61st Congress, 2d Session | SENATE | Document No. 645

REPORT ON CONDITION

OF

WOMAN AND CHILD WAGE-EARNERS IN THE UNITED STATES

IN 19 VOLUMES

VOLUME IX: HISTORY OF WOMEN IN INDUSTRY IN THE UNITED STATES

Prepared under the direction of
CHAS. P. NEILL
Commissioner of Labor
by
HELEN L. SUMNER, Ph. D.

WASHINGTON
GOVERNMENT PRINTING OFFICE
1910

IN THE SENATE OF THE UNITED STATES,

June 15, 1910.

Resolved, That the complete report on the condition of woman and child wage-earners in the United States, transmitted and to be transmitted by the Secretary of Commerce and Labor in response to the act approved January twenty-ninth, nineteen hundred and seven, entitled "An act to authorize the Secretary of Commerce and Labor to report upon the industrial, social, moral, educational, and physical condition of woman and child workers in the United States," be printed as a public document.

CHARLES G. BENNETT,
Secretary.

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LETTERS OF TRANSMITTAL.

DEPARTMENT OF COMMERCE AND LABOR,
OFFICE OF THE SECRETARY,
Washington, November 23, 1910.

SIR: In partial compliance with the Senate resolution of May 25, 1910, I beg to transmit herewith a report on the history of women in industry in the United States.

This report is the ninth section available for transmission of the larger report on the investigation carried on in accordance with the act of Congress approved January 29, 1907, which provided "that the Secretary of Commerce and Labor be, and he is hereby, authorized and directed to investigate and report on the industrial, social, moral, educational, and physical condition of woman and child workers in the United States wherever employed, with special reference to their age, hours of labor, term of employment, health, illiteracy, sanitary and other conditions surrounding their occupation, and the means employed for the protection of their health, person, and morals."

The remaining sections of the general report are being completed as rapidly as possible and will each be transmitted at the earliest practicable moment.

Respectfully,

BENJ. S. CABLE,
Acting Secretary.

HON. JAMES S. SHERMAN,
President of the Senate, Washington, D. C.

DEPARTMENT OF COMMERCE AND LABOR,
BUREAU OF LABOR,
Washington, November 23, 1910.

SIR: I beg to transmit herewith Volume IX of the report on woman and child wage-earners in the United States which relates to the history of women in industry in the United States. This is the ninth section transmitted of the report of the general investigation into the condition of woman and child workers in the United States, carried on in compliance with the act of Congress approved January 29, 1907.

The preparation of this study is the work of Miss Helen L. Sumner. The work has been carried on under the direction of Chas. H. Verrill.

I am, very respectfully,

G. W. W. HANGER,
Acting Commissioner.

THE SECRETARY OF COMMERCE AND LABOR,
Washington, D. C.

CHAPTER I.

INTRODUCTION AND SUMMARY.

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The history of women in industry in the United States is the story of a great industrial readjustment, which has not only carried woman's work from the home to the factory, but has changed its economic character from unpaid production for home consumption to gainful employment in the manufacture of articles for sale. Women have always worked, and their work has probably always been quite as important a factor in the total economy of society as it is to-day. But during the nineteenth century a transformation occurred in their economic position and in the character and conditions of their work. Their unpaid services have been transformed into paid services, their work has been removed from the home to the factory and workshop, their range of possible employment has been increased and at the same time their monopoly of their traditional occupations has been destroyed. The individuality of their work has been lost in a standardized product.

The story of woman's work in gainful employments is a story of constant changes or shiftings of work and workshop, accompanied by long hours, low wages, insanitary conditions, overwork, and the want on the part of the woman of training, skill, and vital interest in her work. It is a story of monotonous machine labor, of division and subdivision of tasks until the woman, like the traditional tailor who is called the ninth part of a man, is merely a fraction, and that rarely as much even as a tenth part, of an artisan. It is a story, moreover, of underbidding, of strike breaking, of the lowering of standards for men breadwinners.

In certain industries and certain localities women's unions have raised the standard of wages. The opening of industrial schools and business colleges, too, though affecting almost exclusively the occupations entered by the daughters of middle-class families who have only recently begun to pass from home work to the industrial field, has at least enabled these few girls to keep from further swelling the vast numbers of the unskilled. The evil of long hours and in certain cases other conditions which lead to overstrain, such as the constant standing of saleswomen, have been made the subject of legislation. The decrease of strain due to shorter hours has, however, been in part nullified by increased speed of machinery and other

devices designed to obtain the greatest possible amount of labor from each woman. Nevertheless, the history of woman's work in this country shows that legislation has been the only force which has improved the working conditions of any large number of women wage-earners. Aside from the little improvement that has been effected in the lot of working women, the most surprising fact brought out in this study is the long period of time through which large numbers of women have worked under conditions which have involved not only great hardships to themselves but shocking waste to the community.

CHANGES IN OCCUPATIONS OF WOMEN.

The transfer of women from nonwage-earning home work to gainful occupations is evident to the most superficial observer, and it is well known that most of this transfer has been effected since the beginning of the nineteenth century. In 1870 it was found that 14.7 per cent of the female population 16 years of age and over were breadwinners, and by 1900 the percentage was 20.6 per cent.[a] During the period for which statistics exist, moreover, the movement toward the increased employment of women in gainful pursuits was clear and distinct in all sections of the country[b] and was even more marked among the native-born than among the foreign-born.[b] It must be borne in mind, however, that even in colonial days there were many women who worked for wages, especially at spinning, weaving, the sewing trades, and domestic service. Many women, too, carried on business on their own account in the textile and sewing trades and also in such industries as the making of blackberry brandy. The wage labor of women is as old as the country itself and has merely increased in importance. The amount, however, of unremunerated home work performed by women must still be considerably larger than the amount of gainful labor, for even in 1900 only about one-fifth of the women 16 years of age and over were breadwinners.

Along with the decrease in the importance of unremunerated home labor and the increase in the importance of wage labor has gone a considerable amount of shifting of occupations. Under the old domestic system the work of the woman was to spin, to do a large part of the weaving, to sew, to knit; in general, to make most of the clothing worn by the family, to embroider tapestry in the days and regions where there was time for art, to cook, to brew ale and wine, to clean, and to perform the other duties of the domestic servant. These things women have always done. But machines have now come in to aid

[a] See Table I, p. 245.

[b] See Table II, p. 246. Table III (p. 246) also shows that the proportion of married, as well as of single, widowed, and divorced women at work is increasing.

in all these industries—machines which in some cases have brought in their train men operatives and in other cases have enormously increased the productive power of the individual and have made it necessary for many women, who under the old régime, like Priscilla, would have calmly sat by the window spinning, to hunt other work. One kind of spinning is now done by men only. Men tailors make every year thousands of women's suits. Men dressmakers and even milliners are common. Men make our bread and brew our ale and do much of the work of the steam laundry where our clothes are washed. Recently, too, men have learned to clean our houses by the vacuum process.

Before the introduction of spinning machinery and the sewing machine the supply of female labor appears never to have been excessive. But the spinning jenny threw out of employment thousands of "spinsters," who were obliged to resort to sewing as the only other occupation to which they were in any way trained. This accounts for the terrible pressure in the clothing trades during the early decades of the nineteenth century. Later on, before any readjustment of women's work had been effected, the sewing machine was introduced, which enormously increased the pressure of competition among women workers. Shortly after the substitution of machinery for the spinning wheel the women of certain localities in Massachusetts found an outlet in binding shoes—an opportunity opened to them by the division of labor and by the development of the ready-made trade. But when the sewing machine was introduced this field, at least for a time, was again contracted. Under this pressure, combined with the rapid development of wholesale industry and division of labor, women have been pressed into other industries, almost invariably in the first instance into the least skilled and most poorly paid occupations. This has gone on until there is now scarcely an industry which does not employ women. Thus woman's sphere has expanded, and its former boundaries can now be determined only by observing the degree of popular condemnation which follows their employment in particular industries.

ATTITUDE OF THE PUBLIC TOWARD THE EMPLOYMENT OF WOMEN.

The attitude of the public toward the employment of women has, indeed, made their progress into gainful occupations slow and difficult, and has greatly aggravated the adjustment pains which the industrial revolution has forced upon women as compared with those of men, whose traditional sphere is bounded only by the humanly possible. This attitude has, moreover, been an important factor in determining the woman's choice of occupations.

The proper sphere of woman has long been a subject of discussion. At least as early as 1829 opinions upon the subject were divided along practically the same lines as to-day. A writer in the Boston

Courier asserted, from the radical viewpoint, that women should have their full share of the labor of the world and should be adequately rewarded. He commented upon the fact that "powerful necessity is rapidly breaking down ancient barriers, and woman is fast encroaching, if the assumption of a right may be deemed an encroachment, upon the exclusive dominion of man." "Custom and long habit," he said, "have closed the doors of very many employments against the industry and perseverance of woman. She has been taught to deem so many occupations masculine, and made only for men, that excluded, by a mistaken deference to the world's opinion, from innumerable labors, most happily adapted to her physical constitution, the competition for the few places left open to her has occasioned a reduction in the estimated value of her labor, until it has fallen below the minimum, and is no longer adequate to present comfortable subsistence, much less to the necessary provision against age and infirmity or the everyday contingencies of mortality."[a] In 1830 the same paper asserted that "the times are out of joint" because "the women are assuming the prerogatives and employments which, from immemorial time, have been considered the attributes and duties of the other sex," and suggested that soon "our sons must be educated and prepare to obtain a livelihood in those dignified and more masculine professions of seamstresses, milliners, cooks, wet nurses, and chambermaids."[b]

The National Trades' Union was decidedly opposed to the employment of women in industry, and one of its leaders, William English, in a Fourth-of-July oration before the Philadelphia Trades' Union, hoped that the time might soon come "when our wives, no longer doomed to servile labor, will be the companions of our firesides and the instructors of our children; and our daughters, reared to virtue and usefulness, become the solace of our declining years." He did not consider it possible for women to "recede from labor all at once," but urged them to form trades unions and raise their wages until "half the labor now performed will suffice to live upon. * * * And the less you do," he added, "the more there will be for the man to do, and the better they will be paid for doing it, and ultimately, you will be what you ought to be, free from the performance of that kind of labor which was designed for man alone to perform."[c]

Again in 1866 the Daily Evening Voice complained that, though women rejoice in man's successes, they themselves receive from man "cold justice, perhaps, but no enthusiasm." "That is natural," said the Voice; "she labors under a disadvantage. It is man's work to succeed under the frown and cold shoulder of half the creation."[d]

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[a] Boston Courier, July 15, 1829.

[b] Ibid., August 16, 1830.

[c] Radical Reformer and Workingmen's Advocate, Philadelphia, August 4, 1834.

[d] Daily Evening Voice, Boston, January 27, 1866. This was a labor paper.

Against this hardening force of tradition have worked, however, two other great forces, the need of women for remunerative employment and the need of employers for cheap labor. And hand in hand with these two forces have come vast improvements in machinery, in motive power, and in division of labor, as well as other historical changes, such as wars, industrial depressions, and the growth of trade unions with their accompaniment of strikes.

CAUSES OF THE ENTRANCE OF WOMEN INTO INDUSTRY.

Complaints of machinery as a means of bringing women and children into industry were not lacking in the early labor press. This point was repeatedly urged, illustrated mainly by English examples, by the writer of a series of articles on "Labor-saving machinery" in the *Mechanics' Free Press* in 1829. Speaking of Philadelphia, he said: "Look at some of our city machinery—young girls are earning a scanty pittance, by standing many hours in a day attending the monotonous motion, till their faculties of body and mind are in a fair way of being benumbed." His chief complaint was against child labor, but he asserted that "so far, the effect of machinery has been to impose burdens on sex and age, not necessary in former periods." What became of "the adult workmen who were heretofore engaged in the fabrication of staples, now fabricated by women and children" was, he said, "a gloomy picture, though we are forced to admit that they are not necessarily thrown out of all employment."[a]

Machinery, combined with division of labor and the substitution of water, steam, and electric power for human muscles, has certainly made it possible to employ the unskilled labor of women in occupations formerly carried on wholly by men. Machinery, however, has as yet affected only slightly the broad lines of division between woman's work and man's work. And especially upon its first introduction the sex of the employees is rarely at once changed to any considerable extent. Thus when spinning machinery was first introduced women and children were employed to operate it. Later women became the power-loom weavers. The sewing machine, too, has always been operated largely by women. On the other hand, most of the machinery of the iron and steel industry is operated by men. In watchmaking, to be sure, formerly man's work, a large part of the machinery is now managed by women. But division of labor, itself made possible by the machinery, is probably the primary cause of the introduction of women into the manufacture of watches.

Division of labor, indeed, which has always accompanied and frequently preceded machinery, is probably even more responsible

[a] "Mechanics' Free Press, Philadelphia, November 7, 1829. This was the first labor paper published in the United States.

that the latter for the introduction of women into new occupations. The most striking single tendency in manufacturing industries has been toward the division and the subdivision of processes, thereby making possible the use of woman's work, as well as of unskilled man's work, in larger proportion to that of skilled operatives. A more recent tendency toward the combination of several machines into one has even been checked, in some cases, because a competent machinist would have to be hired. Unless the advantage of the complicated mechanism is very great, in many industries simpler machinery, which can be easily run by women, is preferred.

As a result, both of machinery and of division of labor, the actual occupations of women, within industries, do not differ as widely as do the occupations of men within the same industries. It frequently happens, indeed, that the work of a woman in one industry is almost precisely the same as that of another woman in an entirely different industry.

Other historical forces have brought about changes in the occupations of women. Often, especially in the printing trades and in cigar making, women have been introduced as strike breakers. On the other hand trade unions have in some places been strong enough to prevent the introduction of women in industries to which they were well adapted. Usually, however, this has been only for a short period.

The scarcity of labor supply in particular places or at particular times has often been responsible for the use of women's work. Thus during the early years of the Republic the employment of women in manufacturing industries was doubtless greatly accelerated by the scarcity and high price of other labor. This, too, was doubtless largely responsible for the fact that, in the early years of the cotton industry, a larger proportion of women was employed in the cotton mills of Massachusetts and New Hampshire than in those of Rhode Island, New Jersey, and Pennsylvania. One of the remedies frequently suggested in the thirties and forties for the evils under which working women suffered was that "the excess of spinsters" should be transported to the places where "there is a deficiency of women."[a]

The Civil War was another force which not only drove into gainful occupations a large number of women, but compelled many changes in their employments. In 1869 it was estimated that there were 25,000 working women in Boston who had been forced by the war to earn their living.[b] The war, too, caused a large number of cotton factories to shut down, and thousands of women thus thrown out of employment were obliged to seek other occupations.

Similar to war in its influence, and in some ways more direful, has been the influence of industrial depressions. The industrial

[a] Pontoon's American Daily Advertiser, Philadelphia, January 9, 1832, and New York Daily Tribune, March 9, 1845.

[b] Workingman's Advocate, Chicago and Cincinnati, May 8, 1869.

depression which began in 1837, for example, temporarily destroyed the newly-arisen wholesale clothing manufacture, and caused untold hardships to the tailoresses and seamstresses of New York and Philadelphia. These women turned, naturally, to any occupation in which it was possible for them to engage. Industrial depressions, too, like war, have taken away from thousands of women the support of the men upon whom they were dependent and have forced them to snatch at any occupation which promised them a pittance.

EXPANSION OF WOMAN'S SPHERE.

As a result of these factors and forces and in many cases of others less general in their operation, woman's sphere of employment has been greatly expanded during the past hundred years. The number of occupations open to women during the early part of the nineteenth century has, however, been greatly underestimated. Harriet Martineau in 1838 mentioned eight occupations as open to women in this country—teaching, needlework, keeping boarders, work in mills, shoe binding, typesetting, bookbinding, and domestic service. But in the same year the committee of the National Trades' Union, which was appointed to inquire into the evils of female labor, reported that in the New England states, "printing, saddling, brush making, tailoring, whip making, and many other trades are in a certain measure governed by females," and added that of the 58 societies composing the Trades' Union of Philadelphia 24 were "seriously affected by female labor."[1]

As early as 1820, indeed, women were employed in at least 75 different kinds of manufacturing establishments,[2] and in 1832 women employees were found in about 20 other industries.[3] The census of 1850, moreover, enumerated nearly 175 different industries in which women were employed. In 1864, among the 5,422 women applicants for employment to the New York Working Women's Protective Union, there were representatives of 50 different trades or occupations.[4] And in 1867 this union reported that "during the three years of our active operations, we have been the means of introducing 30 females into seven branches of labor of a mechanical character not generally occupied by them."[5] In New York City in 1870

[1] National Laborer, Philadelphia, November 12, 1836. Abbott, Women in Industry, p. 66, estimated, after a study of three reports belonging to the period from 1820 to 1840, that at least 100 occupations were open to women at that time. Reprinted in Documentary History of American Industrial Society, Vol. VI, p. 286.

[2] American State Papers, Finance, Vol. IV, pp. 28-228. (Statistics of manufacturing industries collected by the census of 1820.)

[3] Documents Relative to the Manufactures of the United States. Executive Documents, Twenty-second Congress, first session, Vols. I and II.

[4] Daily Evening Voice, December 10, 1864.

[5] Daily Evening Voice, March 7, 1867. This organization appears not to have furnished domestic servants. (Daily Evening Voice, May 20, 1865.)

there were said to be some 75 employments at which women worked.[a] The next year, 1871, the Revolution called attention to the need for a labor exchange for women in New York who were engaged in other occupations than housework—those employed in composing rooms, bookbinderies, ornamental-china establishments, places where artificial flowers were made, etc.[b]

During the period for which statistics on the subject are available, the proportion of all the gainfully employed women engaged in "agricultural pursuits"[c] decreased from 21.6 per cent in 1870 to 18.4 per cent in 1900, and the proportion engaged in "domestic and personal service" decreased from 58.1 per cent in 1870, or 44.6 per cent in 1880,[d] to 39.4 per cent in 1900. At the same time the proportion engaged in "professional service" increased from 6.7 per cent in 1880 to 8.1 per cent in 1900, the proportion engaged in "manufacturing and mechanical pursuits" increased from 13.3 per cent in 1870 to 34.7 per cent in 1900, and the proportion engaged in "trade and transportation" increased from 1 per cent in 1870 to 9.4 per cent in 1900.[e]

The importance of agriculture and of "domestic and personal service" has evidently decreased, while the importance of "manufacturing and mechanical pursuits," "trade and transportation," and "professional service" since 1880, when this division was first introduced, has increased. Two other facts, however, are noticeable—first, that the importance of the group "manufacturing and mechanical pursuits" has changed very little since 1880 and has even decreased since 1890; and, second, that the most pronounced increase has been in the group "trade and transportation," in which only 1 per cent in 1870 and nearly 10 per cent in 1900 of the women breadwinners were employed. In general the movement has been the same among the native and the foreign born,[f] and much the same among the married as among the single women.[g]

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[a] American Workman, Boston, August 20, 1870. The Woman's Journal, Boston and Chicago, February 26, 1870. Quoted from the New York Evening Post.

[b] The Revolution, New York, January 12, 1871. This was the organ of the woman suffrage movement.

[c] Agricultural pursuits and professional service are not considered as part of this study except for their indirect influence on women's work in other occupations. Nevertheless it is of interest to note the employment of German women in harvest work in northern Illinois and Wisconsin, at $1 a day, recorded in the New York Weekly Tribune, August 15, 1868, and the employment of Norwegian women in the same work in Minnesota, at "the same wages as men," mentioned in the Revolution, September 17, 1868.

[d] The group "professional service" was included in "domestic and personal service" in 1870, thus affecting comparisons of the latter group. See Table IV, p. 246.

[e] See Table IV, p. 246. It will be observed that these figures refer to females 10 years of age and over, while in the previous tables only women 15 or 16 years of age and over are included.

[f] See Tables V and VI, pp. 249 and 247.

[g] See Table VII, p. 248.

For manufacturing industries the statistics of the employment of women date back to 1850, and for special industries, such as cotton manufacture, or single States, as Massachusetts, even earlier.[a] In 1850 and 1860 the census of manufactures contained figures for "male employees" and "female employees," according to which 23.3 per cent in 1850 and 20.7 per cent in 1860 of all the employees in manufacturing industries were females of all ages. The age distinction was added in 1870 and in that year it appeared that women 16 years of age and over constituted 15.5 per cent of all the employees in manufacturing industries.[b] In 1880 the proportion increased to 19.4 per cent, dropping again in 1890 to 18.9 per cent, and again increasing in 1900 to the same figure as in 1880, 19.4 per cent. In 1905 women over 16 years of age constituted 19.5 per cent of all the employees in manufacturing industries, exclusive of the hand trades, which were included in other censuses.[c]

When, however, the occupations in which women are engaged are considered with reference to the relative number of women employed in each, at different periods, it is evident that the vast majority of working women have remained within the limits of their traditional field. Table IX, which is a summary for various groups of manufacturing industries,[d] shows that in every census year considerably more

[a] As early, indeed, as 1820 the census of manufactures collected figures in regard to the employment of men, women, and boys and girls, but its results were evidently not considered of sufficient value to be worth a summary. Roughly speaking, it was found that about 10 per cent of all the employees in manufacturing industries were women and about 24 per cent were boys and girls, but it was not stated what were the ages of the latter. (American State Papers, Finance, Vol. IV, pp. 23–228, 244–247.)

[b] Even by adding all the children this proportion little more than equals that given for 1860 and does not equal that given for 1850. This is, however, the first year for which the statistics may be considered as fairly trustworthy.

[c] See also Table VIII, p. 248, for an analysis of the employment of women in manufacturing industries by geographical divisions.

[d] The industries are grouped in Table IX as textile industries, clothing industries, food and kindred products, liquors and beverages, and other manufacturing industries, including tobacco and cigars, paper and printing, iron and steel, etc. As far as possible the groups, as given in the Twelfth Census (1900), have been used, but the census group "textiles" has been divided, the various branches of clothing manufacturing being taken out to make up, together with "boots and shoes" from the division "leather and its finished products" and a number of industries from the group "miscellaneous industries," a new group, "clothing industries." See the footnotes to Table IX, p. 250.

The figures for 1850 and 1860 refer to all "female hands," regardless of age; those for 1850, 1860, and 1870 have been grouped by the author, and those for 1905 were collected upon a somewhat different basis than previously used, the principal difference being the omission in 1905 of all hand trades. For these and other reasons the figures are only roughly comparable. For a résumé of reasons for the inexactness of all comparisons down to 1900, see the Twelfth Census, 1900, Manufactures, Part I, p. lxii.

than half of all the women employed in manufacturing industries have been in the first two groups, textile and clothing industries. These industries and also, in large part at least, those included in the group "food and kindred products" and "liquors and beverages" have as household industries been theirs from time immemorial. But women have been driven, by the industrial forces already in part analyzed, into many occupations formerly considered as belonging exclusively to man's sphere. Thus, in the manufacture of tobacco and cigars in 1850, 13.9 per cent, and in 1905, 41.6 per cent, of all the employees were women, and in the manufacture of "metals and metal products other than iron and steel" the proportion of women has increased during the same period from 3.4 per cent to 14.2 per cent, and in "other manufacturing industries" from 3.6 per cent to 13.8 per cent.*

It is evident that, on the whole, there has been a certain expansion of woman's sphere—a decrease in the proportion employed in certain traditional occupations, such as "servants and waitresses," "seamstresses," and "textile workers," but an increase in the proportion employed in most other industries, many of them not originally considered as within woman's domain. There has been, for instance, an increase in the proportion of women engaged as "bookkeepers and accountants," as "saleswomen," as "stenographers and typewriters," and in "other manufacturing and mechanical pursuits," and this movement has affected, roughly speaking, all elements, according to nativity or conjugal condition, of the population of working women.

