from those working elsewhere.

<sup>116</sup> To census figures were added all women returned as "Coopers," all of whom were assumed (or known) to be in "Saw and planing mills" and in "Other woodworking factories," as follows: 5 in 1920; 7 in 1910; 10 in 1900; and 40 in 1890.

<sup>117</sup> To census figures were added 3 women returned as "Coopers," assumed to be in "Saw and planing mills" and in "Other woodworking factories"; 8 added because of undercount in 13 Southern States.

<sup>118</sup> Because of indefinite returns of occupations and industries, many of the workers in paper box factories were classified elsewhere in 1930, in 1920, and in 1910.

119 Figures probably include boxmakers (wood).

120 To census figures, which probably include boxmakers (wood), were added

- 13 because of undercount in 13 Southern States.
  - 121 7 added because of undercount in 13 Southern States. See, also, footnote 62.
- <sup>122</sup> The few operatives and laborers in rayon factories in 1920 were classified with operatives and laborers in "Not specified textile mills." None were returned in 1910.
- 123 To census figures for 1920 was added 1 woman estimated in "Skilled occupations (n.e.c.), petroleum refineries," i.e., "Distillers," "Refiners," or "Treaters." No women were returned in these occupations in 1910.
  - 124 3 added because of undercount in 13 Southern States. See, also, footnote 62.
- 125 To census figures were added 59 returned as "Glass blowers," glass factories in 1910 and 67 estimated as "Glass blowers," glass factories in 1920.
  - 126 3 added because of undercount in 13 Southern States.
- <sup>127</sup> Includes metal engraving (except for printing purposes), plating, and polishing.
- <sup>128</sup> Figures include any persons enumerated as filers, forgemen and hammermen, structural iron workers (building), toolmakers and die setters and sinkers operatives and laborers in automobile repair shops, but do not include those in car and railroad shops properly allocated to railroad and miscellaneous transportation equipment manufacture. On the basis of 1930 data, correct classification of these items would reduce the total by 0.2 percent.
- 120 To census figures were added 31 returned as "Glass blowers," electrical machinery and supply factories in 1910, and 22, estimated on the basis of 1910 and 1930 data, as "Glass blowers," electrical machinery and supply factories in 1920.
- 130 The 1940 figures for farmers and farm managers are probably fairly accurate; changes in numbers of hired farm laborers from 1930 to 1940 also may be actual changes in large measure. Some persons who would have been returned as "Farm laborers, unpaid family workers" under 1930 instructions, however, would have been returned in 1940 as not having jobs because they usually worked regularly at outdoor farm work only during the season of the year when extra help is needed in the fields. It is impossible to group the 1920 and 1910 agricultural pursuits exactly according to 1930 classification. It is believed, however, that differences in the grouping as here presented are negligible.
  - 181 1,869 added because of undercount in 13 Southern States.
- <sup>182</sup> Includes approximately 3,000 girls estimated on the basis of past trends as the number of farm laborers (wage workers) 10 to 13 years of age who would have been enumerated in 1940.

- 133 87,001 added because of undercount of farm laborers. Probably a majority of those omitted were "Unpaid family workers."
- 134 630,985 deducted because of overcount of farm laborers. Probably most of these were "Unpaid family workers."
- 125 Includes addition to account for farm laborers classified as "Laborers (not specified)": 31,523 in 1900; 26,382 in 1890; and 31,464 in 1880.
- $^{136}$  12,947 added to account for farm laborers classified as "Laborers (not specified)," and 43,344 added because of undercount in 13 Southern States.
- <sup>137</sup> Includes approximately 25,000 girls estimated on the basis of past trends as the number of farm laborers (unpaid family workers) 10 to 13 years of age who would have been enumerated in 1940.
- <sup>138</sup> "Watchmen (crossing) and bridge tenders," classified in "Protective service workers" in 1940, are included in this table in "Operatives and kindred workers" in order to list them next to occupations with which they were combined in earlier censuses.
- 130 "Probation and truant officers," classified in "Social and welfare workers" in 1940, were classified in the group "Watchmen, policemen, etc." in 1900 and 1890.
- 140 Estimated. "Probation and truant officers," classified in "Social and welfare workers" in 1940, were classified in the group "Watchmen, policemen, etc." in 1880 and 1870.
- <sup>141</sup> United States marshals, here included, were included in the group "Officials (government)" prior to 1910.
- $^{142}\,\mathrm{Excludes}$  commissioned officers, professional and clerical workers, and craftsmen.
- <sup>143</sup> The following occupations which were classified in other major occupation groups in 1940, as shown below, were included in "Service workers, except protective" in this table, in order to list them next to occupations with which they were combined in earlier censuses.
  - Foremen, personal services.......Craftsmen, foremen, and kindred workers Laborers, laundering, cleaning, and dyeing services....Laborers, except farm Laundry operatives and laundresses,
  - except private family.......Operatives and kindred workers Operatives, amusement, recreation,
  - and related services........................Operatives and kindred workers Operatives, laundering, cleaning,
  - and dyeing services......Operatives and kindred workers

Proprietors, managers, and officials, laundering, cleaning

and dyeing services.......Proprietors, managers, and officials, except farm

144 Figures include estimated number of "Attendants, pool rooms, bowling alleys, golf clubs, etc.," estimated on the basis that they increased 50 percent during each decade from 1870 to 1930.

145 Estimated on the basis that female stage hands and circus helpers and theater ushers equaled 4 percent of the actresses at each census, and that the "Attendants, pool rooms, bowling alleys, golf clubs, etc.," increased 50 percent during each decade from 1870 to 1930.

146 Includes estimated number of manicurists.

<sup>147</sup> Includes estimated number of manicurists, and 7 added because of undercount in 13 Southern States.

<sup>148</sup>The decrease from 1930 to 1940 in the number of boarding house and lodginghouse keepers may have resulted in large measure from the use of more specific instructions in 1940, when only persons keeping five or more boarders or lodgers were returned.

149 63 added because of undercount in 13 Southern States.

150 At each census from 1910 to 1940 the enumerators returned as "House-keepers" so many servants who were in no sense housekeepers that it is believed the statistics for "Housekeepers, private family" are very inaccurate. In 1940 many of those returned as housekeepers were in fact only servants, and considerable numbers of them were housekeepers in their own homes.

151 Census figures less estimated number of "Attendants, pool rooms, bowling alleys, golf clubs, etc.": 81 in 1920 and 54 in 1910.

