## UNITED STATES DEPARTMENT OF LABOR BULLETIN OF THE WOMEN'S BUREAU, No. 104

## THE OCCUPATIONAL PROGRESS OF WOMEN, 1910 T0 1930

# [Public-No. 259-66тh Congress.] 

[H. R. 13229.]
An Act To establish in the Depariment of Jabor a bureat to be known as the Women's Bureau

Be it enacted by the Senate and Honse of Represfutatives of the I'nited States of Americu in Congress assembled, That there sbatl be established in the Department of Labor a bureau to be known as the Women's Bureau.

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

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

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

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

Sec. 6. That this act shall take effect and be in furce from and after its passage.

Approved, June 5, 1920


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## LETTER OF TRANSMITTAL

> United States Department of Labor, Women's Bureau, Washington, January 18, 1933.

I have the honor to submit the second of this bureau's reports of the occupational progress of women from one census date to another. The first such report, published in 1922, analyzed women's status in 1920 as compared to that in 1910. The present report compares the figures for 1930 with those for 1920 and shows the still greater contrast to the findings of the census of 20 years before.

These analyses of changes in women's occupational distribution, a subject of profound significance whether from the point of view of workers, of employers, of students of social trends, or of any one of a number of other groups, are among the most important of the bureau's publications.

The cooperation of the Bureau of the Census in making available such detailed figures as would contribute to the report is gratefully acknowledged.

The report is the work of Mary V. Dempsey.
Respectfully submitted.

Mary Anderson, Director.

# THE OCCUPATIONAL PROGRESS OF WOMEN, 1910 to 1930 

## INTRODUCTION

Working women in the United States now total nearly 11,000,000, according to 1930 occupation statistics published by the Federal Bureau of the Census. The announcement of these figures that show the present-day trend in the occupations of American women has been eagerly awaited. Throughout the entire country the unusual conditions brought about by the World War, together with the phenomenal development and specialization of industry during that period, were responsible for overwhelming changes in the employment of women between 1910 and 1920. Since that time considerable speculation has existed as to the future of women in industry, upon which the 1930 census figures now throw some light.

American women to the number of $10,752,116$ told census enumerators in April, 1930, that usually they were at work for a monetary consideration. These figures represent an advance of 25.8 per cent in a decade, while the number of all women 10 years of age and over in the United States increased 20.6 per cent during the same period. In other words, this signal rise in the number of working women has far outstripped the growth of the female population.

A 10 -year increase of $2,202,605$ gainfully occupied women was scarcely to be expected in view of the fact that, with all the impetus given the employment of women by the industrial upheaval incident to war activities, the net gain between 1910 and 1920 was less than half a million, or but 6 per cent.

Two or three reasons may be advanced to account for this unexpectedly large increase in the number of working women since 1920. Those men who were killed or incapacitated by the war made permanent gaps in the ranks of employable males that must ultimately have been filled by women, since practically all able-bodied men in the country were already at work prior to the war. The great influenza epidemic of 1918 caused a further shortage among employable persons of both sexes. Then, too, the restriction of immigration shut off the continuously fresh supply of young adult men that previously had been available year after year throughout the entire history of the country. Inasmuch as the census of 1920 was taken on January 1 of that year, before the chaotic industrial conditions peculiar to war time had even partially subsided, the employment of women to fill the resultant gap had not yet been effected on a permanent basis.

At the same time the war succeeded in breaking down many imaginary barriers that had existed since time immemorial in the minds of people of all classes. Even in parts of the country where the position of women has always been that of traditional conservatism, women
recently have been taking up trades, businesses, and professions formerly held sacred to men. The prevailing attitude of married women and of women with high social status regarding the subject of their own employment was not even dreamed of in this country 20 years ago.

No picture of unemployment was intended by these census statistics on women's occupations; rather, in conformity withideas of the Bureau of the Census, this figure of $10,752,116$ working women in the United States "represents all persons who usually work at a gainful occupation and includes such persons temporarily unemployed at the time the census was taken." ${ }^{1}$ However, the census enumerator was left to decide what constituted temporary unemployment, and there is no positive assurance that he took time to explain to each person interviewed that the usual occupation was what he wanted to know.

Many women whose factory or mercantile employment had ceased around Christmas, 1929, and who saw no chance of reemployment in the immediate future, undoubtedly stated that they had no occupation when interviewed in April. Presumably the enumerator accepted this statement without question, in some instances at least. Especially would this be true when the enumerator found the temporarily unemployed married woman busily engaged as a housewife at the time she was interviewed. In certain cases he no doubt assumed, without giving the matter serious thought, that she had always been so engaged, but the number of such instances is problematical. In other words, the enumerator may have obtained neither the usual occupation nor the fact of unemployment in the case of certain women who had been out of work for some time and who said off-hand that they had no occupation.

It is not improbable that more unemployed women than men may thus have been entirely omitted from the number of gainful workers as listed by the census, and these omissions may include more married women than single women. If this be true, then the number of working women enumerated in 1930, large as it is, may even be a slight understatement of those usually engaged in gainful occupations, and the figure may reflect to a slight degree the extent of lessened industrial activity, though the bureau's instructions ${ }^{2}$ ruled otherwise.

A difficult situation is encountered when one attempts to compare 1930 census occupation statistics with those for 1920. The difficulty has its root in the fact that the 1920 census was taken on January i, less than 14 months after the signing of the armistice. By that time strenuous efforts were being made to bring the country back to its pre-war status, yet apparently little had been achieved except in the case of munitions plants and other factories that made war requisites. The use of 1920 statistics as a basis of comparison is made doubly difficult by the fact that progress toward return to a pre-war basis was by no means comparable in different types of industries, some of which had accomplished little or nothing while others had made considerable advance in this direction.

Most of the soldiers had returned to their homes by January, 1920, but not all of these returned soldiers had found jobs by the census date, and many were admittedly at work in jobs taken as stop-gaps

[^0]only. Furthermore, in the year 1920 the cost of living (index based on 1913) as determined by the Bureau of Labor Statistics had reached its peak.

All these facts combine to make 1920 not only an extremely unusual year on which to base a comparison of social trends, but possibly one of the most abnormal years the country has ever known. Nor is this year representative of any distinct period. If the census had been taken in 1918, the occupational data would have portrayed employment conditions when war activities were at their peak. In reality, however, 1920 was a year that typified neither ante-bellum nor postbellum conditions with any degree of fidelity; nor can this year be considered as illustrative of war activities at their zenith. For these reasons, comparisons between 1910 and 1930 are to be preferred in some respects to those made between 1920 and 1930; on the other hand, the 1930 occupation classification is much more comparable to that of 1920 than to that of 1910.

The census of 1930 was taken on April 1, and this, too, has been considered an abnormal time, in that the early stages of the depression were evident, though at the moment nearly everyone thought the country would soon be back on the highroad to prosperity. After the inflated days of 1928 and 1929 the relatively poor spring season of 1930 seemed extremely inauspicious. In retrospect, however, the census date, now more than two years past, appears in the light of a fairly prosperous era. At any rate, conditions in the spring of 1930 probably attained as close an approach to a theoretical normal as is ever the case when a census is taken. According to the New York Times weekly business index, industrial activity in this country was approximately 96.5 per cent of normal on April 1, 1930, the census date, though this fact was realized with difficulty at the time because of the supernormal period of prosperity that immediately preceded it.

## SUMMARY OF FINDINGS

The really significant deduction to be made from a study of 1930 occupation statistics is that an unexpectedly large increase has taken place among women usually at work, whether one considers merely the last decade or the 20-year period from 1910 to 1930. Moreover, if the comparison is confined to women in nonagricultural pursuits the increase in the number of gainfully occupied women is even greater.

The numerical gain among women usually at work is accentuated further by the great reduction in child labor that becomes evident when one compares 1920 and 1930 occupation statistics. A decline of 40.5 per cent took place among employed girls 10 to 15 years of age, whereas in the larger group 10 to 17 years of age the decline was only 24.6 per cent.

It is true that in 1930 only a very small proportion of all women who work for a monetary consideration were engaged in pursuits not followed by women for many years. In fact, the proportion of women in jobs considered unusual for them to pursue was apparently even smaller in 1930 than it was in 1920, when they had recently had the incentive to undertake a man's work in order to release him for war duty. When the earlier censuses are adjusted to the 1930 classification those occupations in which no women whatever were employed
declined in number from 39 in 1910 to 23 in 1920 and rose again to 30 in the decade following.

To be sure, decided changes have occurred in the distribution of women among the various gainful pursuits. According to the latest census, 30 occupations employed each at least 50,000 women; the same was true of 1920 , whereas in 1910 there were but 28 such pursuits. The census of 1910 listed 165 occupations in which 1,000 or more women were engaged; 10 years later the number had increased to 191, and in 1930 it was 208. It is evident that the occupational field for women has broadened since 1910 instead of concentrating on a few long-established occupations. Furthermore, this occupational field was slightly broader in 1920 than seems to have been the case in 1930, probably because of war conditions.

Servants ranked first as a woman-employing occupation both in 1920 and in 1930; in 1910, however, first place was held by farm laborers, the occupation that ranked sixth in 1930. Servants comprised the only pursuit to qualify with a million or more women at each of the last three censuses.

School-teachers advanced from fourth place in 1910 to second place in 1930, while stenographers and typists, the third occupation in 1930 from a numerical standpoint, ranked eighth in 1910.

Between 1920 and 1930 the greatest increases occurred among women in professional service, in domestic and personal service, in trade, and in the clerical occupations. Agricultural pursuits continued to decline, while women in the manufacturing and mechanical industries decreased somewhat from 1920 to 1930 after making a relatively slight advance from 1910 to 1920. Inasmuch as an increase is recorded for women factory operatives, though not a very large one, the recent decline in the total number of women in the manufucturing and mechanical industries must be traced to the diminution among those women engaged in the various sewing trades. The three major sewing occupations-dressmaking, millinery, and tailoring-decreased by 117,108 women between 1920 and 1930 , whereas women operatives in clothing factories showed a net gain of 81,108 . To a large extent these changes represent the development of factory production at the expense of home activities.

The decade 1920 to 1930 saw increases of 200,000 or more women in the occupations of servant, office clerk, school-tenchor, and stenographer and typist, while in each of eight other pursuits a gain of 50,000 or more women took place. Probably the greatest change in the past decade was the reversal in trend among servants, the occupation that scored an increase of 61.5 per cent from 1920 to 1930 compured with a 22.7 per cent decline during the preceding 10-year period.

Four prominent occupations have waned in importance since 1910, though their decline was retarded somewhat during the second half of the period. Two major pursuits-dressmakers and farm laborershad decreases of more than 50,000 women since 1920 , but milliners and home laundresses as well suffered considerable losses. If the women employed as farm laborers, dressmakers, milliners, and home laundresses had but held their own in number from 1910 to 1930 , the increase among working women would have been 50.7 per cent instead of 33.1 per cent. To pursue the idea further, if the women in these four occupations had shown a gain in number commensurato with that of the female population from 1910 to 1930, the total number of gain-
fully occupied women would have advanced 64 per cent during these two decades, practically double the increase that actually occurred.

Changes in the employment of women in the manufacturing and mechanical industries were far less striking between 1920 and 1930 than during the preceding decade. Women operatives in factories of all kinds increased by 115,610 between 1920 and 1930, but even this small gain of 8.6 per cent was partially offset by a loss of 40,197 women classed as factory laborers. Only in the production of clothing, food, automobiles, chemicals (principally rayon), and electrical products did women operatives in the country's industrial plants register a gain of at least 5,000 and a per cent increase commensurate with the growth of the female population. Inasmuch as the increase among female factory operatives reached the figure of 298,952 , or 28.6 per cent, between 1910 and 1920, it is obvious that the advance in the employment of women as factory operatives has slowed up considerably since the war emergency subsided.

With reference to factory operatives, by far the greatest numerical gains were made by the women in the clothing industries; this group increased by 81,000 , while the second in rank-electrical machinery and supplies-increased by less than 18,000 .

In several industries women experienced appreciable declines between 1920 and 1930 after making marked gains during the earlier decade. Conspicuous among these were employees in cigar and tobacco factories, in candy factories, and in textile industries as a whole, though not in all their subdivisions.

Many of these changes are indicative of changes within the industries themselves and show similar growth or decline for men. Furthermore, some part of these increases and decreases among industrial employees may hinge on the change in census date from January 1 in 1920 to April 1 in 1930. Ordinarily, January represents a dull point in industry, followed by a season of high activity in the spring.

- The greatest increase in any one occupation of importance, considered over a 20 -year period, is shown for office clerks, as distinguished from stenographers and bookkeepers; since 1910 the number of women in this pursuit has increased nearly 600,000 , or 476 per cent. In 1930 hairdressers and manicurists were five times as numerous as they were 20 years earlier. Trained nurses and stenographers and typists also made enormous numerical gains between 1910 and 1930, while eight other occupations, each with 50,000 or more women in 1930, more than doubled in number during these two decades.

Women operatives and laborers outnumbered men in 12 manufacturing industries, not only in 1930 but in 1920. Among these were the clothing industries as a whole and four of their subdivisions, silk mills, knitting mills, cigar and tobacco factories, and candy factories.

Although the increase among gainfully occupied women was greater between 1920 and 1930 than the gain in female population 10 years of age and over, the opposite is true of men. This decade saw an increase of 15.2 per cent among gainfully occupied men, compared to an 18.1 per cent advance in the male population 10 years of age or more.

In 17 important occupations (exclusive of subtotals) men are increasing in number more rapidly than are women, whereas in 26 pursuits women are registering greater relative gains. This statement
is based on changes occurring between 1910 and 1930 in the number of men per 100 women in all occupations of numerical importance to both sexes. For example, men are taking the territory formerly held by women as compositors, linotypers, and typesetters; to a less degree they are increasing in number more rapidly than are women as textilemill operatives. In addition, men musicians and music teachers are now enjoying the numerical supremacy that women maintained in these professions for decades.

On the other hand, women are registering relative gains as college presidents and professors, real-estate agents, automobile-factory operatives, telegraph operators, and barbers, hairdressers, and manicurists, though in each of these pursuits the number of men still is greatly in excess of the number of women.

In most of these occupations the number of women, already large, is increasing with the growth of the pursuit. In the case of real-estate agents and officials, positions in which women have heretofore been represented to only a small extent, it is evident that women are entering these commercial pursuits in considerable numbers and are gaining ground to a marked degree.

As stenographers and typists women are pressing the advantage they so long have held; as office clerks they have advanced to a remarkable extent; and as bookkeepers and cashiers they have taken away from men the superiority in numbers that the male sex had always held prior to 1920 .

American women have advanced by great strides in the clerical occupations, in the professions, and in the field of business-three great groups of pursuits that form the backbone of the so-called "white-collar", occupations. The vast number of women engaged in such occupations and the increases registered during the past two decades reflect among other things the extent of the educational advantages open to the women of this country. It is true that some of the pursuits discussed require initiative and ability rather than education, but the woman who succeeds is, after all, the one who possesses these characteristics enhanced by education and by training.

Students of social changes will watch carefully to see how American women in the higher-class occupations weather the depression. When the census of 1940 rolls around, will they still be holding their own in the professions, in clerical positions, and in the realm of business?

## CHANGES IN NUMBER AND PROPORTION OF WOMEN IN GENERAL DIVISIONS OF OCCUPATIONS

In the gencral divisions of occupations all gainfully employed women are classified, with a fair degree of accuracy, according to industry or place of work. These general divisions may be assembled into three main groups: The extractive industries, which include agriculture, forestry and fishing, and the extraction of minerals; industry proper, consisting of the manufacturing and mechanical industries, transportation and communication, and trade; and the service groups, in which belong professional service, domestic and personal service, and the residuary public-service group. In addition, clerical occupations are considered separately on the ground that these pursuits are carried on in each general division of occupations.

The $10,752,116$ women who told census enumerators on April 1, 1930, that usually they had gainful occupations, comprised 22 per cent of all American women 10 years of age and over. This proportion is somewhat higher than the corresponding percentage of women at work in 1920, but it is just as much lower than the proportion of women who were gainfully employed in 1910. Because of an admitted overstatement in the number of women following agricultural pursuits in 1910, the extent of the general tendency toward the increasing employment of women in this country is obscured if women in all occupations are compared.

In 1930 women engaged in nonagricultural pursuits comprised 20.2 per cent of all women 10 years of age and over, compared with 18.5 per cent in 1920 and 18.1 per cent in 1910. These figures demonstrate how much greater has been the increase between 1920 and 1930 in the number of women usually employed than was the case in the preceding 10 -year period.

Table 1 shows the proportion of all gainfully occupied women engaged in each general division of occupations in 1930, in 1920, and in 1910.

Table 1.-Number and per cent distribution of gainfully occupied women 10 years of age and over, by general division of occupations: 1930, 1920, and 1910

| Clenoral division of occupations | Giainfully occupled women |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1930 |  | 1020 |  | 1910 |  |
|  | Number | Per cent distrf. bution | Number | Per cent distri- bution | Number | $\begin{gathered} \text { Per } \\ \text { cent } \\ \text { distri- } \\ \text { bution } \end{gathered}$ |
| All occupations. | 10,752, 116 | 100.0 | 8, 549,511 | 100.0 | 8, 075, 772 | 100.0 |
| Agriculture, forestry, and fishing | 910,268 | 8.5 | 1,053, 819 | 12.7 | 1, 807, 181 | 22.4 |
| Nonagrlcultural pursuits. | 9,841,818 | 01.5 | 7,465,602 | 87.3 | 6, 268, 501 | 77.6 |
| Extraction of minerals. | 750 | (1) | 2,864 | (1) | 1,004 | ${ }^{(1)}$ |
| tries. | 1,886, 307 | 17.5 | 1, 030, 352 | 22.6 | 1,820,847 | 22.5 |
| Transportation and communication..... | ${ }^{231,201}$ | 2.6 | 224, 270 | 2.6 | 115, 347 | 1.4 |
|  | 062, 680 | 0.0 | 671,083 | 7.9 | 472, 703 | 5.9 |
| Public sorvice (not elsewhero classifled). | 1, 1726,234 | 14.2 | 1,017, $\begin{array}{r}1038 \\ \hline 180\end{array}$ | 11.9 | 4,836 734,752 | 9.1 |
| Domestle and personal servico. | 3, 180,251 | 29.6 | 2, 186, 682 | 25.6 | 2,530, 103 | 31.3 |
| Clorical occupatlons......................... | 1, 080, 830 | 18.5 | 1, 421, 225 | 16.6 | 588,609 | 7.3 |

1 Less than 0.05 per cent.
Because the number of women at work in the extraction of minerals is very small, this general division is not discussed in this report. The few women engaged in forestry and fishing, a general division shown separately by the Bureau of the Census, are combined with those in agriculture throughout this study.

Between 1920 and 1930 the number of women increased in all general divisions of occupations with the exception of agriculture, forestry and fishing, the extraction of minerals, and the manufacturing and mechanical industries. (See Table 2.) In each of the other six general divisions of occupations the percentage of increase in the number of women outstripped the growth of the female population

Chart 1. OCCUPATIONAL DISTRIBUTION OF WOMEN: 1930, 1920, AND 1910


10 years of age and over. In fact, during this decade women in four of the general divisions registered a rate of increase more than double that shown for the female population.

Table 2.-Number and per cent of increase or decrease among women engaged in each general division of occupations from 1920 to 1930, from 1910 to 1920, and from 1910 to 1930

| General division of occupations | -Increase or decrease, 1920 to 1930 |  | Inctease or decrease, 1910 to 1920 |  | Increase or decrease, 1910 to 1930 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent | Number | Per cent | Number | $\underset{\text { Per }}{\text { cert }}$ |
| Population 10 years of age and over All occupations. | $\begin{aligned} & +8,323,903 \\ & +2,202,605 \end{aligned}$ | +20.6 <br> +25.8 | $\begin{array}{r} +5,896,634 \\ +473,39 \end{array}$ | +17.1 +5.9 | $\begin{array}{r} +14,220,537 \\ +2,676,34 \end{array}$ | $\begin{array}{r}+41.2 \\ +33.1 \\ \hline\end{array}$ |
| Agriculture, forestry, and flshing | -173, 551 | -16.0 | -723, 362 | -40.0 | -896, 913 | -49.6 |
| Nonagricultural pursuits | +2,376, 156 | +31.8 | +1, 197, 101 | +19.1 | +3, 573,257 | +57.0 |
| Extraction of minerals- - .------.-...- | -2,105 | $-73.5$ | +1,700 | +161.8 | -335 | -30.6 |
| Manufacturing and mecbanical industries. | -44,045 | -2.3 | +109, 505 | +6.0 | +65,460 | +3.6 |
| Transportation and communication.... | +56,934 | +25.4 | +108, 923 | +94.4 | +165,857 | +143.8 |
| Trade.-.-.--......................... | +290,697 | +43.3 | +199,280 | + +2.2 | +489, 977 | $+103.7$ |
| Public service (not elsewhere classifled) - | +6, 897 | +66.1 | +5 \% 750 | +118.9 | +12, 747 | +203. 6 |
| Professional servico--1-................. | $+509,204$ <br> +983 | +50.1 | $+282,278$ +343721 | +38.4 -13.6 | +791, 482 | $\underline{+107.7}$ |
| Clerical occupations... | +564,905 | +39.7 | +833,316 | +141.6 | +1,398, 221 | $+237.5$ |

## MANUFACTURING AND MECHANICAL INDUSTRIES

## In general.

In 1930 the number of American women usually at work in the manufacturing and mechanical industries was $1,886,307$, or 17.5 per cent of all gainfully occupied women. According to Table 1, the proportion of working women engaged in this general division of occupations has decreased considerably since 1910. To be sure, an increase of 109,505 women was recorded in the manufacturing and mechanical industries between 1910 and 1920, but this gain was by no means commensurate with the growth of the female population 10 years of age and over. Later, from 1920 to 1930, an actual decline of 44,045 , or 2.3 per cent, was experienced among women in this large industrial group. These facts are strikingly brought out in Table 2, which shows the actual increase or decrease in the number of women at work in each general division of occupations.

A correlation of age and occupation shows that all of this decrease, and more, was among girls under 16 , whose number declined by 47,921 , while the number of women of 16 years and over increased by 3,876 .

Manufacturing and mechanical industries include not only all factory operatives and laborers, with their proprietors, officinls, managers, and forewomen, but persons engaged in building and the other hand trades, together with their apprentices. Clerks in factories are listed with the clerical pursuits.

It must not be assumed that all occupational groups classed under manufacturing and mechanical industries registered declines during the decade 1920 to 1930. In fact, the number of women factory operatives increased by 115,610 , or 8.6 per cent, during this period, while much smaller numerical gains were recorded for manufacturers, factory managers and officials, and women bakers.

Although women employed as factory laborers decreased by 40,197, or 26.1 per cent, the great bulk of the decline in the manufacturing and mechanical industries is confined to women in the various sewing trades, almost wholly nonfactory operations. The decrease among women in these sewing trades corresponds closely to the gain among women factory operatives, with the result that the decline noted for factory laborers remains practically a net loss to the manufacturing and mechanical industries. Table 3 shows in some detail the changes in the different main groups included in this general division of occupations.

Table 3.-Women engaged in manufacturing and mechanical industries, with number and per cent of increase or decrease, according to occupation: 1980 and 1920

| Occupation | Women engnged in manutneturing and mechanical Industries |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1030 | 1820 | Increnso or docrense, 1920 to 1030 |  |
|  |  |  | Number | $\begin{gathered} \text { l'er } \\ \text { cent } \end{gathered}$ |
| All occupations. | 1,888, 307 | 1, 030, 332 | - 14.005 | $-23$ |
| Factory operatives 1. | 1, 154, 370 | 1, 343, 16B | +118, 610 | +8. 6 |
| Factory liborery ${ }^{\text {1 }}$...... | 113.081 | 154, 181 | -40, 197 | -26. 1 |
|  | 24,487 16,133 | 30,171 13,260 | $-1,704$ $+2,857$ | -5.6 +21.5 |
| Sewing trades. | 210,837 | 330, 015 | -117, 108 | -34.8 |
| Dressmakers nnd seamstregges (not in inctory) | 157,023 | 235, 810 | -77, 501 | -32.0 |
| Mulliners and mbllinery dealers. | 40, 102 | 60, 5198 | $-20,490$ | $-12.4$ |
| Talloresses............ | 21, 807 | 31, 828 | -10,021 | $-31.5$ |
| Compositors, linotypers, and typesettors. | 10,200 | 11,303 | -1,037 | -0.2 |
| Bakers.............--..........-............. | 8,916 | 4,503 | +4,323 | +04. 1 |
| Apprentices (manulacturing and mechanical) | 3,807 | D. 433 | -8, 330 | -58. 7 |
| Dressmakers' and milliners' apprentlces. Other apprentices. | 2,161 1,730 | 4,300 3, 124 | $-2,148$ $-3,388$ | -49.8 -66.1 |
| Bullding operntives and laborers and general and not apocifled laborers. |  | 18, 255 |  |  |
| All other occupations. | 14, 470 | 12, 020 | +2,44, | -24.3 +20.3 |

1 For dennition seo p. 12.
In 1930 more than a quarter of a million women in manufacturing and mechanical pursuits were not classed as factory operatives, managers and forewomen, or laborers. They constituted 14.3 per cent of all women in the manufacturing and mechanical industries. Two hundred and twenty thousand of these were in trades in which women have been numerically prominent for generations, grouped for convenience in discussion as the sewing trades. Striking differences may be observed, however, among these occupations.

Only those sewers who are not working in factories are classed as dressmakers and seamstresses, a group that necessarily includes some women not especially skilled. It is recognized that a very fow of the milliners and millinery dealers may not even know how to sew, especially since the millinery business has in recent years become more a
commercial pursuit than a hand trade. The tailoresses include skilled women who work in clothing factories as well as those who carry on their trade in old-fashioned tailor shops. So far as is practicable, however, these three groups are confined to women who earn their living according to old-school methods and not by performing the repetitious processes common to clothing factories. These sewing trades reached their heyday in 1910 , when 611,020 women were engaged in them; in 1930 those at work in the same pursuits comprised only 36 per cent of this number.

The decline in these sewing occupations coincides with certain changes in the industrial order in this country. Their lessened importance gives point to the development of specialized manufacturing processes at the expense of the skilled hand trades. Only among tailoresses may factory sewers be found, and in this group the decline has been the least, not only in number but in per cent. If accurate figures covering three censuses were available for tailors outside of factories, probably a much greater decrease would be shown.

It becomes increasingly evident that the average American woman prefers ready-made clothing to the product of the home dressmaker; in fact, the manufacture of ready-to-wear garments has now reached a stage of efficiency where their purchase represents a saving of time, energy, and money. The willingness of men to purchase ready-made clothing seems equally in evidence. It is no mere coincidence that the decrease of 117,108 among more or less skilled women in the sewing trades is met by an increase of 81,108 women operatives in clothing factories.

Certain hand trades that women have followed to some extent in the past recorded numerical gains during the decade under consideration. For example, the 8,916 women bakers almost doubled in number from 1920 to 1930, though a slight decline was recorded among women in this occupation during the preceding 10 -year period. Enamelers, lacquerers, and japanners have evidenced a similar tendency toward a recent advance after a decline in the earlier decade. The number of women engravers, on the other hand, increased in both decades, though to no great extent.