HISTORY OF LABOR CONDITIONS.

The history of the conditions under which women have worked in this country is a history of the relative importance of wage labor in the home and in the factory, of sanitary and other health-affecting conditions, of hours, of wages, of the effect of the employment of women upon men's work and wages, of the relation of charity to woman's work, and of the industrial education and efficiency of women.

HOME AND FACTORY WORK.

In general, it may be said that during the past century the amount of home work of women for pay has steadily decreased and the amount of factory work has steadily increased. The shoe binders, who loom so large in the Massachusetts industrial census of 1837, were almost all home workers, but the women engaged in boot and shoe making to-day are nearly all working in factories. In the sewing trades, though the change has not been so complete, a similar movement from the home to the workshop and factory

*See Table IX, p. 230.

has been going on. Home workers have become sweat-shop workers and sweat-shop workers are gradually becoming factory workers. So long ago as now to be almost forgotten a similar transformation took place in the textile industries. Indeed, this is the general tendency of the employment of both men and women in manufacturing industries. Independent domestic production has practically become a thing of the past.[a] But the history of woman's work shows that their wage labor under the domestic system has often been under worse conditions than their wage labor under the factory system. The hours of home workers have been longer, their wages lower, and the sanitary conditions surrounding them more unwholesome than has generally been the case with factory workers. The movement away from home work can hardly, then, be regretted.

GENERAL CONDITIONS OF LIFE AND LABOR.

The conditions under which the working women of this country have toiled have long made them the object of commiseration. Mathew Carey devoted a large part of the last years of his life, from 1828 to 1839, to agitation in their behalf. Again and again he pointed out in newspaper articles, pamphlets, and speeches that the wages of working women in New York, Philadelphia, Baltimore, and Boston were utterly insufficient for their support; that their food and lodging were miserably poor and unwholesome; and that the hours they were obliged to work were almost beyond human endurance.

In a letter in regard to the strike of the women shoe binders in Philadelphia in 1836, he declared, for instance, that he was convinced that many of the working women of Philadelphia were so inadequately paid that their wages, if they had children, even when fully employed, were "barely sufficient to procure them a scant supply of the very commonest food and raiment; that they are frequently very partially employed, and sometimes wholly unemployed, particularly in the dreary season of winter; and that in such cases they suffer intense distress, and are actually reduced to a state of pauperism."[b]

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[a] As late, however, as 1905 the Census of New York State, pp. 411-414, reported under "miscellaneous manufacturing industries" the following articles which must have been made in part by women: One hundred and forty-one blankets, 208 pairs of boots and shoes, 34,550 yards of carpets, 31,307½ yards of rag carpets, 611 yards of tufted cloth, 871 yards of flannel cloth, 2,287 yards of linen cloth, 2,701½ pounds of yarn, 1,070 pairs of buckskin mittens, 2,898 pairs of wool mittens, 24,706 pairs of socks, 7,385 pairs of socks and mittens, 58 shawls, 171,220 pounds of dried apples, 42,851 gallons of rhubarb wine, 120 gallons of blackberry wine, etc.

[b] Pennsylvanian, Philadelphia, May 2, 1836. The Pennsylvanian was not a labor paper, but sympathized with the labor movement.

In 1845 an investigation of "female labor" in New York, used as the basis of a series of articles in the New York Tribune, developed "a most deplorable degree of servitude, privation, and misery among this helpless and dependent class of people," including "hundreds and thousands" of shoe binders, type rubbers, artificial-flower makers, match-box makers, straw braiders, etc., who "drudge on in miserably cooped up, ill-ventilated cellars and garrets, pining away, heartbroken, in want, disease, and wretchedness." * Said the Tribune:†

In addition to the constant supply to the ranks of these classes furnished by the poor population of our city, poor girls continually flock to the city from every part of the country, either because their friends are dead and they have no home, or because they have certain vague dreams of the charms of city life. Arriving here, they soon find how bitterly they have deceived themselves, and how really they have entered a condition where it is almost impossible for them to subsist, and where want and starvation are their only companions. They have been educated and reared in such a manner as to render the idea of servitude quite unendurable, and their only resort is the needle or some similar employment. Here they find the demand for work greatly oversupplied, and competition so keen that they are at the mercy of employers, and are obliged to snatch at the privilege of working on any terms. They find that by working from 15 to 18 hours a day they can not possibly earn more than from $1 to $3 a week, and this, deducting the time they are out of employment every year, will barely serve to furnish them the scantiest and poorest food, which, from its monotony and its unhealthy quality, induces disgust, loathing, and disease. They have thus absolutely nothing left for clothes, recreation, sickness, books, or intellectual improvement, and the buoyancy and exquisite animality of youth become a slow torturing fever from which death is a welcome relief. Their frames are bent by incessant and stooping toil, their health destroyed by want of rest and proper exercise, and their minds as effectually stunted, brutalized, and destroyed over their monotonous tasks as if they were doomed to count the bricks in a prison wall – for what is life to them but a fearful and endless imprisonment, with all its horrors and privations!

Again in 1860 the working women of Boston, in a petition to the Massachusetts legislature for the establishment of "garden homesteads" for their class, asserted that they were insufficiently paid, scantily clothed, poorly fed, and badly housed, that their physical health, if not already undermined by long hours and bad conditions of work, was rapidly becoming so, and that their moral natures were being undermined by lack of proper society and by their inability to attend church on account of the want of proper clothing and the necessity, being constantly occupied throughout the week, "to bring

* Voice of Industry, Fitchburg and Lowell, Mass., August 28, 1845. This was the organ of the factory operatives.

† New York Daily Tribune, August 19, 1845.

up the arrears of our household duties by working on the Lord's Day."[a]

HOURS OF LABOR.

Hours, however, except for home workers, have been reduced by legislation. In the early part of the nineteenth century from 12 to 18 hours a day was common, and it is safe to say that 12 hours was about the average day's work in factories. Gradually, through legislation, these hours have been reduced to perhaps nearer 10 a day. The change, too, from home to factory labor has tended to reduce hours, for women home workers have always lived up to the old adage that "woman's work is never done."

WAGES AND UNEMPLOYMENT.

The low wages paid to women and the inequality of men's and women's wages have always been the chief causes of complaint. The National Laborer estimated in 1830 that "the compensation of a female for her labor, in every branch of business, does not average 37½ cents a day."[b] Twenty-five cents a day was the wage of thousands of sewing women at this time. The New York Journal of Commerce, however, asserted that at the beginning of the century "50 cents a week was a common price for female labor and 50 cents then was for their use not worth as much as 25 cents now."[c] In 1845 the New York Tribune estimated that of the 50,000 working women in that city one-half were employed as seamstresses, book folders, in factories, etc., at wages averaging less than $2 per week. Thousands, said this editorial, could not earn more than $1.50 a week.[d]

The average wages paid to women in New York in 1863, taking all the trades together, were said to have been about $2 a week and in many instances only 20 cents a day, while the hours ranged from 11 to 16 a day.[e] The price of board, which before the war had been about $1.50 a week, had been raised by 1864 to from $2.50 to $3.[f]

During the war period, indeed, according to Mr. Mitchell, the wages of women increased less, on the whole, than the wages of men,[g] while their cost of living increased out of all proportion to their

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[a] Workingman's Advocate, April 24, 1830.

[b] National Laborer, April 23, 1830.

[c] New York Journal of Commerce, June 23, 1835. The Journal of Commerce was decidedly hostile to the labor movement.

[d] New York Daily Tribune, July 9, 1845. Horace Greeley, editor.

[e] Fincher's Trades' Review, Philadelphia, November 21, 1863. This was a labor paper. Practically the same statement was made in 1867 by Mayne Hallman before a mass meeting of citizens in behalf of the Working Women's Protective Union (Daily Evening Voice, March 2, 1867), and again in 1870 in a "Letter from a working woman" to the New York Tribune of March 29, 1870.

[f] Idem, April 2, 1864.

[g] Mitchell, History of the Greenbacks, p. 307.

wages. This fact was recognized, at least, by the labor papers of the period. "While the wages of workingmen have been increased more than 100 per cent," said the Daily Evening Voice, in commenting upon the report for 1864 of the New York Working Women's Protective Union,[a] "and complaint is still made that this is not sufficient to cover the increased cost of food and fuel, the average rate of wages for female labor has not been raised more than 20 per cent since the war was inaugurated; and yet the poor widow is obliged to pay as much for a loaf of bread or a pail of coal as the woman who has a husband or a stalwart son to assist her. In many trades the rate of wages has been lowered during the year, until it has become a mere pittance, while in other occupations the prices paid to females are generally insufficient to maintain them comfortably."

By 1870, however, the wages of women in the 75 employments in which they were said to be engaged in New York were given as from $3 to $8 per week.[b]

One of the causes of complaint of the organized working women of Boston in 1860 was "the present fragmentary nature, the insufficiency, and great precariousness of the poor working women's labors," which "render it impossible for them to procure the common necessaries of existence, or make any provision for sickness and old age." It was complained that real wages were lower than they had been twenty-five years before,[c] while board had risen from $2.25 per week in 1849 to $3 per week by 1870.[d] In the same year Miss Phelps testified before the Massachusetts legislative committee on hours of labor that, though some women in Boston received $1 to $1.50 a day, a far greater number earned $2 to $2.50 per week and many only $1.75 per week.[e]

In 1887 it was said that in New York City 9,000 and in Chicago over 5,000 women earned less than $3 per week.[f] And in 1885 a resolution of the assembly of the State of New York asserted that in the city of New York there were 100,000 women, on many of whom families were dependent, working for an average wage of 50 cents a day. A large proportion, it was said, received much smaller sums.[g]

[a] Daily Evening Voice, December 15, 1864.

[b] American Workman, Boston, August 20, 1870. The Woman's Journal, Boston and Chicago, February 26, 1870. Quoted from the New York Evening Post.

[c] Idem, June 26, 1858. Resolutions adopted by the Industrial Order of the Temple and presented to the Labor Reform Convention by Miss Phelps.

[d] The Revolution, January 13, 1870. Letter from Jennie Collins.

[e] American Workman, May 1, 1869.

[f] Industrial Leader, July 9, 1887.

[g] Report and Testimony, Special Committee of the Assembly Appointed to Investigate the Condition of Female Labor in the City of New York, 1885, p. 1.

History teaches that working women have suffered fully as much and perhaps more than workingmen from unemployment. Especially is this true in the sewing trades, nearly all of which are seasonal in character. Domestic servants, who have always been in great demand, have long had employment agencies to aid them in their search for work,[a] but little aid has been given the women engaged in manufacturing industries, except by wholly or partially charitable societies, which have given them work, often at starvation prices. The Working Women's Protective Association of New York, it is true, during the three years ending in April, 1868, obtained employment for 3,222 young women,[b] and during the year 1870 is said to have procured employment for about 2,000.[c] But in 1869 the applications for employment were given as 16,025 and the places filled as only 3,318.[d] While these figures may not be strictly accurate, there can be no doubt that there was in these years an enormous amount of unemployment among women workers.

In the sewing trades, since the early part of the nineteenth century, the proportion of workers who have been without steady employment has always been large. Piecework and a fluctuating demand for labor, combined with a constant oversupply, have been largely responsible. Even in other trades, however, women, partly because of their lack of training and skill, have continually suffered from unemployment. In 1890, according to the census figures, 12.7 per cent, and in 1900, 23.3 per cent of all the females engaged in gainful occupations were unemployed during some portion of the census year.[e]

The inequality of the wages received by men and by women has long been the subject of complaint. In 1829 an "intelligent and respectable lady of New Jersey," in a letter addressed to Mathew Carey, urged that women, as well as men, often have families to support, and that "seeing that women labor equally with the men—that their life is of no longer duration—showing an equality of suffering—that their necessities are as great (for I will not allow that the clothing of a poor woman, properly clad, is of less cost than a

[a] The Corporation of New York in 1834 passed an ordinance that there should be a place appointed in every market for persons who wanted employment to meet those who wanted to hire. Certain hours of attendance were fixed for men and others for women. (New York Evening Post, Mar. 28, 1834.) This was apparently the first "public employment office," and appears to have been for servants. A society "for procuring girls situations without expense," is said to have existed in Boston about 1850, which, according to its account, placed about a hundred girls a day. (Mooney, Nine Years in America, 1850, pp. 118, 119.)

[b] Workingman's Advocate, June 6, 1868.

[c] The Revolution, December 16, 1870.

[d] Idem, January 21, 1869.

[e] Twelfth Census, Occupations, 1900, p. ccxxxi.

man's] and thirdly are 50 per cent more moral and industrious than the men—they are fully entitled to an equality of wages." "Give women bread, clothing, and shelter enough for her children," she exclaimed, "and your prisons will be turned into workshops, and your houses of refuge will be converted into schools."[a]

One of the arguments for an increase of wages used by the women shoe binders of Lynn in 1834, was that, as few mechanics could earn more than $1 a day, "the wife of the mechanic should receive a sufficient remuneration for her services, in order that she may assist her husband to defray their expenses, and to provide for their children." Daughters, too, should receive wages sufficient to enable them to pay "a reasonable price for their board, and to support themselves respectably and independently."[b]

On the other hand, a writer in the New York Evening Post,[c] during this early discussion of women's wages, seriously asserted that the only way to make husbands sober and industrious was to keep women dependent by means of insufficient wages. "I once lived in a place," he said, "where there was such a demand for female labor, of a particular description, that the wages of the women would support the family. The consequence was, that the town was filled with the most lazy, drunken, worthless set of men I ever knew." Upon which Robert Dale Owen sarcastically remarked that in order to reform the habits of the husbands, this writer proposed to keep women's wages "so low that a widow, if she attempted to support herself and children, must starve."[d]

That working women should receive the same pay as men for the same work has long been the desire of trade-unionists. Though not expressly stated, it was implied in the resolution of the National Trades' Union in 1834, which complained that "the extreme low prices given for female labor, afford scarcely sufficient to satisfy the necessary wants of life, and create a destructive competition with the male laborer."[e] In 1836, the National Trades' Union acknowledged that woman's work in industry was necessary in "the present state of society," but nevertheless urged the women to organize and strive for higher wages.[f] A resolution in the National Labor Union, moreover, repeatedly passed resolutions expressing sympathy for the "sewing women [as] daughters of toil," urging them to unite in trade-

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[a] Free Enquirer, New York, Nov. 5, 1829. This was a free thought weekly edited by Robert Dale Owen and Frances Wright and was in sympathy with the labor movement.

[b] Lynn (Mass.) Record, January 8, 1834.

[c] Quoted in the Free Enquirer, September 26, 1829.

[d] Free Enquirer, September 26, 1829.

[e] National Union," New York, October 10, 1835. Reprinted in Documentary History of American Industrial Society, Vol. VI., p. 251.

[f] National Laborer, September 12, 1836. Reprinted in Documentary History of American Industrial Society, Vol. VI., p. 281.

unions, and demanding for them "equal pay for equal work." The New England, Massachusetts, New York, and other labor conventions of the time passed similar resolutions. In 1868, too, the National Labor Union passed a resolution urging Congress and all the state legislatures to pass laws securing equal pay for equal work to all women in public employment.[a]

The actual relation between the wages of men and women was given in 1833 as 4 to 1—"for instance, a man receives $1, whilst the woman only gets 25 cents."[b] About the same time it was asserted that three-fourths of the working women of Philadelphia "do not receive as much wages for an entire week's work, 12 or 14 hours per day, as journeymen receive in same branches for a single day of 10 hours."[c] In 1868 the Workingman's Advocate declared that "women do not get, in the average, one-fourth the wages that men receive."[d] About this time a report presented to the New York Working Women's Association stated that rag picking was the only business in that city "where women have equal opportunities with men."[e] And a little later Virginia Penny estimated that women's wages in the industrial branches were from one-third to one-half those of men.[f]

DISPLACEMENT AND EFFECT OF WOMEN'S WORK ON MEN'S WAGES.

As for the effect of the employment of women upon the work and wages of men, it is exceedingly doubtful, in spite of popular opinion, whether women have, in the long run, displaced men. It has not been possible, in this study, owing to the lack of material, to make any detailed investigation of the difficult subject of displacement, but a broad survey of industrial history appears to justify certain general conclusions. That women have been the cause of reductions in the wages of men is more probable, though it is a serious question whether, if they had never been engaged in industrial labor, employers would not have found other sources of cheap, unskilled labor. The mere fact, however, that they have worked at wages so much lower than those of men has undoubtedly been a menace to the man's standard.

The gainful employment of women, however, must be regarded rather as an industrial readjustment than as a substitution of one

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[a] Proceedings of the National Labor Union, 1868, p. 24. Reprinted in Documentary History of American Industrial Society, Vol. IX, p. 205.

[b] Workingmen's Shield, Cincinnati, January 16, 1833.

[c] Carey's Select Excerpts, vol. 35, p. 164. This is a collection of about 100 volumes of newspaper clippings made by Mathew Carey, and is now in the Ridgway Branch of the Library Company, Philadelphia. Unfortunately the clippings are not dated, nor are the names given of the papers from which they were extracted.

[d] Workingman's Advocate, June 6, 1868.

[e] The Revolution, December 24, 1868.

[f] Penny, Think and Act, p. 84.

sex for the other. To a certain extent women have displaced men. Forced in part out of their traditional sphere by machinery primarily, and secondarily by men introduced as the result of the readjustment due to machinery, they have followed the machine into other occupations not theirs by tradition. But much of their problem of employment has been solved by the growth of new industries, which, of course, men have claimed, but in many of which women have entered almost if not quite from the beginning and have successfully held their own.

The menace of woman's low wage scale, however, was early felt by the leaders of the trade-union movement. In 1836 the committee on female labor of the National Trades' Union declared "the system of female labor, as practiced in our cities and manufacturing towns, * * * the most disgraceful exotheism on the character of American freemen, and one, if not checked by some superior cause, will entail ignorance, misery and degradation on our children to the end of time." They complained, first, of the injury to the health and morals of "the young females," and, second, of "the ruinous competition brought in active opposition to male labor," for "when the females are found capable of performing duty generally performed by the men, as a natural consequence, from the cheapness of their nubile and dependent situation, they acquire complete control of that particular branch of labor." The wages of a woman's labor, they asserted, were scarce sufficient to keep her alive, and were each year being reduced, and she should realize, they said, "that she in a measure stands in the way of the male when attempting to raise his price or equalize his labor; and that there her efforts to sustain herself and family are actually the same as tying a stone around the neck of her natural protector, man, and destroying him with the weight she has brought to his assistance. This is the true and natural consequence of female labor, when carried beyond the necessities of the family." The number of females employed in the United States "in opposition to male labor" was estimated as over 100,000, "who labor on an average from 12 to 15 hours per day." The committee recommended the formation of women's unions, and also that females "under a certain age" be forbidden by law "from being employed in large factories, and then only under the care and superintendence of a parent."[a]

Mathew Carey's remedy, moreover, for the evils of women's work—to "multiply descriptions of labor," or seek out new occupations for them—was seriously objected to by the trade-unionists of that day. At the 1836 convention of the National Trades' Union a resolution was passed recommending that the workingmen oppose, "by all honest means, the multiplying of all description of labor for females

[a] National Laborer, November 12, 1836. Reprinted in Documentary History of American Industrial Society, Vol. VI, p. 281-201.

inasmuch, as the competition it creates with the males, tends inevitably to impoverish both."[a] "Any project which introduces females into employments belonging to the male operative," said the National Laborer, "necessarily ruins his occupation and forces him to resort to some other mode of procuring a subsistence. The prices given to females are generally one-fourth of what the men receive—and thus a destructive competition commences between the male and female which must inevitably end in the impoverishment of both." The trades-unionists of that day also objected to woman's work on the ground of its "effect upon the character of the female, and the consequences to society." They proposed as a remedy that "the compensation of the male operative be raised so as to enable him to train up in a proper manner his own family, and then the isolated females may pursue those branches of industry which appertain exclusively to their sex."[b]

A generation later the labor papers complained of "a persistent effort, on the part of capitalists and employers, to introduce females into various departments of labor heretofore filled by the opposite sex".[c] "After trying many experiments in vain," said Fincher's Trades' Review, "to keep down wages to the old standard, when paper and gold were equal in value, they now attempt to substitute female for male labor." The result of this must be, said the Review, to bring down the price of labor "to the female standard, which is generally less than one-half the sum paid to men." This forcing of women into men's occupations was not, it was said, any advantage to the women. The trouble with women's work was not that it was insufficient in quantity, that new avenues of employment were needed, but that it was not fairly compensated. And if the effort to substitute female for male labor was successful it was predicted that it would "take but a few years to reduce their wages by mechanical labor down to the pittance now received for needle work."[d]

The Address of the National Labor Congress to the Workingmen of the United States, issued in 1867, deplored the prejudice against the employment of female labor and declared that the position of the laboring classes on this point had been grossly misrepresented. "They have objected," it said, "and naturally, too, to the introduction of female labor when used as a means to depreciate the value of their own, and accomplish the selfish ends of an employer, when under the specious plea of disinterested 'philanthropy,' the ulterior object has not been the elevation of woman, but the degradation of man, as has been the case in almost every instance, where the labor of one

[a] National Trades' Union, October 10, 1834. Reprinted in *Documentary History of American Industrial Society*, Vol. VI, p. 237.

[b] National Laborer, April 23, 1836.

[c] Fincher's Trades' Review, January 28, 1865.

[d] Idem, October 1, 1864.

has been brought into competition with the other. We claim that if they are capable to fill the position now occupied by the stronger sex—and in many instances they are eminently qualified to do so—they are entitled to be treated as their equals, and receive the same compensation for such services. That they do not is prima facie evidence that their employment is entirely a question of self-interest, from which all other considerations are excluded. Why should the seamstress or female factory operative receive one-third or one-half the amount demanded by and paid to men for the performance of the same work? Yet that such is the case, is a fact too well established to require corroboration."[a]

Again in 1868 the president of the National Labor Union, in his opening address to the congress, referred to "the extent to which female labor is introduced into many trades" as "a serious question," and stated that "the effect of introducing female labor is to undermine prices, that character of labor being usually employed, unjustly to the woman, at a lower rate than is paid for male labor on the same kind of work." He also spoke of "the damaging physical effects and demoralizing tendencies of the prevailing system," and suggested that the Government should be induced to set "the example of equal compensation for male and female labor."[b]

INDUSTRIAL EDUCATION AND EFFICIENCY OF WOMEN.

Apprenticeship for girls has never meant any thorough training. Even in colonial days girl apprentices were rarely taught a trade, though sometimes their indentures specified that they were to be taught to spin and sew. But generally, apprenticeship meant simply a hiring out at domestic service till of age. In the manufacturing industries, too, apprenticeship has usually meant to girls merely work and no industrial education. In many cases, indeed, it has been used as a means of procuring cheap labor, and the girls have been discharged, as soon as their term was over, to make room for a new set of apprentices at very low wages or none at all.

As early as 1853 a writer in the Una[c] suggested that an industrial association should be formed for the relief of working women, where they could be taught "to be clerks, shoemakers, watchmakers, sailors [sic], florists, horticulturists, chandlers, hatters, nurses, midwives, accountants, scribes, telegraphers, daguerreotypists, and a dozen other things." In the same year there was a "Girls' Industrial

[a] Address of the National Labor Congress to the Workingmen of the United States, pp. 10, 11.

[b] The Revolution, October 1, 1868.

[c] The Una, Providence, R. I., July 1, 1853, p. 62. The Una was a woman's rights journal.