182 Census figures less estimated number of "Attendants, pool rooms, bowling alleys, golf clubs, etc.": 36 in 1900; 24 in 1890; and 16 in 1880. Figures include "Porters, domestic and personal service," and "Porters, professional service," classified elsewhere in 1940.

158 Estimated number of "Attendants, pool rooms, bowling alleys, golf clubs, etc.," deducted from census figures (11), and 28,227 added because of undercount in 13 Southern States. Figures include "Porters, domestic and personal service," and "Porters, professional service," classified elsewhere in 1940.

154 Figures do not include workers in cleaning, dyeing, and pressing shops,

155 2,493 added because of undercount in 13 Southern States. Figures do not include workers in cleaning, dyeing, and pressing shops.

158 The decrease from 1930 to 1940 may have resulted in part from an underestimate of the effect of the transfer of ward maids from this group, and in some

measure from the fact that, through recourse to the wage income and education information, entered in the 1940 but not in the 1930 schedules, the return "nurse" was coded "trained nurse" more frequently in 1940 than in 1930. Figures for males in 1940 are not comparable with earlier years.

157 Estimated numbers of trained nurses deducted from decennial figures, on the basis of the proportion trained nurses formed of "Nurses and midwives" in 1900.

158 Estimated numbers of trained nurses deducted from decennial census figures, on the basis of the proportion trained nurses formed of "Nurses and midwives" in 1900, and 390 added because of undercount in 13 Southern States.

<sup>159</sup> Teachers (athletics, dancing, etc.) were included in the group "Teachers" in 1880 to 1900. Estimated number of billiard room, dance hall, skating rink, etc., keepers included as follows: 1900, 7,563; 1890, 3,413; 1880, 1,543.

<sup>190</sup> Figures include 149 "Teachers of dancing," 21 added because of undercount in 13 Southern States, and 1,220 estimated as the number of billiard room, dance hall, skating rink, etc., keepers.

161 22 added because of undercount in 13 Southern States.

<sup>102</sup> The relatively small increase in the number of technical engineers during the decade 1930-1940, shown by the census figures, doubtless resulted largely from the fact that, as a result of the depression, an unusually large proportion of the young men who graduated from engineering schools during the decade were not working as engineers in 1940. In addition, at the 1940 census, persons under 35 years old returned as technical engineers were not coded as technical engineers unless they had had at least 4 years of college education.

<sup>163</sup> Estimated number of electricians deducted from enumerated figures, and 120 added because of undercount in 13 Southern States.

194 1,060 added because of undercount in 13 Southern States. "Probation and truant officers," classified in "Social and welfare workers" in 1940, were included in "Watchman, policemen, etc.," in the group "Other domestic and personal service" in 1870.

<sup>165</sup> Estimated number of demonstrators deducted from census figures, and 2,383 added because of undercount in 13 Southern States.

166 149 added because of undercount in 13 Southern States.

<sup>167</sup> Figures include "Inventors," classified in "Professional workers (n.e.c.)" in 1940. 5 added because of undercount in 13 Southern States.

108 89 added because of undercount in 13 Southern States.

169 160 added because of undercount in 13 Southern States.

170 94 added because of undercount in 13 Southern States.

171 1,966 added because of undercount in 13 Southern States.

172 5 added because of undercount in 13 Southern States.

178 8,354 added because of undercount of male workers 16 years old and over in 1920. Figures include "Managers and officials, postal service," classified in "Officials, United States" in 1940 and "Inspectors, salt wells and works," classified in "Operatives and kindred workers, miscellaneous chemical industries" in 1940. From census figures were deducted 309 returned as "Turpentine farmers," and the number, estimated on the basis of 1910 and 1930 data, of "Owners, operators, and proprietors" and "Managers and officials" in "Gas works" (3,567), "Electric light and power plants" (6,005), and "Not specified industries and services" (12,634). 364 "Proprietors, managers, and officials, stockyards," estimated on the basis of 1910 and 1930 data, were added.

174 Figures include "Managers and officials, postal service," classified in "Officials, United States" in 1940 and "Inspectors, salt wells and works," classified in "Operatives and kindred workers, miscellaneous chemical industries" in 1940. From census figures were deducted the number returned as "Turpentine farmers" (511), and as "Owners, operators, and proprietors" and "Managers and officials" in "Gas works" (2,822), "Electric light and power plants" (3,351), and "Not specified industries and services" (17,800). 315 returned as "Proprietors, managers, and officials, stockyards" were added.

<sup>176</sup> Partly estimated, and estimated number of "Turpentine farmers" deducted as follows: 468 in 1900; 429 in 1890; 393 in 1880; 361 in 1870. Includes "Agents, express companies," classified in "Ticket, station, and express agents" in 1940; "Express messengers," classified in 'Express messengers and railway mail clerks" in 1940; "Inspectors, telegraph and telephone," classified in "Inspectors, communication and utilities," in 1940; "Managers and officials, postal service," classified in "Officials, United States," in 1940; "Inspectors, salt wells and works," classified in "Operatives and kindred workers, miscellaneous chemical industries" in 1940; and "Owners, operators, and proprietors" and "Managers and officials" in each of the following industries: "Gas works" and "Electric light and power companies," classified in "Utilities" in 1940; and "Not specified industries and services," classified in "Industry not reported" in 1940. Does not include "Proprietors, managers, and officials, stockyards," or "Owners and managers of log and timber camps." On the basis of 1930 data, correct classification of these items would reduce the total by 4,0 percent.

176 632 added because of undercount in 13 Southern States. See, also footnote 175.

<sup>177</sup> Includes bartenders, not shown separately from saloon keepers, and 256 added because of undercount in 13 Southern States.

178 2,165 added because of undercount in 13 Southern States.

<sup>179</sup> 1,258 added because of undercount in 13 Southern States. "Milliners" were included with "Dressmakers and seamstresses."

180 285 added because of undercount in 13 Southern States.

181 3,612 added because of undercount in 13 Southern States.

182 272 added because of undercount in 13 Southern States.

183 Census figures estimated, and 374 added because of undercount in 13 Southern States.

184 70 added because of undercount in 13 Southern States.

<sup>185</sup> Partly estimated, and 494 added because of undercount in 13 Southern States. Figures do not include "Abstractors, notaries, and justices of peace," classified in 1940 in the group "Clerical workers (n.e.c.)."

186 Includes radio and wireless operators, classified separately in 1940.

<sup>187</sup> Census figures include telegraph operators only; 90 added because of undercount in 13 Southern States.

188 Census figures estimated, and 84 added because of undercount in 13 Southern States.

189 443 added because of undercount in 13 Southern States.