As compositors, linotypers, and typesetters, women are losing ground. Although their numerical decrease has not been great, the number of men in this trade has gained so rapidly that at the date of the last census 17 men were at work in this skilled pursuit for each woman so employed, whereas in 1910 the ratio was 8 men per woman.

Declines have been observed among women jewelers and lapidaries in factories since 1910, but the employment of men has fallen off at approximately the same rate, so that these figures seem merely to reflect the lack of advance in the manufacturing jewelry industry. As jewelers and watchmakers not in factory the employment of women changes but little.

The hand trades enumerated combine lighter work and less rigid apprenticeship than do most other trades; no doubt these features explain their attraction for women. Nevertheless, if the sewing occupations be excepted, relatively few women are at work in all these hand trades in the aggregate.

## Unusual trades for women.

The building trades and certain of the hand trades constitute one of the last strongholds of which men have a monopoly. Although a few women may return their occupations as electricians, carpenters, or house painters, their numbers are extremely small, and each such return is challenged by the Bureau of the Census in an effort to eliminate all obvious errors, such as entries on the wrong line.

The widow who continues to run her husband's plumbing or carpenter shop after his death has a tendency to return her occupation as a plumber or carpenter, though she may never have had the tools of the trade in her hands. Likewise, the girl who becomes expert in the operation of a certain machine, may, after long experience in a factory, decide to return her occupation as a machinist. Largely because of such returns, the error in the number of women reported in the building and hand trades is believed to be high, though every practicable means has been used to insure the accuracy of figures showing women in unusual occupations.

On April 1, 1930, no women were employed in the following building and hand trades: Boilermakers; coopers; mechanics in railroads and car shops; cement finishers; pressmen and plate printers (printing); rollers and roll hands (metal); roofers and slaters, and structural iron workers (building). Fewer than 10 women were reported in each of the following occupations: Blacksmiths, forgemen, and hammermen; brick and stone masons and tile layers; cabinetmakers; machinists; millwrights; mechanics in air transportation; brass molders, founders, and casters; iron molders, founders, and casters; plasterers; plumbers and gas and steam fitters; stonecutters; and tinsmiths and coppersmiths.

In 1930 women to the number of 2,336 were employed as metal filers, grinders, buffers, and polishers; this group has declined slightly in number since 1910. Of these 2,336 women, 1,581 earned their living as metal buffers and polishers.

Forty-one women were at work as oilers of machinery in factories. No women were employed in 1930 as metal rollers, furnacemen, smeltermen, pourers, or puddlers, but one gave her occupation as metal heater.

## Women in factories.

Women factory operatives numbered $1,458,776$ in 1930, an increase of 115,610 , or 8.6 per cent, in a decade. Between 1910 and 1920 , however, the increase among female operatives reached the figure of 298,952 , or 28.6 per cent. In other words, the advance in the employment of women as factory operatives has slowed up considerably since the war emergency subsided.

In the parlance of the Bureau of the Census, factory operatives are those persons engaged in the actual manufacture of the industry's product, while the employees who fetch and carry materials to and from the operatives and who do other heavy, menial work are designated as laborers. Comparatively few women actually do laboring work in factories, but a number classified as laborers are in reality sweepers and scrubbers who come in at night to clean during the absence of the operatives. In fact, employers willing to hire women for genuine laboring work in factories are not numerous, probably because they find such employment unprofitable in the end.

Though nearly all women who work in factories are operatives without question, census enumerators returned 113,984 women as factory laborers in 1930, compared with 154,181 in 1920. It is impossible to determine what proportion of this 26 per cent decline actually took place in the employment of women as factory laborers and what proportion may be attributed to the superior enumeration and classification of census data that unquestionably existed in 1930. If operatives and laborers be combined, an increase of but 75,413 , or 5 per cent, took place among female factory employees between 1920 and 1930.

In 1930, textile mills, with 452,007 women employed as operatives and laborers, ranked first among the woman-employing industries of this country, while clothing industries, with 353,486 women workers, were second. Food and allied industries were third in numerical importance, with 106,670 women employees, and the 97,348 women workers in leather industries caused that group of manufacturing plants to rank fourth. A number of different kinds of industrial plants form the component parts of each of these large groups of industries, however, making the inclusive figures less significant. For example, 89 per cent of the women in the leather industries are employed in shoe factories, one of five kinds of plants in this industrial category.

More than half the women operatives and laborers in factories in the United States are at work in textile mills or clothing factories. But the traditions of these two great groups of industries are widely at variance. As long as women have worked in factories, for that length of time have vast numbers of them toiled in textile mills; in fact, even this group of 452,007 textile-mill employees represents a slight decline from 1920 to 1930 and an increase of but 12 per cent since 1910. On the other hand, the employment of so many women in the clothing industries is a development of comparatively recent origin; in this group women have increased 30 per cent during the past 10 years, though between 1910 and 1920 the gain among women at work in the clothing industries was but 12 per cent.

Women have always engaged in the making of clothing, but in the past they sewed at home. It may definitely be said that the increase among women in the factory production of clothing has taken place at the expense of women in the various sewing trades. Sixty-one per cent of all the women in the clothing industries are at work in factories making chiefly women's nontailored garments, and it is in this group that practically all the recent increase has occurred.

Table 4.-Number of women employed in the clothing industries and in the textile industries and in their component groups of factories: 1930, 1920, and 1910

| Occupation and Industry | Number of women cmployed in- |  |  | Occupation and industry | Number of women cmployed in- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1930 | 1930 | 1010 |  | 1930 | 1020 | 1010 |
| Clothing industries. <br> Operatives <br> Laborers $\qquad$ | 353. 486 | 272,005 | 242,086 | Carpet mills | 12,715 | 10, 859 | 20,024 |
|  | $\begin{array}{r} 346,751 \\ 6,735 \end{array}$ | $\begin{array}{r} 265,643 \\ 6,362 \end{array}$ | $\begin{array}{r} 237,270 \\ 4,810 \end{array}$ | Operatives. Laborers.. | $12 \frac{123}{802}$ | $10, \underset{575}{384}$ | $\begin{array}{r} 19,602 \\ 332 \end{array}$ |
| Corset factories...........- | 10,256 | 12, 104 | 12,246 | Cotton mill | 154, 763 | 165, 854 | 146,433 |
| Operatives <br> Laborers. | $\begin{array}{r} 10,069 \\ 217 \end{array}$ | $\begin{array}{r} 11,527 \\ 577 \end{array}$ | $\begin{array}{r} 11,688 \\ 548 \end{array}$ | Operative <br> Laborers. | $\begin{array}{r} 145,683 \\ 9,080 \end{array}$ | $\begin{array}{r} 149,185 \\ 16,669 \end{array}$ | $\begin{array}{r} 140,666 \\ 5,767 \end{array}$ |
| Glove factories....--......- | 14, 119 | 17,631 | 14,410 | Knitting milis | 03,331 | 86.022 | $\underline{68,878}$ |
| Operative Laborers. | $\begin{array}{r} 13,510 \\ 609 \end{array}$ | $\begin{array}{r} 16,773 \\ 853 \end{array}$ | $\begin{array}{r} 13,086 \\ 424 \end{array}$ | Opmentives <br> Laborers. | $\begin{array}{r} 89,603 \\ 3,528 \end{array}$ | $\begin{array}{r} 80,9822 \\ 3,340 \end{array}$ | $\begin{array}{r} 65,338 \\ 3,540 \end{array}$ |
| Hat lactories (felt) <br> Operatives <br> Laborers. | 8,640 | 6,623 | 10. 536 | Laceand embroidery mills- | 7,321 | 13,204 | 11, 928 |
|  | 8,473 176 | 6, 462 | $\begin{array}{r} 10,318 \\ 218 \end{array}$ | Operativ Lahorers | 7.190 125 | 12,1077 307 | 11,601 237 |
| Shirt, collar, and cuff factories. | 47. 585 | 43, 407 | 48,221 | Silk mills. | 75, 818 | 75,408 | 51,472 |
| Operatives Laborers. | 45, 763 | 42, 016 | 46, 858 | Operat Labor | $\begin{array}{r} 73,600 \\ 2,158 \end{array}$ | $\begin{array}{r} 72,768 \\ 2,730 \end{array}$ | $\begin{array}{r} 80,360 \\ 1,112 \end{array}$ |
|  | 1,822 | 1,391 | 1,303 |  |  |  |  |
| Sult, coat, and overall factories. | 57, 921 | 60, 250 | 63,867 | and printing mills....... | 5, 080 | 6.302 | 8,799 |
| Operatives <br> Laborers. | 56.583 | 64, 515 | 02, 508 | Operative Laborers. | 8,6066 314 | 5، 888 | 3, 203 596 |
|  | 1,338 | 1,765 | 1,200 |  |  |  |  |
| Other clothing factories... | 214,020 | 125, 057 | 92,800 | Woolen and worsted mills. | 50, 858 | 65, 704 | 54, 101 |
| Operatives. Laborers. | 212,353 | 124,350 | 91,812 | Labo | 49,000 1,798 | 61.715 | 52, 036 |
|  | 2,573 | 1,607 | 01, 934 |  | 1,708 | 3, 089 | 2,045 |
| Textile industrics.. | 152,007 | 471, 332 | 401,086 | Other textile mills | 51, 191 | 47,720 | 43,351 |
| Operatives Laborers. | 432,250 | 438.3A3 |  | Operatives | 40,029 | 45, 050 | 40, 041 |
|  | 10,757 | - 32.900 | 16,039 | Latorers. | 2, 162 | 2,679 | 2,410 |

${ }^{1}$ Included in thls group are hemn, Jute, and linen mills, rope and cordage factories, sail, awning, and tent factorfes, and other and not speciled coxtile mills.

Because of their importance as woman-employing industrics, textile mills and clothing industries are shown in Table 4 with the number of female employees in each subdivision.

It is interesting to observe that, despite changing styles in fabrics and all the recent vicissitudes of the cotton industry, no other single type of manufacturing plant employed so many women as did the cotton mills, with 154,763 female employees in 1930. And even this number represents a decline of 11,091 since 1920.

Knitting mills, with 93,331 women operatives and laborers, ranked numerically as the second textile industry of importance, followed by silk mills with 75,848 women, and woolen and worsted mills with 50,858.

Chart II illustrates the change since 1910 in the employment of women in those branches of industry having 50,000 or more women operatives and laborers in 1930 . Because of their vast numbers, employees in textile industries as a whole could not be included in this chart.


Table 5.-Men and women employees 1 in those manufacturing industries in which women predominated in 1930 and in 1920, with corresponding figures for 1910

| Industry | 1930 |  | 1020 |  | 1910 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men | Women | Men | Women | Men | Women |
| Blank-book, envelope, tag. paper-bag, etc., factories. | 0, 560 | 11.403 | 7.763 | 9. 388 | 4, 519 |  |
| Candy factories.................................. | 21,484 | 28, 288 | 25,311 | 33, 554 | 18.453 | 18, 188 |
| Cigar and tobacco factories. | 49,861 | 74, 435 | 82, 557 | 97. 822 | 91, 392 | 76, 801 |
| Clothing Industries ${ }^{\text {P }}$ | 350, 716 | 353, 486 | 150, 132 | 272,005 | 154, 290 | 242,086 |
| Corset factories. | 985 | 10, 20 | 1.309 | 12.104 | 1. 661 | 12,246 |
| Glove factories. | 5, 505 | 14, 119 | 7, 483 | 17, 631 | 8. 799 | 14.410 |
| Shirt, collar, and cuff factorles | 12,022 | 47, 515 | 11.678 | 43, 407 | 14,132 | 48.221 |
| Other clothing factories '. | 60, 011 | 214,936 | 32, 545 | 125, 0.57 | 31,360 | 92,606 |
| Knitting mills - .i. | 50,087 | 93, 331 | 33, 525 | 80,032 | 20,792 | 88.878 |
| Lace and embroidery mills. | 4, 605 | 7,321 | 6, 363 | 13, 264 | 4,804 | 11,928 |
| Paper-bor factories. | 7.753 | 9.118 | 0. 478 | 14.358 | 5, 653 | 13,667 |
| Silk mills... | 61,000 | 75, 818 | 50,303 | 75, 498 | 31, 705 | 51, 472 |

[^1]Cigar and tobacco factories represent the only instance of an industry where women gained in 1920 and held in 1930 the numerical supremacy that they lacked in 1910. According to the last census, 74,435 women were employed in this industry, which has experienced an enormous decline since 1920 in the number both of men and of women operatives and laborers.

In the textile industries as a whole women operatives have been more numerous than men at each of the last three censuses, but these industries employ so many men as laborers that only in 1910 have women employees as a whole predominated. Women were in the majority in straw and straw-hat factories, both in 1930 and in 1910, but not in 1920; at the date of the last census this industry had very few employees of either sex, straw hats not being worn to any great extent.

Apparently, women are holding their own better than men are in suit, coat, and overall factories, that branch of the clothing industry in which most tailoring processes are carried on. Both sexes have decreased greatly in numbers, but women were more numerous than men in 1930, though men were enormously in the lead in 1920 and 1910.

## Industries in which women operatives have increased at least $\mathbf{5 , 0 0 0}$ since 1920.

An interesting study is afforded by those manufacturing industries in which the decade 1920 to 1930 has seen an increase of 5,000 or more women operatives, though the gain in per cent is not large in every instance. These changes appear in Table 6.

Table 6.-Manufacturing industries in each of which the number of women operatives increased 5,000 or more from 1920 to 1930, with number and per cent of increase, and with corresponding increase from 1910 to 1920

| Occupation and Industry | Increase, 1920 to 1930 |  | Increase, 1910 to 1920 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent | Number | Per cent |
| Operatives: |  |  |  |  |
| Clothing industries ${ }^{\text {a }}$--................... | 81, 108 | 30.5 | 28,373 | 12.0 |
| Electrical machinery and supply tactories | 17,926 | 65.4 | 16,348 | 148.1 |
| Food and allied industries. | 15,489 | 21.2 | 34,658 | 90.2 |
| Fruit and vegetable cannlng, etc. | 7,246 | 114.9 | 3, 143 | 99.4 |
| Chemical and nllled industries. | 9, 734 | 50.9 | 5, 453 | 39.9 |
| Rayon tactories ${ }^{1}$ | 10,853 | ${ }^{(2)}$ | ${ }^{(2)}$ | (2) |
| Leather industries. | 8,956 | 10.8 | 17, 287 | 26.4 |
| Shoe factories. | 8, 139 | 11.1 | 14, 146 | 23.9 |
| Knitting mills. Automobile factories | 9, 121 | 11.3 48.8 | 15,344 11,940 | $\begin{array}{r} 23.5 \\ 1,408.0 \end{array}$ |

"The number of women operatives In "other clothing factories" incrensed 88,003 from 1920 to 1930; these factories produce women's dresses, blouses, underwear, and other nontailored garments. The increase among women operatives in clothing industries of other kinds was negligible or else there was an actual decrease.
1 Inasmuch as rayon factorfes were not included among the Industries listed by the Bureau of the Census In 1920 and in 1910, the number of women operatives given as the increase between 1030 and 1930 equals the entlre number so amployed in 1830.

Except in clothing industries, great numerical increases did not occur between 1920 and 1930 to the extent that they did during the preceding decade. On the whole, however, healthy gains were recorded in 10 classes, not only from 1920 to 1930 but during the earlier 10 -year period. Among these areclothing industries as a whole, electrical machinery and supply factories, food and allied industries, chemical and allied industries, knitting mills, leather industries, automobile factories, and certain subdivisions of these major groups. But only in the production of electrical supplies, chemicals, automobiles, clothing, and food have women in the country's industrial plants registered gains in the last decade at least commensurate with the 20.6 per cent growth in the female population 10 years of age and over.

The numerical increase among women operatives in clothing industries overshadows all other gains between 1920 and 1930. Considering specific types of manufacturing plants rather than groups of related industries, it is apparent from Table 6 that during the last decade women operatives increased most in those clothing factories other than glove, corset, felt-hat, shirt, suit, coat, and overall factories; in other words, the greatest increase was found among women in the plants that manufacture women's dresses, blouses, underwear, and similar nontailored garments. Likewise, nearly half the increase recorded among women operatives in the food industries occurred among those at work in fruit and vegetable canneries, just as the major gain among factory hands in the leather industries is attributable to shoe-factory operatives. (Table 6.)

Rayon factories comprise a new industry for which no data were available in 1920. At that time the Bureau of the Census classed such artificial silk-mill operatives as were returned with textile mills not specified. Because of the many chemical processes involved in
the manufacture of rayon these factories are classed with chemical and allied industries. On the other hand, plants that produce rayon fabrics after the chemical processes have been completed are classed with knitting mills or with "other textile" mills, according to whether the rayon yarn is knitted or woven. Were it not for the inclusion of these rayon-factory operatives, the number of women employed as operatives in the chenical and allied industries would show a decline from 1920 to 1930. In the chemical phases of this new rayon industry the operatives of each sex number approximately 10,000 .

Although women employed as knitting-mill operatives and as shoefactory operatives show large numerical increases, the per cent of advance has been too slight since 1920 to keep pace with the growth of the female population. During the past two decades the greatest percentage increases in industries employing at least 10,000 women in 1930 have been scored by women operatives in automobile factories, in fruit and vegetable canneries, in slaughtering and meat-packing plants, and in electrical machinery and supply factories.

A further idea of the changes in the various manufacturing industries is afforded by Table 7, which shows those industrial occupations in which the number of women has decreased by 5,000 or more since 1920, although in each instance an increase, sometimes a large one, was recorded between 1910 and 1920. Probably no table shows more clearly the reversal in industrial trend with regard to certain industries during the two decades in question.

Evidently women operatives in cigar and tobaceo factories have diminished most in number, though the drop of 16,012 , or 19 per cent, represents a smaller percentage decrease than appears for certain other industries. As is true of candy and paper-box manufacturing, for example, this decline has been charged to the increasing installation of labor-saving machinery that has displaced both men and women operatives during the past decade.

Table 7.-Manufacturing industries in each of which the number of women operatives or laborers decreased 5,000 or more from 1920 to 1930, with number and per cent of decrease, and with corresponding increase from 1910 to 1920

| Occupation and Industry | $\begin{gathered} \text { Decrease, } 1920 \text { to } \\ 1030 \end{gathered}$ |  | $\begin{aligned} & \text { Increase, } 1010 \text { to } \\ & 1920 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent | Number | Por cont |
| Operatives-cigar and tobncco fnctorles... | 16, 012 | 10.1 | 12, 115 | 16.0 |
| Laborers-textlia industrles | 13,212 | 40.1 | 10, 030 | 105.8 |
| Laborera-cotton mills | 7, 880 | 45.6 | 10, 002 | IRO. 0 |
| Operatlves-textilo industries | 0,113 | 1.4 | 52, 416 | 13. 0 |
| Operatives-woolon and worstod mills... Operatives-lace and ombroldery mills.. | 12,058 8,801 | 20.5 44.6 | 0,080 1,300 | 18.6 11.2 |
| Operativeg-suit, cont, and overall factorles. Laborers-celgar and tobacco factories.......... | 7,032 7,375 | 12.3 83.2 | 1,017 8,1000 | 174. 7 |
| Employees l-paper, printing, and allied industries. | 8, 167 | 7.0 | 10,410 | 18.4 |
| Employees l-paper-box factories. | 6, 240 | 36.8 | 001 | 6. 1 |
| Operatives-straw factories... | 8,117 | 80.6 | 2,381 | 80.0 |
| Employees b-candy factories. | 8, 010 | 14.0 | 18,080 | 81.7 |

In certain cases the increases and decreases in Table 7 are merely indicative of changes within the industries themselves and are taking place among all workers regardless of sex. For example, the percentage of decline in the number of men operatives was approximately the same as for women operatives in candy factories, woolen and worsted mills, and straw factories.

As in every other decade, changing styles have played an important part in the industrial development between 1920 and 1930, if the number of factory hands be any criterion. Operatives in felt-hat factories, for example, have gained in number at the expense of those in straw-hat factories, where the operatives have been nearly wiped out, with a decline of 87 per cent. Knitting mills were fairly prosperous, probably because of the continued popularity of the sweater and of so-called knitted underwear. On the other hand, women employees registered a decline of more than 10,000 both in cotton and in woolen mills, while silk mills little more than held their own.

The number of gainful workers reported by the Bureau of the Census unquestionably reflects in some slight degree the extent of lessened industrial activity that existed in April, 1930, even though the bureau's instructions ${ }^{3}$ to its enumerators ruled otherwise.

## TRANSPORTATION AND COMMUNICATION

In 1930 the number of women engaged in the general division of occupations known as "transportation and communication" was 281,204 , according to the census. Women in this industrial group showed an increase of 25.4 per cent from 1920 to 1930, compared with a gain of 94.4 per cent in the preceding decade. (See Table 2.)

Under transportation and communication are listed pursuits connected with water transportation; road and street transportation (including the building, repair, and cleaning of streets); railroad transportation, as well as its construction, maintenance, and repair; transportation by air, express, and pipe lines; and communication by post, radio, telegraph, and telephone.

Although women pioneered in the field of transportation quite extensively during the war days when men had to leave their posts, there is little or no evidence to indicate that this tendency continued after the omergency had passed. Few pursuits in this general division of occupations show an increase in the number of women between 1920 and 1930. Among those that do so are chauffeurs; garage laborers; garage owners, managers, and officials; owners and managers, truck, transfer, and cab companies; postmasters; inspectors, telegraph and telephone; and proprietors, managers, and officials, telegraph and telephone.

On the other hand, these groups are all very small, and the slight numerical increases recorded are offset by declines among conductors, street railway; switchmen and flagmen, steam railroad; laborers, steam and street railroad; ticket and station agents; mail carriers; telegraph messengers; telegraph operators; longshoremen and stevedores; and draymen, teamsters, and carriage drivers.

Some of these declines are due to changing times, though the gradual elimination of horse-drawn vehicles, for example, has resulted in much vaster change among men's occupations than among

[^2]those of women. Other decreases, such as that among women railroad laborers, probably are attributable to improved census enumeration. But when it comes to street-car conductors and to switchmen and flagmen on steam railroads, it is evident that, although women threw themselves into the gap during the war days, they gave up these activities when the excitement had subsided. For example, 253 women were employed as street-car conductors in 1920, though not a single one held such a job in 1910, and when 1930 rolled around only 17 women were at work in this occupation.

Census returns for 1930 indicate that no women were working as bus conductors; locomotive engineers or firemen; brakemen, steam railroad; steam-railroad conductors or motormen; foremen and overseers, air transportation; hostlers or stable hands; baggagemen; boiler washers and engine hostlers; yardmen, steam railroad; switchmen or flagmen, street railroad. In each of the last five pursuits mentioned a few women were at work in 1920.

Sixty-six women were earning their living as aviators in 1930, as against eight in 1920. Apparently, most American girls able to fly regard this activity as an avocation, inasmuch as 197 women had been licensed as pilots by the Department of Commerce at the time of the taking of the census.

Notwithstanding the fact that there were small numbers of women in many occupations under transportation and communication, the numerical increase among telephone operators alone is equivalent to the entire increment in this general division of occupations. In fact, 84 per cent of all women in transportation and communication were employed in this one job of telephone operator in 1930, as were 80 per cent in 1920.

## TRADE

In 1930 nearly a million women were engaged in trade, whereas 20 years earlier fewer than half that number were so classed. (Tablo 1.) In this general division of occupations women are maintaining a steady rate of progress, inasmuch as their number increased by 43.3 per cent from 1920 to 1930 , compared with an advance of 42.2 per cent during the preceding decade. (Table 2.)

Wholesale and retail dealers, with most of their employees, are listed under trade. This group of pursuits includes bankers, brokers, and money lenders; real estate and insurance agents and officials; undertakers; and those engaged in coal and lumber yards, grain elevators, stockyards, employment agencies, advertising agencies, and warehouses. In 1920 and again in 1930 each of the pursuits listed under trade was followed by some women.

Of the 962,680 women engaged in trade in 1930, the majority (705,793, or 73 per cent) were employed in two occupations that women have long pursued: Saleswomen and clerks in stores. Moreover, 62 per cent of the increase among women in commercial pursuits from 1920 to 1930 is attributable to these two occupations.

Though most of these so-called clerks in stores probably are engaged in selling goods over the counter, just as are the saleswomen, a small proportion may actually be doing clerical work in the offices of department stores and other large mercantile establishments. For this reason the Bureau of the Census tabulates saleswomen and clerks in stores separately, but in the present report, mainly intended
for popular consumption, these two closely allied occupations are discussed as a single group.

Women who earn their living as retail dealers numbered 110,166 in 1930 a a 39.5 per cent increase in the last decade. The 1,688 wholesale dealers, importers, and exporters are more than twice the number reported in 1920. Women undertakers scored a gain of 72.1 per cent during the decade in question, the number so occupied in the last census being 1,940 .

The 31,787 women real-estate agents and officials are more than three times the number indicated by the census of 1920 , while since 1910 women in this occupation have increased tenfold. Western women have long been interested in handling the sale and rental of property, but in the South and East the attraction of this pursuit for large numbers of women is of comparatively recent date. In fact, in 1920 Los Angeles, San Francisco, and New York were the only cities with as many as 600 women real-estate agents.

Likewise, the 14,705 women insurance agents and officials in 1930 had nearly trebled their number in the past decade, and bankers and brokers had maintained a substantial increase. The country's stockbrokers include 1,793 feminine representatives, nearly five times the number so recorded in 1920, while 632 women gave their occupation in 1930 as pawn or loan broker.

The occupation of advertising agent, shown separately for the first time in the census of 1930, is followed by 5,656 women, while 768 others stated that they were proprietors or officials of advertising agencies. Large increases are listed for certain other commercial pursuits of a proprietary and managerial nature that are included under "business women" in Table IV, page 82.

The number of women decorators, drapers, and window aressers has advanced from 1,155 in 1920 to 6,238 in 1930. Some part of this great increase is due to the fact that many interior decorators in the employ of mercantile establishments of different kinds are classed here. No occupation is more difficult to classify than that of interior decorator.

## PUBLIC SERVICE (NOT ELSEWHERE CLASSIFIED)

Only 17,583 women were listed in the general division of occupations known as public service (not elsewhere classified), according to the census of 1930. Even so, the number of women in this category increased 66 per cent between 1920 and 1930, compared with a gain of 119 per cent during the decade just preceding. In fact, among the general divisions of occupations this service group shows the greatest increase in percentage over a 20 -year period, though very small numbers are involved.

This general division of occupations is in reality a residuary publicservice group, since persons who work for Federal, State, county, or municipal governments are classed according to the actual work they are doing, whenever such a course is possible. For example, all government clerks, bookkeepers, stenographers, and accountants are included with clerical occupations; navy-yard machinists are grouped with other machinists in the manufacturing and mechanical industries; press feeders in the Bureau of Engraving and Printing and in the Government Printing Office are classed with printing-office operatives, rather than with government employees; and physicians and
lawyers in the government service are considered with their respective professions. In other words, the Bureau of the Census groups under "public service" only those government employees who are engaged in peculiarly public-service pursuits, such as mayors of cities, sheriffs, policemen, firemen, and allied occupations, which can not be classified satisfactorily under any other general division of occupations.