School" in New York,[a] but nothing of real importance along this line appears to have been done until after the war, when schools were opened in Philadelphia, New York, Boston, and other cities to teach girls various industrial arts. In Boston, too, an effort was made about this time by the Massachusetts Working Women's League to encourage girls to serve regular apprenticeships so that they should acquire skill and therefore command higher wages.[b] A little later Miss Jennie Collins proposed to establish in Boston an institution to be called the "Young Woman's Apprentice Association" for the education of girls in needlework, machine work, and scientific housework. In 1871 she petitioned the state legislature for aid for this institution,[c] but nothing appears to have been done.

The industrial schools and business colleges which originated in the sixties and seventies, it is true, have made it possible for women to enlarge somewhat their field of activity by entering new employments. They have done little or nothing, however, to make women wage-earners in mechanical industries more skilful or more efficient.

The condition of the great majority of working women, indeed, as regards skill and efficiency, is probably worse now than that of their grandmothers who were not wage-earners. Before the introduction of machinery women were probably, on the whole, as compared with men workers, more skilful and efficient than they are to-day. The occupations taught them then were theirs for life. A girl could well take pride and pleasure in learning to spin, to weave, to sew, and to cook. She was preparing herself for the great event in her life—her marriage, and for the career every girl looks forward to—the keeping of the home and the care of children. Gradually, however, as girls have been forced, on the one hand by machinery, which has taken away their work, and on the other hand by division of labor, which has drawn them into all manner of strange occupations, to undertake tasks which have no direct interest to them as prospective wives and mothers, there has grown up a class of women workers in whose lives there is contradiction and internal discord. Their work has become merely a means of furnishing food, shelter, and clothing during a waiting period which has, meanwhile, gradually lengthened out as the average age of marriage has increased. Their work no longer fits in with their ideals and has lost its charm.

Women wage-earners, too, have always been and still are held down by the very real difficulty, already mentioned, of acquiring proficiency in their occupations. In the olden days girls were carefully taught the domestic arts, but when woman's industrial revolution came to sweep these arts out of the home their industrial edu-

[a] New York Daily Tribune, June 20, 1865.

[b] American Workman, November 20, 1869. Constitution of the Massachusetts Working Woman's League.

[c] The Revolution, April 13, 1871.

cation became a thing of the past. Only in the intellectual classes, which are largely influenced by the fact that intellectual work can often be carried on in the home, have parents recognized the need of educating their daughters for a useful occupation. Girls are taught the same branches as boys and are expected to marry. Formerly a girl who did not marry had a useful occupation as a "spinster." Now she has no useful occupation in the home and is therefore thrown upon her own resources to obtain outside employment.

Denied adequate training while under her parents' protection, once a wage-earner she is obliged to labor incessantly to obtain food, clothing, and shelter. Her wages are rarely sufficient to afford her opportunity to improve her position by self-education or attendance at industrial schools, even if such schools were not woefully lacking where most seriously needed.

Finally, the possibility of promotion, or even of praise for excellence of workmanship, is practically denied to her. In most cases, probably, woman's expectation of marriage is responsible for her lack of skill, but in some instances, doubtless, her enforced lack of skill is responsible for her longing for marriage as a relief from intolerable drudgery. The only certain deduction is that, in the days when marriage and skill were not divorced, women were proficient, according to the standards and knowledge of their time, in the work which they performed, but that, since the general upheaval in their occupations which has accompanied the industrial revolution, they have come to be to an alarming extent the cheap laborers of the employment market, the unskilled and underpaid drudges of the industrial world.

In spite, however, of all these difficulties, a study of the history of the working women of this country shows that there has been a gradual pushing up of women workers from the level of the purely mechanical pursuits to the level of semi-intellectual work. There is hope in this tendency, slight as it may be. There is some hope, too, in the gradual relaxation of the old rigid rule that the good positions in business and industry could be given only to men.

SCOPE AND SOURCES OF THE REPORT.

In this report on the history of women in industry, wage-earning occupations alone are considered. The unremunerated home work of women, which has probably dovetailed in with their wage labor in such a way that at all periods approximately the same proportion of the work of the world has been done by them, is necessarily neglected. Women engaged in professions, in independent business, and in agriculture, too, are considered only in their relation to the wage-earning women in industry. That is, these occupations are

studied statistically as outlets for women who would otherwise be competitors of those engaged in wage labor in the industrial field. The pressure of competition in other branches of labor is in part to be ascertained by a study of the statistics of these industries. But they are not primarily the subject of this history.

For convenience of study and presentation of the changes in the employment of women as reflected in the principal sources, the industries to be studied have been classified in six main groups, (1) the textile industries, (2) clothing and the sewing trades, (3) domestic service, (4) the manufacture of food and kindred products, including beverages, (5) other manufacturing industries, including tobacco and cigar manufacture, the paper and printing industries, the manufacture of metals of all kinds, and of wood, clay, glass, and chemicals, and (6) trade and transportation. Of these, the first four are within woman's traditional sphere, and only in the last two groups can their work be said to really encroach upon that of men. The study of the history of these first four groups of industries is, then, not a study of the entrance of women into new occupations, but merely a study of changes in the conditions under which they have labored. In the fifth and sixth groups, however, the history of woman's employment is of an entirely different character, for here women have infringed upon man's traditional domain.

The history of women in industry in the United States is a broad subject, nearly as broad as the history of men in industry, and the material for such a study is voluminous. The principal sources used in this study have been the census and other publications of the Federal Government, state labor and statistical bureau reports, the reports of legislative committees, and old books, pamphlets, and newspaper files, the latter located primarily through the search set up by the American Bureau of Industrial Research. Representative establishments, too, of nearly all the principal industries have been visited, and persons familiar with the industries have been consulted.

As a result, however, of the breadth of the subject as compared with the space allotted, and of the comparative inaccessibility of the sources of information prior to the establishment of labor and statistical bureaus as compared with the reports of those bureaus and with other sources made accessible during the past thirty years or so, it has been thought best to give a somewhat disproportionate amount of space to information and quotations derived from the rare early sources. The character and conditions of woman's work within recent years have been fully described in reports, books, magazines, and newspapers which can be easily obtained, but the history of the formative period of woman's work has long been buried away in rare old books and papers, many of them until recently unknown even to

close students of the labor question. The history of the wage labor of women during and shortly after this formative period, moreover, is not only comparatively unknown, but furnishes the only possible basis for any historical interpretation of women in industry.

The sources of information in regard to labor conditions during these early years are largely pamphlets and newspaper files. Outside of these the existing material is extremely meager, for thorough investigations of labor problems in an impartial way were unknown. In consequence, anything that will throw light from whatever angle upon the conditions of those early days is worthy of examination. Most of the pamphlets were written by persons thoroughly familiar with the conditions which they discussed, and some of the newspaper articles, such, for instance, as the series in the New York Tribune, are comparable with the better class of articles upon similar subjects in the magazines of to-day. On the other hand, many of the statements from these old files disclose the intensity of the controversy of which they were a part and the strong personal bias of the authors; in many instances statements of facts are directly contradictory. So far as the material exists, great care has been exercised to present both sides in all matters of controversy, as closely as possible in the original words, and always with the authority cited. The reader must take into consideration the character of the material and the relative value of the sources of information, just as he would in reading similar material of recent publication.

CHAPTER II.

TEXTILE INDUSTRIES.

CHAPTER II.

TEXTILE INDUSTRIES.

GENERAL CHARACTERISTICS.

The first appearance of women in industry, apart from their employment in domestic service, was in the manufacture of textiles. Not merely was this their recognized occupation from time immemorial, but it was the first employment in which women in any large numbers worked for compensation outside of their immediate families, or were gainfully employed. Since the dawn of civilization women have provided the great bulk of the labor required in the manufacture of textile fabrics, and in 1791 Alexander Hamilton, in his report to Congress on manufactures, spoke of the "vast scene of household manufacturing" and stated that, in a number of districts, it had been computed "that two-thirds, three-fourths, and even four-fifths of all the clothing of the inhabitants are made by themselves." As late as 1810 Gallatin estimated that "about two-thirds of the clothing, including hosiery, and of the house and table linen, worn and used by the inhabitants of the United States, who do not reside in cities, is the product of family manufacture."[a]

The history of women's employment in the cotton industry may be divided roughly into three periods, that of hand labor before the use of improved machinery, that of the use of spinning machinery before the introduction of the power loom, and that of the complete textile factory, in which all the branches of manufacture were carried on under one roof. The first period lasted approximately from the first settlement of the country to 1787, when the first "cotton mill," which was, in reality, simply a spinning mill, was erected at Beverly, Mass. The second period began with the introduction of improved spinning machinery run by water power and ended with the erection of the first complete cotton factory, containing both spinning and weaving machinery, at Waltham, in 1814. The third period extends from that date to the present time.

In the other textile industries the same industrial development was somewhat more backward, especially the introduction of the power loom. Woolen cloth was woven on a large scale by men hand-loom weavers in Philadelphia and other places until after the middle of the nineteenth century. It is possible, however, to

[a] American State Papers, Finance, Vol. II, p. 427.

treat these three periods as approximately exhaustive, though with variations in time, in all the textile industries. But it must not be forgotten that there was a considerable amount of overlapping of the different methods of production.

In general, it may be said that during the first period all the spinning and a large part of the weaving was done by women; during the second a small number of men were employed in various occupations connected with spinning, but women assumed a much larger proportion of the weaving; and during the third the proportion of women to men has, upon the whole, steadily declined.

Spinning had always been women's work, but in weaving there has been a certain amount of displacement of men by women. Much weaving of the lighter goods was done by women in colonial days, but the heavier goods were woven by men. In the days of the hand loom, for instance, carpets were woven almost if not exclusively by men, but the Bigelow power loom, introduced between 1840 and 1850, brought women carpet weavers. In 1848 a letter from a Thompsonville, Conn., "Factory Laborer" appeared in the Harbinger which spoke of the future prospects of carpet weavers as "very gloomy," since power looms were sure to come in "and if we are allowed to work at them at all, we shall have to work at very low wages, probably at the same rate as girls."[a] The year before, the carpet mill at Lowell was said to be the only one in the world using power looms. But by these looms "a young woman easily does the work, which, by the hand process, required the hard labor of three men."[b]

Naturally, public sentiment has never been vigorously opposed to the employment of women in the textile industries. Throughout the period from the beginning of textile manufacture until its thorough establishment, indeed, one of the chief arguments for its protection by tariff legislation was that it would employ women and children who would otherwise "eat the bread of idleness."[c] In colonial days it was taken as a matter of course that women should spin and weave, and the establishment of "manufactories" or "spinning schools" was one of the favorite methods of relieving poverty. Thus a petition presented to the Massachusetts legislature January 15, 1750, by the company of persons who established

[a] Harbinger, Brook Farm, Mass., June 24, 1848. Vol. III, pp. 29, 30. The Harbinger was the organ of the Brook Farm movement.

[b] Miles, Lowell as It Was and as It Is, 1845, p. 100.

[c] In arguing for the establishment of manufactories the Republican Herald, of Poughkeepsie, N. Y., said in 1810: "Many poor persons and many children, who would otherwise be brought up in ignorance and idleness, find employment, and employment, too, of a nature suited to their age and circumstances. The public is relieved from the support of paupers, who would be a serious tax upon 'human industry'." (Quoted in the Boston Independent Chronicle, Apr. 12, 1810.)

the Beverly factory, set forth that "it will afford employment to a great number of women and children, many of whom will otherwise be useless, if not burdensome to society."[a] In 1792 Tench Coxe asserted that the objection to manufactures that it took people from agriculture was not valid, "since women, children, horses, water and fire all work at manufactures and perform four-fifths of the labor."[b] In 1812 he congratulated the country on the fact that "female aid in manufactures, which prevents the diversion of men and boys from agriculture, has greatly increased."[c] And the increase of woman's work in textile factories during the war of 1812 was referred to by White, in his Memoir of Slater,[d] as "adding to the public prosperity." As early as 1827, too, the establishment of manufactories in the slave States was urged on the ground that it would "employ thousands of the idle women and children (slaves) who are to be found on every plantation in Maryland and Virginia and the adjacent States."[e]

By 1830, however, the evils of the factory system had developed considerable opposition to the employment of women in factories, and the Baltimore Transcript was driven to reply to these criticisms that "the notion * * * that factory labor should be restricted to men, is too visionary to merit refutation."[f]

THE HOME WORK AND HANDICRAFT STAGE.

It is impossible to say just how early women began to spin and weave for profit. Miss Edith Abbott[g] shows that at least as early as 1685 women were employed in weaving by a Boston shopkeeper. It is probable, indeed, that almost from the very beginning of industry in this country some women were employed in spinning and weaving for profit.

Very early in the history of the country, too, public effort was made to encourage textile manufactures. The Massachusetts assembly, for instance, passed an order in 1640 for the encouragement of the manufacture of linen cloth and of the spinning and weaving of cotton wool, requiring the magistrates and deputies of the several towns "to make inquiry what seed is in every town, what men and women are skillful in the braking, spinning, weaving; what means for the providing of wheeles; and to consider with those skillful in that manufacture, what course may be taken * * * for reeckling the

[a] Bagnall, Textile Industries of the United States, Vol. I, p. 91.

[b] Coxe, Reflections on the State of the Union, p. 8.

[c] Coxe, Statement of Arts and Manufactures, p. xiv.

[d] White, Memoir of Slater, second edition, 1836, p. 200.

[e] Carey's Excerpts, New Series, Vol. 7, pp. 407, 408. Carey, Miscellaneous Essays, pp. 332–334.

[f] Quoted in Public Ledger, Philadelphia, December 6, 1833.

[g] Abbott, Women in Industry, pp. 28, 31.

boys and girls in all townes the spinning of the yarn;" etc.[a] A similar order was made in Connecticut in the same year. Other colonies followed. In Virginia, for instance, an act was passed in 1666 to promote manufactures, providing that each company should set up a loom. In 1668 the General Court of Massachusetts Bay passed an order enjoining all hands not otherwise employed, "as women, girls, and boys," to spin "according to their skill and ability" and prescribing the amount of yarn to be produced in a year.[b] The chief attention, however, before the introduction of the cotton gin, was given to linen. By 1708 the Southern States produced a large amount of linen cloth of fine quality. "The material was mostly grown upon the farms of the planters and the breaking and heckling being done by the men, while the carding, spinning, weaving, bleaching, and dyeing, were performed by the wives and daughters of the planter."[c]

In 1718 the arrival in Boston of a number of Irish spinners and weavers, bringing the implements of their craft, caused "a great stir." "Directly the 'spinning craze,' as it was aptly called, took possession of the town, and the women, young and old, high and low, rich and poor, flocked into the spinning school, which, for want of better quarters, was set up on the Common, in the open air. There the whirr of their wheels was heard from morning to night."[d] In 1721, too, a spinning school was erected in Boston for the instruction of poor children.[e]

A public effort was made in Boston in 1748 to promote manufactures as a means of relieving the poor by the employment of women and children, and in 1753 there was erected as a linen manufactory, by act of the General Court, a handsome brick building bearing on its front wall the figure of a woman holding a distaff. In the same year, on the second anniversary of the Society for Encouraging Industry and Employing the Poor, about 300 young women spinners sat on the Common seated at their spinning wheels. This factory after a few years was abandoned.[f] Again in March, 1770, a memorial was presented to the General Court of Massachusetts by William Molineux, who, for the purpose of relieving the poor of Boston, had caused about 400 spinning wheels to be made "and hired a number of women for spinning schools, as also a number of mistresses to properly teach such children, and so successful has been his endeavors that, in the course of the summer only, not being able to continue through the winter's cold season, he had learned at least 300 children and women

[a] Bagnall, Textile Industries of the United States, Vol. I, p. 4.
[b] Idem, p. 6.
[c] Bishop, History of American Manufactures, 1868 edition, Vol. I, p. 340.
[d] Bagnall, Textile Industries of the United States, Vol. I, p. 16. Quoted from Winsor's Memorial History of Boston, Vol. II, p. 511.
[e] Bagnall, Textile Industries of the United States, Vol. I, p. 16.
[f] Idem, pp. 35–37.

to spin in the most compleat manner; and has constantly employed to this day all such as would work, and paid them their money to a large amount."[a]

About 1764 a Philadelphia association employed more than 100 persons in spinning and weaving.[b] The United Company of Philadelphia, too, formed for the purpose of promoting American manufactures, is said to have employed in October, 1775, "in spinning and other work four hundred women, who would otherwise have been destitute."[c] This manufactory advertised, on December 4, 1775, that it would "employ every good spinner that can apply, however remote from the factory, and, as many women in the country may supply themselves with the materials there, and may have leisure to spin considerable quantities, they are hereby informed that ready money will be given at the factory, up Market street, for any parcel, either great or small, of hemp, flax, or woolen yarn."[d] In addition to spinning, women were employed to "attend on the weavers to wind their chains and quills for about seven shillings and sixpence per week, and find themselves. One woman can attend three looms."[e] As late as 1788 the Pennsylvania Society for the Encouragement of Manufactures and the Useful Arts reported that, to employ the poor, they had purchased flax and employed between 200 and 300 women in spinning linen yarn during the winter and spring.[f]

In New York, too, in 1764, a society was formed for the purpose of encouraging the manufacture of linen as a means, among other things, of giving employment to the poor. This association employed in 1767–68 in spinning and weaving "above 300 poor and necessitous persons."[g] In 1789 the New York Society for the Encouragement of American Manufactures employed 130 spinners.[h]

Encouragement was also early given to the manufacture of silk. In 1749 Georgia offered bounties "to every woman who should, within the year, become a proficient in reeling,"[i] and sheds were erected and supplied with machines for that purpose. "The laudable was attained," says Bishop, "by 12 young women, who were the next year engaged at the filature."[j] In 1768 a public filature or silk house was erected in Savannah to instruct in the management of private

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[a] Bagnall, Textile Industries of the United States, Vol. I, p. 43.

[b] Idem, p. 61.

[c] Bishop, History of American Manufactures, 1868 edition, Vol. I, p. 387.

[d] Bagnall, Textile Industries of the United States, Vol. I, pp. 70, 71. Quoted from the Pennsylvania Packet and General Advertiser, December 4, 1775.

[e] Bishop, History of American Manufactures, 1868 edition, Vol. I, p. 460.

[f] Idem, p. 497; White, Memoir of Slater, p. 68.

[g] Bagnall, Textile Industries of the United States, Vol. I, p. 58.

[h] Idem, p. 134.

[i] Dunlap, History of American Manufactures, 1848 edition, Vol. I, p. 307.

filatures. Another filature was opened in Philadelphia in 1770.[a] Unlike the manufactures of cotton and wool, England encouraged the silk business, but she could afford to do so as the colonies were not prepared to produce anything but unwrought material. In 1788, however, a company was incorporated in Connecticut to manufacture silk into stockings, handkerchiefs, ribbons, etc. Bishop says that at that time a woman and two or three children could make 10 or 12 pounds of raw silk in five or six weeks.[b]

Isolated instances of the manufacture of silk cloth during the eighteenth century have been discovered, but the real history of woven silk weavers began many years later. The making of sewing silk was, however, a household industry of some degree of importance at the period of the Revolution, and for at least 50 years afterwards.[c] All the silk raised in the United States before 1828, indeed, was spun by hand, and it was not until the introduction of the sewing machine that the practicability for its consumption of the sewing silk then in use brought about, in 1852, the invention of a satisfactory machine for the manufacture of sewing silk.[d]

The work of women in the textile industries during these years was probably in the first instance "to order" or custom work, and there must have been a great deal of this kind of manufacture throughout the entire period. This work was, of course, done at home, as was most of the considerable amount of wholesale manufacture which later developed. This wholesale manufacture was either for retail shops; as or for "manufactories," where a number of spinning wheels or looms were gathered together under one roof and their products controlled by a single individual. The manufactories already noticed furnish instances of the latter kind in which women were employed. In the weaving shops, which appear to have been somewhat more common, the employés were probably men; but the yarn was spun by women in their homes. No instance is known during the period in which both spinning and weaving were carried on in the same manufactory.

The chief characteristic of custom work was that the manufacturer furnished the materials and sold the product. Though a good deal of custom work was doubtless done by women independently, in many cases, probably, as during the same period in England, a prosperous good wife would buy the materials and have her wife and children spin the yarn for his loom. The husband, too, doubtless often sold the work done by his wife and daughters. It is, indeed, impossible to distinguish in this period the labor of the wife from that of the husband.

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[a] Hazard's Register, Philadelphia, January 26, 1836.

[b] Bishop, History of American Manufactures, 1868 edition, Vol. I, p. 360.

[c] Special Report on Silk Manufactures, Tenth Census, 1880, p. 13.

[d] Brooks and others, Great Industries of the United States, 1872, p. 645.

In the wholesale manufacture of textiles the shopkeeper or manufacturer furnished the material, and in work for a manufactory this appears to have been the general plan, but much of the work for shopkeepers was doubtless custom work.

Hand spinning at home continued for a number of years, even after the introduction of power and improved machinery. Mr. Thomas R. Hazard, of Rhode Island, stated that in 1816 and even later he "used to employ scores of women to spin at their homes at 4 cents a skein, by which they earned 12 cents a day at most. Inferior cotton shirtings sold then at 50 cents a yard, thus requiring 4 days' work of the woman to pay for 1 yard of cotton cloth, she boarding herself. The wool was carded into rolls at Pawtucket and transported to and from on the backs of horses."[a] In 1810 Gallatin reported that in New Hampshire "every farmer's home is provided with one or more wheels, according to the number of females," and that "every second house, at least, has a loom for weaving linen, cotton, and coarse woolen cloths, which is almost wholly done by women."[b]

Knitting was, naturally, one of the textile industries carried on for profit by women during the colonial days. It is recorded that knit stockings sold for 2s. or more a pair.[c] In 1698 Martins Vineyard is said to have exported 9,000 pairs of knit hose.[d] Throughout the colonial period, and until well into the nineteenth century, hand-knit hose were an important article of manufacture. The work, of course, was done by women and children.

The manufactories, as has been already pointed out, were of two kinds, for spinning or for weaving, and only in the former were women generally employed. A few women may have been employed in the weave shops as assistants to men, but in general the factory employment of women in the textile industry during this period was confined to spinning.

Manufactories which did not use either the new machinery or power persisted, and in some instances were newly started, even after the introduction of spinning machinery at Beverly. A sail duck factory, for example, was started in Boston in 1788 which promised "to give employment to a great number of persons, especially females who now eat the bread of idleness, whereby they may gain an honest livelihood."[e] In January, 1780, it appeared that "several hundred poor persons" were "constantly employed," and in May of the same year "16 young women and as many girls, under the direction of a

[a] United States Bureau of Statistics, Wool and Manufactures of Wool, Special Report, 1885, p. xxvii.

[b] American State Papers, Finance, Vol. II, p. 426.

[c] Weeden, Economic and Social History of New England, Vol. I, p. 302.

[d] Campbell, Women Wage Earners, p. 74.