190 Includes approximately 10,000 persons estimated on the basis of past trends as the number of newsboys 10 to 13 years of age who would have been enumerated in 1940. The great increase in the number of newsboys may have come in part from an undervaluation of classification changes.

191 27 added because of undercount in 13 Southern States.

192 46 added because of undercount in 13 Southern States.

<sup>193</sup> Figures do not include "Canvassers" and "Sales agents"; 4,139 added because of undercount in 13 Southern States.

194 66 added because of undercount in 13 Southern States. See, also, footnote 217.

198 3,812 added because of undercount of male workers 16 years old and over in 1920.

1981,065 added because of undercount in 13 Southern States. See, also, footnote 217.

197/30 added because of undercount of male workers 16 years old and over in 1920.

198 472 added because of undercount in 13 Southern States. See, also, footnote 217.

<sup>199</sup> Includes ship caulkers, riggers, and smiths, combined in 1880 with ship carpenters.

200 5,305 added because of undercount in 13 Southern States. See, also, footnote 217.

<sup>201</sup> Figures include "Foremen and overseers, postal service," classified in the group "Foremen, government" in 1940. From census figures were deducted the number returned as "Foremen, turpentine farms" (724), and the number estimated on the basis of 1910 and 1930 data, of "Foremen and overseers" in "Gas works" (3,452), and "Electric light and power plants" (3,225). 249 "Foremen and overseers, salt wells and works," estimated on the basis of 1910 and 1930 data, were added.

202 Figures include "Foremen and overseers, postal service," classified in the group "Foremen, government" in 1940. From census figures were deducted the number of "Foremen and overseers" returned in "Gas works" (2,277). "Electric light and power plants" (1,166), and on "Turpentine farms" (899). 221 returned as "Foremen and overseers, salt wells and works" were added.

203 2,464 added because of undercount of male workers 16 years old and over in 1920.

204 822 added because of undercount in 13 Southern States. See, also, footnote 217.
205 644 added because of undercount of male workers 16 years old and over in 1920.

208 17 added because of undercount in 13 Southern States. See, also, footnote 217.

207 31 added because of undercount in 13 Southern States.

208 151 added because of undercount of male workers 16 years old and over in 1920.

200 276 added because of undercount in 13 Southern States. See, also, footnote 217.
210 59 added because of undercount in 13 Southern States. See, also, footnote 217.

att 270 added because of undercount of male workers 16 years old and over in 1920.

212 24 added because of undercount in 13 Southern States, See, also, footnote 217.

<sup>213</sup> From census figures were deducted 21,705 "Stationary engineers, water transportation," estimated on the basis of 1910 and 1930 data, classified in the group "Officers, pilots, pursers, and engineers, ship," in 1940.

<sup>214</sup> In 1910 most of the "Cranemen, derrickmen, hoistmen, etc." were classified with the semiskilled operatives of the respective industries. From census figures were deducted 20,213 returned as "Stationary engineers, water transportation," classified in the group "Officers, pilots, pursers, and engineers, ship," in 1940.

<sup>215</sup> 422 added because of undercount in 13 Southern States. Does not include "Cranemen, derrickmen, hoistmen, etc."

216 4 added because of undercount in 13 Southern States.

<sup>217</sup> All apprentices to manual trades whose trades were specified on the schedules were included in 1870 with the journeymen of their respective crafts. In addition there were 15,302 'Apprentices (not specified),"

<sup>218</sup> Does not include "Agents, express companies," "Operatives, car and railroad shops," or "Laborers, car and railroad shops." On the basis of 1930 data, correct classification of these items would increase the total by 7.6 percent. Includes "Boiler washers and engine hostlers" and "Yardmen," occupations omitted from the 1910, 1920, and 1930 data. Estimated deliverymen for bakeries, stores, and laundries were deducted from "Teamsters."

<sup>219</sup> Partly estimated. See, also, footnote 218.

220 4,897 added because of undercount in 13 Southern States. See, also, footnote 218.

<sup>221</sup> Because of indefinite returns by census enumerators, it is probable that at each census some stationary engineers were included with locomotive engineers, and that some firemen of stationary boilers were included with locomotive firemen.

<sup>222</sup> An examination made of selected 1940 census enumerators' schedules indicated that the decrease in the number of fishermen and oystermen from 1930 to 1940 may have resulted largely, or even entirely, from the fact that, since fishing is seasonal, many fishermen were not actually fishing during the census week and were not included in the labor force.

228 765 added because of undercount in 13 Southern States.

<sup>224</sup> Includes addition to account for workers classified as "Laborers, (not specified)": 18,997 in 1900; 10,122 in 1890; and 7,117 in 1880; Figures include "Inspectors, scalers, and surveyors," "Foremen," and "Owners and managers of log and timber camps."

225 2.416 added to account for workers classified as "Laborers (not specified)" and 587 added because of undercount in 13 Southern States. Figures include "Inspectors, scalers, and surveyors," "Foremen," and "Owners and managers of log and timber camps."

228 249 "Foremen and overseers, salt wells and works," estimated on the basis of 1910 and 1930 data, were deducted

227 221 returned as "Foremen and overseers, salt wells and works" were deducted.

<sup>228</sup> Includes addition to account for operatives classified as "Laborers (not specified):" 93.805 in 1900: 37.026 in 1890: and 37.880 in 1880.

229 14.136 added to account for workers classified as "Laborers (not specified)" and 680 added because of undercount in 13 Southern States.

280 21,705 "Stationary engineers, water transportation" estimated on the basis of 1910 and 1930 data, were added,

231 20,213 returned as "Stationary engineers, water transportation" were added.

232 18.426 added because of undercount of male workers 16 years old and over in 1920.

283 Largely estimated. Figure consists of "Hostlers," "Well borers," "Whitewashers" and "Laborers (not specified)" allocated to manufacturing and to transportation. Estimate includes "Foremen, road and street building," classified in "Foremen, construction" in 1940, "Laborers, street cleaning," classified in "Laborers, utilities" in 1940, and probably "Laborers, postal service," classified in "Laborers, government" in 1940, but does not include "Laborers, stockyards," On the basis of 1930 data, correct classification of these items would reduce the total by 2.2 percent.

234 Largely estimated. Figure consists of "Whitewashers" and "Laborers (not specified)" allocated to manufacturing and to transportation. Estimate includes "Foremen, road and street building" classified in "Foremen, construction" in 1940, "Laborers, street cleaning," classified in "Laborers, utilities" in 1940, and probably "Laborers, postal service," classified in "Laborers, government" in 1940, but does not include "Laborers, stockyards." On the basis of 1930 data, correct classification of these items would reduce the total by 2.2 percent.