Between 1920 and 1930 women occupied as probation and truant officers and as city officials and inspectors practically doubled in number; large increases were noted also among county and State officials and inspectors and among women detectives. Policewomen numbered 849, three and one-half times those so reported in 1920. All these groups are small, however, and since the total number of women engaged in public-service pursuits as defined by the Bureau of the Census was but 17,583 in 1930, it is obvious that only a small number can be at work in each.

Neither in 1930 nor in 1920 were any women at work as firemen for city fire departments; nor were any enlisted as soldiers, sailors, or marines.

## PROFESSIONAL SERVICE

One and one-half million American women are classed in professional service, according to Table 1. This group, which has more than doubled in number since 1910, registered the substantial increase of half a million women in a single decade. (See Table 2.) In fact, the $1,526,234$ women in professional service comprised 14.2 per cent of all gainfully occupied women in 1930, as against 11.9 per cent in 1920 and 9.1 per cent in 1910. This point is illustrated in Chart I.

Women in professional service are in reality subdivided into three main classes: Professional women proper; those engaged in semiprofessional pursuits; and women employed as attendants and helpers to professional persons.

## Professional women.

American women who have the right to call themselves professional persons numbered $1,415,425$ in 1930, or 93 per cent of all women classed in professional service. These professional women are approximately as numerous as are professional men, listed at $1,469,526$. Naturally, this group of professional women includes all those who by reason of a superior education are equipped to engage in one of the recognized professions, such as teaching, nursing, law, or medicine; in addition, this group includes those women possessing gifts that enable them to earn their living in some artistic, musical, literary, or histrionic capacity.

Chart III shows the changes that have occurred since 1910 in those professions that claimed the attention of 5,000 or more women in 1930. Because of their enormous size, the teaching and nursing professions have been omitted from this chart.

School-teaching, the dominant profession of American women, ranks as the second occupation for the female sex, being exceeded numerically only by servants. In 1920 school-teachers ranked third, following servants and farm laborers. This group of 853,967 women, which recorded an increase of 218,760 between 1920 and 1930, represents the rank and file of high-school and grade teachers in public
and private schools, but obviously it does not include certain specialized teachers, such as supervisors of music, art, and physical training, nor does it include college professors and instructors.

Trained nurses, with 288,737 women in their profession, doubled in number between 1920 and 1930. The recognition accorded nurses during the war, together with the prominence recently given the public-health movement in this country and the development of

nursing schools, is largely responsible for the fact that the United States now has almost four times as many professionally trained nurses as it had in 1910.

Just prior to the consus date in 1930, appeals were made to trained nurses, through their professional magazines and at meetings of their national associations, requesting them to return their occupations in such a way as to make their professional status clear. Inasmuch as infinitely less difficulty was experienced in classifying nursing
occupations in 1930 than was the case in 1920, it is believed that these appeals met with a whole-hearted response.

Since the Bureau of the Census classes in this group only persons who make it clear that they are registered, graduate, trained, student, or professional nurses, those whose occupations were reported simply as "nurse" or as "nurse, private family," a practice common in the past, were relegated to the group of practical nurses, among whom an increase of 6,918 , or 5.2 per cent, was recorded for the decade 1920 to 1930 . These practical nurses are listed under domestic and personal service.

Other professions in which the number of women practically doubled between 1920 and 1930 are librarians; authors, editors, and reporters; college presidents and professors; and lawyers, judges, and justices. Manifestly, in these pursuits much smaller numbers are involved.

Social and welfare workers, with 24,592 feminine representatives, are recognized as professional for the first time in the census of 1930; they are now listed apart from the 19,951 religious workers, who remain in the semiprofessional category. The number of women in these two groups combined has increased 65.4 per cent since 1920 .

The 79,611 women musicians ${ }^{4}$ include a 10 per cent increase since 1920, and artists have advanced to the 20,000 class. Although these groups include teachers of music and art, the number of men per 100 women has increased in each of these professions, especinlly during the decade 1920 to 1930. Men so engaged may have relinquished artistic callings for more essential occupations during the war that held over until 1920; and the radio may have had something to do with it.

Nearly half a million women are working in the medical, dental, and nursing professions, or directly or indirectly connected with the art of healing. In addition to the 6,825 ethical physicians and surgeons, 1,287 dentists, 1,563 osteopaths; and the 2,713 chiropractors, the country has 9,774 women classified as "other healers." The last group includes all kinds of quasi-medical persons, such as chiropodists, masseuses, naturopaths, and mechanotherapists, as well as herb doctors, practical bonesetters, and faith healers of all kinds.

The medical and dental professions are aided by 7,700 technicians and laboratory assistants and by 26,298 assistants and attendants in physicians' and dentists' offices, a group that has more than doubled in number since 1920. Then, besides the 288,737 trained nurses, there are 139,576 practical nurses and 3,566 midwives. Moreover, this entire group is somewhat understated because certain publichealth workers and hospital attendants are classed elsewhore. In spite of this fact, women in this entire category have more than doubled in number since 1910.

American women physicians and surgeons have experienced a 6 per cent decline in number since 1920, as have women osteopaths. The 1920 figures for women physicians may have been swollen slightly by the inclusion of a few electrotherapists and hydrotherapists, groups classified with "other healers" in 1930 but with physicians in 1920. Yet it is an established fact that somewhat more women physicians are being graduated from medical colleges today than was the case 10 or 20 years ago.

Architecture still is followed by relatively few women. However, their number increased from 137 in 1920 to 379 in 1930.

Each of the various professions listed by the Bureau of the Census was followed by at least a few women in 1930, even to four in mining engineering, the one professional pursuit without feminine representation in 1920. One may be surprised to learn that 3,276 women gave their occupation as clergyman and 1,905 as chemist, assayer, or metallurgist. Among other unusual professions for women are noted 21 inventors and 11 veterinary surgeons.

In spite of the fact that in each of the many professions some women are engaged, slightly more than four out of five professional women still are occupied in school-teaching or trained nursing, those time-honored feminine pursuits. Chart IV illustrates the fact that 60 per cent of all professional women are teachers and 20 per cent are trained nurses.

## Semiprofessional pursuits.

Among the 55,184 women classed in semiprofessional pursuits in 1930 are those more or less technically trained to assist in the professions of law, medicine, theology, and social service, together with a number engaged in theatrical and recreational activities. For example: Abstracters, notaries, and justices of the peace; technicians and laboratory assistants; chiropractors and other healers; religious workers; and keepers of charitable and penal institutions all belong in this category. Here, too, belong officials of lodges and societies; owners and managers of theaters and of motion-picture production; radio announcers, directors, managers and officials; keepers of pleasure resorts, race tracks, and dance halls; as well as other allied occupations.

## Attendants and helpers in professional service.

Women employed as attendants and helpers in professional service numbered 55,625 in 1030, approximately the same as those engaged in semiprofessional pursuits. Nearly half of this group were assistants in physicians' and dentists' offices, while such occupations as librarians' assistants and attendants and theater ushers also are included.

## CLERICAL OCCUPATIONS

Clerical occupations now claim the attention of nearly $2,000,000$ women, a group three and one-third times as large as it was 20 years ago, while the gain since 1920 is represented by half a million women. In 1930, clerical occupations, with 18.5 per cent of all gainfully occupied women, displaced manufacturing and mechanical industries as the second great group of pursuits for women, whereas in 1910 clerical occupations ranked fifth. (See Table 1.)

Practically all clerical workers are included in this general division of occupations, regardless of the industry in which they are employed. Although during the last decade the number of women in clerical occupations increased by 564,905 , or 39.7 per cent, it nevertheless is a fact that the number reported as engaged in clerical pursuits may have been slightly understated at each of the three censuses in question, because of the unfortunate tendency to refer to saleswomen in stores as "clerks." ${ }^{\circ}$

[^3]The war gave great impetus to the employment of women in clerical positions, and they seem disposed to hold the advantage that accrued during that period. In fact, a steady increase has been noted among

women in these occupations since 1910 , when but 7.3 per cent of all gainfully occupied women were engaged in clerical work, compared with 16.6 per cent in 1920 and 18.5 per cent in 1930. (See Chart I.)

Even so, the $1,986,830$ women classed in this group, according to the census of 1930, were fewer than two-thirds the number in domestic and personal service.

The largest single group of clerical workers, 775,140 , are the stenographers and typists, but the occupation of office clerk, which keeps 706,553 women busy, must be considered a close runner-up. Each of these groups was augmented by more than 200,000 women in the past decade, while the 465,697 bookkeepers and cashiers include 119,951 new recruits since 1920. Of the 706,553 office clerks listed in the census of 1930 , women to the number of 32,718 stated that they operated recording or computing machines or other office appliances.

In the field of accountancy women have to some extent lost the temporary advantage gained during the war when large numbers of men accountants were absent from their regular posts. Accountancy is more a profession than a clerical occupation and would be so considered if the Bureau of the Census had any assurance that only bona fide accountants so returned their occupation.

## DOMESTIC AND PERSONAL SERVICE

At each of the last three censuses, domestic and personal service was the general division of occupations in which the largest number of women were engaged. Of all gainfully employed women, 29.6 per cent were at work in this group in 1930, compared with 25.6 per cent in 1920 and 31.3 per cent in 1910.

This general division of occupations includes not only private and public housekeeping, charwomen and day workers, and laundry work in and out of laundries, as one might expect, but all catering directly to the personal needs of the public except the medical and nursing groups, naturally classed with professional service. Among the occupations that one might not anticipate finding under domestic and personal service are barbers, hairdressers, and manicurists; midwives and practical nurses; bootblacks; porters; janitors and sextons; and elevator tenders. The Bureau of the Census also includes under domestic and personal service all employees of steam laundries and of cleaning, dyeing, and pressing shops, together with their owners and managers. Although the work carried on in these establishments may closely resemble factory operations, laundries and dry-cleaning shops are not classed with manufacturing and mechanical industries because they create no product.

The designation "domestic and personal service" thus includes a much larger class than so-called "servants," though in 1930 the latter occupation was followed by more than half the women engaged in this large service group.

Domestic and personal service is the only general division of occupations in which an increase in the number of women was recorded from 1920 to 1930 after a decline had taken place in the preceding decade. In this group the number of women increased 45.4 per cent between 1920 and 1930 , whereas in the preceding decade there was a decline of 13.6 per cent. (See Table 2.) This change has largely been effected by a similar trend in one pursuit-that of servant, the controlling occupation of this entire group in that it comprises more than half the women engaged in domestic and personal service.

## Servants and allied occupations.

The number of women employed as servants in this country advanced from 1,012,133 in 1920 to $1,634,959$ in 1930. These figures include chambermaids, cooks, ladies' maids, nursemaids, and all general servants, whether employed in private homes, hotels, restaurants, or boarding houses. They do not, however, include waitresses, home laundresses, or charwomen.

The number of negro servants increased 81 per cent, compared with a gain of 49 per cent among all others, the majority of whom are white. The recent migration of negroes toward the cities of the North and the Middle West, a phenomenon of the 1920 's, tended to relieve the labor market in rural sections of the South so far as domestic service was concerned; at the same time this influx made available great numbers of household workers in northern cities that previously had had an insufficient supply to meet the demand, especially since the curtailment of immigration.

Table 8 indicates that 203,376 , or one-eighth, of the $1,634,959$ servants were employees of hotels, restaurants, boarding houses, college dormitories, hospitals, and other kindred institutions, while the remainder presumably were at work in private homes. Nearly half of these employees in hotels, restaurants, etc., gave their occupations as cooks, a pursuit requiring considerable skill under such conditions.

Table 8.-Number and per cent distribution of vomen employed as servants, according to occupation and place of work: 1930, 1920, and 1910

| Occupation and place of work | 1030 |  | 1020 |  | 1010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number |  | Number |  | Number |  |
| Servants. | 1, 034,050 | 100.0 | 1,012,133 | 100.0 | 1,300, 840 | 100.0 |
| Ilotels, restaurants, boarding houses, ote. Other domestic and personal service? <br> Cooks | $\begin{array}{r} 203,376 \\ 1,431,583 \end{array}$ | $\begin{aligned} & 121 \\ & 87.6 \end{aligned}$ | (1) |  | (1) | ........ |
|  | 371,005 | 22.7 | 238, 618 | 20.5 | 333, 436 | 28.5 |
| Rotels, reataurants, boarding houses, etc..... Other domestic and personal sorvice ${ }^{2}$ | $\begin{array}{r} 94,252 \\ 270,843 \end{array}$ | 8.8 10.0 | (1) |  | (1) | ........ |
| Other servants. | 1,263,864 | 77.3 | 743, 818 | 73.5 | 076, 113 | 74.5 |
| Hotels, restaurants, boarding houses, ote. Other domestic and personal nervico'. | $\begin{array}{r} 109,124 \\ 1,154,740 \end{array}$ | $\begin{array}{r} 6.7 \\ 70.0 \end{array}$ | (1) |  | (1) | .-........ |

I Data not avallable. $\quad$ Practically all in this group work in privato homes.
This pronounced gain among servants is the more romarkable because their number decreased 23 per cent between 1910 and 1920, a decline that has been explained in various ways.

Inasmuch as the wages of servants advanced enormously and more or less continuously throughout the war era, household employees had come to be regarded as a distinct luxury by 1020 . Furthermore, with the trend toward urbanization came an increasing preferenco for apartment-house life and the rather general adoption of mechanical household equipment. At the same time higher wages and superior working conditions, especially hours, attracted large numbers of domestic workers to other jobs, principally in factories.

The decline in this occupation between 1910 and 1920 has been further explained by the curtailment of immigration, and the shrinkage
in the number of negro servants.in the South during that period has been attributed partially to the fact that during and directly after the war men of their families found it easy to secure work at good wages, and, as a result, the women were inclined to remain at home without seeking employment.

Yet the more recent decade saw an increase of 62 per cent in the number of women servants. Moreover, with the exception of home laundresses, all allied occupations, such as waitress, charwoman, and janitress, also showed large gains. It is evident that many women who held other jobs during the war must have since returned to the field of domestic service, while some have sought employment of this kind who did not find it necessary to work at all during that period. In view of the practical cessation of immigration since 1914, a rather thorough adjustment of postwar conditions is indicated with regard to domestic service.

The second largest occupation among women in domestic and personal service is that of laundress not in laundry. This kind of work was carried on in 1930 by 356,468 women, a group that has been decreasing since 1910, though the rate of decline has been greatly lessened during the last decade.

This decrease of 163,536 home laundresses since 1910 may be explained in three ways: (1) The more or less general installation of electrical washing and ironing machines in private homes; (2) the supplanting of the old-time laundress by steam laundries and by dry-cleaning establishments; and (3) drastic changes in the style and quantity of women's clothing.

With the aid of electricity many housewives are doing their own laundry nowadays with an ease not even dreamed of a decade or two ago; moreover, except in those communities where unskilled domestic labor is plentiful and cheap, each year sees more and more oldfashioned washerwomen supplanted by steam-laundry operatives, one of whom can accomplish as much with the aid of machinery as several women washing at home by means of the old back-breaking methods. In 1930 women operatives in steam laundries numbered 149,414 , twice as many as in 1920 . Women workers in cleaning, dyeing, and pressing shops to-day number nearly five times the 4,573 so occupied in 1920.

Table 9.-Number and per cent that negro women formed of all women in certain selected occupations in domestic and personal service: 1990, 1920, and 1910

| Occupation | 1030 |  |  | 1020 |  |  | 1910 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { women }}{\text { All }}$ | Negro women |  | $\underset{\text { womon }}{\text { All }}$ | Negro women |  | $\underset{\text { women }}{\text { All }}$ | Negro women |  |
|  |  | Number | $\left\|\begin{array}{c} \text { Per } \\ \text { cont } \\ \text { of } \\ \text { total } \end{array}\right\|$ |  | Number | $\left\|\begin{array}{c} \text { Per } \\ \text { cont } \\ \text { of } \\ \text { total } \end{array}\right\|$ |  | Number | Per $\begin{aligned} & \text { Pent } \\ & \text { of } \\ & \text { total }\end{aligned}$ |
| All ocoupations.. | 10,782, 116 | 1,840,042 | 17.18 | 8, 540, 811 | 1,571,289 | 18.4 | 8, 075,772 | 2,013,081 | 24.9 |
| Domestlo and personal service. | 3, 180, 251 | 1, 152, 560 | 30.2 | 2, 180, 682 | 700, 592 | 30.2 | $2,530,403$ | 853, 302 | 33.7 |
| Servants | 1,034, 050 | 727, 342 | 44.5 | 1,012,133 | 401, 381 | 30.7 | 1,300, 549 | 415, 416 | 31.7 |
| Cooks.................. | 371,008 | 232, 004 | 62.5 | 229, 618 | 108, 710 | 62.8 | 333, 436 | 205, 039 | ${ }^{61.8}$ |
| Other servants.......... | 1,203,80t | 405, 338 | 30.2 | 743, 515 | 232, 871 | 31.3 | 076, 113 | 209, 477 | 21.5 |
| Laundrossas (not in laundry) | 350,468 | 209,008 | 78.5 | 388, 874 | 2233,557 | 73.5 | 520,004 | 301, 531 | 60.5 |
| Wattrossos.....-............ | 231, 073 | 17,028 | 7.6 | 110,921 | 14,155 | 12.1 | 85, 708 | 7, 434\| | 8.7 |

The growing practice of dining away from home is reflected in the 88 per cent increase between 1920 and 1930 among men and women restaurant, café, and lunch-room keepers. Furthermore, waitresses almost doubled in number during the past decade, the gain being 98 per cent; 231,973 women were employed in this capacity in 1930, and it is surprising to learn that only 7.6 per cent of their number were negroes.

In the final analysis the future prospect of adequate domestic service in this country is not particularly rosy. By going back 20 years and skipping the war epoch that so upset the traditions of women's employment, the gain between 1910 and 1930 in the number of servants proves to be considerably less than the corresponding increase in population, to say nothing of the concomitant increase in wealth. Since immigration is likely to remain at its present low ebb, the still wider geographical distribution of household workers from sections of the country oversupplied with such labor seems to offer the only solution to meet the shortage of household employees in the future.

## Other occupations in domestic and personal service.

Hairdressers and manicurists have increased enormously since 1920, both in number and in percentage. In fact, this group, which includes all women engaged in any phase of beauty culture, is nearly three and one-half times as large as it was in 1920 . Undoubtedly, the permanent wave and the various styles of wearing the hair short have played an important part in the rapid development of this occupation.

Increases were noted among practical nurses, a group that includes most attendants in hospitals and other large institutions, and also among housekeepers ${ }^{\circ}$ and stewardesses; in neither of these occupations, however, has the advance been commensurate with the 21 per cent growth in the female population since 1920. Boarding and lodging house keepers registered a gain of 11 per cent between 1920 and 1930; as in the case of servants, this occupation declined between 1910 and 1920 and then reversed its trend in the more recent decade. Each of these three occupations-housekeepers and stewardesses, practical nurses, and boarding and lodging house keepers-is followed by more than 100,000 women.

One prominent outgrowth of war conditions is typified by the 12,359 women at work as elevator operators in 1930; such a change was undreamed of prior to 1917; in fact, only 25 women in the entire country held such jobs in 1910.

Healthy increases occurred among women in certain proprietary and managerial pursuits that likewise are included in the category of domestic and personal service. Among these occupations are hotel and restaurant keepers and managers, and the owners, managers, and officials of laundries.

The 40,008 women restaurateurs have much more than doubled in number during the past 10 years and more than trebled in the past 20 years. Occupations in the field of hotel and restaurant management are unique in that women of mature age, provided they have the proper training and equipment, are preferred to those who are younger.

## AGRICULTURE, FORESTRY, AND FISHING

American women engaged in agricultural pursuits numbered 910,268 in 1930, a decline of 16 per cent in a decade. According to Table 1, this group at the date of the last census represented but 8.5 per cent of all gainfully occupied women, compared with 12.7 per cent in 1920 and 22.4 per cent in 1910.

A sensational decrease among women working on farms occurred between 1910 and 1920. (Table 2.) Moreover, in 1930 the number of women in agricultural pursuits was just half what it was in 1910.

Inasmuch as but 329 women were at work in pursuits classed as forestry and fishing, the only occupations of importance in the entire agricultural group were those of farmers, farm managers or forewomen, and farm laborers.

As farmers, women have held their own pretty well, the decline among them being but 1.1 per cent since 1920. This group includes all women who own and operate their farms, as well as those who are tenant farmers and those who work farms on shares.

The drop among farm managers and forewomen from 14,340 in 1920 to 963 in 1930 appears startling, but much of this decrease may be attributed to the more rigid scrutiny of census returns and the resultant superior classification. Unless the woman who owns and operates her farm actually tills the soil herself, the average census enumerator has an inclination to refer to her as a farm manager instead of as a farmer. Perhaps he has a vague distinction in mind somewhat like that made between a "gentleman farmer" and a "dirt farmer." But the woman who owns her farm, rents it, or works it on shares, and who herself operates it to the extent of deciding on the crops and the various steps that shall be taken in their cultivation, must be considered a farmer, regardless of whether she runs her own plough and hayrake or has such work done by a farm hand.

The 1930 returns for all farm managers and forewomen were carefully looked over in an effort to see whether these women owned their farms, rented them, or worked them on shares, information that is available on the schedules. As a result, many women eventually were classed as farmers whom the enumerators had returned as farm managers or forewomen.

Women farm laborers numbered 1,525,707 in 1910 and but 646,331 in 1930. This 57.6 per cent decline in a period of 20 years is common to both wage workers and unpaid family workers on home farms. The decrease was much greater from 1910 to 1920 than during the more recent decade.

What has caused this tremendous drop among women in agricultural pursuits extending over a 20 -year period? In the first place, the Bureau of the Census has estimated ${ }^{7}$ that the number of women farm laborers in 1910 represented an overenumeration of almost half a million, while the continued decline indicates that the overstatement at that time may in reality have been even greater. The bureau suggests that this excessive number may have been largely the result of an instruction issued to census enumerators, directing them to return every woman working regularly at outdoor farm work as a farm laborer. In compliance with this direction many women who regu-

[^4]larly fed their chickens or who did other farm chores for an hour or so each morning undoubtedly were returned as farm laborers.

To correct this tendency toward overstatement, more explicit instructions were issued in 1920, requiring that only those women who worked regularly and most of the time at farm activities should be considered as farm laborers. This change in directions, which served to eliminate the woman who worked occasionally or only a short time each day at outdoor farm or garden work, naturally resulted in the return of relatively fewer women in agricultural pursuits.

Then there has been, likewise, a tremendous drop since 1910 in the number of children at work on farms, though even at the date of the last census 126,410 , or 14 per cent, of the 910,268 women agriculturally employed were girls under 16 years of age. Nearly one-third (31.6 per cent) of the huge decline since 1910 among women working on farms occurred among girls under 16 ; as in the case with women at all ages, however, some of this decline is more apparent than real, due to the tightening of instructions to enumerators in 1920 and again in 1930.

In accounting for the decline between 1910 and 1920 in the number of women working on farms, considerable importance was attached to the change in census date from April 15 in 1910 to January 1 in 1920-a change, in other words, from a very busy farming season to a time of year when all farming activities were at their lowest ebb. In 1930 the census was taken on April 1, a date comparable with that of 1910; yet a still further decline has been recorded in the number of women at work on farms. It seems probable, therefore, that the change in census date between 1910 and 1920 exerted less influence in reducing the number of women returned in agricultural pursuits than appeared to be the case when the decline in that decade was studied originally.

Among other influences that may account for an actual diminution in the number of women working on farms is the practical cessation of immigration. The census of 1930 was taken 16 years after immigrants had ceased coming to the United States in large numbers. To-day there is no annually recurring supply of young Polish and Bohemian women, accustomed in their homelands to outdoor work on farms. The older members of these nationality groups are dying off and their daughters born in this country evince less enthusiasm for the heavier farm activities.

In the South hundreds of thousands of rural negroes have moved to cities in their own States or to metropolitan centers of the North and the Middle West. In fact, between 1920 and 1930 the number of negroes declined 8.2 per cent in the rural farm districts of the United States, compared with a shrinkage of 3.8 per cent in the entire rural farm population. Practically all negro women and children living on farms work in the fields at cotton-picking time, and in the past these have helped to swell unduly the numbers of farm laborers. Therefore, the exodus of nearly half a million negroes from the rural districts has resulted in a disproportionate decline in the number of women and children reported as working on farms.

In days gone by the housewife on the farm earned extra money by keeping chickens, making butter, or raising vegetables, fruit, and flowers. As already stated, too many of such part-time workers have
been enumerated as farm laborers in the past. To-day, moreover, the number of those who do such lighter forms of farm work may have been reduced because certain of them are meeting the same need by running homes for tourists, an activity classed occupationally with the keeping of boarding and lodging houses.

Although farms in every State have been abandoned because of heavy taxes, worn-out soil, or the desire of the younger generation to live where life is less arduous and where they can go to the movies, it nevertheless is a fact that among men in all agricultural pursuits the decline from 1920 to 1930 has been negligible. In fact, the number of men working as farm laborers for wages increased by nearly half a million ( 21.4 per cent) during this decade, though as farmers, farm managers, and unpaid workers on home farms the number of men decreased by an even larger number.

From census returns alone it is clear that agricultural activities in this country are undergoing a radical change. The farming syndicate that operates a tract of 50,000 acres under a single management still is a rarity, but with the tractor and other improved farm machinery has come a definite tendency to carry on the cultivation of the soil on a very large scale. In 1930 such occupations as presidents, treasurers, accountants, and stenographers of farming corporations were by no means unheard of on census schedules from certain sections of the West. This inclination toward large-scale farming tends of itself to eliminate the employment of women. So long as there are berries to pick, onions to weed, and beans to snip, women and children will be in demand on farms. But the labor of women and children is less likely to be used in connection with large-scale agricultural operations.

## CHANGES IN WOMEN'S STATUS IN LARGE GROUPS

A study of those occupations in which large numbers of women were engaged in 1930, comparing such numbers with the 1920 and 1910 figures, brings out some of the most striking changes in the occupational status of women. Table 10, for example, shows the number of occupations in which feminine groups of specified size were at work in 1930, in 1920, and in 1910.

Table 10.-Number of occupations ${ }^{1}$ in which the specified number of womon were engaged: 1930, 1920, and 1910

| Slzo of group | Number of occupations in which the specifled number of women were engaged in- |  |  |
| :---: | :---: | :---: | :---: |
|  | 1030 | 1020 | 1910 |
| 1,000,000 or more women. | 1 | 1 | 2 |
| 500,000 or more women... | 6 | 5 | 3 |
| 200,000 or more women. | 14 | 12 | 0 |
| 100,000 or more women. | 21 | 18 | 10 |
| 50,000 or more women.. | 30 | 30 | 28 |
| 25,000 or more women.. | 48 | 41 | 33 |
| 10,000 or more womed. | 80 | 76 | 60 |
| 1,000 or more women. | 208 | 101 | 185 |
| No women. .-........ | 30 | 23 | 30 |

[^5]In general, it is obvious that the number of occupations in which are engaged any specific number of persons-whether 1,000 or $100,000-$ should grow with each succeeding decade. This finding is to be expected in a steadily increasing population, even if each pursuit had merely retained its relative proportion. Furthermore, it does not seem that the increase from 1920 to 1930 among occupations employing specified numbers of women has been out of proportion to the growth of the population.