[e] Bagnall, Textile Industries of the United States, Vol. I, p. 113. Quoted from Boston Continental Journal of September 6, 1788.

steady matron" were said to have been employed in spinning at this factory.[a] Again, in October, 1789, President Washington visited the factory and recorded that he saw "14 girls, spinning with both hands (the flax being fastened to their waist). Children (girls) turn the wheels for them." The spinners were paid by the piece, and President Washington added to the account in his diary: "They are the daughters of decayed families and are girls of Character—none others are admitted." In 1792 there were 100 employees.[b]

At other places in New England the manufacture of duck was carried on by similar methods, and manufactories of cotton goods were attempted in a considerable number of places. In 1789 the Baltimore Cotton Manufactory, in advertising for experienced weavers, added: "Apply to the subscriber at the factory, where a few women can be employed at winding yarn."[c]

In these spinning factories, even before the introduction of machinery, various improvements had been made, but none of great importance. In a factory at Haverhill, for instance, Washington recorded in 1789 that "one small person turns a wheel which employs eight spinners, each acting independently of the other."[d] This reminds us of the belated movement by which, about 1812, portable spinning frames, capable of spinning from 6 to 24 threads and made expressly for family use, were quite extensively sold about the country for prices ranging from about $25 to about $50.[e]

In at least one case, and probably in more, it appears that the effort to introduce improvements in machinery resulted in the substitution of men for women spinners. This case was in the factory at Pawtucket, afterwards the scene of Slater's enterprise, where the "billies and jennies" were driven by men, though "the cotton for this experiment was carded by hand and roped on a wooden wheel by a female."[f] The carding for these machines was done "in families."[g] "Jennies" and "billies" of imperfect construction are also said to have been used before 1790, "chiefly by Scottish and Irish spinners and weavers," in Providence, New York, Beverly, Worcester, and other places.[h]

It is safe to say, in general, that before the introduction of the factory system practically all of the spinning and a large part of the

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[a] Bagnall, Textile Industries of the United States, Vol. I, p. 114. The first statement is quoted from a petition to the Massachusetts legislature, and the second from the Gazette of the United States, New York, May 6, 1789.

[b] Diary of Washington, October, 1789, to March, 1790, New York, 1858, p. 33.

[c] Bagnall, Textile Industries of the United States, Vol. I, p. 183.

[d] Diary of Washington, October, 1789, to March, 1790, New York, 1858, p. 42.

[e] Parker & Earl, Hall River and Its Factories, p. 79.

[f] Batchelder, History of the Cotton Industry, p. 39; White, Memoir of Slater, p. 76.

[g] White, Memoir of Slater, p. 93.

[h] Ibid., p. 96.

weaving, whether for home consumption or for the market, was done by women and girls. At the time of the Revolution, for instance, a considerable amount of woolen and linen goods were manufactured at the Bethlehem community in Pennsylvania, and the records show that while most of the heavy weaving was done in the "Brethren's House," where the unmarried men lived, most of the spinning and the lighter weaving was done in the "Sisters' House," where the unmarried women lived, and in the "Widows' House."[a] If we consider only gainful employment, to be sure, the men may have had the advantage in numbers, for most of the itinerant weavers who went from house to house, much as some seamstresses or dressmakers do to-day, were men, while they generally used yarns spun by the women of the family in which they were hired and not by gainful labor. A little later, however, the introduction of spinning machinery created such a great demand for weavers that weaving came to be almost as much woman's work as spinning formerly had been. It is probable, moreover, that from the beginning a much larger part of the hand weaving was done by women in the United States, where labor was dear, than in England, where labor was cheap.

The price, in 1688, for spinning worsted or linen, we are told, was usually 2 shillings the pound, and for knitting coarse yarn stockings, half a crown a pair. The price for weaving linen of half a yard in width was 10 or 12 pence per yard. Wool combers or carders received 12 pence per pound.[b]

Another important home industry connected with the manufacture of textiles in colonial times, and even in the early years of the nineteenth century, was the manufacture of hand cards for combing cotton and wool. The teeth and the cards were cut in the factory, new machinery being invented for this purpose toward the end of the eighteenth century, and were then distributed to the women and children of the neighborhood, who inserted the teeth separately by hand. A single factory in Boston employed in this work in 1794 about 1,200 persons, chiefly women and children.[c] Before 1797 three large factories in Boston are said to have employed nearly 2,000 children and 30 men. There were also in Boston at that time three smaller factories.[c] Some women also worked in the factories, examining the cards returned and correcting imperfect work. In 1812, too, it is recorded that the largest card factory in Leicester, Mass., employed about 18 hands in the cutting of teeth, two-thirds of them girls engaged in tending the machines. The pay for setting teeth averaged, for a "sheet" about 5 inches wide by 36 inches long,

[a] Bagnall, Textile Industries of the United States, Vol. I, p. 27.
[b] Bishop, History of American Manufactures, 1868 edition, Vol. I, p. 317.
[c] Idem, p. 497.

from 25 to 40 cents, according to the fineness of the teeth.[a] Card-making machinery was patented, however, in 1797, and we hear no more of this employment for women.

THE PERIOD OF SPINNING MACHINERY.

The second period of textile manufacture in this country began in 1789 with the Beverly, Mass., cotton factory, which is claimed to have been the first in America to carry on under one roof all the operations of the manufacture of cotton cloth. But the first Arkwright machines were used at the Slater factory at Pawtucket in 1790, and as this type of factory seems to belong naturally to an earlier stage of development it seems best to describe it first. The Slater factory, like many if not the majority of the 168 "cotton factories" in operation in the United States in 1810, was merely a spinning mill. At first it sold its cotton yarn, but later hired weavers to work in their homes and sold the cloth thus manufactured, as well as yarn. During 1790 and 1791 its employees consisted entirely of children from 7 to 12 years of age, most of them boys.[b] Women were later introduced as spinners, but we have no record of the date. Upon the first introduction of machinery it appears to have been common, indeed, for children to displace women in their traditional occupation, spinning. In the Globe Mills at Philadelphia, for instance, in 1787, most of the spinning was done by boys.[c]

The spinning of wool by machinery was introduced later than that of cotton. In the Hartford (Conn.) Woolen Manufactory, started in 1788 and supposed to have been the first which used more than one loom, the yarn, as late as 1794, when the factory was reported by Henry Wansey, the "Wiltshire Clothier" to have been "in decay," was all spun by hand.[d] This work was doubtless done by women, and probably outside of the factory. As late as 1809 there appeared, in a newspaper article on the wool manufacture, an account of "the new constructed spinning jennies, lately made by the ingenious Mr. Schofield of this town" on which "a single woman can easily spin from 30 to 50 runs of fine yarn per day" and which "can be conveniently worked in any private family."[e]

In these early spinning mills the spinners were generally girls from neighboring towns, and the weaving was done by women, or by both men and women of the neighborhood. In 1811 President Timothy Dwight visited the cotton and woolen mills in Humphreys

[a] Conolly and others, Great Industries of the United States, 1872, p. 618.
[b] Bagnall, Textile Industries of the United States, Vol. I, pp. 168-169; White, Memoir of Slater, p. 99.
[c] Bishop, History of American Manufactures, 1868 edition, Vol. II, pp. 71, 72.
[d] Wansey, Journal of an Excursion to the United States, pp. 60, 259.
[e] Bagnall, Textile Industries of the United States, Vol. I, p. 264. Quoted from the Pittsfield Sun, November 16, 1809.

ville, Conn., and he stated that in both "the principal part of the labour * * * is done by women and children; the former hired at from 50 cents to $1 per week, the latter, apprentices." He added that the health and moral conditions were excellent, and that all of the operatives were Americans.[a] Three years earlier, when the "Baltimore Cotton Manufactory" was put in operation, the announcement stated that "a number of boys and girls, from 8 to 12 years of age are wanted," and that "work will be given out to women at their homes, and widows will have the preference in all cases where work is given out, and satisfactory recommendations will be expected."[b]

The records of the Poignaud and Plant mill show that both sexes were employed as weavers, about one-third being women. But in other cases the weaving appears to have been done entirely by women. Mr. Batchelder related that, six or seven years before the commencement of weaving by power loom at Waltham, he was one of the owners of the second cotton mill built in New Hampshire, and that, in order to dispose of his part of the product, he "undertook to manufacture yarn by the hand loom into shirting, gingham, checks, and ticking." Nearly every farmhouse, he said, was furnished with a loom and spinning wheels "and most of the females were weavers or spinners, and were very willing to undertake to weave such articles as I proposed, in order to purchase calicoes and such other goods as they could not manufacture themselves." Before the war of 1812 he made a contract, he said, with the other owners of the mill to purchase the whole of the yarn for several years, and extended his business so that at times he had about 100 weavers in his employ—"not constantly at work, but as they had leisure from other household employment. They came from the neighboring towns for the distance of 6 or 8 miles for the yarn and to return the webs. The price for weaving the different articles was from 2 to 7 cents a yard." He continued this business several years after the introduction of the power loom at Waltham, which was at first confined to plain sheetings and shirtings, while most of the goods he produced by hand looms were twilled or checks, such as were not then produced by the power loom.[c]

Similar customs prevailed in the neighborhood of Providence, R. I., which was early a center of cotton manufacture. By 1813 there are said to have been, within a radius of 30 miles of Providence, in Rhode Island thirty-three factories, and in Massachusetts twenty factories.[d] Before the introduction of the power loom at Fall River

[a] Bagnall, Textile Industries of the United States, Vol. I, pp. 302, 324.
[b] Idem, p. 298.
[c] Webster, Manual of Power, pp. 24, 30.
[d] White, Memoir of Slater, p. 103.

in 1817 little but the spinning of the yarn was done in the factories there. "The cotton was picked by hand in the homes at 4 cents a pound, spun in the mills and then woven by the housewives in their dwellings."[a] "The mills in the neighborhood of Providence kept wagons running constantly into the rural districts, invading both Massachusetts and Connecticut, bearing out yarn to be woven and returning with the product of the hand looms, worked by the farmers' wives and daughters of the country side."[b]

The rapid multiplication of factories using the improved spinning machinery almost immediately caused a great increase in the demand for weavers to use the greatly increased amount of yarn, and to fill this demand women took up, to a greater extent than ever before, the art of weaving. In 1812 Tench Coxe remarked that "women, relieved in a very considerable degree from their former employments, as carders, spinners, and fullers by hand, occasionally turn to the operations of the weaver with improved machinery and instruments, which abridge and soften the labor."[c] He recommended, at the same time, that "young females, particularly those who are bound as apprentices or otherwise, by the public guardians, and who continue for a time in private families," be taught the art of weaving. "It is a business," he said, "a good knowledge of which may be obtained in a few weeks, and it would be a great advantage to those families through the whole of their lives. It is principally by female weavers, that the States of North Carolina and Virginia have been unobservedly enabled to exceed all the others in the number of working looms, and that the Southern States have so imperceptibly advanced in the various cloth manufactures. The stocking looms of England and Germany," he added, "and the new broad and other hose-web looms of England are peculiarly and manifestly worthy of female attention, being much more profitable than the common very unproductive knitting needles."[d]

In a considerable number of early cotton factories, however, spinning by machinery appears to have been combined with hand weaving. This was the case at the Beverly factory, already mentioned, which in 1791 employed 40 persons, both men and women.[e] This factory was closely followed by the Philadelphia "manufactory," also previously mentioned, which was replenished with apparatus for both spinning and weaving of cotton goods in the spring of 1795.[f] Other similar factories followed the introduction of the Arkwright machines.

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[a] Penrose, History of Fall River, p. 23.

[b] Cook and Earl, Fall River and its Industries, p. 79.

[c] Coxe, Statement of Arts and Manufactures, p. xxiv.

[d] Idem, p. xxvi.

[e] Hammond, The First Cotton Mill in America, Collections of Essex Institute, Vol. XXXIII, p. 98.

[f] Bagnall, Textile Industries of the United States, Vol. I, p. 78.

In these factories women and children appear to have been employed in spinning, and perhaps some women were also employed in weaving. A letter written in 1790 by one of the proprietors of the Beverly factory proves further that even at that early date Beverly was not the only place where women were employed to operate machines. This letter complained that Worcester "people" had bribed a Beverly woman spinner who had been taught to use the machines "to desert us as soon as she could be useful to us." Rhode Island "undertakers," too, were said to have "treated us in the same manner."[a]

In some cases, however, the introduction of spinning machinery appears to have caused a temporary displacement of women by men. In the Dickson Cotton Factory at Hell-Gates, about 5 miles from New York, visited by Henry Wansey, the "Wiltshire Clothier," in 1794, spinning machinery of the Arkwright type seems to have been operated at least in part by men, though Wansey recorded that "they are training up women and children to the business, of whom I saw 20 or 30 at work. They give the women," he added, "$2 a week and find them in board and lodging."[b] It was further stated, however, that "they have the machine called the mule," which doubtless accounts for the men spinners.

This type of "manufactory" survived, and new factories even were started upon this plan for a number of years after the first introduction of the power loom. In 1822, for instance, when the manufacture of cotton sail duck was first commenced at Paterson, N. J., hand looms were used. Power looms, however, were substituted in 1824.[c]

It is impossible to make even a rough estimate of the number of women engaged in the manufacture of textiles during this period. Some statistics can be given, to be sure, for the cotton industry. But these relate only to their employment in factories and take no account of the probably larger number of women who worked at home.

The first estimates which we have of the proportion of women to men in the textile industries relate only to cotton manufactures. Secretary Gallatin estimated in 1810, from the returns received from 87 mills, that the cotton mills of the country employed about 8000

[a] Gaskell, The First Cotton Mill in America, Collections of Essex Institute, Vol. XXXIII, pp. 37, 38.

[b] Wansey, Journal of an Excursion to the United States, p. 94.

[c] Weblen, Manual of Power, p. 48. "The town of Paterson had originally been started in 1791 under a charter granted to an ambitious cotton manufacturing corporation, but the schemes were too extensive to be carried out and the factory ran only for about two years, from 1794 to 1796, when the 125 operatives were discharged. (Bagnall, Textile Industries of the United States, Vol. 1, pp. 178–183.) It is recorded of this first cotton factory at Paterson that "the workhouses of New York City" were searched "to supply operatives." (Marshall, History of Industrial Paterson, p. 88.)

men and about 3,500 women and children, or 87.5 per cent women and children.[a] It is, of course, impossible to determine how many of the children were girls and how many boys. In one factory near Providence there were employed on August 31, 1809, in the manufactory 24 males and 39 females, and in neighboring private families 50 males and 75 females.[b] In this case, then, only 54.7 per cent of the persons employed in the factory and 58.4 per cent of all the employees were women, which would seem to indicate that a large number of boys were included in the estimate above given for the whole United States.

Another estimate of the relative employment of men and women in the cotton industry was made by the Committee of Commerce and Manufactures in a report to the House of Representatives of the United States on February 13, 1816. It was as follows:[c]

Males employed from the age of 17 and upward	20,000
Women and female children	66,000
Boys under 17 years of age	24,000

It appears from this estimate that about two-thirds of the employees were women and girls. But four years earlier Tench Coxe estimated that in the manufacture of cotton yarn only one-eighth part of the employees should be adult males.[d]

Employment in textile mills or even in the manufacture of textiles for sale can not be said, however, to have become an important employment for women until the time of the second war with England and the introduction of the power loom. In 1800 only "800 bales of cotton were manufactured in manufacturing establishments; in 1805, 4,000; in 1810, 10,000, and in 1815, 90,000."[e]

THE COMPLETE FACTORY SYSTEM.

The third period of textile manufactures in this country began with the introduction in 1814 of the first successful power loom at Waltham, Mass. This brought weaving, as well as spinning, into the factories, and women followed the occupation in which, by reason of the growing demand for weavers, they had already, to a great extent, displaced men. The change affected at first only cotton weaving, in which women had always engaged to a far greater extent than in the weaving of wool. But gradually the power loom displaced the hand loom in other textile industries until women became weavers of all kinds of cloth and even of carpets. At the same time, too, the textile industries were brought completely under the dominance of the factory system.

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[a] American State Papers, Finance, Vol. II, p. 427.

[b] Idem, p. 434, note D.

[c] American State Papers, Finance, Vol. III, p. 82.

[d] Coxe, Statement of Arts and Manufactures, 1812, p. 3.

[e] American State Papers, Finance, Vol. III, p. 38.

The changes which have occurred since the inauguration of the complete factory system in the textile industries of this country may be divided into changes in the relative employment of men and women, changes in hours, changes in wages, and changes in other labor conditions, such as in the character and nationality of employees, in their home environment, their amusements, and their social position, and in factory regulations and the character and comparative healthfulness of their work.

The proportion of women as compared with men engaged in all the textile industries combined has decreased since the inauguration of the complete factory system. Table X shows that in 1850 half of the employees in textile industries were women and in 1900 only 40.6 per cent were women, but there were such variations in the intervening years, and the opportunities for error due to changes in census classification are so great that the figures can be considered as only a rough indication of true changes.[a]

In the complete textile factories there was doubtless, from the beginning, a higher proportion of men than in the spinning mills, but the scarcity of labor supply and the high price of male labor both contributed to make women the chief dependence. The rapid development of the country and the many opportunities open to men for more remunerative employment made their assistance exceedingly difficult to obtain until immigration began upon a large scale. Even to women, with their far narrower opportunities, it was necessary to offer comparatively high wages as an inducement. But it was their occupations which were being transferred to the factory, and naturally they followed. As a correspondent of the Banner of the Constitution[b] said in 1831: "There is in fact no other market for this description of labor; there is no other mode in which, so far as national wealth is concerned, it can be made productive at all. The improvements in machinery have superseded all household manufactures so entirely, that labor devoted to them, so far as useful production is concerned, is as much thrown away as if it were employed turning so many grindstones. * * * Take

[a] Special Reports of Census Office, Manufactures, 1905, Part III, Selected Industries, p. 7, gives the following as the proportion of women to all employees in the combined textile industries, including cotton manufactures, woolen and worsted goods, worsted manufactures, silk and silk goods, flax, hemp, and jute products and dyeing and finishing textiles:

	Per cent
1860	44.3
1880	43.4
1900	41.2
1905	44.7

[b] Banner of the Constitution, New York and Philadelphia, June 29, 1831. This paper was perhaps the most important organ of the free trade movement of that day.

away the employment of females in the different branches of manufactures, chiefly in cotton and wool, and there is absolutely no market, no demand, for the great mass of female labor existing in the community. It is an inert, unproductive, untried power—an unknown capability."

COTTON MANUFACTURE.

It is, however, in particular branches of textile manufacture that the movement can be most accurately and profitably studied. For the cotton industry the figures show a steady and decided drop in the proportion of women employees. Even though no formal statistics existed, there is abundant evidence in contemporary descriptions that the cotton factories of the early part of the century employed many more women than men. Thus in 1810 the Waltham factory is said to have employed 14 men and 288 women,[a] and one at Fishkill had from 70 to 80 employees, five-sixths of whom were women.[b] In 1825 the Poignaud and Plant factory near Worcester, Mass., employed only 8 men and 39 women,[c] and a couple of years later, in 1827, it was estimated[d] that the Lowell factories employed 1,200 persons, nine-tenths of them females and 20 of these from 12 to 14 years of age. In the same year the factories at Newmarket, N. H., are said to have employed 20 men as overseers and assistants, 5 boys, and 250 girls.[e] The Chicopee cotton factory at Springfield, Mass., was reported in 1831 to employ about seven-eighths women.[f] In Lowell, moreover, in 1833 all the factories are said to have employed 1,200 males and 3,800 females,[g] and in 1834, 4,600 females out of a total of 6,000 employees.[h] In 1835 seven Lowell companies employed 1,152 males and 4,070 females,[i] and one company 65 men, 148 women, and 93 children.[j] Other figures for all the Lowell fac-

[a] Carey, Essays in Political Economy, 1822, p. 162.

[b] Blom, p. 459.

[c] Seven men and an overseer. See Abbott, Women in Industry, p. 29. Record taken from the Manuscript Time Books, Poignaud and Plant Papers, in the Town Library at Lancaster, Mass.

[d] By Kirk Boott, a prominent Lowell manufacturer, in a letter written in answer to queries from Mathew Carey, of Philadelphia. This letter was published in a number of contemporary newspapers. In White's Memoir of Slater, pp. 252–260, and a copy is to be found in Carey's Excerpts, Vol. I, p. 250.

[e] White, Memoir of Slater, p. 134.

[f] Niles' Register, July 2, 1831, vol. 40, p. 307.

[g] Boston Courier, June 27, 1833; quoted from the Lowell Journal. People's Magazine, March 8, 1834, Vol. I, pp. 301, 302.

[h] Boston Transcript, May 27, 1834. Quoted from Bankes' Hill Annals.

[i] From a letter dated Lowell, April 20, 1835, published in White's Memoir of Slater, pp. 254, 255. This does not include the Lawrence Company, which was running four mills.

[j] Carey, Essay on the Rate of Wages, p. 95.

tories give in 1839, 2,077 males and 6,470 females;[a] in 1844, 2,345 males and 5,395 females;[b] in 1845, 2,415 males and 6,420 females;[c] in 1846, 3,340 males and 7,915 females,[d] and in 1848 about 4,000 males and 9,000 females.[e]

The proportion of women to men employees in cotton mills appears, however, not to have been as high in other parts of the country as in Lowell and its neighborhood. The cotton factories at Paterson, N. J., for instance, in 1830, are supposed to have employed about 2,000 males and 3,000 females.[f]

When the factory system was first introduced in this country two distinct "schools" of cotton manufacture arose, based in part upon the difference between mule and throstle (ring) spinning, in part upon the kind of loom employed,[g] and in part upon the labor system. The Lowell "school," which followed the plan originally worked out at Waltham, used throstle spindles operated by women. Mule spinning was not introduced at Lowell until after 1839,[h] and in 1845 it was said that a large mill soon to be completed, in which the spinning was to be done by mules, would be "the only one of the kind in the city."[i] At Lowell, too, the employees were almost entirely girls from the farming districts, who were housed in factory boarding houses. At Fall River, on the other hand, mule spindles operated by men were used and the employees were hired by families—men, women, and children—and were housed in company tenements. The Fall River plan appears to have been followed by the factories of New York, Pennsylvania, and New Jersey.

Nevertheless, upon the whole, the proportion of women employees appears to have been much higher in the early cotton factories of this country than in those of England, a fact which Henry C. Carey accounted for by the more general use here of throstle spinning.[j] According to English statistics of this period about three-fourths of the mule spinners were men and three-fourths of the throstle spinners were women.[j] In 1905 the census report showed that the mule spinners

[a] Montgomery, Practical Detail of Cotton Manufacture of the United States, p. 170.

[b] Scoresby, American Factories and their Female Operatives, p. 38.

[c] New York Daily Tribune, August 16, 1845.

[d] Prairie Farmer, 1847, Vol. VII, p. 148.

[e] An estimate from Handbook for the Visitor to Lowell, 1848, p. 9.

[f] Trumbull, History of Industrial Paterson, p. 62.

[g] As both types of loom were operated by women, this difference is not here of importance.

[h] Batchelder, Cotton Manufacture in the United States, p. 78.

[i] Miles, Lowell as it Was and as it Is, 1845, p. 89.

[j] Carey, Essay on the Rate of Wages, 1835, p. 76.

were almost exclusively men.[a] In 1833 the females employed in cotton factories in England exceeded the males by about 9 per cent, while in the United States they were estimated to exceed the males by more than 110 per cent.[b]

Gradually, however, the differences in the employment of women in cotton factories in various parts of this country and between this country and England have disappeared. The first statistics for the country as a whole are those of the census of 1820, which are avowedly incomplete. According to these figures more than half the employees engaged in the manufacture of cotton goods and yarns were "boys and girls," ages not specified; only about 25 per cent were classed as women.[c] The next statistics upon the subject, which are far more satisfactory, were collected in 1831 by a society called the Friends of Domestic Industry, and though also incomplete, appear to have been gathered and compiled with care.[d] The results of this investigation are contained in the following table:

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[a] Special Reports of Census Office, Manufactures, 1905, Part III, Selected Industries, p. 36. In general the relative importance of mule spinning by men and throstle or ring spinning by women and children has been determined by the needs of the business and the kind of yarn required. But in at least one instance a strike of mule spinners led directly to the substitution of throstle spindles, which could be operated by a "more docile and manageable class of operatives." This was in Fall River in 1873, when the hosiery market having been overstocked and the number of mule spindles greatly increased by the large increase in mills, the wages of the mule spinners, who were generally foreigners, were reduced. The ensuing strike resulted, not merely in the defeat of the operatives, but in turning the attention of manufacturers to the "production of weaker yarn, by the improved lightening spindle instead of the mule." Thus women were substituted for men. (Webber, Manual of Power, p. 72.)