285 Largely estimated, and 4,697 added because of undercount in 13 Southern States. Figure consists of "Whitewashers," "Hostlers," and "Laborers (not specified)" allocated to manufacturing and to transportation. Estimate includes "Foremen, road and street building," classified in "Foremen, construction" in 1940,

"Laborers, street cleaning," classified in "Laborers, utilities" in 1940, and probably "Laborers, postal service," classified in "Laborers, government" in 1940, but does not include "Laborers, stockyards," On the basis of 1930 data, correct classification of these items would reduce the total by 2.2 percent.

238 816 added because of undercount of male workers 16 years old and over in 1920, and 1,406 "Laborers, postal service," estimated on the basis of 1910 and 1930 data, deducted.

<sup>237</sup> 606 returned as "Laborers, postal service" were deducted.

238 1,681 added because of undercount in 13 Southern States.

239 118 added because of undercount in 13 Southern States.

240 1,116 added because of undercount in 13 Southern States.

241 775 added because of undercount in 13 Southern States.

242 14 added because of undercount in 13 Southern States.

243.191 added because of undercount in 13 Southern States.

244 2.873 added because of undercount in 13 Southern States. Includes milliners and millinery dealers, milliners' apprentices, tailors' and tailoresses' apprentices, and dressmakers' apprentices.

245 To census figures were added 16.521 returned as "Coopers" in "Saw and planing mills" and in "Other woodworking factories" in 1910, and estimated numbers in other years as follows: 12.011 in 1920: 25,296 in 1900: 33,240 in 1890; and 38,835 in 1880.

246 To census figures were added 32,735, the estimated number of "Coopers" in "Saw and planing mills" and in "Other woodworking factories": 1.697 added because of undercount in 13 Southern States.

247 To census figures, which probably include boxmakers (wood), were added 49 because of undercount in 13 Southern States.

248 460 added because of undercount in 13 Southern States. See, also, footnote 217.

249 92 added because of undercount in 13 Southern States.

250 To census figures were added 1,346 in "Skilled occupations (n.e.c.). petroleum refineries," i.e., "Distillers," "Refiners," or "Treaters," estimated on the basis of 1910 and 1930 data.

251 To census figures were added 984 returned in "Skilled occupations (n.e.c.). petroleum refineries," i.e., "Distillers and refiners."

- 282 1,684 added because of undercount in 13 Southern States. See, also, foot-mote 217.
  - 253 192 added because of undercount in 13 Southern States. See, also, footnote 217.
  - 254 523 added because of undercount in 13 Southern States.
- 255 1,362 added because of undercount of male workers 16 years old and over in 1920.
- <sup>256</sup> To census figures were added 8,986 "Glass blowers," glass factories, estimated on the basis of 1910 and 1930 data,
- <sup>287</sup> To census figures were added 15,467 returned as "Glass blowers," glass factories.
  - 258 55 added because of undercount in 13 Southern States.
  - 259 41 added because of undercount in 13 Southern States.
  - 200 297 added because of undercount in 13 Southern States.
- <sup>261</sup> Figures include any persons enumerated as filers, forgemen and hammermen, structural iron workers (building), tool makers and die setters and sinkers, operatives and laborers in automobile repair shops, but do not include those in car and railroad shops properly allocated to railroad and miscellaneous transportation equipment. On the basis of 1930 data, correct classification of these items would reduce the total by approximately 8.7 percent.
- <sup>262</sup> 2,071 added because of undercount in 13 Southern States. Figures include any persons enumerated as filers, forgemen and hammermen, structural iron workers (building), tool makers and die setters and sinkers, operatives and laborers in automobile repair shops, but do not include those in car and railroad shops properly allocated to railroad and miscellaneous transportation equipment. On the basis of 1930 data, correct classification of these items would reduce the total by approximately 8.7 percent. See, also, footnote 217.
- <sup>263</sup> To census figures were added 158 "Glass blowers," electrical machinery and supply factories, estimated on the basis of 1910 and 1930 data.
- <sup>204</sup> To census figures were added 97 returned as "Glass blowers," electrical machinery and supply factories.
  - 205 106,770 added because of undercount in 13 Southern States.
- <sup>200</sup> Includes approximately 10,000 persons estimated on the basis of past trends as the number of farm laborers (wage workers) 10 to 13 years of age who would have been enumerated in 1940.

- 287 782,958 added because of undercount of farm laborers. Probably a majority of those omitted were "Unpaid family workers."
- <sup>208</sup> 796,542 deducted because of overcount of farm laborers. Probably most of these were "Unpaid family workers."
- 200 Includes addition to account for farm laborers classified as "Laborers (not specified)": 670.702 in 1900: 909.740 in 1890; and 925.421 in 1880.
- <sup>270</sup> 616,527 added to account for farm laborers classified as "Laborers (not specified)," and 208,063 added because of undercount in 13 Southern States.
- <sup>271</sup> Includes approximately 80,000 persons estimated on the basis of past trends as the number of farm laborers (unpaid family workers) 10 to 13 years of age who would have been enumerated in 1940.
- <sup>272</sup> Estimated on the basis that male stage hands and circus helpers and theater ushers equaled 50 percent of the actors at each census, that female stage hands and circus helpers and theater ushers equaled 4 percent of the actresses at each census, and that the "Attendants, pool rooms, bowling alleys, golf clubs, etc." increased 50 percent during each decade from 1870 to 1930.
- <sup>273</sup> Includes estimated number of manicurists, and 363 added because of undercount in 13 Southern States.
  - 274 109 added because of undercount in 13 Southern States,
- <sup>275</sup> Census figures less estimated number of "Attendants, pool.rooms, bowling alleys, golf clubs, etc.": 10,779 in 1920 and 7,186 in 1910.
- <sup>276</sup> Census figures less estimated number of "Attendants, pool rooms, bowling alleys, golf clubs, etc.": 4,791 in 1900; 3,194 in 1890; and 2,129 in 1880. Figures include "Porters, domestic and personal service," and "Porters, professional service," classified elsewhere in 1940.
- 277 Estimated number of "Attendants, pool rooms, bowling alleys, golf clubs, etc." deducted from census figures (1,420) and 33,659 added because of undercount in 13 Southern States. Figures include "Porters, domestic and personal service," and "Porters, professional service." classified elsewhere in 1940.
  - 278 29 added because of undercount in 13 Southern States.
- <sup>279</sup> 2,540 added because of undercount in 13 Southern States. Figures do not include workers in cleaning, dyeing, and pressing shops.
- <sup>280</sup> Estimated numbers of trained nurses deducted from decennial census figures, on the basis of the proportion trained nurses formed of "Nurses and midwives" in 1900, and 407 added because of undercount in 13 Southern States.