## OCCUPATIONS WITH 50,000 OR MORE WOMEN

A study of Table 10 arouses curiosity as to which pursuits fall within the larger groups. It is interesting to learn, for example, that the only occupation to qualify with a million women at each of the last three censuses is that of servant.

Table 11 lists those pursuits in each of which 50,000 or more women were at work in 1930, in 1920, or in 1910, together with the number engaged in each such occupation.

Table 11.-Occupalions in which 50,000 or more women were engaged and number engaged in each: 1930, 1920, and 1910

| Occupation | Women occupled In- |  |  |
| :---: | :---: | :---: | :---: |
|  | 1030 | 1020 | 1910 |
| Servants. | 1.634,050 | 1, Q12, 133 | 1,309, 549 |
| School-teachers.......... | 883,017 | 835, 207 | 476, $\times 164$ |
| Stenographers and typlsts. ....... | 775.140 | 564, 74 | 261,315 122,605 |
| Clerks (excest "clerks" In stores) | 706, 6.53 | 472,163 341,718 | 122.685 362,081 |
| Farm laborers. | 8-10, 311 | 803, 229 | 1,525, 007 |
| Bookkeepers and cashlers. | 485, 697 | 345, 746 | 183, 569 |
| Laundresses (not in laundry) | 356, 464 | 385, 874 | 320, 004 |
| Operatives-clothing industri | 346, 751 | 2is, 013 | 217. 270 |
| Trained nurses.. | 208, 737 | 143, e64 | 78, 508 |
| Formers (owners and tenants) | 202, 415 | 275, 577 | 273, 142 |
| Housckwerers and stewardessts | \% 23,383 | 204,350 178,379 | 173,333 88,262 |
| Waltresses..........- | 2m1, 473 | 118, 1189 | 85, 768 |
| Dressmakers and seamstresses (not in fa | 167, 020 | 255, 514 | 447. 700 |
| Laundry operatives. | 149, 114 | 72, 675 | 71, 604 |
| Cotton-mill operatives | 145, $0 \times 3$ | 149, 185 | 140.608 |
| Nurses (not trained).. | 130, 576 | 132, 858 | 110, 012 |
| Boarding and lodging house | 127, 278 | 114,740 | 142, 400 |
| Retall dealers..... | 110.104 1100 | 33, 248 78,080 | 67, 103 |
| Knitting-mill operatives | 80.403 | 80, 188 | 05, 338 |
| Operatives-lood and allied Industries | 88,688 | 73, 097 | 38, 439 |
| Shor-factory operulives- | 81,551 | 73, 112 | 50, 230 |
| Musiclatis and teachers of music | 79,011 | 72, 77 N | 84,478 |
| Silk-mill oncritives.. | 73, 109 | 72,708 | 50.360 |
| Opuratlves-cikar and lobacco factorles | 67, 948 | 83, 960 | 71, 80.4 |
| Oprrative-paper, printing, nnd alled | 63,4100 60,763 | 67, 845 | 30, 574 |
| Hotel and restaurant keepers and monag | 67,318 | 27, 778 | 24,751 |
| Operatives-worlen and worshed mills. | 40,040 | A1,715 | 62, 056 |
| Milliners and millinery dealers. | 40, 102 | 60, 508 | 122, 147 |

During the past 20 years but little change has taken place in the number of occupations giving employment to as many as 50,000 women. In fact, such pursuits numbered 30 at the date of the last census as well as in 1920, though the occupational groups so included are not identical.

In 1920 milliners and woolen-mill operatives were among the 30 occupations having 50,000 or more women, but the census of 1930
indicated that the former occupation, long considered the most feminine of pursuits, was followed by but 40,102 women, and that the number of woolen-mill operatives had declined to 49,060 . In numerical importance these time-honored occupations for women were replaced by the following two: Hairdressers and manicurists and hotel and restaurant keepers and managers, groups in which the 50,000 mark was achieved for the first time in 1930.

In fact, hairdressers and manicurists reached the 100,000 class, having increased in number from 33,246 in 1920 to 113,194 in 1930 . This numerical gain, more striking than almost any other, may be attributed largely to the changing attitude of American women toward the matter of beauty culture. The increase in hotel and restaurant keeping or management, where women have practically doubled in number since 1920, is in keeping with the tendency to enter the field of business that may be observed among women in all sections of the country.

About half the 30 occupations with as many as 50,000 women are traditionally feminine callings, such as servants, school-teachers, stenographers, laundresses, clothing-factory operatives, nurses (both trained and untrained), housekeepers and stewardesses, telephone operators, dressmakers, cotton, silk, and knitting mill operatives, and boarding and lodging house keepers. Certain other pursuits, such as saleswomen, office clerks, bookkeepers, waitresses, steam-laundry operatives, and cigar-factory operatives have come to be recognized as occupations just as suitable for women as for men.

In 1920 it was freely prophesied that iron and steel would no longer figure as a prominent woman-employing industry after the hangover from the war had subsided. This forecast is disproved by the census of 1930. Although the gain since 1920 has not been large among women operatives in the iron and steel group as a whole (only 5.1 per cent), in one branch, automobile manufacturing, a pronounced increase has been recorded in the number of women employees.

At the date of the last census women operatives in automobile factories numbered 19,032 , compared with 12,788 in 1920 and 848 in 1910. These figures represent an advance of 48.8 per cent during the 10 years from 1920 to 1930. Moreover, women classed as laborers in automobile factories have scored a similar increase. The production of automobiles represents one branch of manufacturing in which the employment of women has outlasted the exceptional conditions that led to their being taken on in increased numbers during the war. A general decline has occurred among women at work in other branches of the iron and steel group, however, such as agricultural-implement factories, blast furnaces, car and railroad shops, ship and boat building, wagon and carriage factories, machine shops, and iron foundries.

The 28 occupational groups that employed 50,000 or more women in 1910 comprised 89.7 per cent of all working women 10 years of age and over. Although the number of such groups increased to 30 in 1920 and was 30 at the latest census, the proportion they formed of all gainfully occupied women decreased to 86.8 per cent in 1920 and was practically the same ( 87 per cent) in 1930 . These percentages indicate that the occupational field for women has broadened since 1910 instead of concentrating in a few long-established occupations.

Nine of the 28 occupations in which such large numbers of women were engaged in 1910 showed decreases in 1930-farm laborers, farm owners and tenants, musicians and teachers of music, boarding and lodging house keepers, cigar and tobacco factory operatives, laundresses, dressmakers, milliners, and woolen-mill operatives-yet, with the exception of the last two, all retained in the census of 1930 their standing as emploving 50,000 or more women.

Considering only those occupations that qualified in 1930 with at least 100,000 women, a net gain of five occurred between 1910 and 1930. There are six new groups in this category, however, as the 122,447 milliners listed in 1910 had declined to only 40,102 by 1930. The six new groups mentioned are trained nurses, telephone operators, waitresses, steam-laundry operatives, hairdressers and manicurists, and retail dealers.

Chart V shows the relative numerical rank of the occupations having 100,000 or more women in 1930, in 1920, or in 1910.

Occupations that have forged steadily to the front as employers of women during the past 20 years, so far as numerical prominence is concerned, are school-teachers, stenographers and typists, saleswomen and clerks in stores, bookkeepers and cashiers, telephone operators, and waitresses. Even more pronounced gains have been recorded by office clerks, trained nurses, and hairdressers and manicurists.

Farm labor, the most common occupation for women in 1910, ranked second in 1920 and sixth in 1930. This indicates a radical change, though the extent of the decline is considerably minimized when it is realized that in 1910 the numbers of women and children employed as farm laborers were grossly overstated, the result of loose interpretation of the instructions to enumerators. 8 Nevertheless, even if the census data for 20 years ago are definitely discounted in respect to agricultural employment of women, it still is evident that farm labor as an occupation for women has experienced a significant decline.

Few people are aware that, next to servants, farm labor has consistently figured in the past as the occupation in which the largest numbers of American women have been at work. Census figures indicate that this condition prevailed in the United States for at least 40 years prior to 1910 .

If farm laborers dropped from first to sixth place between 1910 and 1930, an equally significant change is observed in the relative rank of dressmakers, who were fifth in 1910 and fifteenth in 1930. Likewise, home laundresses occupied eighth place in 1930 though they were third in 1910.

## OCCUPATIONS WITH 1,000 OR MORE WOMEN

The number of pursuits in each of which 1,000 or more women were engaged in 1930, in 1920, and in 1910 is shown for each general division of occupations in Table 12.

[^6]Chart V. RELATIVE NUMERICAL RANK IN 1930, 1920, AND 1910 OF OCCUPATIONS IN WHICH 100,000 OR MORE WOMEN WERE EMPLOYED:

| Oscupation | 1930 | 1920 | $\underline{1910}$ |
| :---: | :---: | :---: | :---: |
| Servants . . . . . . . . 1-1 2 |  |  |  |
| School teaohers. |  |  |  |
| Stenographers and typists...... |  |  |  |
| Ciorks (except "olorks" in stores) . |  |  |  |
| Saloswomen and "olerks" in stores. - |  |  |  |
| Farm laborera. |  |  |  |
| Bookkeepers and onshiers . . . . |  |  |  |
| Laundresses (not in laundry) . . . . |  |  |  |
| Operatives, olothing industries. . 9 , 9 |  |  |  |
| Trained nurses . . . . . . . . |  |  |  |
| Parmers (owners and tenants) |  |  |  |
| Housckeepers and stemardesses |  |  |  |
| Telephone o |  |  |  |
| Waitresses . . . . . . . . 14 |  |  |  |
| Drosomairers and ceamatresses . . . . (not in faotory) |  |  |  |
|  |  |  |  |
| Cotton-mill operatives . . . . . 17 ${ }^{\text {a }}$ 13 |  |  |  |
| Nurses (not trained) |  |  |  |
| Boarding and lodging house keep |  |  |  |
| Hairdressers and maniourists. . . . 20 |  |  |  |
| Retail dealers . . . . . . . . . 2 |  |  |  |
|  |  |  |  |
| Miliners and millinery dealers. |  | 2/ |  |

[^7]Table 12.-Number of occupations ${ }^{1}$ in which 1,000 or more women were engaged, according to general division of occupations: 1930, 1920, and 1910

| General division of occupations | Number of occupations: in which 1,000 or more women were engaged |  |  |
| :---: | :---: | :---: | :---: |
|  | 1030 | 1020 | 1910 |
| All occupations. | 30 | 191 | 163 |
| Agriculture, forestry, and fishing - | 3 | 1 | 4 |
| Manufacturing nud mechantion industries. | 90 | $\infty$ | 80 |
| Transportation and communication.-... | 9 | 6 | 7 |
| Trade......-........................ | 31 | 28 | 34 |
| Public service (not elsewhere classifiod) | 0 | 5 | 2 |
| Professional service............. | 33 | 30 | 22 |
| Domestic and personal service | $\stackrel{22}{12}$ | 20 | 18 8 |

1 Includes new occupatlon:, listed In the census for the first time in 1030 or in 1030, ws the case may be, but excludes indeflnite residuary kroups. (See Aptendix 13, 1 , 85 .) These occupattons were counted after the 1920 and 1910 data had been fitted into the 1030 schemo of occupation classilication.

Occupations with 1,000 or more women numbered 208 in 1930, compared with 191 in 1920 and 165 in 1910. The two general groups in which the pursuits employing 1,000 or more women increased most in the past decade are trade and professional service, with a gain of five occupations each in 1930. In the decade 1910 to 1920 the greatest advances in occupations with 1,000 or more women were in the manufacturing and mechanical industries and professional service. In the manufacturing and mechanical industries such occupations numbered 90, both in 1920 and in 1930.

Although the comparison afforded by Table 12 is interesting, it must be discounted somewhat because of the fact that the scheme of occupation classification has been improved slightly at each census and new occupations are added, necessarily, as conditions change. To illustrate, osteopaths were listed as a separate pursuit for the first time in the census of 1920 , while in 1930 new occupations included rayon-factory operatives and laborers; chiropractors; technicians and laboratory assistants; advertising agents; county agents, farm demonstrators, etc.; and others. It seemed advisable to include in Table 12 the new pursuits that afforded employment to 1,000 or more women. ${ }^{9}$

## OCCUPATIONS IN WHICH NO WOMEN WERE AT WORK

Of the 534 separate occupations and occupation groups established by the census classification for 1930, women were at work in all but 30. Of the 572 such classes in 1920 no women were employed in 35 , and of the 428 in 1910 no women were engaged in 43 . From these figures it would appear that the occupational territory unexplored by women is narrowing, but if the occupational data for all three censuses are fitted into the 1930 classification, the number of occupations not followed by any woman declined from 39 in 1910 to 23 in 1920 and rose to 30 in 1930 . While these figures do not give a strictly accurate picture, because of changes in the method of classification at each census, they afford, nevertheless, the best available basis of comparison.

The fact that occupations with no women at work were more numcrous in 1930 than in 1920 implies that in the earlier year a fow women

[^8]still were substituting, in unusual lines, for men who had gone to war. This finding was most noticeable in the field of transportation.

In the last 3 censuses a number of occupations were inviolate so far as their invasion by women is concerned. These are boilermaker; puddler; roofer and slater; structural-iron worker; brakeman, steam railroad; locomotive engineer; locomotive fireman; motorman, steam railroad; conductor, steam railroad; fireman, fire department; and soldier, sailor, or marine. With the exception of roofer and slater it appears that none of these pursuits has been reported at any census as the occupation of a woman.

## STRIKING CHANGES IN OCCUPATIONS FOR WOMEN

During the decade 1920 to 1930 striking changes occurred in the kind of work that American women have chosen to do. It is not altogether improbable that the great wave of prosperity that struck this country in the second half of the period in question may have been responsible for some of the advances. The acceleration of business, for example, made numerous openings for clerical workers and the generally prosperous feeling that prevailed until 1930 led to the continued employment of more servants than had formerly been the case.

The nature of these changes is brought out by a study of the 12 occupations in each of which the number of women increased by at least 50,000 during the 10 -year period. For purposes of comparison, Table 13 records as well the increase or decrease in these occupations between 1910 and 1920.

Table 13.-Twelve occupations in each of which the number of women increased $\dot{j 0,000}$ or more from 1920 to 1930, with number and per cent of increase, and with corresponding increase (or decrease) from 1910 to 1920

| Occupation | $\begin{gathered} \text { Increase, } 1920 \text { to } \\ 1930 \end{gathered}$ |  | Increase for decrease), 1910 to 1020 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent | Number | Per cent |
| Servants | 622826 |  | -207, 416 | 227 |
| Clerks (exeent "clerks" in stores) | 234,300 218 | 40.6 | +34.9.488 | +284 +33 |
| Stehool-teachers ${ }^{\text {a }}$ - |  | ${ }^{34.4}$ | + | +33.2 +114 |
| Saleswomon and "clorks" In stores. | 170,075 | 34.0 | +161, 637 | +45 5 |
| Tralned nurses. | 145,073 | 101.0 | ${ }_{+}^{+67.156}$ | +87. ${ }^{\text {8 }}$ |
| Bookkeepers and cashiers. | 119, 951 | 34.7 | +162, 177 | +883 |
| Waitresses. | 115, 052 | ${ }^{\text {® }}$. 4. | $\begin{array}{r}+31.123 \\ +883 \\ +8 \\ \hline\end{array}$ | $+30^{3}$ +120 |
| Oporntivos-ciothing industries | 81, 108 78 | 30.5 240.5 | + $+10,988$ +083 | +12.1 |
| Laundry operatives. | 76,739 | 105.6 | +1,071 | +1. 5 |
| Telephone operators. | 56,880 | 31.8 | +00,117 | +1021 |

The greatest numerical increases in the past decade were among certain occupations in domestic and personal service, in the various clerical pursuits, and in the professions. Here are servants, with a gain of 622,826 women since 1920 after an actual decline of considerable extent during the 10 years previous; here are waitresses, with an increase of 115,052 ; also hairdressers and manicurists, and steamlaundry operatives, with a gain of nearly 80,000 each. The numerical advance in these four occupations alone is represented by 894,565 women. Yet not a single occupation in domestic and personal service qualified with an increase of 50,000 women between 1910 and 1920 .

Then the ranks of the three great clerical pursuits-office clerks, stenographers and typists, and bookkeepers and cashiers-were
augmented in the aggregate by 564,737 women between 1920 and 1930. Women have been prominent in clerical service for many years, though to a less overwhelming extent prior to 1920. As fast as war activities claimed men in clerical occupations, women filled their places, and from the census of 1930 it seems doubtful that they will ever relinquish the position they have won in this field.

The third great increase is noted for two professions, teaching and nursing, in which the number of women has advanced 363,833 in the past decade. Although the numerical gain among teachers is much the greater, the expansion among trained nurses is extremely large, both in number and in percentage.

The only occupation in manufacturing and mechanical industries to qualify with such a large increase between 1920 and 1930 is that of operatives in the clothing industries, for whom a numerical advance of 81,108 women was listed. In trade, saleswomen and clerks in stores have increased steadily, with a gain of 179,075 women from 1920 to 1930; and in transportation, telephone operators increased by 56,880 .

Relatively few occupations registered a shrinkage of 25,000 or more women during the decade 1920 to 1930. Such declines as did occur are shown in Table 14, with the corresponding change for these occupations between 1910 and 1920 and between 1910 and 1930.
Table 14.-Occupations in each of which the number of women decreased 25,000 or more from 1920 to 1930, with number and per cent of decrease, and with corresponding decreases from 1910 to 1920 and from 1910 to 1930

| Occupation | Docreaso, 1020 to |  | Decrease, 1010 to 1920 |  | Decrease, 1910 to 1830 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Per cent | Number | Por cent | Number | Per cent |
| Parm laborers. | 156,808 | 19.5 | 722, 478 | 47.4 | 879, 376 | 57.6 |
| Wage workers <br> Unpald family workers | $\begin{array}{r} 85,204 \\ 101,634 \end{array}$ | 24.4 17.6 | $\begin{aligned} & 122,535 \\ & 800,143 \end{aligned}$ | $\begin{aligned} & 35.1 \\ & 61.0 \end{aligned}$ | $\begin{aligned} & 177,709 \\ & 701,577 \end{aligned}$ | $\begin{aligned} & 50.9 \\ & 59.6 \end{aligned}$ |
| Eewing trader ${ }^{\text {- }}$ | 117, 108 | 34.8 | 274, 075 | 44.9 | 391, 183 | © $\boldsymbol{4} .0$ |
| Dressmakers and senmstresses (not in ractory) <br> Miliners and milinery dealers | 77,501 29,406 | 32.9 42.4 | $\begin{array}{r} 232,241 \\ 62,349 \end{array}$ | 47.4 | $\begin{array}{r} 280,822 \\ 82,345 \end{array}$ | 64.7 67.2 |
| Laundresses (not In laundry)... | 20, 106 | 7.6 | 134, 130 | 25.8 | 163, 538 | 31.4 |

1 Includes tailoresses also.
For 20 years the occupations of dressmaker, milliner, and home laundress have been losing ground in this country, though the decline has been somewhat retarded since 1920, especially in the case of laundresses. With reference to these pursuits it has been said that "women are not leaving the occupation so much as the occupation is leaving them." ${ }^{10}$

From a sociological standpoint the decline in these three pursuits is highly significant. Most of the dressmakers and laundresses and a few of the milliners have worked at home. To a large extent these have been part-time pursuits that could be combined with the care of children and of a household. The high cost of living that accompanied the war, together with the tendency toward specialization in every line, led many women desiring employment to prefer full-time

[^9]occupations, which, though taking them away from home, had the merit of compensating them far better.

The increasing tendency on the part of women to buy ready-made clothing, together with the better-paid positions opened to the younger dressmakers and seamstresses when war activities were at their height, undoubtedly accounts for a large part of the great reduction in the number of women engaged in sewing outside of factories.

For several years prior to 1930 a type of small felt hat with a ribbon band, which with slight variation could be worn both winter and summer, was popular with women. Inasmuch as these hats were made and trimmed in felt-hat factories, the employment of milliners was dispensed with to a great extent. Moreover, fabric hats with a variety of trimming are now made in factories and bought in large numbers.

Between 1920 and 1930 a decrease of 156,898 women took place among farm laborers, the job that held first rank among women's occupations in 1910 and second place in 1920. This great shrinkage in the number of women at work on farms has been discussed (page 28), together with some of the probable reasons for the decline.

From 1920 to 1930 the number of women more than doubled in 32 of the occupations having 500 or more women at the later date. (Table 15.) In 1920 there were 77 occupations in which the number of women had increased in 10 years by more than 100 per cent. Obviously, as the groups increase in size the probability of doubling becomes less.

Table 15.-Occupations with 500 or more women each in 1930 in which the number of women had doubled since 1920; number of women occupied in 1930 and in 1920, with the per cent of increase

| Occupation | Women occupied |  | Per cent of increase, 1920 to 1930 |
| :---: | :---: | :---: | :---: |
|  | 1930 | 1020 |  |
| Managers and offlelals, insurance companies | 1, 752 | 306 | 472.5 |
| Inspectors, gnugers, and samplers (trade). | 5,820 | 1,031 | 464.5 |
| Decorators, drajers, and window dressers (ty | 6,238 | 1,155 | 440.1 |
| Proprictors, managers, and omplals, telegraph | 2, 873 | 54.4 | 428.1 |
| Keepers of pleasure resorts, race thacks, ete | ${ }^{977}$ | 197 | 395.9 |
| Stock brokers. | 1,793 | 376 | 376.9 |
| Cleaning, dyeing, and prossing shop workers | 21,603 | 4, 573 | 372.4 |
| Loan brokers and mawnbrokers. | 632 | 152 | 315.8 |
| Laborers-domestic and professional servi | 6, 406 | 1,669 | 283.8 |
| Hetnil dealers, automobiles and accessorles. | 516 | 142 | 263.4 |
| Policewomen. | 848 | 236 | 259.7 |
| Paper hangers. | 1,450 | 408 | 256.9 |
| Renl eatato eronts and ofmelals | 31, 787 | 9,208 | 245.3 |
| Inspertors, telegraph and telephono | 1,133 | 330 | 243.3 |
| Fairdreseers and manleuists | 113, 194 | 33, 248 | 240.5 |
| Canvassers. | 11,813 | 4,191 | 181.9 |
| Retail dealers, furniture, esrpots, and rugs | 1, \%65 | 692 | 169.5 |
| Dentists' assistants and attendants...-... | 12, 845 | 4,910 | 162.0 |
| Ifestaurant, cafor, and lunch-room keeper | 40,003 | 15,614 | 155.7 |
| Insurance arents...........-.-.... | 12,953 | 6,083 | 154.8 |
| Guards, watchmen, and doorkeepers | 1,000 | 309 | 150.6 |
| Owners and managers, truck, transfer, and ca | 576 | 206 |  |
| Operativos-irult and vegotable canning, etc- | 13, 552 | 6, 300 | 114.9 |
| Operatives-hrick, tile, and terrs-rotta factor | 1,340 | 630 | 114.1 |
| Wholesala dealers, importers, and exporters... | 1. ${ }^{\text {ass }}$ | 794 | 112.6 |
| Phyyicians' and surpeons' attendants. | 13,353 | 6. 410 | 108.3 |
| Editors and roporters. | 11, 924 | 5,330 | 108.1 |
| Marshals, sherilss, deteetives, e | 3, 676 | 1,240 | 106.7 |
| I.aundry operatives............ | 149.414 | 72, 875 | 105.6 |
| Trained nurses. | 1288,737 | 143.664 | 101.0 |
| 1, brarlans... .-. | 27,056 | 13, 502 | 100.4 |
| Employment-oflico keepors | 1,340 | 689 | 100.3 |

Except under extraordinary conditions, those pursuits with huge absolute gains are not the ones that register large percentage increases. Yet four occupations listed in Table 13 (occupations with at least 50,000 increase) advanced enormously both in number and percentage between 1920 and 1930. These are trained nurses, hairdressers and manicurists, laundry operatives, and waitresses, the numbers employed having doubled in all but the last named and almost doubled in that.

After studying those occupations in which the number of women has doubled in a decade, it is interesting to learn in which activities the number of women has been reduced by one-half during the same period. Table 16 lists nine occupations having 1,000 or more women in 1920 that had fewer than one-half as many in 1930.

Table 16.-Occupations with 1,000 or more women each in 1920 in which feucr than half as many women were engaged in 1930; number of women occupied in 1980 and in 1920, with the per cent of decrease

| Occupation | Women occupled |  | Per cent of decrease. 1920 to 1930 |
| :---: | :---: | :---: | :---: |
|  | 1930 | 1820 |  |
| Farm managers and forewomen. | 063 | 14,340 | 03.3 |
| Operatives -straw factorles .-.......... | 1,24 | 6,351 | 80.6 |
| Operatives-plano and organ factories | ${ }^{6+2}$ | 2,003 | 77.8 |
| Sales agents. ${ }_{\text {Apprentices (tal)... }}$ | $\begin{array}{r}517 \\ \hline 1.352\end{array}$ | 1.634 | 68.4 55.3 |
| Laborers-clock nnd watch factories | +1352 | 1, 170 | 55.3 |
| Laborers-woolen and worsted mills. | 1,763 | 3, 2689 | 54.9 |
| Laborers-cikar and tobacco lactorles | 0, 487 | 13, 862 | 83.2 |
| Laborers-steam rallroad. | 3,111 | 6, 588 | 62.8 |

The probable reason for the greatest shrinkage-that among farm managers and forewomen-has been discussed on page 27. Presumably, the falling off among women sales agents and women laborers on steam railroads may be attributed to better enumeration and better occupational classification in the Bureau of the Census; in other words, the 1920 figures for these two pursuits may have been overstated.

In the case of each factory occupation listed in Table 16 there was a decline for both sexes, implying that certain changes have taken place within the industries themselves. Similarly, the number of apprentices is falling off at about the same rate among both men and women.

In 12 outstanding occupations, each of which afforded employment to 50,000 or more women in 1930, the number of women had more than doubled since 1910; in fact, in three of these it had doubled since 1920, and it had practically doubled in two others. The development of these large occupational groups, as shown in Table 17, gives a vivid picture of the changing conditions in the occupational status of women over a period of two decades. Because of the large numbers of women in each of the pursuits listed, this table has great significance.

Table 17.-Twelve occupations in each of which 50,000 or more women were engaged in 1930 and in which the number occupied had more than doubled since 1910; number of women occupied in 1930 and in 1910, with the per cent of increase


I "Clerks" in stores could not be included with saleswomen in this table because saleswomen and "clerks" in stores together have increased but $\theta i .9$ per cent since 1910.

Table 14 (page 40) shows several occupations which, having 100,000 or more women at work in 1910, showed a decline of more than 50 per cent in number at the census of 1930. In this table point is given to the enormity of certain reductions over the 20 -year period from 1910 to 1930 .