[b] Gray, Essay on the Rate of Wages, 1835, pp. 71, 73.

[c] American State Papers, Finance, Vol IV, pp. 29-293. In the manufacture of mixed cotton and woolen goods about 40 per cent of the employees were "boys and girls" and about 20 per cent women.

[d] The information was collected by means of circulars addressed to all establishments "within the knowledge of the committee." The important establishments known to exist were in Vermont, from which returns were received only from the three western counties, and in the Southern and Western States, where no less than 30 establishments were known to exist, but from which no authentic returns were received. The results were published in the New York Convention of the Friends of Domestic Industry, Report on the Production and Manufacture of Cotton, 1832.

COTTON INDUSTRY OF THE UNITED STATES, 1831.[a]

	Total number of employees.	Males employed.	Females employed.	Children under 12 years.	Hand weavers.	Per cent of women of all employees.[b]
Cotton mills:						
Maine	283	84	199			70.1
New Hampshire	5,026	876	4,090	60		81.4
Vermont	431	102	328	10		75.0
Massachusetts	12,914	2,665	10,078			78.0
Rhode Island	8,500	1,781	3,297	3,472		38.8
Connecticut	4,315	1,309	2,477	529		57.4
New York	5,600	1,374	3,652	624		65.2
New Jersey	6,488	2,151	3,000	337	1,000	47.2
Pennsylvania	15,600	6,545	6,351		2,700	40.9
Delaware	1,353	678	675			50.0
Maryland	2,047	374	1,700			82.7
Virginia	419	140	276			66.3
Total	66,017	18,593	38,927	4,691	4,700	58.1
Bleacheries	788	673	120			17.1
Printeries	1,708	863	136	(430)[c]		8.5
Grand total	67,800	[d]20,301	39,178	5,121	4,700	58.0

a Table from the Report on the Production and Manufacture of Cotton, 1832, p. 10. New York Convention of Friends of Domestic Industry.

b These percentages are not given in the "Report," but are added for convenience. They are based upon the supposition that all the hand weavers were men.

c Report on the Production and Manufacture of Cotton, 1832, p. 18. These 430 "children" were called "boys."

d This is the total number of "males employed" as given. No explanation can be offered of the fact that the total of the figures given above equals only 20,304.

Assuming that all the hand weavers were men,[a] it appears that of all the employees in cotton mills about 58 per cent were women. If the hand-loom weavers be entirely disregarded, 62.5 per cent of the employees were women.[b] Another fact which is evident on the face of these figures is the high proportion of women in Maine, New Hampshire, Vermont, and Massachusetts, and the comparatively low proportion in the other States, especially New Jersey and Pennsylvania, where the hand-loom weavers were found.[c] The low proportion of women employed in Rhode Island is accounted for by the surprisingly large proportion of children under 12 years of age, about 40 per cent of the total number of employees. Children were also in evidence in Connecticut, New York, and New Jersey, and a few in Maine and New Hampshire. This table brings out strikingly the differences in the employment of women in different sections of the country.

In a chapter on the employment of women in cotton mills,[d] Miss Abbott gives the following percentages, which are supposed to

a This assumption is probably not far from the truth, as the hand weavers are reported only from the States of New Jersey and Pennsylvania, where the hand-loom weavers, so far as is known all men, were active trade unionists between about 1835 and 1850. Out of the "weavers" given in the census of 1850 nearly 30 per cent were women.

b Miss Abbott gives this percentage as 68 (Women in Industry, p. 102), but her figures, as there given, do not include either the 4,691 "children under 12 years" or the "hand weavers," and both were evidently neglected in obtaining this percentage.

c If the hand-loom weavers are disregarded, the percentage would be 56.4 in New Jersey and 58.1 in Pennsylvania.

d Abbott, Women in Industry, p. 102. For her method of obtaining these figures, see same work, p. 359.

represent the employment, on the one hand, of men and boys combined, and, on the other hand, of women and girls combined.

NUMBER OF COTTON-MILL EMPLOYEES OUT OF EVERY 10,000 IN POPULATION OVER 10 YEARS OF AGE

Date.	Men.	Women.	Per cent women formed of all employees.	Date.	Men.	Women.	Per cent women formed of all employees.
1831	53	111	68	1880	49	75	60
1840	39	74	66	1890	61	93	54
1850	41	60	62	1900	52	82	61
1870	35	58	60	1905			61

a This figure, as has already been pointed out, is the percentage of women of the total number of men and women, thus omitting the children and the husband workers.

It is evident that there has been a steady decrease in the proportion of women, as compared with men, engaged in the manufacture of cotton. The same decrease is seen in Table X, where the apparently sudden break in 1870 is accounted for by the fact that the percentages for that year and later relate to the employment of women alone as compared with both men and children.

It is also evident that the number of women cotton-mill operatives to the total female population 10 years of age and over has steadily decreased, with the single exception of a slight increase between 1890 and 1900. The proportion of men has fluctuated decidedly. Since 1870, however, it has steadily increased, and the present tendency appears to be decidedly toward a displacement of women by men in cotton factories."

a Some interesting figures in regard to the average number of male and female employees engaged in each room of the Boott Cotton Mill No. 1 at Lowell for four weeks during May of 1838 and 1876 were given in a paper read by William A. Burke before the New England Association of Cotton Manufacturers on October 26, 1876. The figures were as follows (Webber Manual of Power, p. 97.):

Operatives.	Average number in May, 1838.	Average number in May, 1876.
Card room (including picking):		
Males	54.3	9.88
Females	33.0	11.0
Spinning room:		
Males	4.15	2.4
Females (including spoolers)	55.0	18.0
Drawing room:		
Males	2.0	1.5
Females (including cotton tenders)	20.0	4.0
Weaving room:		
Males	8.0	3.5
Females	48.3	31.0
Total males	68.19	16.28
Total females	156.3	74.0
Total operatives	224.19	90.28

It will be observed that there was a large decrease in the total number of operatives, which was decidedly more pronounced in every department in the number of women

Meanwhile the proportion of women to the total number of employees in Massachusetts cotton factories, which in 1831 was 80 per cent, has steadily decreased until in 1905 it was only 48 per cent, only 1 per cent higher than for the entire United States.

These changes are in part due to the substitution of a foreign for a native labor supply and in part to improvements in machinery. It has already been seen that wherever the family system of labor was adopted more men and, obviously, more children were employed, and in the North the family system has usually meant foreign labor. But this change will be later discussed. The essential points to be here noted are the changes in the technique of the industry which have made it possible for men to displace women in their traditional occupation.

The characteristics and relative importance of throstle and mule spinning as they affect the employment of women have already been discussed. But in weaving, too, the introduction of improved and fast looms has led within recent years especially to the substitution of men for women weavers.[a] In the dressing rooms, moreover, in which, in the early years, women were almost exclusively employed under a man overseer, men now work amid intense heat, as a result of the introduction of a new machine called the "slasher."[b] The doffers, too, who were formerly girls, are now perhaps as often boys.

Still another reason for the increase in the proportion of men is, probably, the change in the character of goods produced. In the early years of the cotton manufacture in this country a large proportion of the goods manufactured were coarse and plain. More complicated looms, requiring a greater amount of adjustment, and more attention to bleaching, dyeing, and printing, have doubtless tended to increase the proportion of men employed in the industry as a whole.

The tendency, to sum up, is distinctly toward the displacement of women by men in the cotton industry. The reasons for this cited by

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than of men. Meanwhile the number of spindles had increased from 6,144 to 6,960, the number of looms from 178 to 194, and the number of pounds of cloth made from 71,088 in 308 hours in 1868 to 21,882 in 240 hours in 1876. The improvements in machinery, and perhaps also in organization, had evidently displaced both men and women, but the decrease in the number of women was much greater than in the number of men.

[a] Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 32.

[b] Light is thrown upon the substitution of men for women in the dressing room by the following incident: In 1866, when the agent of the Merrimac Corporation stopped the fans in the dressing room and ordered that the girls should put up their own "beams," which would enable him to discharge from two to four men, the girls went on a strike. (Daily Evening Voice, July 5, 1866). The strike was successful and the girls went back to work, for a time at least, in the old way. In regard to this strike the Lowell correspondent of the Boston Voice wrote: "If the men's work is put upon them, and there are many men who are not able to do the work; and I think there are but few of the colonels who would not much rather face a rebel battery than work in the dressing rooms of the cotton mills with the fans off." (Boston Weekly Voice, July 12, 1866.)

the census of 1900[a] are that "the operation of some of the modern machines requires the care of men, because it is beyond the physical and nervous capacity of women;" that there has been a decrease in the number, always small, of women employed as mule spinners, and that the generally improved conditions of labor have enabled a larger proportion of men to support their families without the assistance of the wife and children, or else the latter find employment in shops and offices. "The number of places," added the census of 1905,[b] "in which women can profitably be employed in a cotton mill in preference to men or on an equality with them, steadily decreases as the speed of machinery increases and as the requirement that one hand shall tend a greater number of machines is extended. Accordingly, we find that without any concert of action—perhaps unconsciously to the general body of manufacturers—there is a slow but steady displacement of women by men. In the New England States, in twenty-five years, the proportion of women employed has dropped from 49.7 per cent to 45 per cent; that of men has risen from 30.2 per cent to 40 per cent."

WOOL MANUFACTURE.

In the manufacture of wool a smaller proportion of the labor supply has always been furnished by women than in the manufacture of cotton. In the Amesbury mills at Newburyport, Mass., which manufactured broadcloth and flannels, the proportion of males to females was said in 1827 to be as 3 to 1;[c] but certain woolen mills in Connecticut in 1831 employed about 44 per cent female hands,[d] and a woolen mill at Lowell about 1835 is said to have employed 44 men, 57 women, and 39 children.[e] In the entire State of Massachusetts, in 1837, there were reported as engaged in woolen mills 3,612 males and 3,485, or nearly as many, females;[f] and in 1845, 3,901 males and 3,471 females,[g] again nearly as many females.

The first statistics for the entire country of the manufacture of "woolen and worsted goods," those of the census of 1850, show only

[a] Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 32.

[b] Special Reports of Census Office, Manufactures, 1905, Part III, Selected Industries, pp. 39, 40.

[c] Merrimack Journal, Lowell, Mass., January 12, 1827, quoted from the Newburyport Herald.

[d] Documents relative to the Manufactures of the United States, Executive Documents, first session, Twenty-second Congress.

[e] Carey, Essay on the Rate of Wages, p. 95.

[f] Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1837, p. 164 et seq.

[g] Statistics of the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1845, p. 350 et seq. There were also 288 men and 418 women reported under "worsted" and 715 men and 310 women reported under "carpeting."

about 14 per cent of the employees to have been women, but about 30 per cent were boys and girls, ages not specified.[a]

For all wool manufactures except "hosiery and knit goods" the census figures give 41.6 per cent women in 1850, 40.8 per cent in 1860, 37.3 per cent in 1870, 37.0 per cent in 1880, 42.1 per cent in 1890, 40.8 per cent in 1900, and 40.1 per cent in 1905.[b] The proportions have evidently not varied to any great extent, but since 1890 there has been a slight decrease in women due, doubtless, to the same causes as in the cotton industry—the increased speed and efficiency of modern machinery. The tendency is not marked in "woolen goods" proper,[c] but is decided in "worsted goods."[d] The proportion of women to men in carpet factories has, however, increased.[e]

HOSIERY AND KNIT GOODS.

In the hosiery and knitting industry women originally had practically a monopoly. But in the latter part of the eighteenth century hand looms operated by men were introduced, and in the thirties power looms which brought with them the factory system and almost entirely displaced women hand knitters. In 1845 there were reported to be employed in the manufacture of hosiery in Massachusetts 53 "male hands" and 185 "female hands."[f] Women evidently to a considerable extent followed the industry into the factory. In 1844 it was boasted that "a girl can make, with a power loom, 30 pairs of drawers a day."[g] Even in the fifties, however, the hand-loom weaving of hosiery was an important business in Philadelphia. The actual weaving appears to have been done by men,

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[a] American State Papers, Finance, Vol. IV, pp. 27–32, 291–297.

[b] The percentages for 1850 and 1860 are derived from the table in the Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 628; and those for 1870 to 1900 are as given in the Special Reports of Census Office, Manufactures, 1905, Part I, p. lxxxvi. In 1850 and 1860 the percentages are for "female hands" and in the other years for "women 16 years and over." The industries included in this summary are "woolen goods," "worsted goods," "felt goods," "carpets and rugs, other than rag," and "wool hats." The latter is given in Table XI, p. 268, instead of in Table X.

[c] See Table X, p. 799. The Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 90, gives the same figures in Table X for 1880, 1890, and 1900, but for 1860 gives 10,574 women, making the percentage 42.2; in 1850, 10,540 women, making the percentage 46.0; and for 1870, 21,082 women, making the percentage 44.6. From these figures it would appear that there has been a more steady decrease in the proportion of women.

[d] A carpet factory at Baltimore in 1833 employed from 50 to 60 men and about 40 women and children. (Niles' Register, Baltimore, Oct. 5, 1833, vol. 45, p. 84.) In 1905, 43.7 per cent of the employees engaged in the manufacture of "carpets and rugs, other than rag," were women. (Special Reports of Census Office, Manufactures, 1905, Part I, p. 6.)

[e] Statistics of the Conditions and Prospects of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1845, p. 128 et seq.

[f] Workingman's Advocate, New York, May 11, 1844. Quoted from the Albion.

but the business is said to have afforded "employment to a large number of females, who sew and finish the various articles after they leave the frame; and thus at leisure hours add to the income and comforts of their families."[a]

Since 1870 hosiery and knit goods show a decided increase in the proportion of women employees, which was 54 per cent in 1870 and 64.2 per cent in 1900.[b] In 1905, moreover, the proportion of women rose to 66.4 per cent, a little over 2 per cent higher than the percentage of "female hands" in 1850. The movement, however, has fluctuated considerably and the recent change is attributed merely to the extension of the industry in the South.[c]

SILK MANUFACTURE.

The manufacture of silk was begun on a small scale in colonial days, but was only a rare household industry until about 1820, when the first silk factories began to appear.[d] About the same time, too, the raising of the silk worms, as well as the reeling and preparing of the silk, was persistently urged as a suitable employment for women and children.[e] It was pointed out that "this will be a work at home, by one's own fireside, and in one's own domestic circle; and will open an employment for females healthful, profitable, and pleasant."[f] In 1825, indeed, it was expected that the development of silk manufactures would give "profitable employment to vast numbers of women and children at their own homes."[g]

Early in the thirties, however, the power loom was applied to silk manufacture, and the factory system began to develop.[h] In the silk manufactures of Massachusetts there were reported to be employed in 1837, 36 "male hands" and 39 "female hands,"[i] and in 1845, 28 "male hands" and 128 "female hands."[j] These figures, of course, relate only to Massachusetts, where the proportion of women employers in textile industries has always been high. But in 1850 females, without distinction of age, appear to have

[a] Bradley, Philadelphia and Its Manufactures, 1858, pp. 254, 255.

[b] See Table N, p. 262.

[c] Special Reports of Census Office, Manufactures, 1905, Part III, Selected Industries, p. 43.

[d] National Gazette, Philadelphia, January 18, December 30, 1829.

[e] Niles' Register, March 19, 1831, and November 16, 1833.

[f] The Man, New York, March 17, 1834. This was a labor paper edited by George Henry Evans.

[g] National Gazette, August 22, 1825.

[h] In 1834 power looms were in use in a factory at Lisbon, Conn. (The Man, April, 1834. Quoted from the New York Journal of Commerce.)

[i] Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1837, p. 102, et seq.

[j] Statistics of the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1845, p. 323 et seq.

constituted 62.5 per cent of the employees engaged in the manufacture of "silk and silk goods" and 66.3 per cent of those engaged in the manufacture of "silk, sewing and twist." In 1860 the proportion of women appears to have been even higher, but in 1870, when the children were separately given, the women alone in both branches of silk manufacture constituted only 53.1 per cent of the employees. In 1900 their proportion was almost precisely the same, 53.2 per cent, but in 1905 it had risen to 56.8 per cent. The proportion of children declined from 20.8 per cent in 1870 to 9.2 per cent in 1905, and the proportion of men rose from 26.1 per cent in 1870 to 34 per cent in 1905.[a]

Many changes, however, have occurred in the silk industry which do not appear on the face of the statistics. Machinery, for instance, was substituted about 1867 for female labor in the cutting of fringes.[b] In the weaving of ribbon, moreover, which was formerly almost all done by men,[c] the high-speed looms introduced between 1890 and 1900 are said to have caused a substitution of women for men, because the ease in manipulation made the work suitable for women.[d]

OTHER TEXTILE INDUSTRIES.

These four industries, cotton, woolen (including worsted), hosiery and knitting, and silk, contained in 1900 about 88 per cent of all the women engaged in the group "textile industries" as given in Table X. Of the other industries there given, which employed in 1900 over 2,000 women, the proportion of women has, upon the whole, decreased in the manufacture of "jute and jute goods." But in 1905, 50.7 per cent of the employees in this industry were women,[e] an increase over 1900. In the manufacture of cordage and twine there appears to have been a large increase in the proportion of women between 1880 and 1890, but since the latter date the proportion has steadily declined, being 34.2 per cent in 1905.[f] In the dyeing and finishing of textiles, too, the proportion of women

[a] Special Reports of Census Office, Manufactures, 1905, Part I, p. lxxxi. See also Table X, p. 252.

[b] Broadley, Philadelphia and its Manufactures, 1858, p. 247.

[c] In 1871 the employment of men weavers in an establishment at Mileo caused a strike among the men. (The Revolution, May 25, 1871.)

[d] Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 200. In 1905 there were reported as ribbon weavers 4,383 men, 1,828 women, and 47 children. (Special Reports of Census Office, Manufactures, 1905, Part III, Selected Industries, p. 177.)

[e] Special Reports of Census Office, Manufactures, 1905, Part I, p. lx.

[f] Idem, p. 7. In 1820 there were reported as engaged in the manufacture of cotton, flax, and hemp bagging, cables, and cordage 340 men, 18 women, and 400 children, or 1.4 per cent women. (American State Papers, Finance, Vol. IV, pp. 29-223, 231-737. Statistics of manufacturing industries collected by the census of 1820.) One cordage factory in Philadelphia in 1858 is said to have employed 70 hands, about one-third females. (Broadley, Philadelphia and its Manufactures, 1858, p. 374.)

employees appears to have increased since 1890, being 15.9 per cent in 1905.[a] And in the manufacture of "bags, other than paper," the proportion of women employees increased steadily and rapidly from 1850 to 1900, but dropped from 66.3 per cent in the latter year to 59.7 per cent in 1905.[b] In the manufacture of "upholstering materials," in which nearly 2,000 women were engaged in 1900, the proportion of women employees has increased decidedly since 1850. As early as 1845, however, a considerable number of women in New York were engaged in the weaving of hair cloth, which was done by hand looms worked by two girls, and also in the picking apart of curled hair, which was generally done, it was said, by married Irish women and their children at home.[c] Soon afterwards, however, power looms were introduced for the weaving of hair cloth, and one girl could attend to four looms.[d]

HOURS OF LABOR.

The hours of labor in textile factories in the early part of the nineteenth century were much longer than within recent years. In Massachusetts in 1825 the "time of employment" in incorporated manufacturing companies was "generally 12 or 13 hours each day, excepting the Sabbath." Of the places which reported the number of hours in that year, at only two, Ludlow and Newbury, were the hours as low as 11 a day. At Brimfield, West Dayton, Bellingham, North Bridgewater, Chelmsford (Lowell), Danvers, Franklin, Framingham, Hopkinton, Pembroke, Rehoboth, Southbridge, Seekonk, and Taunton the hours were 12 a day, at Northboro 11½, and at Springfield 12½. At Duxbury the hours were from sunrise to sunset, and at Troy (Fall River) and Wellington the employees worked "all day."[e] In 1826, 14 or 15 hours constituted, according to the Hon. William Gray, the working day at Ware, Mass.[f]

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[a] Special Reports of Census Office, Manufactures, 1905, Part I, p. 9. In 1890 764 persons were engaged in wool carding, cloth dressing, dyeing, and rubber printing, of whom only 7, or nine-tenths of 1 per cent, were women, and 160, or 20.2 per cent, were boys and girls. (American State Papers, Finance, Vol. IV, pp. 20–23, 2d ser., Statistics of manufacturing industries collected by the census of 1810.)

[b] Idem, p. 9.

[c] For an interesting description of the work of women in the manufacture of hair cloth and of curled hair at this period see New York Daily Tribune, August 26, 1845.

[d] Crowley and others, Great Industries of the United States, pp. 631, 632.

[e] Massachusetts Legislative Files, 1825, Senate, No. 3074. Manuscript. Reprinted in Documentary History of American Industrial Society, Vol. V, pp. 87 91. At Troy "all day" means, in winter from as soon as the operatives could see until 7.30 in the evening, with half an hour for breakfast and half an hour for dinner, and in summer from sunrise to sunset, with but an hour for breakfast and three-quarters of an hour for dinner. According to Nourse, Genesis of the Power Loom, p. 39, cotton spinners at the Pidgeon and Plant Mill, Worcester County, Mass., worked 72 hours a day in 1812.

[f] Gray, Argument on Petition for Ten-Hour Law before Committee on Labor, February 13, 1873, p. 5.

By the thirties the hours appear to have been, if anything, longer. At Fall River, about 1830, the hours were from 5 a. m., or as soon as light, to 7.30 p. m., or till dark in summer, with one-half hour for breakfast and the same time for dinner at noon,[a] making a day of 13½ hours.[b] In general the hours of labor in textile factories in New Hampshire, Rhode Island, and Massachusetts in 1832 were said to be 13 a day.[c] But at the Eagle Mill, Griswold, Conn., it was said that 15 hours and 10 minutes actual labor in the mill were required.[d]

At Paterson, N. J., in 1835, the women and children were obliged to be at work at 4.30 in the morning. They were allowed half an hour for breakfast and three-quarters of an hour for dinner, and then worked as long as they could see.[e] After the strike of that year, however, the hours at Paterson were reduced to an average of 11½ a day.[f] At Manayunk, Philadelphia, in 1833, the hours of work were said to be 13 a day.[g] And a little later the hours at the Schuylkill factory, Philadelphia, were "from sunrise to sunset, from the 21st of March to the 20th September, inclusively, and from sunrise until 8 o'clock p. m. during the remainder of the year." One hour was allowed for dinner and half an hour for breakfast during the first-mentioned six months, and one hour for dinner during the other half year. On Saturdays the mill was stopped "one hour before sunset for the purpose of cleaning the machinery."[h]

A detailed statement of the hours of labor in cotton factories, and one which may be considered to represent roughly conditions from early in the thirties until the beginning of legislation in 1847, and even later in many places, was made in 1839 by James Montgomery, superintendent of the York factories at Saco, Me. He said:[i]

From the 1st of September to the 1st of May work is commenced in the morning as soon as the hands can see to advantage, and stopped regularly during these eight months at half past 7 o'clock in the evening.

During four of these eight months, viz, from the 1st of November to the 1st of March, the hands take breakfast before sunrise, that

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[a] Peck and Earl, Fall River and its Industries, p. 29.

[b] See also Conner, History of Fall River, p. 23.

[c] Free Enquirer, June 14, 1832; The State Herald: The Factory People's Advocate, Portsmouth, N. H., June 7, 1832, gave the average hours as 13½.