## **INDEX**

Page	Page
Accountants. (See Bookkeepers,	Canning and preserving 97-98
accountants, and cashiers.) Actresses and dancers 168	Carpets and rugs 111
Actresses and dancers 168	Census classification (see also
Adjustment factors,	Occupational classification) —
occupational 13	Of boarding house and lodg-
Age—	inghouse keepers151
Of gainful workers 13	Of manufacturing opera-
Of labor force 13	tives 94
Age groups:	Of nurses 148
Clerical and kindred work-	Of social and welfare work-
ers 77	ers164-165
Cotton workers 107	Of technicians and labora-
Nurses, trained 163	tory assistants 176-177
Practical nurses and mid-	Census dates 14
wives 149	Census, history 53-55
Sales workers 86	Census of manufactures 122-123
Service workers in private	Chemical manufactures 91
and public housekeeping 144	Chemists, assayers, and
Teachers 160	metallurgists177
Age trends—	Child labor:
Of population 3, 34	Cotton industry107
Of workers3, 34, 36-37	Laws 158
Agents, collectors, and credit	Civil War:
men82	And nursing 161
Agricultural workers 57-58, 190-195	And teaching 157
Amusement and recreation, at-	Gainful workers at close 33
tendants, ushers, operatives 151	Clay products, structural 128-129
Apparel and accessories115-116	Clergymen165, 174 Clerical, sales, and kindred
Architects177-178	Clerical, sales, and kindred
Artists and art teachers166-168	workers (see also Clerks and
Attendants and assistants,	kindred workers; White-collar
library169-170	workers)19-21, 59 Clerks and kindred workers, a
Attendants, physicians' and	
dentists' offices 81	social-economic group 48-49, 51
Attendants, ushers, operatives,	Clocks, watches, jewelry, and
amusement and recreation 151	silverware 131
Authors169	Clothing stores, proprietors.
Automobile manufactures 131-132	(See General merchandise, ap-
Aviators 179	parel, and shoe stores.) Clothing workers 58, 112-117
Bakery products 99-100	College presidents, professors,
Banking and finance, proprie-	and instructors 159-160
tors, managers, officials, and	Comparability—
salesmen 188	Of major occupation groups 45
Barbers, beauticians, and	Indexes for individual occu-
manicurists147-148	pations. (See Adjust-
Barriers, occupational, effect on	ment factors, occupa-
occupational trends 9-10	tional.)
Beauticians. (See Barbers,	Compositors and typesetters 121-122
beauticians, and manicurists.)	Concentration:
Beverage industries 101	Industrial, effect on wom-
Boarding house and lodging-	en's employment
house keepers 151-152	Occupational18, 26-29
Bookkeepers, accountants, and	Men's and women's
cashiers 78-79	compared4, 67-69
Business development. (See	Trends in 6-7, 65-69
Concentration, industrial;	Confectionery workers 98-99
Corporations.)	Consumer habits. (See Stand-
Businesswomen 180-189	ard of living.)

# 254 WOMEN'S OCCUPATIONS THROUGH SEVEN DECADES

Page	Page
Cooks57, 140	Factory system, effect on
Corporations, rise of 72	women's employment 7
Cotton workers 105-108	Farm laborers 192-195
County agents and farm	Farmers, farm managers, and
demonstrators 82	foremen 192, 194-195
Craftsmen, foremen, and kin-	Food and dairy products stores,
dred workers. (See Trades	proprietors, managers, and officials181-182
and crafts.) Craftsmen, printing 121	Food industries, miscellaneous 100
Oransmen, printing 121	Food manufacturing 94-101
Dairy products 101	Footwear manufacture 124-125
Dealers, wholesale and retail 50	Foremen 196-197
Decorators and window	Fruit and vegetable graders
dressers 197-198	and nackors 133_134
Decreases in occupations,	Funeral directors and
1910-194064-65	embalmers 179
Demand for labor, effect on	Furniture manufactures 118-119
occupational trends 7	Gainful workers:
Demonstrators 87	Ages included 13
Dentists173-174	Definition 12
Depression employment:	General merchandise, apparel,
Decorators and window	and shoe stores, proprietors.
dressers 197 Doctors' and dentists'	and shoe stores, proprietors, managers, and officials 184
attendants 81	Glassworkers126-127
Sales occupations 84	Glassworkers 126-127 Government officials and inspectors 186
Designers and draftsmen 176	inspectors186
Distribution 84-86	ATTABLE MILL DECOLUCES AND MISCELS
Doctors171-173	laneous food industries 100
Domestic service workers (see	Hand trades 01
also Cooks; Household work-	Hand trades         91           Clothing industry         115           Decline, 1910-1940         64           Milliners         184           Hat workers         117           Home housework, women         15 17
ers; Housekeepers; Laun-	Decline 1910-1940 64
dresses; Waitresses) 23, 142-143	Milliners 184
Dressmakers and seamstresses 116	Hat workers 117
Druggists and pharmacists 187-188 Durable goods manufactures 94	Home housework, women
D	engageu m
textiles111-112	Hosiery. (See Knit goods.)
·	Hotels and lodging places, pro-
Eating and drinking places,	prietors, managers, and of-
proprietors, managers, and of-	ficials185-186
ficials182-183	Household industry:
Economic activities, household.	Chemical products 122-123
(See Household industry.)	Clothing112
Economic and social factors,	Dyeing textiles 111
effect on occupational	Food preparation 94
trends3-4, 7-12, 35	Knit goods 108 Nursing care 149, 162 Pharmacy 110
Editors and reporters 170-171	Nursing care 149, 162
Education of women 156-157	Pharmacy187
Graduate 160	DIIK
Legal       175         Medical       171	Household workers (see also
Medical 171	Cooks; Domestic service work-
Electrical machinery and	ers; Housekeepers; Laun-
equipment 132-133	dresses; Waitresses) 57, 142-143
Elevator operators 149-150	Housekeepers57, 140-141
Employed women, 194015-17	Hucksters and peddlers 87-88
Employment status, 194015-17	
Engineers, technical 177-178	Immigrant labor:
<u>L</u>	Clothing industry 114
Factory operatives 21-23	Cotton industry 106