## COMPARISON WITH CHANGES IN THE OCCUPATIONS OF MEN

A comparison of changes in the occupations of women with those observed among men's pursuits is of interest from many different angles. The actual numbers at each of three censuses and the increases or decreases from 1920 to 1930 and from 1910 to 1930 in the employment of men and women are shown in Tables I and II, pages 56 to 79. As a rule, only those occupations are listed in Table II which had 1,000 or more persons of each sex at work at each of the last two censuses, but for reasons of space not all the component groups are shown in the case of the manufacturing industries, even when this numerical prerequisite is met.

In the first place, the female population 10 years of age and over increased 20.6 per cent from 1920 to 1930, corresponding to an advance of but 18.1 per cent in the male population. Between the increases in the numbers of gainfully occupied persons, however, a much greater difference appears. Among the women usually at work, a gain of $2,202,605$, or 25.8 per cent, is in evidence, compared with an increase of $5,013,067$, or 15.2 per cent, among the employed men. This pronounced expansion in the number of working women during the recent decade has lowered the ratio of 387 employed men per 100 employed women in 1920 to 354 men per 100 women in 1930.

A study of Table II indicates that in the majority of the occupations listed the direction of change-increase or decrease-was the same for both sexes. In all, 121 occupations are shown (exclusive of subtotals), and only 33 of these indicate a decrease for one sex and an increase for the other; 17 of the 33 are in the manufacturing and mechanical
industries. In 20 of the 33 an advance is recorded for men, but not for women.
No one is surprised to learn that men decreased in number and women increased as stenographers and typists and as nurses (both trained and untrained). But why should the number of men inspectors, gaugers, and samplers, commercial pursuits, have declined slightly during these past 10 years, while the number of women so engaged became nearly six times what it was in 1920?

On the other hand, why did the number of women physicians, dentists, and osteopaths decrease while men in the same professions were increasing in number?

It is even more surprising to learn that male milliners and millinery dealers increased in number when the reduction among women in this group, as already shown, ran into the tens of thousands. Apparently, millinery dealers selling more or less standardized hats are becoming more numerous, while the milliner who had her own shop and made, trimmed, and sold hats is passing into the discard, as are the hat maker, the millinery trimmer, and the apprentice whom she used to employ. In spite of the numerical loss noted among women milliners and millinery dealers and the gain among men in this class, women still outnumber men eight to one.

Fram Tables II and III it appears that women are definitely supplanting men as operatives in the clothing industries. The enormous gain in the number of women employees in clothing factories since 1920 has been discussed, but its significance is not brought out unless one understands that there was a slight decrease among men in clothing factories.

Numerical advances among women operatives in leather industries, in rubber factories, and in the iron and steel industries are made conspicuous by decreases in the number of men employed as operatives in these factories. In the past the majority of these industrial plants have offered few or no inducements leading to the employment of women. Shoe factories monopolize nearly all the increase noted among women operatives in the leather industries, just as the gain among women in the iron and steel industries is limited to those in automobile factories.

Table II lists 69 occupations with additions for both men and women, but the rates of increase in the various pursuits were by no means the same for the two sexes. In fact, from 1920 to 1930,38 occupations had greater percentage gains for women than for men. With all due allowance for the smaller basic figures usually found in the case of women workers, it is nevertheless of interest to note that in each of 17 occupations the percentage of increase among women was more than 50 points higher than that shown for men.

Conversely, women school-teachers registered a gain of 218,760 , or 34.4 per cent, while the men in this profession, whose numbers have been augmented by 73,201 teachers since 1920 , scored an increase of 62.6 per cent. Men school-tenchers actually declined in number between 1910 and 1920, and it is not improbable that some of this group had not yet returned to their professional duties in 1920 after participation in war activities.

Altnough the total number of men in the manufacturing and mechanical industries registered a gain of 12.1 per cent from 1920 to 1930 , compared with a 2.3 per cent decline among women in this
general division of occupations, it is evident that additional workers in the building and hand trades account for most of this increase among men. At any rate, men factory operatives increased but 6.4 per cent, compared with an 8.6 per cent advance among women. The percentage of decline among factory laborers was much greater for women than for men.

Between 1920 and 1930 the production of electrical machinery and supplies constituted the only manufacturing industry that showed unusual development common to both sexes; furthermore, the great enlargement in factories of this type has continued throughout two decades. On the other hand, the absolute increase from 1920 to 1930 among men and women operatives and laborers in electrical machinery and supply factories was but 62,582 , compared with a net gain of 82,065 employees of both sexes in clothing factories.

Even the chemical and allied industries, with 64,656 additional employees of both sexes, outstripped the numerical increase in electrical machinery and supply factories, though in the case of the latter group the advance in percentage was much the greater. The inclusion of rayon factories is entirely responsible for the gain among women operatives in chemical industries, but men registered considerable increases in petroleum refineries, in gas works, and in paint and varnish factories. From 1920 to 1930 the numbers of both men and women operatives were augmented by groups of substantial size in clay, glass, and stone industries, in food and allied industries, and in knitting mills.

Cigar and tobacco factories lost a total of 56,083 employees during the last decade, the decline being considerably the greater for men. Iron and steel industries as a whole had 106,521 fewer men employees in 1930 than in 1920, while the net gain among women in all factories of this type was but 457, inasmuch as the decline among laborers almost offset the advance among operatives.

Fourteen occupations are listed under "trade" as having at least 1,000 persons of each sex both in 1920 and in 1930. Women recorded increases in each of these 14 occupations and most of the gains were fairly large.

It is a matter of common knowledge that the increasing use of machinery has resulted in the employment of fewer factory operatives; in candy, paper box, and cigar and tobacco factories, for example, where operatives of both sexes have been thrown out of employment by greater mechanical development

So far as one is able to judge by a comparison of census figures for 1920 and 1930, the employment of women in important manufacturing pursuits has held its own as compared with the employment of men, but it has not registered an advance commensurate with the increase in population.

For 119 of the same occupations as are compared for 1920 and 1930, the increase or decrease over the 20 -year period 1910 to 1930 is shown. (Table II.) ${ }^{11}$ During this period the female population 10 years of age and over increased 41.2 per cent, in contrast to an advance of 34.9 per cent in the male population. Among women usually
gainfully employed there was a gain of 33.1 per cent, compared to an increase of 26.5 per cent among employed men.

The number of employed men per 100 employed women is found to have been 373 in 1910, 387 in 1920, and 354 in 1930.

Of the 119 occupations, only 20 indicate a decrease for one sex and an increase for the other. Disregarding the relative importance of these pursuits, the 20 increases were evenly divided, each sex having 10 .

Table II lists 88 occupations that show increases for both men and women, but the rates of increase differ widely. From 1910 to 1930,61 occupations had greater percentage gains for women than for men.

In three of the group totals-professional service, domestic and personal service, and clerical occupations-women had increases in actual numbers greater than those of men.

## CHANGES IN NUMBER OF MEN PER 100 WOMEN IN SELECTED OCCUPATIONS

A tabulation showing changes in the ratio of men to women in certain selected occupations for a 20 -year period is of great interest. In Table III, page 80, changes in the number of men per 100 women from 1910 to 1930 are shown for those occupations in which 10,000 or more persons of each sex were engaged both in 1930 and in 1920.

This general table indicates that in certain occupations, even among some of great numerical importance, such as servants and schoolteachers, no definite trend can be observed between 1910 and 1930 in the ratio of men to women. In an effort to clarify the extensive data assembled in this general table, those occupations in which the number of men per 100 women has increased steadily since 1910 are listed in Table 18.

Table 18.-Men per 100 women in those selected occupations ' in which men have stcadily advanced from 1910 to 1980

| Occupation | Men jer 100 women |  |  |
| :---: | :---: | :---: | :---: |
|  | 1030 | 1020 | 1010 |
| Farm laborers. | SM0 | 421 | 307 |
| Wage workers......... | 1,495 | 431 | 720 |
| Unjaid famlly workers. | 210 | 221 | 181 |
| Compositors, linotypers, and typesctiers | 1, bx | 1. 140 | 803 |
| Tallors and talloresses....-............... | 1,080 | 921 | 703 |
| Operatives: | 0 | S04 | 401 |
| Chemical and alled industries.......- | 307 | 268 | 101 |
| P'aptrer, printing, and allied industries. | 180 | 1317 | 124 |
| Paper and pulp mills............ | ${ }_{3}^{181}$ | 127 810 | 107 |
| Printink, pubilsbing, and engravin | 1357 | 310 105 |  |
| Textile industries....--... | 80 | 105 81 | 100 70 |
| Carpet mills.... | 138 | 12. | 00 |
| Sotik mills... | 103 | 103 | 09 |
| Woolen and worsted milis | 71 | 00 | 18 |
| Artists, sculptors, and teachers of art | 108 | 105 | 102 |
| Mustelans and teachers of musie... | 185 107 | $1{ }^{12}$ | 121 |
| Charwomen ant cleaners. | 107 61 | 47 | 68 <br>  <br>  <br> 7 |
| Janitors end sextons... | 78 | 815 | 427 |

[^10]The past two decades have seen unexpected changes in the ratio of men to women in certain occupations of numerical importance to both sexes. In a word, men appear to be gaining the ascendancy in 17 occupations (exclusive of subtotals), whereas in 26 pursuits census figures indicate that women are making greater relative gains than are men.

As a matter of fact, it rarely happens that a woman directly replaces a man in any occupation or that a woman is discharged solely to make place for a man. Rather, conditions in industry change in such a way as to make the employment of one sex preferable to that of the other. The adoption of new types of machinery in certain factories has led to a preference for women in some cases; in cigar and tobacco factories, on the other hand, both men and women employees have lost their jobs because of the introduction of labor-saving machinery.

During the past two decades the number of men per 100 women has doubled in but two occupational groups-paid farm laborers, and compositors, linotypers, and typesetters. One is forcibly struck by the rapidity with which men are succeeding women in the latter. Although the decline among women in this group has already been noted, no other table brings out the change so vividly as does Table 18. Supplementing this information is the accompanying advance made by men operatives in printing, publishing, and engraving.

Another skilled trade in which women are declining is that of tailoring. Twenty years ago the country had four tailors per tailoress, but in 1930 the ratio in this occupation was seven men per woman.

The census of 1930 listed 107 men musicians and music teachers for every 100 women in this profession, whereas 20 years earlier only 65 men were enumerated for every 100 women so engaged. Instructions to census enumerators were rather loose in 1910 as to the inclusion among the gainfully occupied of women who worked for a few hours a week. These directions were tightened in 1920, however, with the result that only women at work regularly and most of the time were included as having gainful occupations; this new instruction undoubtedly eliminated many music teachers who devoted very little of their time to their profession. Furthermore, the demand for music lessons has appreciably lessened since the victrola, the radio, and the sound-motion pictures reached their present stage of mechanical development. In other words, this country had in 1930 many more men than women musicians, though the opposite condition prevailed 20 years earlier, when more parttime music teachers were included.

As artists, sculptors, and teachers of art, likewise, men appear to be forging to the front at the expense of women, but the change is not so great as among musicians and teachers of music.

If one did not foresce that men operatives were gaining more rapidly than women in the chemical and allied industries and in electrical machinery and supply factories, at least no one is amazed at these facts. On the other hand, it is rather a surprise to learn that in the textile industries as a whole, as well as in carpet, cotton, silk, and woolen mills, men are slowly but steadily gaining numerical ascendancy.

For 20 years the number of men farm laborers per 100 women so employed has continued to increase. While this finding was to be expected by those familiar with conditions in the field of aqriculture, the overstatement in the number of women farm laborers in the census of 1910 obviously influences this ratio to a considerable degrec.

Table 19 assembles those pursuits in which the number of men per 100 women declined during the period 1910 to 1930 , provided 10,000 or more persons of each sex were so engaged both in 1930 and in 1920.

Table 19.-Men per 100 women in those selected occupations ${ }^{1}$ in which men hare steadily lost ground from 1910 to 1930


1 This table is limited to those occupations In each of which 10,000 or more persons of cach sex were engaged, both in 1930 and in 1020. (See Table 1II, general tables, p. 80.)

To the casual observer it would appear that women are taking the places of men in certain of the occupations listed in the foregoing table. Conspicuous among the pursuits indicating this are operatives in the clothing industries and in candy factorics; telephone operators; social and religious workers; boarding and lodging house keepers; and stenographers and typists-all occupations in which women have had a majority for more than 20 years. Nor is one surprised to learn that in these two decades women have arrived at numerical supremacy as waiters, as actors, and as bookkeepers and cashiers.

The phenomenal rise among women barbers, hairdressers, and manicurists has resulted in reducing the number of men per 100 women in this occupational group from 776 in 1910 to 231 in 1930. Causes of the sensational increase among women in this pursuit have been discussed. On the other hand, the small gain among men barbers, which in reality constitutes a relative decline, may be attributed to the general adoption of safety razors. To-day few men are shaved
by barbers, compared with a generation ago, when that was the customary procedure for men in comfortable circumstances.

Although men still have a majority as telegraph operators, they are losing ground at a rapid rate. This statement is true likewise of college presidents and professors, among whom men have dropped from 430 per 100 women in 1910 to 208 per 100 women in 1930. Even as postmasters women are slowly gaining in comparison with men.

The number of men per 100 women operatives has declined in the clay, glass, and stone industries, where detailed analysis indicates a decrease common to operatives in brickyards, in lime, cement, and artificial stone factories, in glass factories, and in potteries. And women are gaining ground as automobile-factory operatives at such a rate as to exert a reducing influence on the number of men per 100 women in the entire group of iron and steel industries. Relative gains have also been recorded by women in shoe factories and by those in the nonferrous metal industries, the latter a group of plants that includes brass mills and factories making tinware and enamelware, clocks and watches, jewelry, and gold and silver products.

Table 19 depicts the substantial advances made by women in clerical occupations and in the field of business. In the stenographic realm women have been numerically preeminent for several decades, though in 1910 this country had but 5 women stenographers and typists for each man so occupied. Even during the days of the war the ratio was but 11 such women per man, whereas in 1930 women stenographers numbered 22 for each man so occupied. Another occupation in which the number of men per 100 women has been reduced by more than one-half is that of office clerks; in this pursuit 487 men per 100 women were at work in 1910, compared with 183 in 1930. For bookkeepers and cashiers the figure dropped from 144 in 1910 to 59 in 1930.

The census of 1930 showed 10 men to 1 woman at work as realestate and insurance agents and officials, compared with 39 men per woman in 1910-a striking difference. If this group be subdivided, the change is found to be much greater among real-estate agents than among insurance men and women. For example, the ratio of men insurance agents and officials has dropped from 36 per woman so engaged in 1910 to 18 in 1930; but among real-estate agents and officials men numbered 42 per woman in 1910 and only 7 per woman in 1930. In no other occupation are women advancing so speedily.

Women have made great progress as hotel and restaurant keepers and managers and as retail dealers, but the change in ratio is not particularly pronounced. Likewise, as manufacturers, factory managers, and officials, the number of men per woman has been almost cut in two since 1910, though the men in this group still number 31 for each woman so occupied. On the other hand, foremen in factories have made an appreciable gain at the expense of forewomen during the past 20 years.

In four occupations, then, it is apparent that women are increasing much more rapidly in number than are men. Women have long been in the majority in one of these pursuits-stenographers and typiststhough to a less degree in years gone by. Though the present rate of advance is high among women real-estate agents and officials; among barbers, hairdressers, and manicurists; and among office clerks,
men so occupied still are much more numerous than women in these particular occupations.

According to Tables 18 and 19, men are adrancing at the expense of women in 17 occupations (exclusive of subtotals), whereas in 26 pursuits the opposite is true. Since practically every able-bodied man in this country is at work in normal times, it is of course to be expected that women would register relative increases in a greater number of occupations than would be possible for men. Obviously, the vast numbers of the female sex not gainfully occupied comprise an almost inexhaustible source of labor supply.

## WOMEN IN TEN MAJOR OCCUPATIONAL GROUPS

This report has already described the classification of women's occupations by general divisions, according to industry or place of work. Yet everyone recognizes the fact that the pursuits comprising any one general division of occupations are not at all homogencous. Sometimes it is desirable, therefore, to have a brief clussification of occupations combining pursuits that are fairly similar in character for the reason that persons who have not mastered the intricacy of occupationclassification schemes are likely to want information regarding employed women in terms of a few large groups, such as factory operatives, clerical workers, professional women, or servants.

With this idea in mind the gainfully occupied women have been assembled in 10 major occupational groups, the total of which forms more than 95 per cent of all women usually at work. These major groups of pursuits must not be confused with those occupations that form the component parts of each group, a point that is carefully defined by Table IV, page 82. This tabulation shows in detail just which occupations are included in each of the major groups and how many women were engaged in each such pursuit in 1930, in 1920, and in 1910.

Each of these 10 major groups represents a distinct entegory that is comparatively homogencous, not only as to occupation but as to economic and social status and as to educational qualifications. For most of the groups the inclusive names assigned are self-explanatory.

Chart VI gives a vivid picture of the changes among women at work in each of these major occupational groups in 1910, 1920, and 1930. Declines of appreciable size are shown for all women engaged in sewing occupations, as well as for those in agricultural pursuits. Although women servants and allied workers increased enormously from an absolute standpoint, their relative gain from 1910 to 1930 did not keep pace with the grow th of the femule population. In this major group the decline among home laundresses nullified some of the increase among servants proper. Neither did housekeepers, ${ }^{12}$ stewardesses, and practical nurses-high-class occupations in the field of domestic service-score a gain commensurate with that of the population.

The remaining six major occupational groups experienced incroases that far surpassed the rise in population. Between 1910 and 1030 the greatest increase, whether considered absolutely or relatively, was that for women in clerical and kindred pursuits. Table IV demonstrates the fact that this large group includes certain positions, such
as mail carriers, ticket and station agents, technicians and laboratory assistants, librarians' assistants, and various allied positions not usually classified with clerical occupations. In addition, telephone and telegraph operators, jobs that might also be considered as clerical occupations without too much stretch of the imagination, likewise registered a very large increase.


Factory and laundry employoes, on the other hand, scored a gain of but 47.7 per cent during this 20 -year period, whereas the population increase among women 10 yeurs of age and over was 41.2 per cent. Laundry employees and those in cleaning, dyeing, and pressing shops are included with factory employees in this tabulation of 10 major occupational groups. Industrially, of course, laundries and cleaning shops can not be classed as factories because they turn out no manufactured product; rather, they rendor a service.

Business women and professional women more than doubled in number between 1910 and 1930, while among saleswomen, clerks in stores, commercial travelers, demonstrators, and allied selling occupations an increase of 93.3 per cent took place.

The term "business women" is used in this report to connote those working in proprietary, official, and supervisory pursuits in the field of business. American women engaged in occupations of this type may roughly be grouped together as business women in the sense of being entrepreneurs. Unless narrowly defined, such terms as "business women" are subject to very loose interpretation.

It is quite true that the census scheme of occupation classification does not lend itself 100 per cent to the compilation of proprictors, officials, and supervisors as a group. For example, the millinery dealers who are classed with milliners and the proprictors of beauty shops who are lost in the great group of hairdressers and manicurists would be included with business women if information as to their numbers were available. Nevertheless, these minor omissions of women who in reality should be included are offset to a large extent by the inclusion of a few women who are not bona fide business women as herein defined. Women pharmacists, for example, are classed with druggists, as are embalmers with undertakers, with the result that the total includes a certain few who may have no responsibility for the management of the enterprise with which they are connected. On the whole, figures for business women represent the group with a reasonable degree of fidelity.

Among the women operating or managing business concerns in 1930 were 110,166 retail dealers; 57,318 hotel and restaurant keepers and mangers; 46,492 real-estate and insurance agents and officials; 16,133 manufacturers, factory managers, and officials; 9,192 bankers and brokers; and 6,424 advertising women. The remainder owned or managed laundries, dry-cleaning establishments, theaters, small telephone companies, garages, transfer companies, undertaking establishments, wholesale stores, importing and exporting companies, and businesses of an allied nature.

Between 1910 and 1930 these business women increased 130.4 per cent in number, or from 114,133 to 262,050 . Numerical gains occurred in each of the large subdivisions noted just above. Changes in certain individual occupations included in this category have already been discussed in considerable detail in the section of the ratio of men to women. Only by considering the number of men per 100 women can one see the great advance made by women in certain of these proprietary and supervisory pursuits.
Table 20 lists changes from 1010 to 1930 in the number of men per 100 women in each of these 10 major occupational groups. It is pertinent to add that in 1930 men in these 10 groups numbered but 65.8 per cent of all gainfully employed men, wherens women so classed comprised 95.3 per cent of all women at work. This great difference is due to the fact that five million men are employed in the heavier skilled building and hand trades-occupations in which women figure but slightly; in addition, three and one-half million men are nt work on railroads and in other fields of transportation, over a million as building and general laborers, and almost a million in mining-nll occupations in which few women are employed.

WOMEN IN TEN MAJOR OCCUPATIONAL GROUPS
Tanle 20.—Men per 100 women in each of 10 major occupational groups: ${ }^{1}$ 1930, 1920, and 1910

| Oceupational group ${ }^{1}$ | Men per 100 women |  |  |
| :---: | :---: | :---: | :---: |
|  | 1030 | 1920 | 1910 |
| All occupations. | 354 | 387 | 373 |
| Servants and allird occurations. | 36 | 35 | 24 |
| Clericul and kindrad pursuits.... | 112 | 129 | 214 |
| Fretory and laundry employers | 271 | 294 | 282 |
| Professtonal pursuits... | 104 1,078 | 109 909 | 128 599 |
| Suleswomen, "clarks in stores, ete | 1.270 | 23 | 296 |
| Houxnkegers, stewardesces, and practical nurses | 9 | 11 | 11 |
| Tretephone and telexraph oferators........ | ${ }_{2}^{28}$ | 38 | 74 |
| Husines menand busthess women | 1,384 69 | 1,773 | 2,044 27 |
| All other oecupations | 2.576 | 3,183 | 3,074 |

${ }^{1}$ Table IV, keneml tables, p. 82. Indicates what occupations have been included in each of these major occupational groubs and the number of wonien in each.

No table illustrates more vividly than the foregoing the comparative decline of women in agricultural pursuits. The reader may be surprised to learn that men have scored relative increases even as servants and in the sewing trades. Professional women have made a slow but steady advance since 1910, while as clerical workers the progress of women has been much more marked.

It seems likely that the woman in business is here to stay. The gradual nature of the change is indicated by the fact that in 1930 this country had 14 business men for each woman in business, whereas 20 years earlier the ratio was 20 men for each woman in this occupational category.

Changes in the number of men per 100 women are indicative of social trends operating throughout the country. Such ratios are much more significant than numerical increases or decreases in certain occupations, but all this information taken together gives a picture of the occupational progress of women in the United States that can not be gainsaid.

## APPENDIXES

## APPENDIX A-GENERAL TABLES <br> APPENDIX B-CLASSIFICATION AND METHOD; INSTRUCTIONS TO ENUMERATORS

Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United States: 1950, 1920, and 1910
[Reproduced from Occupation Statistics, United States Summary: Fifteanth Census of the United States, 1030]


| Cosher operatives in extraction of minerals. | 621, 681 | $621,545$ |  | 733,036 | 2,41 |  | 613,924 | 613, 519 | 408 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Copper-mine operatives........ | 281480 30,939 | 298,990 30,936 | $4{ }^{400}$ | 285, 031 | 283, 852 | 1,179 | 302,673 |  |  |
| Gold and silver mine ope | 18,157 | 18, 148 | 3 8 8 | 36. 034 | 35, 018 | 130 | 39,270 | 302,101 | ${ }_{19} 8$ |
| Lead and zinc mines. | 24, 248 | 24,245 | 3 | 32,704 | 32,086 38605 | 34 | 85,436 | 85, 347 | 38 |
| Other specified mine operat | 16.154 | 16, 153 | 1 | 20,709 | 20,740 | 49 | 49.948 | 40. 009 | 20 |
| Not specifed mine operasive | 1,78s | 11, 71 | 17 | 11.320 | 11, 271 | 40 | 7, 1045 | 10, 671 | 15 |
| Quarry operatives | 65, 288 | 25, 293 | 13 | 9,271 | 9,2m2 | 0 | 10, 821 | 10.205 | 8 |
| Bait well and worts operatives. | 105, 224 | 103, 212 | 25 12 | 45, 162 | 45.044 | 78 | 80.840 | 10, 705 | 14 |
|  | 4,124 | 3,717 | 407 | 8,472 | 85,303 | 247 | 23, 362 | 25, 548 | 14 |
| Manufacturing and mechanical industriz | 14, 110, 652 | 12, 224, 34 | 1,888,307 |  |  | 478 | 4, | 4,082 | 353 |
| Apprentices to building and hand |  |  |  | 12,831,870 | 10,001, 527 | 1 1, 230, 352 | 10, 050, 848 | 18, 838, 808 | 1 1, 830, 847 |
| Blacksmiths' apprentices | 40, 138 | 40,105 | 28 | 73,953 |  |  |  |  |  |
| Boilermakers' apprenticas |  | 682 |  | 2,661 | 2,859 | 8 2 | (i) 818 |  |  |
| Carpenters' sppreatices | 4,138 | 631 4.133 |  | 2,005 4,805 | 2,005 |  |  |  | 12 |
| Machinists' apprentices ${ }^{\text {a }}$ | 4,611 | 4,604 | 7 | -1, ${ }^{\text {0, }} 502$ | 4,797 | 8 | 10,009 | 10,001 |  |
| Plumbers' apprentices. | 13,606 | 13,600 | 6 | 30, 163 | 3.548 | 8 | 12,001 | 12,000 | 1 |
| Tinsmiths' and coppersmiths apprentic | 5,1937 1,937 | 5,937 |  | 7,380 | 3, $7,3 \times 6$ | 16 |  |  |  |
| Appreatices to other building and hand tradps | 1,937 8,591 | 1,887 |  | 2,816 | 2,815 |  | ${ }^{10} 0,003$ | '0,800 | (1) 14 |
| Apprentices (except to building and hand trades)' |  | 8, 581 | 10 | 6,255 | 8,230 | 25 | (9, 882 | (1) 6,808 |  |
| Dressmakers' and milliners' apprentice | 37,319 $\mathbf{2} 181$ | 33, 450 | 3,880 | 66,47 |  |  |  |  |  |
| Jewelers', watchmakers', goldsmiths', and silversmiths' ${ }^{\text {Bp- }}$ prentices |  | 20 | 2, 161 | 4,320 | 87, 17 | $\begin{aligned} & 9,377 \\ & 4,309 \end{aligned}$ | $\begin{aligned} & (4) \\ & 12,011 \end{aligned}$ | ${ }^{(9)} 31$ |  |
| Printers' and bookbinders apprentioes | 1,177 | 1,041 |  |  |  |  |  |  |  |
| Other apprentices in manufacturing' | 10,928 23,033 | 10,575 | 353 | 11,603 | 2,24 10,360 | ${ }_{237}^{386}$ | 31,839 | 4, 1,770 | 0 |
| Bakers. |  |  |  | 47,885 | 44,440 | 3,415 |  | (11) 454 | 191 |
| Blacksmiths, forgemen, and | 140,800 | 131,884 | 8,816 | 97,040 | 03,347 | 4,603 |  |  |  |
| Blacksmiths... | 147,469 | 147,460 |  | 221,421 |  |  |  | 4,752 | 4,779 |
| Forgemen and hammermen | 124,373 | 124,305 | 8 | 295, 255 | 221,416 105,251 |  | 240, 174 |  |  |
| Bollermakers. |  | 23,095 |  | 26, 180 | 28,165 |  | 232,988 7,186 | 232, 057 | 31 |
| Brick and stone masons and tile la | 49,923 | 49,023 |  |  |  |  |  |  |  |
| Bailders and building contractors. | 170,003 167,512 | 170, 808 |  | 131,264 | 131, 257 |  | - $\begin{array}{r}41,761 \\ \hline\end{array}$ | 44,761 |  |
| Cabinetmakers. |  | 167, 310 | 202 | 80, 109 | 90, 030 | 79 | 169,402 174,422 | 169,387 173,573 | 915 |
| Carpenters. | 57, 887 | 57,890 |  | 45, 811 |  |  |  |  |  |
| Composilors, linotypers, and typesetters | 829,428 183,632 | 929, 376 |  | 887, 379 | 887, 208 | ${ }_{171}^{8}$ | 41,892 | 11,884 | 8 |
| Dressmakers and seam | 11,347 | 11,347 | 10,269 | 140, 105 | 128,859 | 11, 300 | 817, 128 | 817,082 | 38 |
| Dyers. | 158,380 |  |  | 219,066 | 19,031 |  | 25, 299 |  | 14,081 |
| Electricians. | 17,719 | 17, 425 | - 294 | 23, 1509 | 14.338 | 236, 519 | 449,342 |  |  |
| For footnotes see pp. 74 and | 280, 317 | 280, 279 | 38 | 212, 904 | 14,078 212,945 | ${ }_{19}^{131}$ | 14, 050 | 13, 396 | 477,760 605 |

Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United States: 1980, 1920, and 1910—Continued

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow{2}{*}{Occupation} \& \multicolumn{3}{|c|}{1930} \& \multicolumn{3}{|c|}{1920} \& \multicolumn{3}{|c|}{1010} \\
\hline \& Total \& Male \& Female \& Total \& Male \& Female \& Total \& Malo \& Female \\
\hline Manufacturing and mechanical-Continuod. \& \& \multirow[b]{2}{*}{\[
\begin{gathered}
18,44 \\
7,805 \\
8,643
\end{gathered}
\]} \& \multirow[b]{2}{*}{\[
\begin{aligned}
\& 24 \\
\& 24 \\
\& 295
\end{aligned}
\]} \& \multirow[b]{2}{*}{\[
\begin{aligned}
\& 12,716 \\
\& \text { 6, } 19 \\
\& 8,29
\end{aligned}
\]} \& \multirow[b]{2}{*}{18, 830 8,484
8,048 8,046} \& \multirow[b]{2}{*}{\[
\begin{aligned}
\& 180 \\
\& 170 \\
\& 170
\end{aligned}
\]} \& \multirow[b]{2}{*}{\[
\begin{gathered}
12,506 \\
4,368 \\
8,138
\end{gathered}
\]} \& \multirow[b]{2}{*}{\[
\begin{gathered}
13,029 \\
4,208 \\
7,001
\end{gathered}
\]} \& \multirow[b]{2}{*}{\[
\begin{aligned}
\& 577 \\
\& 100 \\
\& 977
\end{aligned}
\]} \\
\hline Electrotypers, stereot spers, and lithographers. Electrot ypers and stereotypers. Lithographers. \& \[
\begin{gathered}
10,692 \\
7,88 \\
8,868
\end{gathered}
\] \& \& \& \& \& \& \& \& \\
\hline Encineers (stationary), crademen, hoistmen, te. Engipeers (stationary) Cranemen. derrickmen, boistmen, ete. \& \[
\begin{gathered}
816,9048 \\
2540,078 \\
60,856
\end{gathered}
\] \& \[
\begin{aligned}
\& 314,942 \\
\& \text { sicion } \\
\& 60,882
\end{aligned}
\] \& 22
18
4 \& \[
\begin{aligned}
\& 272,081 \\
\& 242006 \\
\& 37,888
\end{aligned}
\] \& \[
\begin{gathered}
274,940 \\
242,04 \\
37,876
\end{gathered}
\] \& \[
\begin{aligned}
\& 44 \\
\& 32 \\
\& 32
\end{aligned}
\] \& \[
\underset{(11)}{(19)} \underset{(121)}{(1)}
\] \& \[
\underset{\substack{(113), 031 \\(10)}}{\substack{210}}
\] \& \[
\begin{aligned}
\& \text { (in) } \\
\& \text { (in) }
\end{aligned}
\] \\
\hline Engravers.... \& 19, 137 \& 18, 747 \& 600 \& 15,053 \& 14,492 \& 861 \& 13, 007 \& 13,429 \& 638 \\
\hline \begin{tabular}{l}
Filers, arinders, buffers, and polishers (motal) Buifers and polishers. \\
Filers \\
Grinders.
\end{tabular} \&  \&  \& 2330

1,531
235
530 \&  \&  \& 2470
207
060
377 \&  \& 46,09
28,
28,
180
1000
8,419 \& 2,
2, 306
167
374
374 <br>

\hline Firemen (exrept bocomotive and Are department) Foremen and overseers (manufacturing) $\mathrm{H}_{\text {......... }}$ \& 127, ${ }^{129}$ \& \[
$$
\begin{aligned}
& 177,203 \\
& 310,056
\end{aligned}
$$

\] \& 28, $46 \frac{1}{1}$ \& \[

$$
\begin{aligned}
& 143,875 \\
& 308, \\
& 137
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 143,8 M 2 \\
& 2 \pi, 960
\end{aligned}
$$

\] \& 80, 171 \& | 111,248 |
| :--- |
| 176,077 |
| 10 | \& | 111,248 |
| :--- |
| 150,256 |
|  |
| 18 | \& 19,741 <br>

\hline Furnace men, stmelter men, heaters, puddlers, etc. Furnace men, smelter men, and pourers. Heaters \& 3,106
18.168
14.62 \&  \& $\stackrel{1}{1}$ \&  \& 40,800
19,215
10,468 \& 0
4
2 \& 30. 231
23.14
10.120 \& 30,238
12308
10,111 \& 25
16
9 <br>
\hline  \& 1,597 \& 1,397 \& \& 5,115 \& ¢, 115 \& \& 8.717 \& 6, 717 \& <br>
\hline Glass blowers. \& 2,208 \& 3, 209 \& 80 \& 2, 144 \& 2,055 \& 80 \& 15, 604 \& 16, 774 \& $\infty$ <br>
\hline Jewelers, watchmakers poldsmiths, and silversmiths \& 38.802 \& 37,408 \& 1,24 \& 32, 592 \& 97, 914 \& 1,678 \& \& 30,007 \& 2.157 <br>
\hline  \& 4, 7 , 519 \& ${ }_{8}^{2,055}$ \& ${ }_{621}^{81}$ \& ${ }_{8}^{4} 888$ \& 4,701 \& 1,056 \& $\begin{array}{r}3.751 \\ 10.751 \\ \hline\end{array}$ \& ${ }_{8}^{4}, 783$ \& - 204 <br>
\hline Jowelers and watchmakers ( Dot in inciory) \& 27, 125 \& ${ }^{29,553}$ \& 552 \& 20,007 \& 24.42 \& ${ }^{1} 803$ \& 19, 180 \& 14,701 \& ${ }_{4}^{1,465}$ <br>
\hline loom fixers. \& 12, 215 \& 19, 180 \& 3 \& 13,901 \& 14, as8 $^{\text {c }}$ \& 8 \& 13,234 \& 12, 254 \& <br>

\hline Mschinists, miltwrights, and toolmakers.. \& \& \& \& \& \& \& \& \& $$
\begin{aligned}
& 83 \\
& 73
\end{aligned}
$$ <br>

\hline Alachinists- \& $$
\begin{array}{r}
640,299 \\
42012
\end{array}
$$ \& 640, 285 42000 \& \& ${ }_{37}^{801.801}$ \& \[

$$
\begin{gathered}
801,800 \\
77,600
\end{gathered}
$$
\] \& ${ }^{8}$ \& 461,34 \& 461,271 \& 73 <br>

\hline Toolmaters and die seliers and sinkers.... \& 78,791 \& 78,784 \& 10 \& 64, 002 \& [4060 \& 3 \& Q, 203 \& Q, 243 \& 20 <br>

\hline Mamapers and officials (manofacturing) it Manuladurers ii $\qquad$ \& \[
$$
\begin{aligned}
& 312.750 \\
& 207.901
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 30234 \\
& 2023 \\
& \hline 100
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 10,42 \\
& 5,711
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 210.050 \\
& 183,005
\end{aligned}
$$

\] \& 241,019 178, 750 \& \[

$$
\begin{aligned}
& 8,331 \\
& 4,445
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 125,098 \\
& 254
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 123,831 \\
& 231,317
\end{aligned}
$$

\] \& \[

$$
\begin{aligned}
& 1,800 \\
& 4,301
\end{aligned}
$$
\] <br>

\hline
\end{tabular}



For lootnotes see pp. 74 and 75.


| 638, 100 | 63 | (I) |
| :---: | :---: | :---: |
| 3,405 | 1 | (t5) |
| 394, 169 | 19 | (1) |
| 21,847 |  | (iv) |
| 218,769 | 43 | (ii) |
| 15.906 | 40 | 23,272 |
| 4,846 | 40, 102 | 73,255 |
| 103, 139 | 10 | 123, 681 |
| 6, 234 | 3 | 7,238 |
| 63, 237 | 2 | 114,031 |
| 35,568 | 14 | 2,412 |
| 31, 109 | 41 | 24,012 |
| 524, 150 | 4.781 | 323,0022 |
| 4. 622 | 1,138 | 4,137 |
| 429, 882 | 123 | 248,497 |
| 89, 546 | 3,522 | 70,398 |
| 20.872 | 1,450 | 18,746 |
| 20, 711 | 39 | 27, 720 |
| 6,799 | 24 | 7,047 |
| 85, 477 | 3 | 45, 878 |
| 13. 427 |  | 7,621 |
| 70,030 | 3 | 38,235 |
| 237, 813 | 1 | 206, 718 |
| 31,215 |  | 18, 683 |
| 30, 765 |  | 25,061 |
| 23, 836 |  | 11,378 |
| 35, 984 | 80 | 33. 809 |
| 76, 127 | 261 | 78,859 |
| 12, 227 | 31 | 12,343 |
| 22, 887 | 1 | 22,099 |
| 22,966 |  | 18,836 |
| 147,476 | 21,807 | 192,232 |
| 83,421 | 6 | 74,008 |
| 3,020 | 1 | 5, 233 |
| 80,395 | 5 | 69,735 |
| 49,097 | 2,355 | 29,605 |
| 18,419 | 23 | 7,003 |




Table I.-Gainful workers 10 years old and over, by occupation and sea, for the United States: 19s0, 1920, and 1910-Continued

| Occupation | 1030 |  |  | 1920 |  |  | 1010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Malo | Fomalo | Total | Male | Femala | Total | Male | Femalo |
| Manufacturing and mechanical-Continued. |  |  |  |  |  |  |  |  |  |
| Oparatives-Continued. <br> Chemical and allied industries. | 117,4671,5875,5041,53813,8988,29725,27420,9405,28934,742 | 88604 |  | 1170,4161,722 | ${ }^{14} 51,287$ | ${ }^{4} 19,129$ |  | 28, 134 | $\begin{array}{r} 13,676 \\ 16 \end{array}$ |
| Charcoal and coke works.- |  | 1. 572 | 28,803 |  | 1, 092 | 302588 |  | 1,618 |  |
| Explosives, ammunition, and |  | 3,322 | 2,582 | 7, 379 | 4,811 |  | $\begin{aligned} & 1,634 \\ & 5,263 \end{aligned}$ |  | $\begin{array}{r} 16 \\ 2,405 \end{array}$ |
| Gas wrorks |  | 13,873 | ${ }_{23}^{23}$ | 9,402 | 1,352 9,294 | 35 168 | 6, ${ }^{035}$ | 8622 | 1343028 |
| Paint and varnish Sactori |  | 7,266 | 1,001 | 5, 521 | 4,686 | 835 | 3, 020 | 3,292 |  |
| Petroleum refinaries.. |  | 24,781 |  | 8881 | (1i) 229 | ${ }^{662}$ | 1,739 | (1,660 | (1) 70 |
| Rayson factories. |  | 10,087 | 10,853 | (1) ${ }^{\text {a }} 288$ | $\begin{aligned} & 3,239 \\ & 17,984 \end{aligned}$ | $\begin{gathered} 8,010,0 \\ 11,762 \end{gathered}$ | $\begin{gathered} 4,143 \\ 10,144 \end{gathered}$ | $\begin{array}{r} 2,518 \\ 7,870 \end{array}$ |  |
| Otber chemical factories |  | 22,814 | 11, 028 | 29, 746 |  |  |  |  | $\begin{aligned} & 1,827 \\ & 8,874 \end{aligned}$ |
| Cigar and tobacco factories. | 108, 715 | 35,767 | 67,948 | 145,222 | 61, 262 | 83,900 | 181,801 | 70,056 | 71,845 |
| Clay, glass, and stone industries. | 日6, 342 | 80, 830 | 15, 712 | 85, 434 | 72,269 | 13, 105 | 88,60113,407 | 79,23012,449 | 2,481 |
| Brick, tile, and terra-cotts factorie | 12,884 | 11, 335 | 1,349 | 8, 987 | 0,357 |  |  |  |  |
| Olass factories.....-. | 40, 853 | 33, 354 | 7, 289 | 41, 831 | 37, 036 | 7, 1205 | 41.877 | 37,927 | 3, 050 |
| Lime, cement, and articial-stone factories | 11,395 | 11,069 | 320 | 7,033 | 7,4888,478 | 20768 | 8,0098.539 | $\begin{aligned} & 8,480 \\ & 8,380 \end{aligned}$ | 150 |
| Marble and stone sards | 7,963 23,247 | 7,93 16,519 | 10 6,728 | 6,348 17,437 |  |  |  |  |  |
| Clothing industries. | 488, 909 | 142, 158 | 346, 751 | 400,301 | 143,718 | 205, 633 | 380, 136 | 148, 808 | 237, 270 |
| Corset factories. | 10,921 | 852 |  | 12,642 |  |  |  | 1,375 | 11, 098 |
| Qhove factories. | 18,465 | 4.955 | 13.510 | 23,357 | ${ }_{6}^{1,584}$ | 16, 773 | 19,339 | B, 353 | 13, 080 |
| Hat hactories (telt). | 26, 454 | 17, 881 | 8,473 | ${ }^{21.178}$ | 14,716 | 6,40212016 | 33,02060,169 | 22,702 | 10,31840,558 |
| Shirt, collar, and culf factories | 35,471 | Q, 708 | 45,763 | 52387 | 10,361 |  |  |  |  |
| Suit, coat, and overall fact | 106, 733 | 50, 190 | 212,353 | 143, 872 | 31, 585 | 124, 350 | $\begin{aligned} & 138,042 \\ & 122,403 \end{aligned}$ | 75, 444 | $\begin{aligned} & 62,508 \\ & 91,812 \end{aligned}$ |
| Other clothing factories. | 270,825 | 68,472 |  | 155, 035 |  |  |  | 30,681 |  |
| Food and allied industries. | 224,416 | 135,830 | 88,586 | 204, 550 | 131, 453 | 73,097 | 136.780 | 98,347 | 38.430 |
| Bateries | 27, 901 | 12,602 | $\begin{aligned} & \text { 15. } 2999 \\ & \text { 4.376 } \end{aligned}$ | 20,411 | $\begin{array}{r}8,858 \\ 16,090 \\ \hline 8.813\end{array}$ | 11,8832,745 | 8.83811.398 | 3,00811,005 | 8, 0330 |
| Butter, cheese, and condensed-milk factories | 25, 707 | 21, 331 |  | 18,81 |  |  |  |  |  |
| Candy lactories-.....-. | 44, 170 | 17, 404 | 27,0063,097 | 52.281 | 20,0134,363 | 31,388 | 30,43 | 13, 608 | 17,335 |
| Fish curing and packing- | 6,796 | 3,699 |  | 7. 386 |  | 3,223 | 3,002 | 3,750 | 980 |
| Flour and grain mills.........--- | 6.872 18.748 | 6, 320 | 13,552 | 8, 112 | $\begin{aligned} & 7,524 \\ & 3,898 \end{aligned}$ | ${ }_{8} 888$ |  |  | 242 |
| Fruit and vegetable canning, etc. | 18,708 | 5,196 |  | 10,204 |  | 8,005 | 8.290 | 2127 | 2, 163 |
| Sugar lactories and refineries. | 3,78 | 43, ${ }^{4} 070$ | 10,008 | 4, 3,801 | 41, 208 |  | 25,897 | 23, 492 | 2405 |
| Other food factories. | 25,898 | 12743 | 13, 158 | 17,633 | $\begin{gathered} 8.701 \\ 14,900 \end{gathered}$ | $\begin{aligned} & 7,812 \\ & 0 \times 5 \end{aligned}$ | $\begin{aligned} & 13,978 \\ & 31,500 \end{aligned}$ | $\begin{gathered} 8_{1}^{8}, 192 \\ 29,004 \end{gathered}$ | $\begin{aligned} & 5,786 \\ & 1,830 \end{aligned}$ |
| Liquor and beverage industries. | 11, 187 | 10,418 |  | 15, 65 |  |  |  |  |  |



Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United States: 1980, 1920, and 1910—Continued

| Occupation | 1930 |  |  | 1920 |  |  | 1010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Malo | Femnte | Total | Nale | Femala | Total | Malo | Female |
| Manufacturing and mechanical-Continued. |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  | 28,609 | 16, 480 | 12,123 | 23,387 | 13, 003 | 10,384 | 37,347 | 17.05 .5 | 19,692 |
| Hemp, jute, and linen mills | 4. 503 | 2,074 | 2429 | 6,742 | 2,811 | 3,931 | 6, 605 | 2710 | 3,805 |
| Lace and embroidery mills. | 11,417 | 4,221 | 7,196 | 19,083 | 6, 080 | 12007 | 16, 027 | 4,336 | 11,691 |
| Rope and cordage factories | 5,468 | 3.067 | 2, 402 | 8,454 | 4,714 | 3,740 | 6, 517 | 3,022 | 3,405 |
| Sail, awning, and tent factories.-... | $\begin{array}{r}4.275 \\ \hline \text { 7, } 387\end{array}$ | 23689 | 1. 709 | 11 31, ${ }^{3,53}$ | 21 21.838 | 913.005 | 31 3, 305 | 21 2324 | 13 32, 011 |
| Other and not specifed tertile mills. | 79,387 | \$6,808 | 42,489 | 21 61, 255 | ${ }^{21} 24,881$ | 936374 | 2150,741 | ${ }^{21} 18,231$ | ${ }^{13} 32.810$ |
| Miseellaneous manufacturing industries. | 538, 108 | 353.744 | 182,364 | ${ }^{3} 538,832$ | ${ }^{21} 344.568$ | '3102, 204 | 21250,675 | 5155,843 | 31104,132 |
| Broom and brush factories............ | 9, 52] | 7.622 | 1,899 | 12.600 | 10,210 | 2387 | 11, 103 | 0,037 | 2,133 |
| Button factories. | 7,565 | 4. 486 | 3,069 | 12, 077 | 7.768 | 5,200 | 11, 481 | 0. 182 | 4,779 |
| Electric light and power plants. | 49,279 | 48, 218 | 515 | 18, 249 | 15,610 | 339 | 8,880 | 8, 704 | 170 |
| Electrical machinery and supply factories | 117,327 | 72012 | 45,315 | 64, 841 | 37, 452 | 27, 359 | 24, $67 \%$ | 13, 636 | 11,041 |
|  | 88,835 | 50,546 | 21, 389 | 80.204 | 67.370 | 18. 34 | 31, 803 | 21. 170 | 10, 423 |
| Straw factories....... | 1,818 | 534 | 1, 234 | 14. 102 | 7,751 | 0.351 | 3. 015 | 1. 045 | 3, 470 |
| Turpentine farms and distilleries..--... | 12,368 | 1,360 |  | 1,138 | \% 1.130 | \% 40, 819 | \% 1.410 | \% 1, 411 | \% 28 |
| Other miscellaneous manufacturing industries | 129,460 138,945 | 88,949 74,957 | 45, 511 | ${ }^{\mathbf{2}} 121.963$ | ${ }^{11} 85,772$ | 8146108 | 217,050 | 23 11, 244 | ${ }^{4} 20,800$ |
| Not specifled industries and servioes | 153, 152 | 123,252 | 29,000 | 207,017 | 121,400 | 85, 851 | 83,487 | 81,684 | 41,803 |
| Lahorers (n. o. s. ${ }^{17}$ ): <br> Bailding, general, and not specifled laborers |  |  |  |  |  |  |  |  |  |
|  | 1.115,667 | 1, 104, 132 | 11, 535 | 680.722 | 671,487 | 15,235 | c85, 781 | 919, 201 | 15,8\%0 |
| Laborers and helpers, buidding construction. | 419, 802 | 419,675 | 11.127 | (15) | (bi) | (19) | (15) | (II) |  |
| Gengral and not specifed laborers. | 695,805 | 684, 157 | 11,408 | (15) | (11) | (11) | (13) |  | (II) |
| Chemital and allied industries | 151. 818 | 148, 507 | 3.411 | ${ }^{21} 134,313$ | ${ }^{31} 130,609$ | ${ }^{31} 3,014$ | 80,951 | 78.82: | 2.12 |
| Charcoal and cote worts.. | 4,783 | 4.722 | 11 | $0.3 \times 4$ | 9, 3.2 | 32 | 11.418 | 11, 431 | 18 |
| Explosives, ammunition, and firaworts factories | 5.047 | 4.447 | 600 |  | 7. 221 | 640 | 4. 271 | 3, 647 | 330 |
| Fertilizer factories. | 18,243 | 18, 157 | 86 | 12.043 | 12.s08 | 135 | 0.847 | U. 357 | 00 |
| Ges works. | 28,897 | 28.884 | 13 | 18.845 | 18.787 | 58 | 16. 340 | 16, 334 | 15 |
| Paint and vamish factories | 6, 171 | 6,017 | 154 | 4. 841 | 4.077 | 184 | 2. 1151 | 2842 | 117 |
| Petroleum refiveries. | 40,816 | 40,645 | 171 | 31, 745 | 31, 360 | 225 | 11.215 | 11,131 | 64 |
| Rayon factories. | 4.982 | 4.451 | 511 | (11) | (11) | (3) | (51) | (11) | (9) |
| Soap faclories. | 4.799 | 4,506 | 233 | 4.713 | 4,340 | 369 | 3, 4.33 | 3,173 | 220 |
| Other chamical tactories. | 38, 200 | 36,568 | 1,032 | 43,323 | 41,342 | 1,2081 | 21, 225 | 19, w2 | 1,233 |

Clay. tiass, and stone industries
Brick, tile, and terra-cotta factories
 Lime, cement, and artincial stone factories.-................................. Potteries and stone yards.

Clothing industries.
Corset factories
Glove factories.
Hat factories (feli)
Shirt, collar, and culf factories
Suit, cost, and overall factories
Other clothing factories.
Food and allied industries.
Bakenes
 Candy factories.
Fish cuting and packing
Flour and grain mills.
Fruit and vegetable canning, etc
Slaughter and packing houses
Sugar factories and relineries
Liquor and beverage industries.
Iron and steel, machinery, and vehicle industries
Agricultural-inplement factories
Automobile factories.
Blest furnaces and steel-roling milis it
Car and railroad shops.
Chip and boat building
Wagon and carriage factories

Not specified metal industries
Metal Industries (except iron and steel)
Brass mills.