[d] Luther, Address to the Workingmen, third edition, 1836, p. 20.

[e] Idem, p. 33. From the report of the committee appointed by the "Mechanics and citizens of Newark" to inquire into the Paterson strike of 1835.

[f] Commercial Bulletin, St. Louis, August 24, 1835; Workingman's Advocate, New York, August 29, 1835.

[g] Pennsylvanian, August 28, 1833.

[h] Luther, Address to the Workingmen, third edition, 1836, pp. 49, 50. "Rules of the Schuylkill Manufacturing Company."

[i] Montgomery, Practical Detail of the Cotton Manufacture of the United States, 1840, pp. 173, 174.

they may be ready to begin work as soon as they can see, but from the 1st of April till the 1st of October 30 minutes are allowed for breakfast at 7 o'clock, and during the months of March and October at half past 7.

During the four summer months, or from the 1st of May to the 1st of September, work is commenced at 5 o'clock in the morning and stopped at 7 in the evening.

The dinner hour is at half past 12 o'clock throughout the year; the time allowed is 45 minutes during the four summer months and 30 minutes during the other eight.

The following table of the average hours of labor has been furnished me by an experienced manufacturer, and is deemed as correct an average as could be given. The time given is for the first of each month:

AVERAGE HOURS OF WORK PER DAY THROUGHOUT THE YEAR.

Month.	Hours.	Minutes.	Month.	Hours.	Minutes.
January	11	24	July	12	45
February	12	00	August	12	45
March	a 11	a 52	September	12	25
April	12	21	October	12	10
May	12	45	November	11	57
June	12	45	December	11	24

a The hours of labor on the 1st of March are less than in February, even though the days are a little longer, because 30 minutes are allowed for breakfast from the 1st to March to the 1st of September.

Taking one day for each month the whole number of working hours in the year, according to the preceding table, are 146 hours 44 minutes, which, divided by twelve for the number of months, gives a result of 12 hours 13 minutes as the average time for each day, or 73 hours 18 minutes per week; therefore about 73½ hours per week may be regarded as the average hours of labor in the cotton factories of Lowell, and generally throughout the whole of the eastern district of the United States. In many, perhaps in the majority, of the cotton factories of the middle and southern districts, the hours of labor in summer are from sunrise to sunset, or from half past 4 o'clock in the morning till half past 7 in the evening, being about 13½ hours per day, equal to 82½ hours per week. In these factories the average hours of labor throughout the year will be about 75½ per week.

The Rev. Henry A. Miles gave this same table of hours as representing conditions in Lowell in 1845, and added: "In addition to the above, it should be stated that lamps are never lighted on Saturday evening, and that four holidays are allowed in the year, viz., Fast Day, Fourth of July, Thanksgiving Day, and Christmas Day."[a] The statements of a writer in the Voice of Industry in 1845, too, giving the actual hours worked in different factories in Lowell, winter and summer, appear to indicate that no reduction had occurred, and in Manchester, N. H., the hours were said to be practically the same as

[a] Miles, Lowell as It Was and as It Is, 1845, p. 101. Nearly the same figures were given in the Voice of Industry, June 20, 1845.

at Lowell.[a] In the same year, moreover, the special committee of the Massachusetts legislature appointed to consider the subject of hours gave in the report, as representing the hours of labor at Lowell in that year, the same table that had earlier been given by Montgomery.[b]

Not only were the hours very long, but it was frequently complained that they were often extended from 5 to 30 minutes by various devices. Sometimes, it was said, the correct time was used to begin work, but slow time to end.[c] Similar complaints were made in 1846.[d] This custom, indeed, was made the subject of bitter complaint by the committee of the New England Association of Farmers, Mechanics, and Workingmen, which reported in 1832 on "the education of children in manufacturing districts," as follows:[e]

In the return from Hope Factory, R. I., it is stated that the practice is to ring the first bell in the morning at 10 minutes after the break of day, the second bell at 10 minutes after the first, in 5 minutes after which, or in 25 minutes after the break of day, all hands are to be at their labor. The time for shutting the gates at night, as the signal for labor to cease, is 8 o'clock by the factory time, which is from 20 to 25 minutes behind the true time. And the only respite from labor during the day is 25 minutes at breakfast, and the same number at dinner. From the village of Nashua, in the town of Dunstable, N. H., we learn that the time of labor is from the break of day in the morning until 8 o'clock in the evening, and that the factory time is 25 minutes behind the true solar time. From the Arkwright and Harris Mills in Coventry, R. I., it is stated that the last bell in the morning rings and the wheels starts as early as the help can see to work, and that, a great part of the year, as early as 4 o'clock. Labor ceases at 8 o'clock at night, factory time, and 1 hour in the day is allowed for meals. From the Rockland Factory in Scituate, R. I., the Richmond Factory in the same town, the various establishments at Fall River, Mass., and those at Somersworth, N. H., we collect similar details. At the numerous establishments in the village of Pawtucket, the state of things is very similar, with the exception of the fact that within a few weeks public opinion has had the effect to reduce the factory time to the true solar standard. And, in fact, we believe these details in server very nearly to illustrate the general practice.

[a] Voice of Industry, December 26, 1845. At Great Falls, N. H., in 1844 a correspondent of the Working Man's Advocate (Sept. 7, 1844) said that "the girls are called to their work at 5 o'clock in the morning, at 7 the bell rings for breakfast, and in 15 minutes the bell again calls them to work; they are allowed 30 minutes for dinner, are again called to work and kept in until 7 o'clock, making in all more than 13 hours, for which they receive $1.25 to $2 per week."

[b] Massachusetts Report on Hours of Labor, House Document No. 50, 1845, p. 6. Reprinted in Documentary History of American Industrial Society, Vol. VIII, pp. 138-161.

[c] The State Herald; The Factory People's Advocate, January 6, 1831; Lowell, Address to the Workingmen, Third edition, 1836, p. 10.

[d] Voice of Industry, February 27, 1846. The Voice of Industry was a labor paper, the organ of the factory operatives.

[e] Free Enquirer, June 14, 1832.

From these facts, your committee gather the following conclusions: (1) That on a general average, the youth and children that are employed in the cotton mills are compelled to labor at least 13¼, perhaps 14 hours, per day, factory time; and (2) that in addition to this, there are about 20 or 25 minutes added, by reason of that being so much slower than the true solar time; thus making a day of labor to consist of at least 14 hours, winter and summer, out of which is allowed, on an average, not to exceed 1 hour for rest and refreshment.

Overtime, too, was frequent. Many of the corporations at Lowell, according to Mr. John Quincy Adams Thayer, ran "a certain quantity of their machinery, certain portions of the year, until 9, and half past 9 o'clock at night, with the same set of hands." [a]

The "lighting up" period, during which the operatives worked "by lamplight in the morning as well as at night," [b] also caused a great deal of complaint. "By candlelight in the morning and by candlelight at night they must prosecute their painful labor," said the Awl. [c] The 20th of March, when the lights were "blown out" for the season, was regularly celebrated in factory towns by the operatives, "who decorate their large hanging lamps with flowers, and form garlands of almost every ingenious description in honor of 'blow-out' evening." [d] The operatives, indeed, found cold comfort in the splendid "view of the mills at evening, when lighted during the winter months," when, from "some eminence it seems as if the whole city were celebrating some holiday in a general illumination." [e] In 1840, indeed, there was a strike at Nashua, N. H., against work "by candlelight." [f]

It should be said, however, that the operatives did not all work these hours. The weavers, for instance, who were obliged to stand constantly at their work, were not required to work as many hours as the other operatives, "being frequently permitted to leave the mill some hours before the rest." [g] Dressers, drawers-in, harness-knitters, cloth-room girls, and carders are also mentioned as not working so long as spinners and weavers, while even the latter could sometimes give their work to a "spare hand." [h]

The Reverend Mr. Miles, indeed, asserted that, though these were the hours during which the wheels were run, "by a system adjusted to secure this end, by keeping engaged a number of spare hands, by

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[a] Thayer, Review of the Report of the Special Committee * * * on the Petition Relating to the Hours of Labor, Boston, 1845, p. 18.

[b] Workingman's Advocate, October 5, 1844.

[c] The Awl, Lynn, Mass., October 2, 1844. Quoted from the New England Operatives' Magazine. The Awl was a labor paper.

[d] Voice of Industry, March 26, 1847.

[e] Handbook for the Visitor to Lowell, 1848, p. 34.

[f] Voice of Industry, October 2, 1840.

[g] Miles, Lowell as It Was and as It Is, 1845, p. 82.

[h] Lowell Offering, December, 1846, vol. 6, p. 281.

occasional permissions of absence, and by an allowed exchange of work among the girls, the average number of hours in which they are actually employed is not more than 10½."[a] This, he said, was not a mere assertion, but had been ascertained by a careful examination of the records kept by the overseer of Boott Mill No. 1, during one year. In this mill, he said, were 196 girls who had been employed a year, working by the job. Disregarding 20 other girls working by the job but who had not worked a year, he said that the record of the 196 girls was as follows:[b] "In the weaving room 56 girls worked 14,097 days. In the dressing room 17 girls worked 4,284 days. In the spinning room 21 girls worked 5,615 days. In the card room 12 girls worked 3,629½ days. Total, 106 girls working 27,625 days."

This gave as the "average number of days per year to each girl, 260.86. Average number of hours per day, to each girl, 10 hours and 8 minutes." The average number of hours of 31 girls who worked by the day, for a period of 2 months, he found to have been 10 hours and 42 minutes. These figures, he said, did not include absences when the girls put their work into the hands of friends. He acknowledged, however, that in some cases, called "rare exceptions," extra hours were run for the purpose of equalizing the work, when the lights "never in the whole mill, but only in one or two of its rooms, are kept burning till 9 or 10 o'clock."[c]

"The labor press early began to protest against the long-hour system and to agitate for a 10-hour day,[d] and strikes for shorter hours were frequent." Naturally the agitation was uphill work. One writer, replying to Seth Luther's Address to the Workingmen,[f] asked: "What class of working people labor so few hours in every 24 as factory people labor in the cotton mills?" They leave off work, he complained, at half past 7 in the evening, while "nobody, at this season of the year, thinks of leaving off work, on ordinary occasions before 9, 10, or even 11 o'clock." Horace Greeley, even, thought that "the factory woman work as few hours as those of any other class of female laborers, while the fact that the mills are greatly

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[a] Miles, Lowell as It Was and as It Is, 1845, p. 108.

[b] Idem, p. 103.

[c] Idem, p. 107.

[d] The State Rights' The Factory People's Advocate, January 8, 1841, said: "The practice of confining people to work at half past 5 in the morning, and keeping them till 8 at night, in the winter, and from daylight till sunset in the summer, at laborious is abominable, and without precedent in other business; no other class of people ever think of laboring more than 12 hours, summer or winter. Now if people must do two days' work in one, they ought to be paid for it. If 12 hours' labor is considered a day's work, then, if any work 16, they ought to be paid for 4 hours' extra labor, and in the same proportion for a greater or less degree of time."

[e] History of Women in Trade Unions, Vol. X of this report, p. 61 et seq.

[f] A Review of Seth Luther's Address to the Workingmen of New England, by a Factory Hand, Waltham, November 28, 1832, p. 21.

preferred to housework by nine-tenths of those who have tried both, is undoubted." "I advise all," he added, "stand by the tariff."[a]

Even the operatives were often, it was said, against a reduction of hours, believing that it would result in a reduction of wages. Harriet Farley, editor of the Lowell Offering, thought a reduction in hours would be desirable "were the factory operatives all young, unmarried, and always to remain single, and always without others dependent upon them," but thought it would work hardship to widows who were toiling for their children, to children who were toiling for their parents, and to many others.[b]

In spite of rebuffs, however, the work of educating public opinion progressed. Petitions for 10-hour legislation,[c] signed by hundreds of factory girls,[d] were repeatedly presented to the Massachusetts legislature, and repeatedly legislative committees were appointed to inquire into the subject.

Verse, too, was employed by the factory girls to express their aspiration for a 10-hour day. According to "Almira,"

> Great and glorious is our cause,
> Commanded by our Maker's laws;
> Those laws which elevate mankind
> Command us to enlarge our minds,
> To cultivate our mental powers,
> And thus endow these minds of ours.
> Time, for this is all we claim,
> Time, we struggle to obtain.
> Then in the name of Freedom rise,
> Nor rest, till we obtain the prize.
>
> —Almira, in Voice of Industry, February 6, 1846.

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[a] New York Weekly Tribune, November 24, 1845. The Voice of Industry, November 28, 1845, replied: "That much wrong may be found in other departments of female labor, * * * is too true, but this is no good reason why we should cover up and attempt to justify the system of factory oppression which is working such sad havoc upon the happiness of our people, and general good of the country."

[b] Lowell Offering, vol. 3, p. 302.

[c] The "Mechanics and Laborers' Association of Peterborough, N. H." in 1846 declared for a 12-hour day, "including the time allowed for meals," and invited "the female operatives in the several manufactories in this town, one and all, to unite in petitioning our legislature for the passage of a law establishing the 12-hour system." (Voice of Industry, Feb. 13, 1846.)

[d] In 1845 four petitions were presented, two from Lowell, one from Fall River, and one from Andover. One of the Lowell petitions asked for a law providing that no corporation or private citizen should "be allowed, except in cases of emergency, to employ one set of hands more than 10 hours per day," and the other asked for a law making 10 hours a day's work "where no specific agreement is entered into between the parties." The first was signed by 850 persons and the last by only 300. A very large proportion of the Lowell petitioners, but none of the 500 from Fall River, were said to be females. (Massachusetts Report on Hours of Labor. Massachusetts House Document No. 50, 1845, pp. 1, 2. Reprinted in Documentary History of American Industrial Society, Vol. VIII, pp. 133, 134.)

An "unknown factory girl," too, who longed to be left alone with her harp and her grief "far from the factory's deaf'ning sound," nevertheless sang:

> But, if I still must wend my way,
> Unheeded by hope's sweet song,
> God grant that, in the mills, a day
> May be but "ten hours" long.
>
> —Anonymous, in Voice of Industry, February 26, 1845.

In 1847, as a result of this agitation, a 10-hour law was passed in New Hampshire.[a] Maine[b] and Pennsylvania[c] followed the example in 1848, New Jersey in 1851,[d] and Rhode Island in 1853.[e] It should not be supposed, however, that these early laws actually established the 10-hour day. As a matter of fact public opinion had been roused to favor a 10-hour day, but had not yet grasped the technical difficulties of its enforcement. Most of the early laws allowed "contracting out," and were applicable only to corporations.

The New Hampshire law, for example, was accompanied by a provision that the operatives might contract for longer hours. As a result, though public meetings were organized and an active agitation carried on to prevent the operatives from signing the "special contracts" prepared by the companies, the law proved wholly ineffective. The companies promptly discharged all the operatives who refused to sign.[f] It was said that only from one-third to one-half of the operatives employed by the Nashua Corporation remained at work[g] and "some mills or parts of mills were stopped."[h] All soon filled up with fresh hands, however, and everything went on as before. Moreover, the operatives who refused to sign were blacklisted even by the Massachusetts employers. "At the present time," said the Manchester Democrat,[i] "when the law of our State provides that the operatives need not work more than 10 hours, unless he or she so pleases, one would hardly have supposed that we had among us men so devoid of humanity, so emphatically blackhearted, as to 'blacklist' an operative for exercising a right conferred by the statute, and one too they have so loudly asserted they had the liberty to exercise at any time, free and unmolested. Yet such is the fact. Operatives who have refused to sign the 'special contracts,' binding them to work 'as long as the mills run,' have been discharged and

[a] Acts of 1847, ch. 688.
[b] Acts of 1848, ch. 63.
[c] Acts of 1848, No. 227.
[d] Acts of 1851, p. 321.
[e] Acts of 1853 (Jan. session), p. 245.
[f] Voice of Industry, September 3, 17, 1847.
[g] Idem, September 17, 1847.
[h] Idem, October 1, 1847.
[i] Quoted in the Voice of Industry, September 17, 1847.

'blacklisted.' Yes, more than this, operatives who had been to Lowell and engaged work on the corporations, have been refused work after word had been sent from Manchester that they had refused to 'take the new regulation papers.' More than this even, operatives who went to Lowell the past week were refused entrance to the yards, and told in the most impudent manner that orders had been given to admit or employ no hands from Manchester."

The Pennsylvania and New Jersey laws, too, were the cause of severe and prolonged strikes on the part of the operatives who attempted to secure their enforcement, especially at Allegheny City, Pa., and Gloucester and Paterson, N. J.[a] In the end many of the Pennsylvania and New Jersey factories adopted the 10-hour day with a corresponding reduction in wages, but as late as 1867 the girls of the Eagle and Anchor mills at Pittsburg went on strike against a reduction of wages with no corresponding reduction of the 12 hours a day during which they appear to have been working.[b] It should be noted in this connection, too, that when the New Jersey law went into effect in 1851 the factories of that State had been working only 11½ hours, while those of New England were working from 12½ to 14 hours a day.[c]

In April, 1847,[d] however, a new set of regulations went into effect at Lowell which reduced the hours 15 minutes a day during eight months of the year and 30 minutes a day during the other four months, by additions to the meal times. The legislative committee on hours of labor reported in 1850 that, as a result of this reduction, the average daily time of labor throughout the year was 11 hours, 58¾ minutes, or less than 2 minutes short of 12 hours. By months the hours were as follows:[e]

Month.	Hours.	Minutes.	Month.	Hours.	Minutes.
January	11	0	July	12	30
February	11	45	August	12	30
March	12	22	September	11	45
April	12	1	October	11	45
May	12	30	November	11	45
June	12	30	December	11	0

In this reduction the Manchester, Nashua, and Dover companies appear to have followed the example of Lowell.[f]

[a] See History of Women in Trade Unions, Vol. X of this report, pp. 63, 68, for account of these strikes. At Allegheny City in 1864 the hours were said to be 11½ a day. (Voice of Industry, Oct. 2, 1846.)

[b] Boston Weekly Voice, September 13, 1867; Workingman's Advocate, September 14, 1867.

[c] New York Daily Tribune, July 14, 28, 1851.

[d] Voice of Industry, May 7, June 11, 1847.

[e] Massachusetts House Document 168, 1850. Reprinted in Documentary History of American Industrial Society, Vol. VIII, pp. 161-180.

[f] Voice of Industry, May 7, 1847.

The next change in the hours of labor at Lowell was made in September, 1853, when the companies, in another effort to stem the rising tide of the 10-hour movement, voluntarily reduced the hours to an average of 11 a day.[a] Even before this change was made, however, it was stated that the working time in some of the other manufacturing establishments in Massachusetts was considerably longer than at Lowell.[b] In 1850, however, the mills at Lawrence reduced their time to 10¾ hours,[c] and by the time the 10-hour law was passed in Massachusetts the hours at Lawrence were 62½ and at Lowell 64½ a week.[d]

In other places, moreover, occasional reductions in hours were made, sometimes voluntarily with the same object as at Lowell and sometimes as the direct result of a strike.[e] In 1861, for instance, a strike in the mills at Great Barrington, Mass., resulted in a reduction from 13 to 11 hours,[f] and the same reduction was effected in 1865 by strikes at Southbridge, Taunton, and other mills in eastern Massachusetts, and also at Lonsdale, R. I.[g] At the latter place the hours, which had been 12 from 1830 to 1865, were further reduced in 1870 to 10½.[h] At Fall River a reduction to 10 hours a day was made on January 1, 1867,[i] and for 21 months the mills were run on this schedule, but in 1873 they were running 63½ hours per week. Soon afterwards, however, the agitation for a 10-hour law caused a reduc-

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[a] Bowley, History of Lowell, second edition, 1868, p. 349. About a year earlier they had reduced the hours in the machine shops to 11, while, as a resolution of the Ten-Hours State Convention of 1852 put it, "The delicate women and feeble children in their factories are left to toil on, apparently unthought of or unheard for." (The Voice of Labor, Address of the Ten-Hours State Convention to the People of Massachusetts, 1852, p. 3.)

[b] Massachusetts House Document 132, 1853, p. 3.

[c] Gray, Argument on Petition for Ten-Hour law, 1872, p. 5.

[d] Idem, p. 6.

[e] As early as 1827 it was stated that the hours at the Amoskeag Mills (woolen) at Amoskeag, Mass., were "at the present season," i. e., January, from 5 in the morning to 8 in the evening, with intermissions including about 2 hours, which, if the intermissions were not exaggerated, would have given these mills a 10-hours day. (Merrimack Journal, Jan. 12, 1827. Quoted from the Newburyport Herald.) But, in 1860, according to a statement of the superintendent, the hours were reduced "one day" by doing away "with washing after work." (Harriet Farley, Operatives' Reply to Hon. Jere Clements, Lowell, 1860. Quoted from a statement of the superintendent sent Miss Farley by J. G. Whittier; and in 1852 there was an unsuccessful strike at these mills against the abolition of a luncheon privilege of 15 minutes each half day. (Mass. House Doc., 122, 1845. Eleventh Annual Report (Mass.) Bureau of Statistics of Labor, 1880, pp. 9 to 11.)

[f] Eleventh Annual Report (Mass.) Bureau of Statistics of Labor, 1880, p. 10. Daily Evening Voice, September 20, 1865.

[g] Eleventh Annual Report (Mass.) Bureau of Statistics of Labor, 1880, p. 21. Daily Evening Voice, September 20, October 7, 1865.

[h] Tenth Census, 1880, Vol. XX., p. 369.

[i] Boston Weekly Voice, December 6, 1866. Cowlow, The Ten-Hours Law, pp. 5–7.

tion to two-thirds time. But on December 1, 1873, full time was resumed and continued until October 1, 1874, when, the 10-hour law having passed the state legislature and received the governor's sanction, the mills were again put upon short time.[a]

A 10-hour day was actually in force in 1865 in one large Lowell mill,[b] and in the Syracuse woolen mills,[c] and two years later in the Atlantic Mills at Lawrence,[d] but in 1866 the Massachusetts commission on hours of labor reported that 11 hours a day was the general rule in large manufacturing towns, and that the Waltham Mills worked 11¼ or 11½ hours, and the Middlefield Woolen Factory 13 hours.[e] In the same year the five large cotton mills at Allegheny City, in spite of the Pennsylvania law, were running 11½ hours a day.[f] At Troy, N. Y., too, the hours were 11½.[g]

Retrograde movements, too, sometimes occurred. At Woonsocket, R. I., the day's work was reduced in 1853, as the result of a strike, to 11 hours and 25 minutes. In 1858, however, by agreement between the manufacturers, the hours were raised to 12 a day in most of the mills,[h] and in 1865 the hours at Woonsocket were said to have been 12½ a day, beginning at 5 o'clock.[i] A strike for shorter hours occurred at Woonsocket in September, 1865.[j]

A similar retrograde movement is recorded of a braid mill in Norwich, Conn., where the women employees were notified in 1868 that they must in future work 11 hours for the same pay that they had been receiving for a 10-hour day.[k]

In general, the hours of labor in Massachusetts, in spite of the lack of legislation, were reduced first, other States following.[l] When the mills of Massachusetts ran 12 hours a day, "those of Rhode Island and New Hampshire ran 13 hours. When her mills came down to 11

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[a] C. H. Baxter, History of the Fall River Strike, pp. 6, 7.

[b] Boston Weekly Voice, April 10, 1868.

[c] Daily Evening Voice, November 16, 1865. Boston Weekly Voice, December 8, 1866.

[d] Gray, Argument on Petition for Ten-Hour Law, 1879, p. 5. Cowley, The Ten-Hours Law, pp. 6-7.

[e] Boston Weekly Voice, March 8, 1866.