INDEX 255

Page	Page
Service workers in private	Printing occupations 121-122
and public housekeeping 141	Shoe manufacture 125
Immigration, effect on occupa-	Silk industry 110
tional trends 11	Mail carriers 83
Ingresses in eccurations	Manual workers 47
1910-194062, 63	Manufacturing: Foremen197
Industrial concentration. (See	Operatives and laborers 91, 94
Concentration, industrial.)	
Industry, proprietors, managers,	Proprietors, managers, and
and officials in 185	officials185 Marital status, trends in popula-
Insurance:	tion and labor force (see also
Agents and brokers 88-89	Married women workers; Sin-
Proprietors, managers, and officials 189	gle women workers) 39-40
Inventions, effect on occupa-	Married women workers:
tional trends (see also Ma-	Clerical and kindred
chines; Sewing machine;	occupations 77-78
Technology; Typewriter) 9	Cotton manufactures 107-108
100miology, 13 political, amount	Nurses, trained 164
Janitors and sextons 150	Nurses, trained 164 Occupations 5, 41-43 Saleswomen, "clerks" in
	Saleswomen, "clerks" in
Knit goods108-109	stores, and demonstrators 86
T 1 A	Teachers160
Labor force:	Meat products 99
Ages included 13	Medical occupations (see also
Definition 12-13	Attendants, physicians' and
Numbers in 1940 15 Reasons for growth 3	Attendants, physicians' and dentists' offices; Nurses, trained) 171-174  Messengers, errand and office
Reasons for growth 3 World War II 1	Magazara and office
Laboratory technicians 176-177	boys82-83
Laborers. (See Operatives and	Metal trades workers 129-132
laborers.)	Milliners 184
Laborers, nonfarm 50, 51	Estimated number
Laborers, nonfarm 50,51 Laundresses 57,146	1870. 1880 113
Laundry workers 144-146	Musicians and music
Laws. (See Legislation.)	teachers166-167
Lawyers and judges 175	NT:
Leading occupations 26-27 Changes in 6-7, 56-60	Negro workers (see also
Changes in 6-7, 56-60	Nonwhite workers): Tobacco manufacturing_102-103
Men's and women's	Trends 38
compared 28-29	New workers, definition 12
Leather products, except footwear126	Newsboys89
Leather tanning and	Newsboys 89 Nondurable goods manufactures 94
currying125-126	Nonmanual workers 47-48
To a second and the second	Nonwhite workers (see also
Child labor 158	Negro workers):
Effect on occupational	Service workers in private
trends 9	and public housekeep-
Prohibition Act 101	ing143-144
School158	Nurses 59
Women messengers 83	Practical, and midwives 148-149
Librarians169-170	Trained161-164
Library attendants and	Occupational classification (see
assistants169-170	also Census classification;
	Comparability)13-14, 54, 56-57,
Machines (see also Sewing ma-	60-62
chine; Technology):	Occupational concentration.
Accounting78-79	(See Concentration, occupa-
Cotton	tional.)
manufactures103, 105-106	Occupational distribution,
Knitting 108 Office74, 76	19404, 17-18
UIIIce	10404·10

Page	Page
Occupational groups, proportion	Public emergency workers:
of women in 194018-19	Apparel industry 115-116
Occupational shifts, 1910-1940.	Library assistants and
(See Social-economic groups.)	attendants170
Occupational trends, economic	Public policy, effect on occupa-
and social factors in. (See	tional trends (see also Legis-
Economic and social factors.)	lation)9
Occupations:	
Changes from 1910 to	Race. (See Negro workers;
194062-69	Nonwhite workers.)
Declining, 1910-1940 64-65	Radio and wireless operators 80-81
Growing, 1910-1940 62-63	Rayon and allied products (see
In early censuses 60-62	also Silk and rayon manufac-
Leading. (See Leading	tures)110, 122
occupations.)	tures) 110, 122 Real estate workers 89
No women reported 30-31, 55	Residence, effect on occupational
Numerically important 56-60	trends38, 39
Predominantly women,	trends 38, 39 Restaurants, operators 182-183
194029-30	Retail trade. (See Proprietors,
World War II 1-2	managers, and officials; Sales
Office machine operators 76-77	occupations.)
Office workers (see also Cleri-	Rubber workers 123-124
cal, sales, and kindred work-	Rural areas, worker rates 38-39
ers; Clerks and kindred work-	
ers) 74-83	Sales occupations (see also Cler-
ers) 74-83 Officials, lodge, society, union, etc. 189	ical, sales, and kindred work-
etc189	ers) 83-89 Sawmills and planing mills 118
Operatives and kindred	Sawmilis and planing milis 118
workers 21-23	Schools. (See Education of
Operatives and laborers (see	women; Legislation, school.) Seasonal workers (see also
also Laborers, nonfarm; Man-	Census dates) 12-13
ual workers; Semiskilled	Agriculture 192
workers)91-134	Canning and preserving 97
Organizations, officials 189	Confectionery 98
Painters 198	Eruit and vegetable
Paper and paper products 119-120	Fruit and vegetable packing133
Paperhangers 198-199	Secretaries. (See Office workers.)
Pharmacists (See Druggists	Semiskilled workers 49-50, 51
and pharmacists.)	Servant classes, a social-
Photographers 178-179	Servant classes, a social- economic group50-51
and pharmacists.) Photographers 178-179 Physicians' and dentists'	"Servants." (See Service work-
attenuants or	ers, private and public house-
Physicians, surgeons, and	keeping.)
osteopaths172-173	As leading occupation 57
Population. (See Age trends; Marital status; Residence.)	Service workers 137-152
Maritai status; Residence.)	Eveent domestic and
Increase 33	Except domestic and protective, 1940 23-24
Postmasters 187 Pottery industry 127-128	Private and public house-
Practical nurses and midwives	keeping (see also Domes-
(see also Nurses,	
trained) 149 140	tic service workers) 137-144
trained) 148-149	Protective 200
Printing and publishing 120-122	Sewing machine 112, 125
Professional and semi- professional workers 25-26	Shoe stores, proprietors. (See
Professional	General merchandise, apparel,
workers48-49, 51, 155-179	and shoe stores.)
	Shoe workers 124-125
Proprietors, managers, and officials50-51, 180-189	Cilly and rower
Protective service workers 200	manufactures109-111
Public emergency work, women	Single women workers 39
employed on, in 194015-17	Occupations 5, 40-41