Copper factorfes

Jewelry factories..
Lead and zinc factories.
Tinware, enamelware, etc., factories.

| 20,581 145,605 | 14,004 142.095 | 6,487 3,570 | 35,157 | 21, 295 | 13,802 | 16,302 | 11,436 | 4,956 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59. 543 | 142035 | 3,570 | 124.544 | 120, 215 | 4,329 | 154,820 | 152.4.38 | 399 |
| 28,108 | 20,362 | 1.751 | 18, 036 | 48,000 | 337 | 77. 0.5 | 77. 333 | 2381 |
| 38,634 | 38,475 | 1,740 | 28, 037 | 20. 161 | 2,4i0 | 24, 834 | 23, $0 \times 6$ | 84 |
| 8102 | 8,057 | 159 | 30,0.51 | 29, 844 | 167 | 34,003 | 35, 931 | 152 |
| 11,278 | 10,389 | 009 | 11,836 | re, | ${ }_{123}^{23}$ | 6. 013 | 6. 817 | fis |
| 15, 293 | 8,558 | 6.735 |  |  |  | 0 | 8,61 | 809 |
| 350 | 8,333 | 0,715 217 | 12,761 | 0, 114 | 6,3n2 | 10.240 | 5. 124 | 4,816 |
| 1,159 | 550 | 600 | 1. 757 | 194 | 577 | 83 | 2046 | 448 |
| 1,142 | 966 | 176 | 1. 959 | 893 | $8: 8$ | 870 | 440 | 424 |
| 4,136 | 2,314 | 1,822 | 2.708 | 1825 | 164 | 1.750 | 1,541 | 218 |
| 3,794 | 2,456 | 1,338 | 2.988 | 1,317 2,216 | 1,301 | 2,184 | 821 | 1,313 |
| 4,712 | 2,139 | 2,373 | 2,567 | 2,210 000 | 1,765 1,007 | 2,920 1,073 | 1,051 | 1, $2 \times 0$ |
| 154.886 | 130. 802 |  |  |  |  | 1,073 | 670 | 4 H |
| 12,302 | 10,786 | 18,084 1,576 | 170, 065 | 153,692 | 18,373 | 100.872 | 03, 085 |  |
| 17,433 | 16,518 | 1.970 915 | 8,315 15,190 | 6, 860 | 1,440 | 4.510 | 3, 3.755 | 0, 897 |
| 5, 552 | 4,080 | 1.472 | 15,190 | 14, 174 | 1,016 | 4.810 | 4, ARS | 753 |
| 6.172 | 4,596 | 1,572 | 6,384 6,300 | 4,3988 | 2,186 | 2,978 | 1, 1,845 | 1.133 |
| 15,997 | 15. 839 | 158 | 18,121 | 8, 201 | 1,030 | 4,870 | 4,637 | 1.233 |
| 19.544 | 14,987 | 4, 557 | 13, 058 | 17.983 0.743 | 138 | 9, 243 | 0,182 | 91 |
| 43, 045 | 39, 384 | 3,661 | 59, 548 | $\begin{array}{r}\text { 9, } \\ 5543 \\ \hline 136\end{array}$ | 8,315 4,112 | 4,670 | 3, $6 \times 3$ | $0 \times 7$ |
| 9,298 | 9, 038 | , 220 | 15, 733 | 55, 436 | 4, 112 | 33, 003 | 32,471 | 1.4:32 |
| 16,988 | 13, 281 | 3,687 | 16,686 | 15,414 | 310 2.807 | 8,755 | 8. 647 | 108 |
| 8,515 | 8,293 | 222 | 10, 530 | 14,119 10,205 | 2,807 235 | 8,270 18,857 | 6.813 18.244 | 1.187 |
| 662,131 | 652, 027 | 10, 104 |  |  |  | 16,207 | 18,244 | 563 |
| 10.873 | 10, 735 | 20, 138 | 711, 409 | 717,022 | 12, 501 | 482, 041 | 476, 801 | 6, 140 |
| 123. 717 | 120.150 | 3, 567 | 83,341 | 11, 292 | ${ }_{2} 117$ | 11. 007 | 10,953 | 6,140 114 |
| 12,653 235,726 | 12,617 | 33 | (16) ${ }^{\text {(1) }}$ | ${ }_{\text {(16) }} 80.84$ | (ii) 467 | 15, 783 | 18, 044 | 1148 |
| 235, 3726 3780 | 234,524 37,542 | 1, 202 | 258,830 | 256, 548 | (1) 2,282 | (16) 302 | (16) | (14) |
| 37,789 17,352 | 37, 542 | 247 | 53,643 | 53, 280 | 2,282 | 202, 302 | 201, 030 | -1,362 |
| 17,352 1,419 | 17,325 | 27 | 69, 190 | 88,917 | 303 270 | 48,342 | 48, 114 | 228 |
| 1,419 171,814 | 107,406 | 13 | 9,817 | 88,917 9,504 | 270 223 | 11,083 12,391 | 11, 075 | 8 |
| 50,788 | 167,534 50,194 | 4, 280 | ${ }^{16} 179,607$ | ${ }^{14} 173,734$ | 165,873 | -138, 050 | 14 12, 232 | 150 |
|  | 5,184 | 594 | 63,770 | 62, 783 | 087 | 42,924 | 134,205 42,558 | $\begin{array}{r} 54,754 \\ 360 \end{array}$ |
| 62,398 14,809 | 58,913 | 3,485 | 67,887 | 62,771 |  |  |  |  |
| 14,809 I, 540 | 14,411 | 308 | 18,485 | 17,614 | 5,110 871 | 44,773 | 42, 134 | 2,030 |
| 1,540 8,013 | 1, 018 | 528 | 3,108 | 1,920 | 1,179 | 10,885 1,870 | 10, 606 | 273 |
| 8,109 1,199 | 7,050 | 63 101 | 10,963 | 10,008 | 1, 55 | 1,870 11,580 | 1,202 11,532 | 617 |
| 307 | 328 | 69 | 2,272 | 2,001 | 211 | 1,277 | 1,102 1,101 | ${ }^{54}$ |
| 8,116 | 8, 093 | 23 | 8,827 | 1,255 8.859 | 186 | 7608 | 1.101 | 176 140 |
| 20, 181 | 18, 313 | 1,808 | 17,605 | 8,859 15,438 | $\begin{array}{r}68 \\ \hline 209\end{array}$ | 7.945 | 7,871 | 140 |
| 8,137 | 7, 702 | 435 | 8,108 | 15,436 4,709 | 2,169 | 7,587 | 6,709 | 878 |
|  |  |  |  |  | 3.7 | 2,016 | 2,525 | 421 |

Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United Stales: 1980, 1920; and 1910-Continued



Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United States: 1980, 1920, and 1910-Continued



Table I:=Gainful workers 10 years old and over, by occupation and sex, for the United States: 1950, 1920, and 1910—Continued



For footnotes see pp. 74 and 75.
$1,703,522$
61,501
36,503
41,784
62,210
19,952
29,870
19,361
148,837
104,727
10,464
9,887
239,436
35,884
89,190
81,187
313,086
52,138
50,610
19,648
23,884
27,478
34,070
14,385
113,061
58,377
$2,069,003$
4,281
63,769
7,533
5,088
$1,98,332$
34,132
83,525
125,175
6,853
1,611
158
5,248
0,926
45,108
52,367
4,580


| 110. 160 | 1,328. 275 |
| :---: | :---: |
| 518 | 28, 364 |
| 3,594 | 25,309 |
| 100 | 48,309 |
| 10,444 | 40.091 |
| 908 | 19.141 |
| 0.51 | 28, 5503 |
| 1,610 | 11, 752 |
| 19,351 | 133, 100 |
| 4,604 | 80, 157 |
| 1, 423 | B, 409 |
| 100 | 9. 309 |
| 6,270 | 202, 444 |
| 1, 813 | 27. 145 |
| 2,093 | (4) |
| 5,176 | 80,020 |
| 29,075 | 239, 236 |
| 022 | 48,933 |
| 1,790 | 60, 402 |
| 76 | 8,203 |
| 888 | 21, 433 |
| 312 | 24, 733 |
| 167 | 27, 687 |
| 616 | 12, 832 |
| 11,684 | $4{ }^{4} 01,107$ |
| 3, 917 | 65, 728 |
| 500, 720 | 1,102, 100 |
|  | 5, 048 |
| 11,813 | 14,705 |
| 5,740 | 4,823 |
| 517 | 41,841 |
| 842,640 | 1, 125, 782 |
| 1,040 | 24, 460 |
| 1,088 | 73, 574 |
| 29, 106 | 67, 611 |
| 100 | (4) |
| 409 | (a) |
|  | (17) |
| 1,728 | (1) |
| 6, 142 | 8,074 |
| 83 | 22,884 |
| 19,407 | 36,653 |



| $\text { J. } 249,29.8$ |
| :---: |
| $\begin{array}{r} 49,29.5 \\ 24,620 \end{array}$ |
| 23.023 |
| 48, 22x |
| 32, 305 |
| 18,031 |
| 26, 0:3 |
| 10,800 |
| 121, 379 |
| 76, 005 |
| 4,840 |
| 9,212 |
| 100, $\times 38$ |
| 26,4:3 |
| (5) |
| 76,317 |
| 210.050 |
| 48, 213 |
| 48, 493 |
| 8,160 |
| 20,642 |
| 24, 581 |
| 27, 389 |
| 11, 743 |
| 485,085 |
| 80, 483 |
| 820,800 |
| 5, 045 |
| 10, 514 |
| 1,039 |
| 40, 207 |
| 769, 461 |
| 23,342 |
| 72, 780 |
|  |
| (17) |
| (1) |
| (4) |
| (47) |
| 4.988 |
| 22, 804 |
| 24,314 |



| $\begin{aligned} & \text { E } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |



[^11]Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United States: 1930, 1920, and 1910-Continued



| 102,730 |
| :---: |
| 20, 008 |
| 79, 922 |
| 2,300 |
| 160, 605 |
| 165, 128 |
| 6, 117 |
| 39,529 |
| 153, 803 |
| $\begin{aligned} & 1,062,615 \\ & 18,599 \\ & 1,04,016 \end{aligned}$ |
|  |  |
|  |  |
|  |
|  |
| 102,056 57,837 |
| 64, 356 |
| 11,970 |
| $\begin{array}{r} 294,189 \\ 11,863 \end{array}$ |
|  |  |
|  |
|  |
|  |
|  |
|  |
| 188,549 |
| 11,756 |
| 2,656 |
| 3,035 |
| 20, 120 |
| $\begin{array}{r} 11,916 \\ 1,923 \end{array}$ |
|  |  |
|  |
| 15,020 |
| 10, 718 |
| 14,515 |
| 1,81931,290 |
|  |  |
|  |
| $19,723$ |
|  |  |
|  |
| 16, 168 |
| 13, 715 |
| 2,213 |



Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United States: 1930, 1920, and 1910-Continued

| Occupation | 1830 |  |  | 1920 |  |  | 1010 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Fomale | Total | Malo | Femalo | Total | Mala | Female |
| Proressional servico-Continued. | $\begin{array}{r} 25,383 \\ 29,803 \\ 1,895 \\ 14,042 \\ 4,274 \\ 12461 \\ 50,370 \\ 4,952,451 \end{array}$ | $\begin{array}{r}23,762 \\ 29,48 \\ \hline 102\end{array}$ | 1,621 | $(4)$ | (41) | (4) | ( ${ }_{(4)}^{4}$ | (4) |  |
| Attendants and belpers, professional service-Ontinued. laborers, prolessional service. |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  | (4) |
| Librarians' assistants and attendants.- |  | 502 $6 \times 9$ | 1, ${ }^{1,363}$ | 2,270 $7,0.51$ | 1,067 | 1,212 6,410 | 3,209 4140 | 507 $0 \times 0$ | 2,702 3,451 |
| Stage hands and circus helpers......... |  | 4,099 | 17, 175 | 6,803 | 5,377 | 430 | 0,836 | 0,444 | 392 |
| Theater ushers--.---.-. |  | 9,308 | 3,153 | 8, 6221 | 2,868 | 2,353 1,078 | (c) 278 | (0) ${ }^{231}$ | 147 |
| Domestic and personal service 4 |  | 1,772 200 | 3,180, 251 | 8, 379, 805 | 1, 103, 313 | 2,180, 182 | 3,755,708 | 1,225,305 | 2, 530,408 |
| Barbers, halrdirasers, and manicurists | 374.290 | 261,006 | 113, 194 | 216,211 133,292 | 182, 015 | $\begin{array}{r}33,240 \\ 114.740 \\ \hline\end{array}$ | 105, 773 | 172.077 23,072 | $\begin{array}{r} 22,244 \\ 142,400 \end{array}$ |
| Boarding and lodging house keepers Bootblacks..................... | 144.371 18.78 | 17,013 | 127,278 37 | 133,392 15,175 | ${ }_{15}^{18,142}$ |  | 14,020 | 14,000 | ${ }^{132} 0$ |
| Charwounch and cleaners. | 61, 032 | 20,043 | 40, 839 | 36,803 | 11,848 | 2, ass | 31,004 | 7,105 | 34.380 |
| Cleaning, dyeing, and pressing shop workers. | 88, 118 | 60, 518 | 21, 003 | 21, 667 | 17,004 | (51) 573 | 14.800 | (12) 218 | $\mathrm{al}^{2,045}$ |
| Owners and proprietors. | 16,275 | 15,207 4,615 | 1,088 1,230 | (\%) | $(11)$ | (\%) | (n) | $(\mathrm{N}$ | $(2)$ |
| Manapers and ollicials.- | 5,841 819 | 4,615 470 | 1,230 | (\%) | (n) | (2) | (10) | 3 | (2) |
| Laborers.-. | 1, 549 | 8,910 | 639 | (0) | (n) | (10) | (m) | n | n |
| Other operatives. | 69,03 | 42,313 | 18,321 | (II) | (2) | (N) | (n) | (3) | (m) |
| Elevator tenders. | 67, 614 | 55, 253 | 12.350 | 40.713 | 33, 376 | 7,337 | 28,035 | 23,030 | 25 |
| Hotel teepers and managers | 56, 848 | 39,538 | 17,310 | 55, 613 | 41,49 | 14, 134 | Of, 305 | 80,300 | 14, 235 |
| Housetrepers and stewards .-....-...-.--- | 256, 740 | 20.363 | 230, 363 | 221.012 | 17.302 | 204.330 | 180.773 | 18,040 | 173,353 |
| Hotels, restacrants, boarding houses, etc. Other housekcepers and stewands. | 30,620 200,120 | 8,488 11,885 | 222,128 | (N) | (N) | ( ${ }_{\text {(1) }}$ | $\left(\begin{array}{l}\text { n }\end{array}\right.$ | (\%) | (r) |
| Janitors and sextons. | 309,625 | 273, 803 | 35, 820 |  |  |  |  |  |  |
| Laborers, domestic and personal service. | 71,687 | 67,337 | 1,310 | H $32,8 \times 3$ | M 31, 224 | $4 \mathrm{~L}, \mathrm{~m}$ | $\cdots \mathrm{Si3} \times 0$ |  | - 31.483 |
| Lsanderers and laundresses (not in laundry) | 361,033 | 4.505 | 359,405 | 359,730 | 10, 人22 | 305, 874 | 633,007 | 13, 013 | 820,004 |
| Leundry ornders, managers, and officials as | 24, 345 | 22.482 | 2003 | 13,002 | 12.230 | 1,453 | 18,043 | 17,037 | 16 |
| Onreers and proprietors... | 15,440 | 14.474 | 006 | 9,027 | 8.188 | 800 | 15,441 | 14.005 | 746 |
| Managers and officisls.. | 9, 105 | 8,008 | 1,007 | 4,605 | 4,001 | 684 | 2002 | 2.302 | 240 |
| aupdry operatives 4. | 240,704 | 80,229 | 100,473 | 120,715 | 30, 068 | 80.747 | 112,204 | 3R,400 |  |
| Delivery men w... | 20.573 | 20,508 | 2, 15 | (*) | (c) | (c) | (F) | (c) | (c) |
| Foremen and overseers | 8.337 | 3.543 | 2.754 | 3,611 | 2076 | 1, 535 | 8,071 | 1,074 | 1,307 |
| Laborers..........- | 10.203 104.501 | 11,001 | 8.702 149,414 | 13,107 103,097 | 31,322 | a, 837 72,078 | 8,780 109,407 | 8,432 <br> 28,803 | 71.004 |



Table I.-Gainful workers 10 years old and over, by occupation and sex, for the United Slotes: 1980, 1980, and 1910-Footnotes



 as here compiled for 1920 and for 1910 , the number of farm laborers classiffed ns "Wago workers" proliably is somewhat too large, and the number classifod as "Unpald fandily wotiers" probabiy is somewhat too strall.
 rita 1930 tikures

Comparable firures for 1810 not avallable.
Figures for 1910 approximate only.
Many of the machinists' apprentices probsbly are machine tenders.




- Figume 190 ficuras ioclude cement finisbers; these numbered 7,021 in 1020.
- Figures lor 1910 estimated.

 were classifitod in. A Arriculrura, forestry, etc." "in 1920 and in 1910.

4 Not otherwiso specified
13 Comparable flures for 1020 and 1910 not arailabio

a In 1930 and in 1920 automobilo repair shops were included to the group "Other fron and steed lactorios."

${ }_{3}$ Incududes iron Ioundries
 bag fictories" In 1230

- Includes bax factories (wood).
a includes the few oneratives reparted in rayon factories in 1920 . NoDe wero returned in ig10. Gee. alsn, fontnote 22


 in 1930 and in 1910, were transterred to "Professional servico" io 1930
 bag bactories" to 1980

Includes the ferr haboress reported in rayon factorles in 1920 . see, also, fontunte 20.



Not classified separately in 1020 of in 1910 .