[f] Daily Evening Voice, September 12, 1866. A 10-hour strike occurred at Allegheny City early in the year. (Fincher's Trades' Review, February 24, 1866.)

[g] Workingman's Advocate, November 10, 1866.

[h] Daily Evening Voice, August 12, 1865. These facts were brought out in the case of Samuel Harris v. Woonsocket Company et al., United States circuit court, June term, 1864, in which the minority mill owners of Pawtucket attempted to force the majority to adopt an 11-hour day in order to effect an equitable distribution of the water power.

[i] Idem, August 4, 1865. Quoted from the Boston Journal.

[j] Idem, September 28, 29, 1865.

[k] Workingman's Advocate, March 21, 1868.

[l] Maine, however, adopted 11 hours a little earlier than Massachusetts. (Gray, Argument on Petition for Ten-Hour Law, Feb. 13, 1879, p. 38.)

hours a day, theirs came down to 12."[a] The early laws of the other States were, indeed, practically dead letters, owing to their contracting-out clauses. In Massachusetts, where the leaders of the 10-hour movement insisted upon effective legislation, the manufacturers reduced hours to prevent the enactment of laws. But even there the women employed in textile factories generally worked 11 hours a day until prevented by legislation. Since 1874, however, the large manufacturing States have one by one regulated the hours of labor of women in manufacturing establishments, with the result that the working time is decidedly shorter.

WAGES.

The wages of women in textile factories were at first considerably higher than in other occupations in which they were engaged.[b] This was especially true in New England. But in all parts of the country the establishment of textile factories distinctly tended to raise the average of women's wages. Before the introduction of manufactures, according to Aiken,[c] the ordinary rate of women's wages in New England was from \$2.17 to \$3 a month and board. By 1833, men's labor would command, he said, 50 per cent more than formerly, but women's wages had risen from 200 to 300 per cent. Women's wages in this country, too, were considerably higher as compared with men's wages than in England.[d]

The effect of the textile factories upon women's wages in other occupations was early evident and was a cause of congratulation or

[a] American Workman, January 1, 1870.

[b] Mathew Carey in 1830 contrasted the condition of women in textile factories with that of seamstresses, and recommended that the latter be sent to factory districts where they could be employed as spinners and weavers. (Carey's Miscellaneous Pamphlets, No. 12. "To the Editor of the New York Daily Sentinel, On the Remuneration for Female Labor," 1830, p. 6.) And in 1845 Horace Greeley, in an editorial on the Allegheny City strike, stated that the girls employed there were getting "at least twice as much as working women throughout the country average and getting their pay promptly." (New York Daily Tribune, October 14, 1845.) Again, in 1868, in commenting on a strike at Chicopee (Springfield), the Springfield Republican remarked that the girls there employed "could earn at the reduced wages from \$2 to \$2.50 a week above their board, which is more than they could get at other business and from 75 cents to \$1 more than the pay for housework." (Quoted in the Lowell Daily Citizen and News, April 9, 1868.) One earlier writer, however, considered this merely an evidence of the bad conditions under which women worked in the textile factories, for, said he, "no one supposes that the operatives are paid anything more than is sufficient to secure their services." (Corporations and Operatives, being an Exposition of the Condition of Factory Operatives and a Review of the "Vindication," by Elisha Bartlett. By a Citizen of Lowell. Lowell, 1843, p. 62.)

[c] Aiken, Labor and Wages at Home and Abroad, 1849, p. 29.

[d] H. C. Carey, Essay on the Rate of Wages, 1835, p. 81. But in 1880 the Massachusetts Commission on Hours of Labor reported that the wages of women in textile factories were from one-fourth to two-thirds the wages of men. (Daily Evening Voice, March 2, 1866.)

complaint, according to the point of view. At the time of the Lynn shoe binders' strike of 1884 for higher wages, their "Address" said: "It is well known that in factories young ladies receive a high price for their services, and unless our females receive nearly an equal amount, they may be induced to seek employment in the factory, the printing office, or some other place where they may receive a just compensation for their services."[a]

The difficulty of hiring women to do housework in the neighborhood of the factories was a frequent cause of complaint. They could earn, it was said, more money in less time and with less labor in the factories than in domestic service.[b]

Though the wages of domestic servants rose from 50 cents a week before the factory system to about $1.50 a week in 1849,[c] still they did not keep pace with the wages offered by the textile mills.

At the Poignaud and Plant Mill, Worcester County, Mass., in 1812, women cotton spinners received from $2.33 to $2.75 a week, out of which they paid $1.08 to $1.16 per week for board, including washing.[d] About 1814, in Fall River, cotton-mill operatives received from $2.75 to $3.25 a week and paid $1.75 for board.[e] At Lowell women's wages in 1827 were said to be from $1 to $3 a week in addition to board,[f] and the Amesbury woolen mill is said to have paid 50 cents a day, or $3 a week.[g] In 1829, however, wages at Lowell were given as only $1.75 a week in addition to board.[h] At Paterson, N. J., too, women's wages in cotton mills in 1830 were about $2 a week.[i]

According to the report of the New York Convention of the Friends of Domestic Industry on the Production and Manufactures of Cotton[j] the average wages in Massachusetts in 1831 were $3.25, in New Hampshire $2.60, in Vermont $1.34, in Maine $2.33, in Connecticut and Rhode Island $2.20, in New York and New Jersey $1.40, in Pennsylvania and Delaware $2, in Maryland $1.91, and in Virginia $1.58. It is probable, however, that there was an actual reduction in wages about the end of the twenties and beginning of the thirties.

It is evident that wages were considerably higher in the New England States, except Vermont, which had comparatively few factories, than farther south. In Maryland, indeed, wages were

[a] Lynn Record, January 3, 1884.

[b] A Review of Seth Luther's Address to the Workingmen of New England, by A Factory Girl, Waltham, November 28, 1832, p. 21.

[c] Sliter, Labor and Wages, 1840, p. 20.

[d] Adams, Genesis of the Fall River Loom, Proceedings, American Antiquarian Society, vol. 10, p. 39.

[e] Peck and Hart, Fall River and its Industries, p. 10.

[f] Merrimack Journal, March 30, 1827.

[g] Idem, January 12, 1827.

[h] Gordon's American Daily Advertiser, August 26, 1829.

[i] Trumbull, History of Industrial Paterson, p. 52.

[j] Page 16.

considered oppressively low. In 1820 a correspondent of the Mechanics' Free Press,[a] writing from Ellicotts Mills, Md., complained bitterly of a reduction of from 12½ to 50 per cent in the Union factory in that neighborhood. "Among those," said this correspondent, "who are obliged to submit to and comply with the mandate of this relentless ruler (of a free people) are a number of females, and the children of widows, who have been induced to locate here for the purpose of getting work and subsistence for their families; and whose previously scanty pittance being thus abridged, will heap additional misery on their already heavily oppressed shoulders." The next year it was stated[b] that another factory of the same neighborhood had not only reduced wages at about the same time as the Union factory, but "pay their hands off with depreciated paper after there is from four to five months' wages due." This practice was said to be indulged in, too, by a manufacturer of Morrisville, Pa., who paid his hands "with money of his own make, which will pass nowhere but at his own store, for dry goods, groceries, etc., on which he has from 10 to 15 per cent profit."[c]

The truck-store system was in use, too, at Fall River, Paterson, and doubtless at other places. At Paterson a circular issued in 1827 declared that this system "reduces us to the disagreeable necessity of paying whatever price the extravagance of the storekeeper may think proper to demand." Further complaint was there made that—

Third. They have in a number of instances, where settlements have been demanded, kept back one week's work, and demanded a receipt in full.

Fourth. They have been uniformly in the practice of deducting one-quarter from each day's labor when we were behind the time but five minutes.[d]

At Lowell, however, the operatives were paid promptly in cash. Payments, under the factory rules, were generally made monthly.[e]

In 1833 and 1834, and again in 1836 and 1837, the manufacturers were hard pressed financially and were driven to reduce wages.[f]

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[a] Free Enquirer, May 6, 1820. Copied from the Mechanics' Free Press, Philadelphia.

[b] Mechanics' Free Press, October 16, 1830.

[c] Idem, October 30, 1830.

[d] Brothers, United States of North America as they are, not as they are generally described; being a cure for radicalism. London, 1840, pp. 342, 343. Circular issued by factory operatives.

[e] "Conditions on which help is hired by the Dunbarton Manufacturing Company, Dover, N. H." (The Man, March 17, 1834, and Luther, Address to the Workingmen of New England, third edition, 1836, p. 36.) "Outward rules of the Lowell Manufacturing Company." (Lindsey, Address to the Workingmen of New England, third edition, pp. 40–42.) "Regulations to be observed by all persons employed in the factories of the Hamilton Manufacturing Company." (Handbook to Lowell, 1848, pp. 42–44. Reprinted in Documentary History of American Industrial Society, Vol. VII, pp. 130, 131.)

[f] See Carey's Select Essays, vol. 10, p. 385, and Boston Courier, March 13, 1834, and June 3, 1837.

These reductions were the cause of a number of strikes,[a] especially in 1834 and 1836, but the resistance of the employees was made impossible by the panic of 1837. In 1842 there was another period of depression when wages are said to have sunk from an average of $2 a week and board to an average of $1.50 a week and board.[b] About 1846, too, wages of woolen-factory operatives were greatly reduced,[c] and in August of that year many of the girls are said to have left the Lowell mills on account of reductions in wages.[d] The reductions continued in 1846.

The Newburyport Advertiser announced on January 23, 1846,[e] that "the weavers in one of the factories in this town have recently had their wages cut down 10 per cent," and that the overseers had so arranged the looms as to make the reduction amount to more than 15 per cent. In 1848, too, reductions occurred in a number of places, especially at Waltham in February[f] and at Lowell during the summer.[g] The state of the market was cited as the excuse. In 1850, again, wages were reduced in one of the mills at Paterson, N. J.,[h] and in 1857 in three woolen mills at Waterford, R. I.[i] At Fall River a reduction of 10 per cent was made on December 1, 1873, and another of the same proportion in 1874. The latter, however, was successfully resisted on the initiative of the women weavers.[j] Other reductions which were the cause of strikes are given in Table A.

Many of these reductions, however, were merely in the piece rates, and by the improvement of machinery and the increase in the number of looms tended the girls were enabled to earn as much in a week as before.[k] Between 1842 and 1846, indeed, the net result of the changes in piece rates and in machinery and organization of labor force appears to have been a rise in average wages, at least at Lowell. The situation was clearly stated by Sarah G. Bagley, one of the labor leaders of the day, who said: "A few years ago no

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[a] See Table A, p. 209.

[b] Alton Labor and Wages, 1849, p. 29. The New York Daily Tribune, October 22, 1845, said that during November and December, 1842, wages were reduced 25 per cent.

[c] Voice of Industry, July 17, 1845. Quoted from Lowell Patriot.

[d] Ibid., August 14, 1845. Shortly afterwards the Morning News (New York) announced that "since the establishment of the present tariff" 1,800 girls had been discharged from the Lowell factories and the wages of the remainder reduced 50 cents per week. But Horace Greeley absolutely denied this. (New York Weekly Tribune, October 20, 1845.)

[e] Quoted in Voice of Industry, February 6, 1846.

[f] Union Journal, February 10, 1848.

[g] Pawtucket Chronicle, July 15, 1848.

[h] Boston Weekly Voice, June 7, 1856.

[i] Ibid., August 22, 1857. In this case wages were reduced 16 per cent.

[j] Baxter, History of the Fall River Strike, 1875. See History of Women in Trade Unions, Volume X of this report, p. 103.

[k] New York Daily Tribune, January 3, 1843. Quoted from the Lowell Courier.

girl was required to tend more than two looms. Now they tend four, and some five; and because they make a few cents more than they did on two, it is trumpeted all over the country that their wages have been raised."[a] "It is an ingenious scheme," said the Voice of Industry of April 17, 1846, "which a few capitalists and politicians have invented, to blind the eyes of the people that because the operatives receive one-eighth more pay in the aggregate, for accomplishing a third more labor with the same facilities, than they did a few years ago that the price of labor has advanced. The price of weaving a yard of cloth never was lower in this country than at this time, the price for tending spinning and carding never was lower, or the wages of those operatives who work by the week."

Mrs. Robinson said that the girls kept their own account of labor done by the piece, which was always accepted and they were paid accordingly.[b] The Rev. Henry A. Miles, however, recorded that in 1845 "on the spoolers, throstles, warpers, and dressers, there are clocks, which mark the quantity of work that is done. The clocks are made to run one week, at the end of which the overseer transfers the account to a board which hangs in the room in the sight of all the operatives. From this board the monthly wages of each operative are ascertained."[c]

The average wages of women in textile factories from about 1838 to about 1850 appear to have been $2 a week and board, which varied from $1.25 to $1.50 a week. Out of these wages it was claimed that the girls were able to save considerable sums which they used to assist their families or deposited in the savings banks. In 1841, according to Doctor Bartlett, the treasurer of the Lowell Institution for Savings reported that out of 1,070 depositors in that institution 978 were factory girls, and out of deposits of $305,796.75 about $100,000 belonged to them.[d] "It is a common thing," he said,

[a] Voice of Industry, April 24, 1846.

[b] Robinson, Loom and Spindle, p. 78.

[c] Miles, Lowell, as It Was and as It Is, pp. 80, 81.

[d] Hartley, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, pp. 21, 22. The amount of these deposits by factory girls was greatly exaggerated by the newspapers of the day. The Philadelphia Saturday Museum, for example, said in 1844: "It is mentioned as a remarkable fact, that the deposits in the savings bank of the humble workers in the factories at Lowell, amount to some $500,000. We hardly know which most to feel, pity or contempt, for those who can make a marvel of the circumstance that 10,000 women, toiling with almost devotion for years, are able to lay aside a few beggarly earnings, the grow amount of which is $500,000. If leisure, and wealth, and enjoyment should be the portion of all in a country where equal and exact justice in every position and relation of life should be possessed, how must we estimate the ratio of justice accorded to labor, whose 10,000 female laborers are made 10,000 wealthy because they can save up a few dollars apiece, not a sum sufficient to support a person decently for three months?" (Quoted in the Working Man's Advocate, August 16, 1844.) In 1845 the Lowell

"for one of these girls to have $500 in deposit, and the only reason why she does not exceed this sum is the fact that the institution pays no interest on any larger sum than this. After reaching this amount, she invests her remaining funds elsewhere."[a] In 1845 the Rev. Henry A. Miles gave practically the same figures in regard to savings-bank deposits and depositors,[b] and in 1855 it was stated that two-thirds of the deposits in the savings banks of Lowell were made by factory operatives.[c]

Many remarkable stories, too, were told of individual women operatives who were reputed to have acquired comfortable fortunes by their factory labor. These stories, however, were denied by the labor press of the day, which even asserted that the annual vacations in which the girls were said to indulge were not evidences of comfort but of ill health. When, for instance, the Lowell Courier reported that there had recently called at its office a woman about 45 years old who stated that she had been an operative in the Lowell mills 18 years, that her health had been improved by factory labor, that she had saved about $2,000, which she had invested in a farm, and had given her parents $1,150, and that she had meanwhile been married and had one son,[d] the Voice of Industry sarcastically remarked:[e]

Why are not the daughters of the manufacturers, agents, and superintendents to be found over the loom, the spinning frame, in the carding and dressing rooms, beside "these fresh spirits, gathered down from the green mountains and peaceful valleys," gaining an education, "improving their healths," and laying up their "two thousand dollars" after buying a farm worth eleven hundred?

Later Miss Bagley referred to this story and stated that, being "somewhat skeptical," and being employed in the same room with the woman about whom this remarkable story had been told, she had inquired and had discovered that the woman, during the 19 years, had been absent 6 years on long visits, besides a number of

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Freeman stated that "the amount of money deposited by the female operatives in the Lowell Savings Bank is equal to $1,250 for every factory girl in the place. Some of them have saved $2,000 each, the interest of which would yield a handsome support." (Quoted in the Voice of Industry, September 4, 1846.) But the Voice of Industry flatly stated that this was a lie and proved its point by giving statistics of the number of factory girls in Lowell and the total amount of money deposited, according to a statement of the "Lowell Savings Institution." The total amount on deposit, it found, was less than that reported to be deposited by the factory girls. Moreover, it estimated that one-half the total was deposited by men in and out of the mills. (Voice of Industry, September 11, 1846.)

[a] Abbott, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, pp. 21, 22.

[b] Miles, Lowell as It Was and as It Is, pp. 203, 204.

[c] Cowley, Handbook of Business in Lowell, 1856, p. 180.

[d] Quoted in the Voice of Industry, June 12, 1845.

[e] Voice of Industry, September 4, 1846.

times for two or three months, that her farm had cost $950, and her aid to her relatives had not been anything like the amount stated, and that she had never been married.[a] She added:

Another fact in this remarkable woman is that she has not been a subscriber to a newspaper, nor a patron to any library, or had a seat at church, or a dress suitable to appear at church, in all the 19 years; and yet she is sent out through the press as a sample of factory girls. Now, bad as the state of mental and moral cultivation is, she is not a fair representative of the female operatives of Lowell, or any other place. Most of the operatives dress well, and a large proportion of them read in their leisure time, which is very limited.

The average weekly wages of women textile factory operatives did not change greatly until the time of the Civil War. Between 1860 and 1890 the wages of woman spinners, weavers, warpers, speeders, spoolers, etc., increased from 50 to 100 per cent.[b] Retail prices, however, meanwhile increased from a basis of 100 in 1860 to 203 in 1890.[c] The per cent of increase, moreover, of women's wages in cotton mills from 1831 to 1880 has been given as only 140.[d]

LABOR SUPPLY.

During the early years of the factory system in this country there was a decided scarcity, especially in New England, of labor supply. In other parts of the country, and even at Fall River, foreign operatives were early introduced, but for many years the factories working under the Lowell or Waltham system put forth systematic efforts to attract the farmers' daughters of the surrounding country. To do this they were obliged, not merely to offer high wages, but also to break down the prejudice against factory labor inspired by the tales of horror which were coming to light in England at just the period of the first establishment of the factory system in this country. One of the favorite arguments at this time against perfection in American manufactures was that the factory system produced a depraved and ignorant laboring class.

To combat this idea and the resulting prejudice of farmers against sending their daughters to the factories, the Waltham and Lowell

[a] Voice of Industry, April 4, 1845.

[b] See Mitchell, History of the Greenbacks, pp. 46, 47.

[c] Idem, p. 261. This refers to average prices per year of 23 commodities.

[d] Eleventh Annual Report of the Massachusetts Bureau of Statistics of Labor, 1880, p. 187. Other wage figures may be found in the twenty-sixth, twenty-seventh, twenty-eighth, and twenty-ninth reports of the Massachusetts Bureau of Statistics of Labor; in the Aldrich report on Retail Prices and Wages (Senate reports, 52d Cong., 1st sess., 1891-92); in the Tenth Census, 1880, Vol. II, Manufactures, "Report on the Factory System in the United States," pp. 61-64; in the Nineteenth Annual Report of the United States Commissioner of Labor, 1904, and in the Twelfth Census, 1900, Special Reports, Employees and Wages. For a long discussion of the statistics of women's wages in the textile industries, see Abbott, Women in Industry, pp. 287-300.

corporations, and others which followed the same system, adopted a plan of paternal care over the factory girls. The general argument was that the depravity and ignorance of the operatives was not a necessary result of the factory system, but was due to other causes. To prove this point a system of factory boarding houses was established and other regulations designed to safeguard the moral character of the girls employed were adopted. Much, too, was done to render factory labor attractive. As Mrs. Robinson has said: "Help was too valuable to be ill treated."[a]

Another method of securing girls for the factories was to send out agents to the country districts who were paid a stipulated sum per head for hiring girls.[b] As early as 1831 the Dedham (Mass.) Patriot announced that "a valuable cargo, consisting of 50 females, was recently imported into this State from 'Down East' by one of the Boston packets. Twenty of this number were consigned to Mann's factory at Franklin, and the remaining 30 were sent to Lowell and Nashua."[c] And in 1846 the Voice of Industry announced, under the heading "Speculation," that "57 girls from Maine arrived at the Lawrence counting room one day last week."[d] In the next year, too, the Waterville Union stated that about 25 girls from the country would leave there on one morning for the Lowell factories.[e] About the same time the Cabotville companies were said to have runners out "to procure operatives, for which a premium of so much per head is paid," and an amusing story was told of a Lowell speculator who brought a girl from Maine with the promise that he would send her back if she did not like it. As soon as she heard the noise of the machinery she refused to work, and finally he was obliged to redeem his promise.[f]

Usually, however, no such promise was given, and the girls were often brought from such a distance that they could not easily get back. The Cabotville Chronicle spoke in 1846 of a "long, low, black, wagon," which "makes regular trips to the north of the State, cruising around in Vermont and New Hampshire, with a 'commander' whose heart must be as black as his craft, who is paid a dollar a head for all he brings to the market, and more in proportion to the distance, if they bring them from such a distance that they can not easily get back. This is done by 'hoisting false colors,' and representing to the girls that they can tend more machinery than is possible, and that the work is so very neat, and the wages such that they can dress in silks

[a] Robinson, Loom and Spindle, p. 72.
[b] Corporations and Operatives, etc., Lowell, 1843, p. 22.
[c] Quoted in Poulson's American Daily Advertiser, Philadelphia, November 8, 1831.
[d] Voice of Industry, May 30, 1846.
[e] Quoted in Voice of Industry, May 14, 1847.
[f] Voice of Industry, May 22, 1846.

and spend half their time in reading."[a] In at least one case a girl under 15 years of age was brought to Lowell and instructed by the agent to give her age as over 16 or she would not be employed, on account of the compulsory education law.[b]

CHANGES IN NATIONALITY.

In the textile factories of the early years native labor was generally employed. It is recorded that at the Beverly factory there were at first a number of Europeans, chiefly Irish, but they were found unsatisfactory, and in 1791 all but one of the 40 persons employed were natives of the vicinity.[c] And in Lowell in 1827 Kirk Boott stated that "except in the print works, there are no foreigners, and those do not exceed one-quarter part."[d] They were probably, moreover, all men. As late as 1856, indeed, it was stated that two-thirds of the factory operatives of Lowell were of American birth, and two-thirds of the foreigners Irish.[e]

Twenty-three years earlier, however, it had been stated that about one-fifth of all the factory operatives of New England were foreigners, mainly English.[f] The great majority of these foreigners were in Fall River and in Rhode Island,[g] and doubtless the proportion was much higher among the men operatives than among the women operatives. But about 1836 the Irish immigration began, and by 1843 Irish women began to be employed in the textile factories of New England, at first merely as scrub women and waste pickers.[h] They earned fair wages, however, and their children soon became Americanized and took up factory work. In 1846, too, the American operatives were said to have been discharged from a cotton factory in Cincinnati and their places filled with Germans.[i]

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[a] Quoted in the Voice of Industry, January 2, 1846. Reprinted in the Documentary History of American Industrial Society, Vol. VII, p. 141. A similar charge was made in the Voice of Industry, April 17, 1846.

[b] Voice of Industry, May 29, 1846.

[c] Rantoul, First Cotton Mill in America, Essex Institute Historical Collections, vol. 33, p. 40.

[d] Gray's Excerpta, vol. 1, p. 260.

[e] Cowley, Handbook of Business in Lowell, 1856, p. 163. In 1845, according to the Rev. Henry A. Miles, "of the 6,320 female operatives in Lowell, Massachusetts furnished one-eighth; Maine, one-fourth; New Hampshire, one-third; Vermont, one-fifth; Ireland, one-fourteenth; all other places, principally Canada, one-seventeenth." (Miles, Lowell as It Was and as It Is, 1845, p. 108.)