INDEX 257

Page	Page
Skilled workers and foremen (see also Hand trades; Trades and crafts)50-51 Social and welfare workers,	Tobacco manufacturing 101-103 Trade, retail and wholesale. (See Proprietors, managers, and officials; Sales occupa-
religious workers, and clergy- men 164-166	tions.) Trades and crafts (see also
men164-166 Social changes and occupational trends8	Hand trades; Skilled workers and foremen; Tailoresses) 196-199
trends 8 Social-economic groups 5-6, 45-51	Trends—
Specialization (see also Technology) Clothing industry	In numbers and character- istics of workers 33-43
Medical occupations 81	In occupations. (See names of specific occupations;
Service workers in private and public housekeeping 141	Occupations, changes
Standard of living, effect on	from 1910 to 1940; Social-
occupational trends 11-12	economic groups.)
Status of women, effect on	Typewriter 74 Typists. (See Office workers.)
occupational trends 7,8	Typists. (See Office workers.)
Stenographers. (See Office workers.)	Undertakers. (See Funeral
Structural clay products 128-129	directors and embalmers.)
·	Unemployed women 15-17
Tailoresses116-117	Upholsterers 199
Tanning and currying leather125-126	Urban areas: Boarding houses
Teachers (see also Artists and	Social and welfare workers 166
art teachers: Musicians and	Worker rates 38-39
music teachers)59, 157-160	Urban life and married women's
music teachers) 59, 157-160 Technicians 176-177	employment 40 Urban population, growth 38
Technology (see also Inventions;	Orban population, growth 38
Machines; Specialization): Bakery products99-100	Veterinarians 178
Bookkeeping and accounting 78	• '
Canning and preserving 97-98	Waitresses57, 140-141
Clothing industry 112-114 Cotton industry 105-106	Wars, effect on occupational trends (see also Civil War;
Cotton industry 105-106	World War I; World War
Effect on occupational trends9	II) 10
Electrical industry 132-133	White-collar workers (see also Clerical, sales, and kindred workers; Clerks and kindred
Food industry 94 Furniture industry 118-119	Clerical, sales, and kindred
Furniture industry118-119	workers; Clerks and kindred
Glass industry	workers) 71-89 Woodworking industries 117-119
Industrial, professions	Wool and worsted
affected by 175-176	manufactures 109
Laundries146	Worker rates—
Metal industries 129	By age 36-37 By marital status 39-40
Paper and paper products 119 Rubber industry123-124	By race 38
Shoe manufacture 125	By race 38 By residence 38-39
Telephone industry 79-80	Workers, trends in numbers
Tobacco manufacturing 101-102	and characteristics 33-43 World War I—
Telegraph and telephone	And elevator operators 149-150
operators79-81	And glass industry 127
Telegraph messengers 83	And metal industries 129-131
Telegraph operators 80-81	And nursing 161 And pottery industry 128
Telephone operators 79-81 Textile dyeing and finishing 111-112	And pottery industry 128
Textile workers 58-59, 103-112	World War II and women workers 1-2
	11 VI IVI D 1-2

#### CURRENT PUBLICATIONS OF THE WOMEN'S BUREAU

For complete list of publications, write the Women's Bureau.

Single copies of bulletins — or a small supply for special educational purposes - may be secured through the Women's Bureau without charge, as long as the free supply lasts. Bulletins may be purchased direct from the Super-intendent of Documents, Washington 25, D. C., at prices listed. A discount of 25 percent on orders of 100 or more copies is allowed. Other publications listed may be secured from the Women's Bureau.

FACTS ON WOMEN WORKERS—issued monthly. 4 pages. Multilith. (Latest statistics on employment of women; earnings; labor laws affecting women; news items of interest to women workers; women in the international

HANDBOOK OF FACTS ON WOMEN WORKERS. Bull. 225. (In press.)

#### EMPLOYMENT OUTLOOK FOR WOMEN

The Outlook for Women in Occupations in the Medical and Other Health Services, Bull. 203:

2.

3.

4.

Physical Therapists. 14 pp. 1945. 10c.
Occupational Therapists. 15 pp. 1945. 10c.
Professional Nurses. 66 pp. 1946. 15c.
Medical Laboratory Technicians. 10 pp. 1945. 10c.
Practical Nurses and Hospital Attendants. 20 pp. 1945. 10c. 5.

6.

- 7. 8.
- 9.

10.

11.

Practical Nurses and Hospital Attendants. 20 pp. 1945. 10c.

Medical Record Librarians. 9 pp. 1945. 10c.

Women Physicians. 28 pp. 1945. 10c.

X-Ray Technicians. 14 pp. 1945. 10c.

Women Dentists. 21 pp. 1945. 10c.

Dental Hygienists. 17 pp. 1945. 10c.

Physicians' and Dentists' Assistants. 15 pp. 1945. 10c.

Trends and Their Effect Upon the Demand for Women Workers. 12. 55 pp. 1946. 15c.

The Outlook for Women in Science. Bull. 233:

1. Science. (In press.)

Science. (In press.)
 Chemistry. 65 pp. 1948. 20c.
 Biological Sciences. 87 pp. 1948. 25c.
 Mathematics and Statistics. 21 pp. 1948. 10c.
 Architecture and Engineering. (In press.)
 Physics and Astronomy. 32 pp. 1948. 15c.
 Geology, Geography, and Meteorology. (In press.)
 Occupations Related to Science. 33 pp. 1948. 15c.
 Your Job Future After College. Leaflet. 1947. (Rev. 1948).

#### LABOR LAWS

Summary of State Labor Laws for Women. 7 pp. Mimeo.

#### Minimum Wage

State Minimum-Wage Laws and Orders, 1942. An Analysis. Bull. 191. 52 pp. 1942. 20c. (Supplements through 1947. Mimeo.) State Minimum-Wage Laws. Leaflet 1. 1948.

Model Bill for State minimum-wage law for women. Mimeo. Map showing States having minimum-wage laws. Desk size; wall size.)

### Equal Pay

Equal Pay for Women. Leaflet 2. 1947. (Rev. 1948.)

Chart analyzing State equal-pay laws and Model Bill. Mimeo. Texts of State laws (separates). Mimeo. Model Bill for State equal-pay law. Mimeo.

Selected References on Equal Pay for Women. 9 pp. 1947. Mimeo.

#### Hours of Work and Other Labor Laws

State Labor Laws for Women, with Wartime Modifications, Dec. 15, 1944. Bull. 202:

Analysis of Hour Laws. 110 pp. 1945. 15c. Analysis of Plant Facilities Laws. 43 pp. 1945. 10c.

258

- III. Analysis of Regulatory Laws, Prohibitory Laws, Maternity Laws. 12 pp. 1945. 5c.
- Analysis of Industrial Home-Work Laws. 26 pp. 1945. 10c. IV.
  - Explanation and Appraisal. 66 pp. 1946. 15c.