 of steciocary bollers were included with locomolive Aremen.


```
    B Radio and wirelevs operators wore incloded with telegreph op|rators in 1020 and in i01a
```



```
    "aransportetion end commonicution" th 1ua
```









```
    4 Includes, amso, manageis and supermicadcesm of zrim stoxem.
```




```
    * Inoluded in tho group Othe oocapations" in 1920 and in 1010.
```



```
    c Incivdes enNy those resident In continental United 8tates at dats of enomamaion.
    # Probably inciudes somo toachers in schools below colleglate rank.
```









```
    Not thown prior to 1930.
```







```
mostic and profesional service."
4 Bome awners of hand letandries ypobbly sre fncinded with laundry operatives
&omo delivery men probably vere redurnod and ciosinod as chansteurs.
```




```
Which Altancamis, pooi romse, bowings sloyt',
```





```
    " Clacoinged in the troup""Agents" in 1920, In 1010, th
    # "Omporppliamce operstors" were included in the gronp "Other cierks" in 1000 and in 1010.
    % Brsept talerreph meesemger:

Table II.-Number and per cent of increase or decrease from 1920 to 1930 and 1910 to 1930 among men and women engaged in certain selected \({ }^{1}\) occupations

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Food and allied industries.. & +4,377 & +3. 3 & & & & & & \\
\hline Other inetal industries. & -41, 528 & \(\pm 6.6\) & \(+15,489\)
+2944 & +21.2 & +37, \(1 \times 3\) & \(+381\) & +80,147 & +130. 5 \\
\hline Leather industries..... & +205 & +.3 & \(+3.56\) & +1.2 & +215182
+12003 & \(+71.0\) & +37,200 & \(+157.8\) \\
\hline Lumber and furniture industries & \(\underline{-20,669}\) & \(-10.5\) & +8,050 & +10.8 & +12, 534 & +24.7
-6.7 & +0.144
+28.243 & \(+17.7\) \\
\hline Paper, printing, and allied industries. & \(+7,762\)
\(+14,742\) & +5.2
+1.8 & +480 & +5. 1 & +3,337 & +2.3 & \(+\infty, 213\)
\(+5,042\) & +40.1
+40.5 \\
\hline Rubber factories........... & +14.742
-7.824 & +16.8
-11.0 & -4.355
+2.455 & -8.4
+130 & \(+38,005\)
\(+38,370\) & +0.3
+01.3 & \(+5,04\)
+3.916 & +10.5
+0.6 \\
\hline Textile industries. & +31,087 & 1.0
+8.8 & \[
-6,113
\] & +13.0
-1.4 & \(+38,370\)
\(+81,815\) & \(+181.3\) & \(+10,260\) & +104.3 \\
\hline Carpet mills. & & & -6, 113 & -1. 2 & +81, 815 & \(+20.8\) & +46,303 & \(+120\) \\
\hline Cotton mills. & +3,483 & +26.8 & +1.739 & +16.7 & & & & \\
\hline Knitting milis & \(+3,549\)
\(+17,281\) & +23
+64 & -3, 502 & +2.3 & +17.335 & -6.6
+124 & & \[
\begin{array}{r}
-34.1 \\
+3.6
\end{array}
\] \\
\hline Silk mills Woolen and worsted mille & \(+17,281\)
+8.127 & +64.2
+21.2 & \(+0,121\)
+922 & 111.3
+11.3 & +17,035 & +12.
+42.2 & \[
\begin{array}{r}
+3,017 \\
+240
\end{array}
\] & \[
\begin{array}{r}
+3.6 \\
+37.4
\end{array}
\] \\
\hline Woolen and worsted milis. & \(+8,127\)
\(-11,042\) & +21.2
+18.5 & +022
\(-12,055\) & +1.3
+1.3
-20.5 & +21.031 & \[
\begin{array}{r}
+40.2 \\
+79.5
\end{array}
\] & \[
\begin{aligned}
& +24,405 \\
& +20,350
\end{aligned}
\] & \[
\begin{aligned}
& +37.4 \\
& +46.3
\end{aligned}
\] \\
\hline Building, general, and not specifled laborers. & & & -12,008 & -20.5 & -300 & -. 7 & -2,000 & -8.8 \\
\hline Factory laborers. & -132, 178 & +6.4
-6.2 & -3,700 & -24.3 & +184,231 & +20.0 & -4,345 & -27.4 \\
\hline Chemjcal and allied industries & & -6.2 & -40, 197 & -20.1 & +474,072 & +31.4 & +51, 187 & +81. 5 \\
\hline Cigar and tobacco factories.... & +17,808 & \(+13.6\) & -203 & -5.6 & & & & \\
\hline Clay, glass, and stone indust & -7,201 & \(-33.8\) & -7,375 & -8.2 & & +88.4 & +1,287 & \(+60.6\) \\
\hline Clothing industries...-........... & \(+21,880\)
\(+2,144\) & +18.2 & -769 & -17.5 & \[
\begin{array}{r}
+2,668 \\
-10,343
\end{array}
\] & +23.2
-6.8 & +1, 531 & \(+30.0\) \\
\hline : Electrical machinery and supply facto & \(+2,144\)
\(+9,783\) & +33.4 & \(+378\) & +5.9 & -10,343
\(+3,13\) & -6.8
+57.8 & \(+1,162\)
\(+1,010\) & \[
+49.5
\] \\
\hline Food and allied industries............ & \(+9,783\)
\(-16,890\) & +41.8 & +313 & \(+9.7\) & +23,292 & + +23.8 & +1,010 & +39.8 \\
\hline Iron and steel, machinery, and vehicle industries & \(-16,890\)
\(-64,095\) & \(-11.0\) & \(+1,711\)
\(\mathbf{+ 2 , 4 8 7}\) & \(+10.5\) & +42,817 & +46.6 & \(+2,109\)
\(+11,107\) & +160.3
+1620 \\
\hline Other metal industries. & -6, 095 & -9.1 & -2,487 & -19.8 & +175,226 & +30.6
+36.8 & \(+11,107\)
\(+3,04\) & \(+162.6\) \\
\hline Leather industries..... & -3,
\(-15,164\) & -6.1
-31.5 & \(-1,031\)
-874 & -31.9 & +16, 779 & +36.8 & \(+3,64\)
+840 & \(\pm 64.6\) \\
\hline Paper, printing, and allied ind & +16,197 & -81.5
+5.2 & -8,274 & - 13.5 & \(+684\) & +2.1 & +2,051 & +32.1
+60.0 \\
\hline Rubber factories........-- & +3,102 & +5.1 & -8, 812 & -30.5
-13.5 & \(+12,843\)
\(+28,208\) & +4.1 & +3,452 & +86.0 \\
\hline extile industri & -21, 535 & -48.3 & -809 & -20.5 & \(+28,208\)
\(+13,756\) & +78.4
+112.5 & +1,333 & \(+34.5\) \\
\hline extile & \(-19,560\) & -16.3 & \(-13,212\) & -40.1 & & & 1,821 & +137.7 \\
\hline Cotton mills. & & & -13,212 & -40. & +29,668 & +41.7 & +3,718 & +23.2 \\
\hline Knitting mills. & \(-13,207\)
-719 & -22.1 & -7.689 & -45.5 & & & & \\
\hline Silk mills Woolen and worsted mills & -719
\(+1,570\) & -10.9
+21.4 & 1,812
-572 & -33.9 & \[
\begin{array}{r}
+14,402 \\
+1,020
\end{array}
\] & +48.0
+38.0 & \(+3,313\)
-12 & +57.4 \\
\hline Woolen and worsted mills. & +1, 283 & +21.4 & -572
\(-2,101\) & -21.0 & +6,234 & +232.1 & -1,040 & + 0.3 \\
\hline Transportation and communjcation. & & & 2,101 & -54. & +1,710 & \(+16.7\) & \(-247\) & -12.1 \\
\hline Laborers, steam railroad & 089 & \(+24.0\) & +56,034 & +25.4 & +1, 012,021 & +39.7 & +105,857 & \\
\hline Mail carriers .-......... & -31,696 & \(-6.8\) & & & & & , & 143.8 \\
\hline Postmasters. & +30,073 & +33.4 & -3, & -52.8
-14.5 & \(-107,973\)
\(+40,537\) & -20.0 & -137 & -4.2 \\
\hline Telegraph operators & +81
\(-10,875\) & +. 4 & +2, 395 & +21.4 & \[
\begin{aligned}
& +40,537 \\
& +1.691
\end{aligned}
\] & +50.9
+8.8 & +118
+4.881 & \(+11.7\) \\
\hline Telephone operators. & -10,875 & \(-17.1\) & -738 & -4.4 & +10,035 & +8.8
-16.3 & +4,881 & \(+50.0\) \\
\hline Ticket and station agents & +1.844
+1.046 & +15.7 & +56,880 & +31.9 & \(-10,035\)
\(+3,094\) & -16.3
+11.8 & +7,903 & \(+00.2\) \\
\hline 1 This table is limited to those occupations in each of which 1,000 or mor & +1,046 & +4.3 & -471 & -20.8 & \(+2,440\) & +11.6
+10.6 & \[
\begin{aligned}
& 10,007 \\
& +582
\end{aligned}
\] & +168.5
+48.2 \\
\hline
\end{tabular}
iactory groups are shown in the case of the manufacturing industries, even when this each sex were engaped, both in ig30 and in ig20, but for reasons of space not all the comp 1910 Agures not available.

Table II.-Number and per cent of increase or decrease from 1920 to 1980 and 1910 to 1980 among men and women engaged in certain selected occupations-Continued

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Musicians and teachers of & +27,930 & +88.5 & +0.033 & +0.8 & +30,685 & +56.01 & -4,807 & -6. 8 \\
\hline Osteopaths... & \(+1,187\)
+4.023 & +35.3
+14.8 & -100
\(+1,247\) & -0.0
+17.5 & \({ }^{(1)}\) & +12. 2 & (1)
\(+3,402\) & +18.8 \\
\hline Physicians and surgeons & +9,220 & +6.7 & -344 & -8. 5 & +1,861 & +34 & -2,140 & -24.3 \\
\hline Teachers (athletics, davcing, & +6.611 & +116.5 & +2.277 & +54. & +9, 520 & +343.9 & +5.148 & +426 \\
\hline Teachers (school). & +73, 201 & +62.8 & +218 \% 60 & +34.4 & +71, 607 & +6.5 & +377, 103 & +70. \\
\hline Trained nurses. & -12 & -. 2 & +145,073 & +101.0 & -367 & -6. 3 & +212, 224 & +277.4 \\
\hline Semiprofessional persons: & & & & & & & & \\
\hline Abstractors, notaries, and fnstices of the pea & +1,260 & \(+14.7\) & +425 & +28.7 & +3,188 & +47.9 & +1,133 & +143. 1 \\
\hline Chiropractors and healers (not eiserfhere cla & +10, 197 & +148.4 & +4,585 & +58.0 & +14,007 & +609. 5 & +7,815 & \(+107.3\) \\
\hline Keepers of charitable and penal institutions & +1,315 & +19.0 & +621 & +128 & +4.222 & +s0.5 & +3,307 & +147.3 \\
\hline Officials of lodges, societies, etc & +1,839 & +20.3 & +840 & +38.9 & +5,208 & +84.4 & +1,032 & +524 \\
\hline  & +3,837 & +27.1 & +17,618 & \(+65.4\) & +10.907 & +134.0 & +35,054 & +401. 1 \\
\hline Theatrical owners, managers, and officials & +1,553 & +9.1 & -22s & -17.9 & +7,604 & +60.5 & \(+737\) & +249.8 \\
\hline Attendants and 'helpers (professional service):
Physicians' and dentists' assistants.... & & & & & & & & \\
\hline Physicians' and dentists' assistants Theatet ushers & -950
\(+6,440\) & -39.4
+224.5 & \(+14,988\)
+800 & +131.7
+34.0 & \[
\begin{aligned}
& +2280 \\
& +7,177
\end{aligned}
\] & \[
\begin{aligned}
& +18.3 \\
& +330.8
\end{aligned}
\] & \[
\begin{array}{r}
+21,343 \\
+3,000
\end{array}
\] & \[
\begin{array}{r}
+430.7 \\
+2,0440
\end{array}
\] \\
\hline Domestic and personal service & +578,887 & +48.5 & +903,569 & +45.4 & +540,805 & +44.6 & +649,848 & +25. 7 \\
\hline Barbers, hairdresserz, and manicurists. & +78, 131 & +42.7 & +79,048 & \(+240.5\) & +88.119 & & & \\
\hline Boarding and lodging house keepers. & -1,559 & -8.4 & +12,638 & \(+10.9\) & -5,959 & -23. 0 & \(\pm 15,122\) & \(\underline{+10.6}\) \\
\hline Charwomen and cleaners. & +9.095 & +76.8 & +16,034 & +64.3 & +13,748 & +101.1 & +14,150 & +52.7 \\
\hline Cleaning, dyeing, and pressing shop & +49,421 & +239.1 & +17.030 & +372.4 & +54,300 & \(+444.8\) & +18,938 & +718.7 \\
\hline Elevator tenders. & +21,879 & +05. 6 & +5,022 & +68. 4 & +30, 245 & +120.9 & +12.334 & +40.330.0 \\
\hline Hotel keepers and managers & -1, 911 & -4.6 & +3, 176 & +225 & \(-10,731\) & \(-21.3\) & +3,076 & +21.6 \\
\hline Housekeepers and stewards & \(+3,121\)
\(+124,215\) & +18.1
+830 & +32,013 & +15.7 & +4,43 & +27.9 & +03,030 & +36. 4 \\
\hline Janitors and sertons_-.....-....-........) & \(+124,215\)
+8933 & +83.0
+288.1 & +6,782 & +23.4
+28.8 & +182, 178 & +188.8 & +14,368 & +67.0 \\
\hline Launderers and laundresses (not in laundry) & \(+89,333\)
\(-6,317\) & \(\begin{array}{r}+288.1 \\ -58.1 \\ \hline\end{array}\) & \(+4,737\)
\(-29,409\) & +2838
+7.6 & \(+70,292\)
\(-0,128\) & +139.8
-66.7 & + \(\begin{array}{r}+3,191 \\ -16353\end{array}\) & \(\pm 093\) \\
\hline Laundry owners, managers, and offlials.- & +10.243 & +83.7 & +610 & +12.0 & +5, 425 & +31.8 & -163,
\(+1,077\) & -109. \\
\hline Laundry operatives. & +13, 765 & +43.9 & +76,739 & +105.6 & +16,284 & +50.8 & +7,810 & +108. \\
\hline Nurses (not trained) & -5,471 & -28.3 & +6,018 & \(+5.2\) & -2.059 & -129 & +28,604 & +25.8 \\
\hline Restaurant, cafe, and lunch-room keepers & \(+53,055\)
+10505 & \(+73.3\) & +24,384 & \(+155.7\) & +75,082 & \(+149.2\) & +29,492 & +280. 4 \\
\hline Servants & \(+105,361\)
\(+49,251\) & +40.7
+43 & +622,820 & +61.5
+08. & \(+101,488\)
+6820 & + +38.6 & + 3251410 & +24.8 \\
\hline Waiters & +49,251 & \(+43.8\) & +115,052 & +08. 4 & +68,820 & +57.4 & +146, 175 & +170.4 \\
\hline Clerical occupations & +348,583 & +20.6 & +504,805 & +39.7 & +908,645 & +80.4 & +1,308, 221 & +237.5 \\
\hline Accountants and auditors- & +69,484 & + 86.1 & \(+3,636\) & \(+27.2\) & \(+138.904\) & & & \\
\hline Agents, collectors, and credit men & \[
+33,200
\] & +22 2 & \[
+1,837
\] & +15.8 & +100,285 & +121.8 & +0, 200 & +221.9 \\
\hline Bookkeepers and cashiers...... & \[
\begin{array}{r}
+2.889 \\
+274.705
\end{array}
\] & & +119,951 & +34.7 & & +3.6 & +282, 128 & +153.7 \\
\hline Clerks (except "cleriks' in stores) & \[
\begin{array}{r}
+274,705 \\
-17.338
\end{array}
\] & +27.0
\(\mathbf{- 1 7 . 6}\) & \(+234,390\)
\(-5,305\) & +49.6
+37.2 & \(+692,614\)
\(+15,318\) & +115.9
+18.8 & + & +476.0 \\
\hline Stenographers and typists.- & -14,360 & \(-28.5\) & +210,306 & +37.3 & -17, 328 & \(-32.5\) & +511,825 & +104.4 \\
\hline
\end{tabular}

\footnotetext{
31910 figures not availsble
}
 wnich in 1930 were shown separately, must still be considered as one group.

Table III.-Men per 100 women in selceled occupations: \({ }^{1} 19.30,1920\), and 1910


Table III.-Men per 100 women in selected occupations: 1930, 1920, and 1910Continued
\begin{tabular}{|c|c|c|c|}
\hline \multirow{2}{*}{Occupation} & \multicolumn{3}{|l|}{Men per 100 women} \\
\hline & 1930 & 1920 & 1910 \\
\hline Damestic and personal servico. & 56 & 55 & 48 \\
\hline Harbers, hairdressers, and manicurists. & 231 & 550 & 776 \\
\hline Horajling and lodzing house keepers. & 13 & 18 & 16 \\
\hline Charwomen and clenners. & 51 & 47 & 27 \\
\hline Ilotel keepers and managers & 228 & 203 & 353 \\
\hline Housekcejers and stewards. & 9 & 8 & 9 \\
\hline Inaudry operatives & \({ }_{30}\) & 515 & 42 \\
\hline Nurses (not tralnel) & 10 & 15 & 14 \\
\hline Restaurant, cale, and lunch-room keerers & 313 & 462 & 478 \\
\hline Nervants................................. & 22 & 26 & 20 \\
\hline Waiters.. & 70 & 96 & 119 \\
\hline Clerical occupations. & 103 & 119 & 192 \\
\hline Accountants and auditors. & 1,023 & 785 & 994 \\
\hline Agents, collectors, and credit men. & 1,355 & 1,284 & 1,967 \\
\hline Bookkeepers and cashlers.-...... & 59 & 78 & 144 \\
\hline Clerks (except "clerks" In stores) & 183 & 215 & 487 \\
\hline Stenographers and typlsts. & 5 & 9 & 20 \\
\hline
\end{tabular}

Table IV.-Number of tomen in each of 10 major oceupational groups and their component occupations: 1930, 1920, and 1910
\begin{tabular}{|c|c|c|c|}
\hline \multirow{2}{*}{Major occupational groups and compronent occumations} & \multicolumn{3}{|l|}{Number of women occupied lo-} \\
\hline & 1030 & 1020 & 1910 \\
\hline \multirow[t]{5}{*}{Servants and allied occupations.
Servants...............
Laundreses (not in laundry
Watresses.....
Charwomen and cleaners......
Janitresses...............} & 2.300. 300 & 1, 509, 021 & 1.963, 812 \\
\hline & 1, 034.005 & 1, 0121.33 & 1,300, 519 \\
\hline & 3rx. 4sa & 305, 574 & 330. 004 \\
\hline & 21, 973 & 110.02 & \({ }^{83}\), 788 \\
\hline & 40, 90 & 24.90, & 2x,439 \\
\hline \multirow[t]{2}{*}{Clerical and kindred pursuits.} & & & \\
\hline & 1.000,073 & 1, 427, 381 & SR, 772 \\
\hline \begin{tabular}{l}
Clerical ocetupations (proper). \\
Technicitns and latoratory usistants
\end{tabular} & 1.0.03, 50 & 1,421,923 & 588,003 \\
\hline  & 7.000 & \({ }^{1}\) (1) \({ }^{\text {a }}\) (20 & (1) \\
\hline Librarians' nssistants and atlendan & 1. \({ }_{1} 1(1)\) & 2. 3 mt & 1,208 \\
\hline Masil carriers........ & 1.12 & 1.330 & 1,011 \\
\hline Agents, express companies & 1,3K4 & 1,212 & 2,702 \\
\hline Express messengers and riluay mail & 74
8 & 100
0 & 71
3 \\
\hline Factory and laundry employees. & 1. 780, 2003 & 1,612,838 & 1, 205, 762 \\
\hline Factory operatives & 1, 415, 76 & 1,343, 100 & 1,044. 214 \\
\hline Factory forewomen & 113. 164 & 135, 181 & 62.797 \\
\hline laundry ojeratives & 20, 407 & 30, 171 & 19,741 \\
\hline Laundry laborers.. & 140. 114 & 72, 775 & 71.604 \\
\hline Operatyes-cleanin & 2.7in & 1,535 & 1,397 \\
\hline Inborers-cleaning, dyeing, and presing shopp & 1N,321 & & \\
\hline Forewomen-cleaning, dyeing, and pressing shops &  & 1,373 & 2,845 \\
\hline \multirow[t]{2}{*}{Protessional women \({ }^{\text {a }}\).} & & & \\
\hline & 1, 115, 425 & 053, 342 & 703,211 \\
\hline Agricultural pursuits. & 910, 278 & 1,083, 810 & 1,807,18I \\
\hline Forestry and fish & 003, 1030 & 1,003, 1413 & 1. \(\mathrm{NOK}^{\text {, }} 124\) \\
\hline Saleswomen, "clerks" in stores, cte. & 320 & & \\
\hline & 727,800 & 534,330 & 370,4,52 \\
\hline "Clerks" in store & [H2, BH & 31/3, 321 & 250, 487 \\
\hline Canvassers. & 183, 147 & 170,307 & 111, 514 \\
\hline Demonstrators & 11. 113 & 4, 101 & 4,615 \\
\hline Commercial trave & 5,740 & 3, 184 & 3, 130 \\
\hline Auctloneers & 3, 142 & 2, 003 & 2,503 \\
\hline & 4 & 3 & 5 \\
\hline Housekeepers, stewardessey, and pructical nursos. & & & \\
\hline Housekcepers and stewardosses & 375,030 & 337,008 & 294,245 \\
\hline Practical inurses & 230,363 & 204, 350 & \[
173,333
\] \\
\hline \multirow[t]{2}{*}{Telophone and telegraph operators.} & 130, 876 & & \\
\hline & 251, 427 & 105, 230 & 06, 481 \\
\hline Telegraph operators. & & & \\
\hline Hadio operators... & \[
16,122
\] & \[
10,800
\] & \[
8,210
\] \\
\hline Business women. & & & \\
\hline & 262, 0,50 & 140, 400 & 114, 133 \\
\hline Retala dealers- & & & \\
\hline Resturant, cale, and linch-room keep & 110,100 & 78,
15000 & 67,103
10,616 \\
\hline Ifotel keepers and managers.- & 31, 787 & (1), 20 N & 2, 127 \\
\hline Manufacturers, mamagers, nad ofichio (imanufacturlig) & 17,310
18,133 & 14,134 & 14, 238 \\
\hline Snsurumeo agents, managers, and oflhe cinls................ & 18,133
14,705 & 13,278
5,389 & \({ }^{6} 1164\) \\
\hline Bunkers, brokers, and thoney londer: & 14,705
0,102 & 6, 3 kg
0,304 & 2, 612
2, 634 \\
\hline  & 6, 0.508 & (i) & (1) \\
\hline proprictors, manakers, and offechis (ransportation) (in. o. so) & 3,104
\(3,10 \times 3\) & 1,001
045 & 1,010
\(i, 611\) \\
\hline  & - 2,204 & & \\
\hline thidertakers.......................... & 2.0641 & (), 453 & 0 OH \\
\hline Wholende dealers, imporiers, and exporters. . . . . . . . . . . . . . & 1,040 & 1,127 & 813 \\
\hline Theatrical owners, manugers, and oftheals..................... & 1,1,032 & J04
1,257 & 025
205 \\
\hline
\end{tabular}

\section*{Data not availatio.}
'T'Otal professlonal survice minus somprofesmlonal and recreational pursuits and attondants and helpers.
' Not otherwise specifled.

Table IV.-Number of women in each of 10 major occupalional groups and their component occupations: 1930, 1920, and 1910-Continued
\begin{tabular}{|c|c|c|c|}
\hline \multirow{2}{*}{¿Major occupational groups and component occupations} & \multicolumn{3}{|l|}{Number of women occupied in-} \\
\hline & 1930 & 1920 & 1910 \\
\hline Businew women-Continued. & & & \\
\hline Keviers of plensure resorts, rbee tracks, etc & 97 & 197 & 223 \\
\hline Owners and mansgers-truck, transfer, and cab compan & \begin{tabular}{l}
576 \\
472 \\
\hline
\end{tabular} & 260
207 & 230
23 \\
\hline Bilitard room. dance hali, skating rink, keepers & 310 & 242 & 818 \\
\hline Bullders and building contractors. & 202 & 79 & 849 \\
\hline Radio announcers, difectors, managers, and omein & 150 & (1) & \\
\hline Mine operstors, managers, and ofllitals........... & 141 & 182 & 107 \\
\hline Directors, managers, and officlati-motion-picture product & 35
26 & \({ }^{(1)} 51\) & (1) 2 \\
\hline Bowing occupations & 221, 998 & 341, 254 & 623,000 \\
\hline Drastmakers and smantresses (not in factory) & 157, 92, & 235, 519 & 447, 760 \\
\hline Milliners and milinery dealers... & 40, 102 & 69,598 & 122,447 \\
\hline Tailoresses........................ & 21, 807 & 31, 828 & 40, 813 \\
\hline Dressmukers and miliners' apprentices. & 2,161 & 4, 309 & 11,980 \\
\hline All other occupations. & 500,022 & 341,597 & 305, 833 \\
\hline Boarding and lodging house keepers. & 127, 278 & 114, 740 & 142,400 \\
\hline Huirdressers and manlcurists... & 113.194 & 33, 240 & [23, 298 \\
\hline All other pursuits..... & 265,550 & 193,611 & 141, 135 \\
\hline
\end{tabular}

\footnotetext{
1 Data not avallable.
}

\section*{APPENDIX B-CLASSIFICATION AND METHOD; INSTRUCTIONS TO ENUMERATORS}

The Women's Bureau has based this interpretive report regarding the occupational progress of women principally on a bulletin of the Fifteenth Census, taken in 1930, entitled "Occupation Statistics: Abstract Summary for the United States." This bulletin of 20 pages, published by the United States Bureau of the Census on June 28, 1932, has been followed by numerous other census publications that show, not only for the United States but for each State and large city, occupation statistics according to sex, age, color or race, nativity, parentage, and marital condition.

\section*{Changes in occupational classification schemes.}

In 1922 the Women's Bureau published a similar report on the occupational progress of women from 1910 to 1920, known as Bulletin No. 27. Certain statements in that report are not strictly comparable with those in this bulletin because of recent changes in the scheme of occupation classification of the Bureau of the Census. For example, Tables 10 and 13 of this report are based on the 1930 classification plan; hence, the data will not absolutely agree with those in Bulletin 27. In its abstract summary just published, the Bureau of the Census has this to say regarding changes in classifications:
Comparative figures.-Since the Fifteenth Census occupation classification differs somewhat from that of the Fourteenth Census, it has been necessary, for comparison, to assign a few Fourteenth Census occupations to general divisions of occupations different from those under which they were presented in 1920. Further, a few of the occupational designations as returned by the enumerators were assigned, in 1930, to an occupation group different from that under which they would have been classified in 1920 . Wherever sucn changes were made the figures for the two censuses will not be exactly comparable, tnough the differences are in most cases negligible.

The transfer of postmasters from public service in 1920 to transportation and communication in 1930 is illustrative of numerous minor changes that slightly affect the number of persons in each general division of occupations, as shown in 1920 census statistics or in reports based on these data.

\section*{Certain methods of procedure.}

In assembling the number of occupations in which any given number of women are engaged, several difficulties are encountered because of the many groups that serve as subtotals, the residuary groups, and new occupations. The method used in counting the number of occupations in which 1,000 women are at work at each census is as follows: All such single occupations not comprising any group or subgroup are counted; groups of occupations forming subtotals are not included among the pursuits with 1,000 women in each unless none of their component parts meets the numerical requirement. No occupation group serving as a subtotal is omitted from this category unless it has at least one component occupation with 1,000 women
workers at each census. To illustrate, operatives in chemical industries and in clothing industries as a whole are omitted from the number of occupations with 1,000 or more women in each, but operatives in several of their subdivisions are included.

Residuary groups whose entity is indefinite have not been included in Tables 10 and 13 on the ground that they do not possess sufficient distinction to be considered as separate occupations. This decision has not been interpreted too literally, however. For example, "other healers," "other laundry operatives," and "other clerks" have been included among those occupations with 1,000 women in each, but such groups as "other occupations in professional service" or "other pursuits in public service" have been omitted.

New occupations that afford employment to a given number of women have been included in Tables 10 and 13, but their inclusion or exclusion was a difficult matter to decide. For example, in 1920 social and religious workers were combined as one group, though each of these two occupations obviously was followed by more than 1,000 women. Inasmuch as these pursuits are shown separately in 1930, Table 13 includes two occupations in 1930 for what was necessarily but one occupation in 1920. On the other hand, it is probable that the country did not have 1,000 women rayon factory operatives in 1920; to omit this new occupation from such a table in 1930 would not represent conditions as they really are. After considering these conflicting points, it was decided to include all the new occupations, but the 1930 figures should be discounted somewhat for the reason that the data for 14 occupations included among them were not so tabulated in 1920.

It may seem inconsistent to show all factory operatives and all factory laborers as occupational groups in certain tables and not in others. Similarly, all textile-mill operatives are sometimes considered as an occupational group, while at other times operatives are shown only for those plants comprising the subdivisions of this industry. The usual criterion as to inclusion has been to list such total groups when it was not possible to include their component parts.

Such decisions are admittedly arbitrary and constitute by no means the only method of procedure; yet some definite plan must be adopted, and the original data on which this report is based do not lend themselves to simpler methods.

\section*{Persons 10 years of age and over.}

Inasmuch as the Bureau of the Census excludes from tabulation the occupations of persons under 10 years of age, the bureau's abstract summary on which this report is based confines its occupation statistics to persons 10 years of age and over. For reasons of ease and convenience this limitation is not mentioned in every table heading; nor is it constantly reverted to throughout the discussion, though the fact has always been borne in mind.

\section*{Housekeepers and housewives.}

The Bureau of the Census has made every effort to include as housekeepers only those who are in reality intrusted with the responsibility of a household, the supervision of servants, or the upbringing of children. Inasmuch as housewives living at home have a tendency to return their occupations as housekeepers, the error in the statistics for
this pursuit is thought to be large; moreover, it is not possible to eliminate this error entirely, though a careful and sustained effort in this direction has been made. Housewives are considered apart from gainful workers for the reason that they are not undertaking their positions with the idea of monetary gain; nor do they compete for their positions in the open labor market.

\section*{Instructions to census enumerators.}

Certain sections of the instructions to enumerators, issued by the bureau in connection with the Fifteenth Census, have a bearing on this report and for this reason are reproduced here.
* * * A "gainful occupation" in census usage is an occupation by which the person who pursues it earns money or a money equivalent, or in which he assists in the production of marketable goods. The term "gainful worker," as interpreted for census purposes, does not include women doing housework in their own homes, without wages, and having no other employment, nor children working at home, merely on general houschold work, on chores, or at odd times on other work.

Occasionally there will be doubt as to whether an occupation should be returned for a person who works only a small part of the time at the occupation. In such cases the rule may generally be followed that, unless the person spends at least the equivalent of one day per week at the occupation, he or she should not be returned as a gainful worker.

Occupation of persons unemployed.-* * * persons out of employment when visited by the enumerator may state that they have no occupation, when the fact is that they usually have an occupation but happen to be idle or unemployed at the time of the visit. In such cases the return should be the occupation followed when the person is employed or the occupation in which last regularly employed, and the fact that the person was not at work should be recorded ***.

Women doing housework.-In the case of a woman doing housework in her own home and having no other employment, the entry in column 25 [occupation] should be none. But a woman doing housework for wages should be returned * * * as housekeeper, servant, cook, or chambermaid, as the case may be; and the entry in column 26 (industry or place of work] should state the kind of place where she works, as private family, hotel, or boarding house.

Where a woman not only looks after her own home but also has employment outside or does work at home for which she receives payment, the outside work or gainful employment should ordinarily be reported as her occupation, unless this takes only a very small fraction of the woman's time. For instance, a woman who regularly takes in washing should be reported as laundress or washerwoman, followed * * * by at home.

Farm workers.- Return a person in charge of a farm as a farmer, whether he [or she] owns it or operates it as a tenant, renter, or cropper; but a person who manages a farm for some one else for wages or a salary should be reported as a farm manager. A man who directs farm labor under the supervision of the owner or of a manager should be reported as a farm forman or a farm overseer; and a person who works on a farm for some one elee, but not as a manager or foreman should be reported as a farm laborer.

Women doing farm work.-A woman who works only occasionally, or only a short time each day at outdoor farm or garden work, or in the dairy, or in caring for livestock or poultry should not be returned as a farm laborer; but for a woman who works regularly and most of the time at such work, the return * * * should be farm laborer. Of course, a woman who herself operates or runs a farm or plantation should be reported as a farmer and not as a farm laborer.

Unusual occupations for women.-There are many occupations, such as car penter and blacksmith, which women usually do not follow. Therefore, if you are told that a woman follows an occupation which is very peculiar or unusual for a woman, verify the statement.

Children working for parcnts.-Children who work for their parents at home merely on general household work, at chores, or at odd times on other work, should be reported as having no occupation. Those, however, who somewhat
regularly assist their parents in the performance of work other than household work or chores should be reported as having the occupation represented by this work.

Unusual occupations for children.-It is very unusual for a child to be a farm or other proprietor of any kind; to be an official, a manager, or a foreman; to follow a professional pursuit; or to pursue any of the skilled trades, such as blacksmith, carpenter, machinist, etc. Therefore, whenever you are told that a child is following an occupation usually followed only by adults, ask whether the child is not merely a helper or an apprentice in the occupation, and make the entry accordingly.

Nurses.-In the case of a nurse, always specify whether she is a trained nurse, a practical nurse, or a child's nurse.

Cooks and general housetworkers.-Distinguish carefully between cooks and general houseworkers. Return a person who does general housework as a servant and not as a cook.

Keeping boarders.-Keeping boarders or lodgers should be returned as an occupation if the person engaged in it relies upon it as his [or her] principal means of support or principal source of income. In that case the return should be boarding-house keeper or lodging-house keeper. If, however, a family keeps a few boarders or roomers merely as a means of supplementing the earnings or income obtained from other occupations or from other sources, no one in the family should be returned as a boarding or lodging house keeper.

\section*{publications of the women's bureau}
[Any of these bulletins still available will be sent free of charge ufon refueat]
*No. 1. Proposed Employment of Women During the War in the Industries of Niagara Falls, N. Y. 16 pp .1918.
*No. 2. Labor Laws for Women in Industry in Indiann. 29 pp. 1919.
No. 3. Standards for the Employment of Women in Industry. 8 pp. Furth ed., 1928.
No. 4. Wages of Candy Makers in Philadelphin in 1919.46 pp .1919.
*No. 5. The Eight-Hour Day in Federal and State Legiklation. 19 pp. 1919.
No. 6. The Employment of Women in Hazardous Industrics in the United States. 8 pp. 1921.
*No. 7. Night-Work Laws in the United States. (1919) 4 pp. 1920.
*No. 8. Women in the Government Service. 37 pp .1920.
*No. 9. Home Work in Bridgeport, Conn. 35 pp. 1920.
*No. 10. Hours and Conditions of Work for Women in Industry in Virginia. 32 pp. 1920.
No. 11. Women Street Car Conductors and Tieket Agents. 00 pp. 1921.
*No. 12. The New Position of Women in American Industry. 158 pp. 1920.
*No. 13. Industrial Opportunities and Training for Women and Girls. 48 pp. 1921.
*No. 14. A Physiological Basis for the Shorter Working Day for Women. 20 pp . 1921.

No. 15. Some Effects of Legislation Limiting Hours of Work for Women. 26 pp . 1921.

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[^0]:    ${ }^{1}$ Fifteenth Census of the United States: 1930. United States Summary. Composition and Characteriatles of the Population. Washington, 1931, p. 11.
    ' Seo Appondix B, D. 80.

[^1]:    1 Includes operatives and laborers.
    ${ }^{2}$ Includes felt-hat factories and suit, coat, and overall factories, as well as the four kinds of clothing factorles listed.
    ${ }^{2}$ Exclusive of felt-hat factories and sult, coast, and overall factories.

[^2]:    ${ }^{1}$ Seo Appendlx B, p. 86.

[^3]:    - See discussion of this occupation, p. 20.

[^4]:    IU. S. Bureau of the Census, Thirteenth Census, 1010. Vol. 4, Population, Occupation Statistics, p. 28.

[^5]:    Includea new occupations, Ilsted in the census for the first time in 1020 or in 1030, as the case may be, but oxcludes Indefinito residuary groups. (Sco Aprendix B, p. 85).) These occupmitions were counted after the 1020 and 1010 data had beon Atted into the 1030 sohome of ocoupatlon classification.

[^6]:    - see pp. 31=32 for explanatlon.

[^7]:    1 Based on data in Table 11.
    2/ Fewer than 100,000 but more than 50,000 women were engaged in this oooupation at this census.
    3/ Fewrer than 50,000 women were epgaged in this ocoupation at this cepsug.

[^8]:    - Bee Appendix B, p. 85,

[^9]:    ${ }^{10}$ U. S. Bureau of the Census. Monograph IX. Women In Cialnful Oocupatlons, 1870 to 1920, by Joseph A. HIII, 1020, p. 36.

[^10]:    1 This table is limited to those oceupatlons in each of which 10,000 or more persons of each max
    were engaged, both in 1930 and in 1020 . (Beo Table III, gencral tables, D. 80 ,

[^11]:    67. 103 53
    1.519
    313
    7.037

    $$
    \begin{aligned}
    & \text { 7.037 } \\
    & 1.3: 3
    \end{aligned}
    $$

    $$
    \begin{array}{r}
    1.3 .4 \\
    3.4 \\
    108
    \end{array}
    $$

    $$
    \begin{array}{r}
    400 \\
    0.8 \times 2
    \end{array}
    $$

    $$
    \begin{aligned}
    & 2.021 \\
    & 2101 \\
    & 1.097
    \end{aligned}
    $$

    $$
    \begin{aligned}
    & 1.018 \\
    & 108 \\
    & 5.144 \\
    & , 10 \pi
    \end{aligned}
    $$

    (d)

    $$
    \begin{aligned}
    & 3.325 \\
    & 18,430 \\
    & 7.104
    \end{aligned}
    $$

    $$
    \begin{aligned}
    701 \\
    3.741 \\
    \text { IN }
    \end{aligned}
    $$

    $$
    \begin{aligned}
    & 141 \\
    & 530 \\
    & 310 \\
    & 010
    \end{aligned}
    $$

    $$
    \begin{aligned}
    & 110 \\
    & 233 \\
    & 330
    \end{aligned}
    $$

    $$
    \begin{array}{r}
    430 \\
    4,706 \\
    4152
    \end{array}
    $$

    $$
    \begin{array}{r}
    4,700 \\
    4,128
    \end{array}
    $$

    $$
    \begin{array}{r}
    202,335 \\
    4.01
    \end{array}
    $$

    $$
    \begin{aligned}
    & 4,815 \\
    & 3,130
    \end{aligned}
    $$

    $$
    \begin{array}{r}
    3,130 \\
    4,0188
    \end{array}
    $$

    $$
    250,487
    $$

    $$
    \begin{aligned}
    & 813 \\
    & 025
    \end{aligned}
    $$

    $$
    \left\{\begin{array}{l}
    7,57 \\
    \left(\begin{array}{l}
    77 \\
    \text { ri }
    \end{array}\right. \\
    (47
    \end{array}\right)
    $$

    $$
    \begin{array}{r}
    2,038 \\
    27
    \end{array}
    $$

    6, 507