Supplements through 1947. Mimeo.

Unemployment Compensation—How it Works for Working Women. Leaflet. 1945. (Rev. 1948, in preparation.)

Map of United States showing State hour laws. (Desk size; wall size.)

#### LEGAL STATUS OF WOMEN

International Documents on the Status of Women. Bull. 217. 116 pp. 1947.

Legal Status of Women in the United States of America:

United States Summary, January 1938. Bull. 157. 89 pp. 1941. 15c. Cumulative Supplement 1938-45. Bull. 157-A. 31 pp. 1946. 10c. Reports for States and District of Columbia (separates). Bulls. 157-1 through 157-49. 5c ea.

Women's Eligibility for Jury Duty. Leaflet. 1947.

#### INDUSTRY

Women Workers in Power Laundries. Bull. 215. 71 pp. 1947. 20c. The Woman Telephone Worker [1944]. Bull. 207. 28 pp. 1946. 10c. Typical Women's Jobs in the Telephone Industry [1944]. Bull. 207-A. pp. 1947. 15c.

Women in Radio. Bull. 222. 30 pp. 1948. 15c.

#### EARNINGS

Earnings of Women in Selected Manufacturing Industries, 1946. Bull. 219. 14 pp. 1948. 10c.

#### COST-OF-LIVING BUDGETS

Working Women's Budgets in Twelve States. Bull. 226. (In press.)

Employment of Women in the Early Postwar Period, with Background of Prewar and War Data. Bull. 211. 14 pp. 1946. 10c.

Women's Occupations Through Seven Decades. Bull. 218. (Instant publi-

Women Workers After VJ-Day in One Community—Bridgeport, Conn. Bull. 216. 37 pp. 1947. 15c.

Baltimore Women War Workers in the Postwar Period. (In preparation.) Charts-

Proportion of All Workers Who Are Women, 1870-1948.

Occupations of Women Workers, 1940.

A Social-Economic Grouping of Women Workers, 1910-1940.

The Leading 10 Occupations of Women Workers, 1870-1940.

Women in Selected Clerical Occupations, 1870-1940.

Women in Selected Operative and Laborer Occupations, 1870-1940.

Women in Selected Service Occupations, 1870-1940.

Women in Selected Professional Occupations, 1870-1940.

Married Women in Population and in Labor Force, 1910-1947.

Marital Status of Women in the Labor Force, 1910-1947.

#### HOUSEHOLD EMPLOYMENT

Old-Age Insurance for Household Workers. Bull. 220. 20 pp. 1947. Community Household Employment Programs. Bull. 221. 70 pp. 1948. 20c.

### REPORTS ON WOMEN IN WARTIME:

Changes in Women's Employment During the War. Sp. Bull. 20. 29 pp. 1944. 10c.

Women's Wartime Hours of Work—The Effect on Their Factory Performance and Home Life. Bull. 208. 187 pp. 1947. 35c.

Women Workers in Ten War Production Areas and Their Postwar Employment Plans. Bull. 209. 56 pp. 1946. 15c.

Negro Women War Workers. Bull. 205. 23 pp. 1945. 10c.

Employment Opportunities in Characteristic Industrial Occupations of Women. Bull. 201. 50 pp. 1944. 10c.

Employment and Housing Problems of Migratory Workers in New York and New Jersey Canning Industries, 1943. Bull. 198. 35 pp. 1944. 10c.

Successful Practices in the Employment of Nonfarm Women on Farms in the Northeastern States. Bull. 199. 44 pp. 1944. 10c.

Northeastern States. Bull. 199. 44 pp. 1944. 10c. Women's Emergency Farm Service on the Pacific Coast in 1943. Bull. 204.

36 pp. 1945. 10c.

Industrial Injuries to Women [1945]. Bull. 212. 20 pp. 1947. 10c. 16 other reports on women's employment in wartime industries; part-time employment; equal pay; community services, recreation, and housing for women war workers.

Posters (7) showing women in wartime jobs.

RECOMMENDED STANDARDS for women's working conditions, safety, and

Standards of Employment for Women. Leaflet 1. 1946. 5c ea. (Rev. 1948.) When You Hire Women. Sp. Bull. 14. 16 pp. 1944. 10c. The Industrial Nurse and the Woman Worker. Sp. Bull. 19. 47 pp. 1944. 10c.

Women's Effective War Work Requires Good Posture. Sp. Bull. 10. 6 pp. 1943. 5c.

Washing and Toilet Facilities for Women in Industry. Sp. Bull. 4. 11 pp. 1942.

Lifting and Carrying Weights by Women in Industry. Sp. Bull. 2. (Rev. 1946.) 12 pp. 5c.

Safety Clothing for Women in Industry. Sp. Bull. 3. 11 pp. 1941. 10c. Supplements: Safety Caps; Safety Shoes. 4 pp. ea. 1944. 5c ea. Night Work: Bibliography. 39 pp. 1946. Multilith.

#### WOMEN UNDER UNION CONTRACTS

Maternity-Benefits Under Union-Contract Health Insurance Plans. Bull. 214. 19 pp. 1947. 10c.

#### TRAINING

See "Outlook for Women in Occupations in the Medical and Other Health Services," Bull. 203; and "Outlook for Women in Science," Bull. 223, for training required in these professional fields.
 See "Community Household Employment Programs," Bull. 221, for training

recommendations.

Training for Jobs—for Women and Girls. [Under public funds available for vocational training purposes.] Leaflet 1. 1947.

#### WOMEN IN LATIN AMERICA

Women Workers in Argentina, Chile, and Uruguay. Bull. 195. 15 pp. 1942.

Women Workers in Brazil. Bull. 206. 42 pp. 1946. 10c.
Women Workers in Paraguay. Bull. 210. 16 pp. 1946. 10c.
Women Workers in Peru. Bull. 213. 41 pp. 1947. 10c.
Social and Labor Problems of Peru and Uruguay. 1944. Mimeo.
Women in Latin America: Legal Rights and Restrictions. (In press.)

REPORTS ON WOMEN IN PREWAR YEARS: Women at work (a century of industrial change); women's economic status as compared to men's; women workers in their family environment (Cleveland and Utah); women's employment in certain industries (clothing, canneries, laundries, offices, government service); State-wide survey of women's employment in various States; economic status of university women.

THE WOMEN'S BUREAU—Its Purpose and Functions. Leaflet. 1946. Women's Bureau Conference, 1948. Bull. 224. 210 pp. 1948.

☆ U. S. GOVERNMENT PRINTING OFFICE: 1948-747639