[f] Testimony of a Philadelphia manufacturer before the English Factory Commission. Mechanics' Magazine and Register of Inventions and Improvements, New York, January, 1834, Vol. III, p. 38.

[g] Part of the present city of Fall River was in Rhode Island until the readjustment of boundary lines between the two States in 1861.

[h] Robinson, Loom and Spindle, p. 12.

[i] Voice of Industry, April 3, 1846. The Rhode Island manufacturers, it was said, preferred foreign laborers, because they could not vote under the Rhode Island property qualification law. (Voice of Industry, September 18, 1846. Reprinted in Documentary History of American Industrial Society, Vol. VII, pp. 142, 143.)

By 1850 the change in nationality of the factory operatives was marked. The minority report of the special committee of the Massachusetts legislature on limitation of hours of labor[a] in that year spoke of "the important change that has been rapidly taking place in the character of the factory population within the last few years. Instead of the female operatives being nearly all New England girls, as was formerly the case, large numbers of them are now foreigners. The infusion of foreigners among the operatives has been rapid, and is going on at a constantly increasing rate." In the same year a factory girl of Waltham, replying to a speech in Congress of the Hon. Jere Clemens, in which he described factory labor in New England as no better than Negro slavery in the South, said that though "some overseers are overbearing and unreasonable, * * * the greatest dissatisfaction, among American operatives, is caused by the introduction of foreign laborers into manufacturing establishments."[b] Again, in 1852, the New York Weekly Tribune quoted an article from the Windham (Vt.) County Democrat, which was edited by a woman, in which it was asserted that "whatever inducements or advantages it (the factory system) has left will soon disappear before the influx of foreign hands."[c] And in the same year a strike in the mills of the Salisbury Corporation and the Amesbury Flannel Mills in Massachusetts resulted in almost a complete change of industrial population from American to Irish.[d] By 1855, too, half of the Lowell operatives were said to be Irish.[e]

The coming of the Irish marked the second period of the history of the nationality of textile-mill operatives. The first period was that of the native Americans, with a few English and Scotch, and in the second period a few Germans came in along with the Irish. But in general the three periods were that of the Americans, extending to about 1840 or 1845, that of the Irish, beginning in the forties, and that of the French Canadians, which began immediately after the Civil War.[f] Recently the races of southern Europe have in part taken the places of both the Irish and the French Canadians, but this movement has only begun.

The change in nationality of cotton-factory operatives was greatly accelerated by the Civil War, which was particularly disastrous to that industry. In a report to the Boston Board of Trade in 1868

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[a] Massachusetts House Documents, 183, 1850. Reprinted in Documentary History of American Industrial Society, Vol. VIII, pp. 161–186.

[b] Quoted in Bailey, Operative's Reply to Hon. Jere Clemens, Lowell, 1850, p. 12.

[c] New York Weekly Tribune, September 11, 1852.

[d] Eleventh Annual Report of the Massachusetts Bureau of Statistics of Labor, p. 18.

[e] Robertson, Two Months in America, 1855, p. 214.

[f] Conant, History of Fall River, p. 74.

Edward Atkinson stated that in June and November, 1862, only about one-half the number of spindles in New York and the New England States were in operation, and that since that time the number had been considerably reduced.[a] At Lowell nine of the great corporations shut down their mills and "dismissed 10,000 operatives, penniless, into the streets." "This crime, this worse than crime, this blunder," naively remarked one historian of the city, "entailed its own punishment. * * * When these companies resumed operations, their former skilled operatives were dispersed, and could no more be recalled than the Ten Lost Tribes of Israel."[b]

The change, indeed, was particularly marked in Lowell, which before the war had never quite lost the reputation, at least, acquired in the days of the Lowell Offering, and where one of the great advantages of the boarding-house system had been considered to be that, in case of interruption to business from any cause, the employees had homes elsewhere to which they could return. But when the factories opened again it was found that the operatives had not returned to these homes and waited ready for the call, but had been absorbed in other industries, such as the manufacture of woolen goods, of shoes,[c] and of clothing, which thrived while the cotton manufacture languished. As a result, there was, after the war, an actual want of women in the factory districts, "so much so that men are now employed to do work formerly done by women."[d]

Overseers in mills at Lowell, New Bedford, Salem, and elsewhere stated to a committee on the message of the governor of Massachusetts, who had proposed the emigration of young women to the West, that they had secured Maine, New Hampshire, and Vermont and had "actually imported families from Canada and Europe to meet the demands of their mills."[e] In the previous year, indeed, 700 factory girls are said to have been brought from England at one time "upon the order of the Lawrence cotton factories."[f] Less than 10 years later the treasurer of the Atlantic Cotton Mills at Lawrence stated that there were employed in those mills people of eight nationalities: American, English, Irish, Scotch, German, Italian, French Canadian, and Portuguese.[g]

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[a] Atkinson, Report of the Boston Board of Trade on the Cotton Manufacture of 1862, pp. 3, 4.

[b] Cowley, History of Lowell, second edition, 1868, pp. 80, 81.

[c] In 1863, when many of the textile factories of Lowell were closed down, it was said that 1,500 factory girls went from Lowell to work in the shoe factories of Lynn. "The shoe trade was brisk." (Fincher's Trades' Review, Dec. 6, 1863.)

[d] Daily Evening Voice, April 7, 1866.

[e] Fincher's Trades' Review, August 13, 1864.

[f] Gray, Argument on Petition for Ten-Hour Law, February 18, 1874, p. 10.

FACTORY BOARDING HOUSES.

For many years there was a distinct difference in the employment of both married women and children, between factories of the Lowell type and factories of the Fall River type. At Lowell the factory boarding house was part of the system, while at Fall River and most of the manufacturing towns further south the company tenement and the company store worked hand in hand. At Lowell individuals were employed and at Fall River families. Most of the Lowell companies made it a rule that all operatives should live in their boarding houses,[a] and there were separate houses for men and for women. The boarding-house keepers were married women or widows, and their children were generally the only young children in the mills. It was said that the companies could not afford to board children for their labor. This, however, applied only to companies—like those at Lowell, Waltham, and Dover—which boarded all of their employees. At the Poignaud and Plant spinning mill in Worcester County, which ran the first factory boarding house of which we have record, it is stated that children, some as young even as 8 or 10 years, were employed for 12 hours a day. Board in this case was $1.08 to $1.16 per week, including washing, and wages of adults from $2.33 to $2.75 per week.[b] But probably none of the children lived in the factory boarding houses or received anything like those wages.

In some localities, indeed, the corporation boarding house was merely a makeshift designed to tide over the early years of a new manufacturing town. A Troy manufacturer wrote, for instance, in

[a] "General rules of the Lowell Manufacturing Company," Luther, Address to the Workingmen, third edition, 1836, pp. 40–42. Also Lowell Offering, vol. 5, p. 96; Miles, Lowell as it Was and as it is, 1845, pp. 110, 160, and "Regulations to be observed by all persons employed in the Service of the Hamilton Manufacturing Company," Handbook to Lowell, 1848, pp. 43–44, reprinted in Documentary History of American Industrial Society, Vol. VII, pp. 187, 188. The requirement, however, that the operatives live in the corporation boarding houses was not universal. Dexter Bordman stated in 1841, for instance, that out of about 800 girls employed in the Boott mills, on the 1st of April 300 boarded outside of the corporation houses. (Bartlett, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, p. 7.) A "Citizen of Lowell," however, replying to Doctor Bartlett, stated that recently "the operatives are compelled to board in the corporation houses or submit to a fine," the corporations taking the privilege of paying a parent their board to the keepers of their boarding houses, which, it seems, they make up by a corresponding reduction of wages." (Corporations and Operatives, being an Exposition of the Condition of Factory Operatives, and a Review of the "Vindication" of Elisha Bartlett, M. D. By a Citizen of Lowell. Lowell, 1843, p. 8.) At Great Falls, N. H., in 1836, it was said that, when the girls asked for an increase of wages to meet a rise in the prices of board at private houses, the company offered to increase 70 cents per week the wages of all who would move to the company boarding houses. (Public Ledger, October 8, 1836.)

[b] Nourse, "Genesis of the power loom," Proceedings, American Antiquarian Society, vol. 16, p. 39.

1827, that though it was usually necessary at first to build such houses, "as soon as families are brought in the help employed is generally distributed." "This is found," he added, "more satisfactory and best; in this way the price of board is regulated by competition, and laborers choose their associates, and the females in this distribution in families are better protected and more pleasantly situated." [a] Another correspondent of White's said that at Newmarket, apparently in 1835, the corporation boarding house had been entirely abandoned, "powerful objections" having been found to it. "A part of the girls whose parents do not live in the village are distributed as boarders with those families which are disposed to receive them." [b]

The idea of most of the companies south of Lowell, indeed, appears to have been to employ "families." The Good Intent factory of New Jersey, for example, advertised in 1830 for "eight or ten female weavers acquainted with weaving on power looms," and added: "N. B. A family that could furnish 4 or 5 hands would be preferred." [c]

But at Lowell and the other towns which followed the Waltham plan the boarding houses were part of the system by which farmers' daughters were lured into the factories. The idea seems to have been to make the factories resemble, as closely as possible, big boarding schools, in which the morals of the girls were carefully protected. To this end the boarding-house keepers were carefully selected to obtain women "of perfectly correct moral deportment," [d] and rules, not unlike those of a boarding school, were adopted. The girls reported at the factory where they were boarding, and the keepers of the houses were required to give an account of the number, names, and employment of their boarders, and to report upon their general conduct and whether or not they regularly attended "public worship." [e] No one could be taken to board in the company houses who was not employed by the company, except by special permission. The doors of the houses were to be closed at 10 o'clock every evening and no person was to be admitted after that hour without a reasonable excuse. In addition, the Hamilton Manufacturing Company, in 1848, provided that the keepers of the houses were not to allow their boarders to have company at unseasonable hours,

[a] White, Memoir of Slater, p. 129.

[b] Idem, p. 131.

[c] Mechanics' Free Press, August 7, 1830. In History of Women in Trade Unions, Volume X of this report, p. 30, is cited an instance of a woman strike breaker in Philadelphia in 1831 who "was willing to let her family (consisting of six) work at the 15 per cent. discount."

[d] Bartlett, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, p. 8.

[e] "Rules of the Merrimack Company," 1844, Miles, Lowell as It Was and as It Is, pp. 69, 70; "Rules of the Hamilton Company," Handbook to Lowell, 1848, pp. 39, 40.

advised that the families of those who lived in houses, as well as the boarders, should be vaccinated, and provided that "some suitable chamber in the house must be reserved and appropriated for the use of the sick, so that others may not be under the necessity of sleeping in the same room."[a]

The rules of the Lowell Manufacturing Company, as early as 1836, were practically identical with those of the Hamilton Manufacturing Company in 1845.[b]

The price of board at Lowell[c] until 1836 was $1.25 for women, a higher price being always charged for men. In October, 1836, the price for women was raised to $1.50, the extra 25 cents to be paid half by the company and half by the employees.[d] In 1840 and again in 1843 board appears to have been reduced as a result of the depression, and in the latter year the old price of $1.25 was again established.[e]

But soon afterwards prices began to rise and the boarding-house keepers found it difficult to maintain themselves. Between 1846 and 1847, when an additional 12½ cents was added to the board,[f] there was vigorous agitation of the subject, in which the operatives took the part of the boarding-house keepers. Meetings were held and resolutions passed,[g] and considerable discussion arose, during which Horace Greeley was led, in defending the protective tariff, to

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[a] Handbook to Lowell, 1848, pp. 45, 46.

[b] Lucius Addison to the Workingmen, third edition, 1836, pp. 40–42.

[c] According to some accounts all necessary laundry appears to have been included, and it was said that "the girls can wash their laces and muslins and other nice things themselves." (Lowell Offering, vol. 1, p. 238.) Miss Ingley, however, stated that the girls were obliged to wash and iron every article used by them except their mill dresses, as well as to do all their own sewing and knitting, etc., and all after 8 o'clock at night at the end of a hard day's work. (Voice of Industry, Jan. 16, 1846.) The same statement was repeated in the Voice of Industry of June 12, 1846. An earlier statement was to the effect that the boarding-house keepers washed for the girls a certain number of pieces per week, but that, as the number was not sufficient for comfortable, the girls were obliged to do about half of their washing and ironing. (Corporations and Operatives, Being an Exposition of the Condition of Factory Operatives and a Review of the "Vindication," by Elisha Bartlett, M. D. By a Citizen of Lowell. Lowell, 1843, p. 17.)

[d] Boston Transcript, October 3, 1836. Quoted from the Lowell Mail.

[e] New York Daily Tribune, October 22, 1845. Corporations and Operatives, Being an Exposition of the Condition of Factory Operatives, etc. By a Citizen of Lowell. Lowell, 1843. George J. Varney, printer, p. 11.

[f] Voice of Industry, May 28, 1847.

[g] Idem, September 25, 1845. At Cabotville (Springfield, Mass., the price of board was also a subject of agitation. Though in 1845, 12½ cents had been added to the board of women and 25 cents to that of men. (Voice of Industry, Nov. 14, Dec. 19, 1845. The proceedings of two meetings at Cabotville, from the Voice of Industry, Nov. 14, 1845, are reprinted in the Documentary History of American Industrial Society, Vol. VII, pp. 133–140).

assert that the companies had no interest in the price of board.[a] The companies, however, were in many cases accustomed to pay for the board of the operatives out of the amount due as wages, and, even when this was not the case, the operatives were so accustomed to consider their wages as the difference between the amount earned and the price of board that a rise in the latter practically necessitated a rise in the former on pain of labor troubles, which the employers dreaded. The companies, moreover, preferred to pay part of the board rather than raise wages correspondingly.

By 1866 the price of board to the operatives at Lowell had risen to $2.25 per week, but it was said that the companies added 50 cents, making the price received by the boarding-house keepers for each operative $2.75.[b] In 1897 the price was still $2.25 for women in the company boarding houses at Lowell, while in many other houses it was $2.50. By that time it was frankly acknowledged that the system, originally established to furnish moral guardianship for the girls, was continued as a means of keeping down wages. "The abandonment of the Lowell system," said one writer, "means an increase in the price of board, and that, quite naturally, would excite a demand for larger wages. With that demand would come the opportunity the labor agitators have so long been looking for in this conservatively progressive and peaceful community."[c]

The rule, however, that all operatives should live in the company houses appears to have been broken down before 1855 by the coming of the Irish.[d] By 1867 it was said that in the company houses in Lowell there was room for only three-fourths of the operatives, and that these were crowded.[e]

Complaint of overcrowding, however, had been made 20 years before. "We are told," said the second number of the "Factory Tracts," in 1845,[f] "that the operatives of Lowell are the virtuous daughters of New England. If this be true (and we believe it is with few exceptions), is it necessary to shut them up at night, 8 in a room, 14 by 16 feet, with all the trunks and boxes necessary to their convenience, to keep them so?" In an open letter to Hon.

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[a] There is an interesting discussion of this subject and, in general, of the low price of board and the resulting hardships to the boarders, in Corporations and Operatives, Being an Exposition of the Condition of Factory Operatives, etc. By a Citizen of Lowell. Lowell, 1843, pp. 10-13, 31-35.

[b] Daily Evening Voice, November 30, 1866.

[c] Illustrated History of Lowell and Vicinity, 1897, p. 281.

[d] Robertson, Five Months in America, 1855, p. 211. As early as 1836 Rush Lather stated that at Lowell 72 Irish people were found "in one-half of a small house." (Luther, Address to the Workingmen, third edition, 1840, p. 13.)

[e] Daily Evening Voice, March 7, 1867. Testimony before Legislative Committee on Hours of Labor.

[f] Quoted in Voice of Industry, November 14, 1845.

Abbott Lawrence, signed "John Allen," it was alleged not only that 6 persons were crowded into one room but that 12 or 18 were obliged to occupy "the same hot, ill-ventilated attic."[a] And the following extract from a letter, signed "Mary," describes the boarding houses of the Tremont Mills in 1847: "'Tis quite common for us to write on the cover of a bandbox, and sit upon a trunk, as tables or chairs in our sleeping rooms are all out of the question, because there is no room for such articles, as 4 or 5 occupy every room, and of course trunks and bandboxes constitute furniture for the rooms we occupy. A thing called a washstand, a little more than a foot square, is our table for the use of 6. Washstands are uncommon articles—it has never been my lot to enjoy their use, except at my own expense."[b] It is evident that even when the old, dilapidated boarding houses of Lowell were new and fresh, living in them was not ideal.

EDUCATION.

Before the coming of the foreigners, most of the girls in the factories of the Lowell type were fairly well educated. A writer in the New York Tribune in 1844[c] stated that he had been informed by one of the paymasters at Lowell that out of the 900 whom he paid there were only 10 or 12 who could not write, and they were foreigners. He added, "Most of the operatives are well educated, and a large portion of them only work a part of the year, spending the rest of the time in their homes in the country." The agent of the Boott Mills in 1844 wrote that of the 816 girls employed "only 13 could not write their names legibly. Forty of these," he added, "are supposed to be Irish, two English, and one Yankee."[d] In Rhode Island, however, illiteracy had been complained of some ten years earlier as one of the evils of the factory system. In eight mills, all on one stream, within a distance of 3 miles, it was said that there were 168 persons who could neither read nor write.[e]

In some cases girls worked in the factories in the winter and taught school in the country places in the summer, just as their brothers went to college in the winter and earned the means for further study by teaching in the summer. The agent of the Merrimack Mills stated, in May, 1841, that of the females then at work in those mills

[a] Voice of Industry, September 18, 1846.

[b] Ibid., March 26, 1847.

[c] New York Daily Tribune, March 16, 1844.

[d] This was reported by Scoresby, American Factories and their Female Operatives, p. 46. A similar statement was made in 1842 by the agent of the Merrimack Mills. (See Report of Committee on Hours of Labor, Massachusetts House Documents, No. 50, 1845, p. 14. Reprinted in Documentary History of American Industrial Society, Vol. VIII, p. 197.)

[e] Luther, Address to the Workingmen, third edition, 1833, p. 20.

124 had previously taught school, while 26 or 30 had "left within the last 30 days to engage their schools for the summer, making in all 150 or more. I also find," he added, "by inquiries at our boarding houses, that 200 of our girls attended school during the evenings of the last winter."[a] In 1845 the Rev. Henry A. Miles found that 827 of the 6,320 female operatives in Lowell had been teachers in common schools.[b] Even as late as 1868 the New York Working Women's Protective Union found a case of a girl who, by working in the Lowell factories during the three busy months of the year, was said to have boarded herself during the remainder of the time while pursuing her studies at the normal school of that city.[c]

With the introduction of foreign labor, however, the proportion of illiterate women workers in the textile mills greatly increased. With the foreigners came the family system and child labor, and the farmers' daughters educated in New England schools[d] were replaced by girls educated mainly in the streets and in the factories. In 1867 one woman testified before the Massachusetts legislative committee on hours of labor, that, of the 250 girls in the room where she worked, 15 or one of every 20 could not write their names. And another woman stated that of 45 operatives in her room half could not write their names.[e]

LITERARY ACTIVITY AT LOWELL.

In no other part of the country, however, was there room for the same radical change as at Lowell, for nowhere else did the New England girls so thoroughly color factory life with their own hopes and ambitions. The flowers in the factory windows and the bits of poetry or passages from the Bible pasted up over the looms to be committed to memory were characteristic of girls attracted by the

[a] Report of Committee on Hours of Labor, Massachusetts House Documents, No. 66, 1846, p. 14, reprinted in Documentary History of American Industrial Society, Vol. VIII, p. 147. The same facts are given in Rathbone, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, 1841, p. 12.

[b] Miles, Lowell as It Was and as It Is, 1845, p. 84.

[c] Workingman's Advocate, July 4, 1868.

[d] In 1841 Doctor Perkins assured that, of 2,000 Lowell girls whose ages were ascertained, the average age was 23 years, while in one establishment, employing 677 young women, the exact mean age was found to be 23½ years, and the average time they had been working in factories, 3¾ years. In another establishment, a single factory only, employing 208, the mean age was 23 years, nearly, and the average time during which they had worked in factories, about 4 years. (Rathbone, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, 1841, p. 17.) The same facts were given in Scoresby, American Factories and their Female Operatives, p. 58. The Rev. William Scoresby, who visited Lowell in 1841, was doubtless influenced in his judgment of conditions there by the contrast with them in the factory districts of England with which he was well acquainted.

[e] Boston Weekly Voice, March 7, 1867.

paternalistic system which made Lowell the "alma mater" of such women as Lucy Larcom, Harriet Curtis, Harriet Farley, and Mrs. Robinson. The period from 1840 to 1850, which saw the publication of the Lowell Offering, has been called the "golden era" of the Lowell factory girls. The difference, however, between factory life at Lowell in 1845 and sixty years later seems to be quite as much a difference in the character of the operatives as in labor conditions. Though the Lowell Offering, moreover, was written by factory girls,[6] it appears to have found a large part of its support, so far as subscribers were concerned, outside of Lowell.

The Lowell Offering was not in any sense a labor paper. The Voice of Industry, indeed, which represented the interests of labor reform, especially the 10-hour movement, asserted that "its influence has proved detrimental to the interests of those it professed to protect."[7] And Mr. John Quincy Adams Thayer, a local labor leader, said of the Lowell Offering: "This unfortunate publication *rove* over the country, even to other lands, bearing on its deceptive breast a continual repetition of notes, less valuable to the reader than to the writer, but destructive to both; leaving behind the abuses and downward progress of the operatives, the very part which becomes their life, liberty, and greatness to give to the world, even if they were compelled to write the record with blood from their own veins."[8] The "Citizen of Lowell," moreover, who replied to Doctor Bartlett's Vindication of the Character and Condition of the Females Employed in the Lowell Mills, thought that the Offering was little more than a bait prepared by the employers to lure girls to work in the mills.[9]

At one time Miss Sarah G. Bagley, the leading woman labor agitator of Lowell, entered into a somewhat acrimonious newspaper controversy with Miss Farley, in which she asserted that articles which she had written for the Offering complaining of factory girls' wrongs had been rejected and that the Offering "is and always has been under the fostering care of the Lowell corporations, as a literary repository for the mental gems of those operatives who have ability, time, and inclination to write, and the tendency of it ever has been to varnish over the evils, wrongs, and privations of a factory life. This is undeniable, and we wish to have the Offering stand upon its own bottom, instead

[6] In August, 1845, Miss Farley stated that in all more than 70 different factory girls had already written for the Lowell Offering. (Lowell Offering, vol. 5, p. 206.) After the publication of the first two volumes, Rev. Abel C. Thomas, pastor of the Second Universalist Church and leader of the "Improvement Circle," in which the magazine had originated, turned the editorship over to Miss Farley and Miss Curtis, who were factory girls as were, from the beginning, all the contributors to the paper.

[7] Voice of Industry, January 2, 1845.

[8] Thayer, Review of the Report of the Special Committee * * * on the Petition Relating to the Hours of Labor, Boston, 1846, p. 16.

[9] Corporations and Operatives, etc., Lowell, 1845, pp. 23–25.

of going out as the united voice of the Lowell operatives, while it wears the corporation look and their apologizers hold the keys."[a] Miss Farley, of course, denied that she was "a vile tool for aristocratic tyrants," but lamented at the same time that she saw "the support of that class, whom she has most wished to serve, almost withdrawn."[b] Four years later she said in an editorial: "The charges of 'corporation tool,' and like epithets, must have already been refuted by the difficulty, visible to all who are willing to see, of even maintaining our existence." At the same time she proposed that the operatives should receive their copies of the Offering and transmit their subscriptions through the agents and overseers, and offered to allow a liberal discount in all such cases.[c]

The object of the Offering, indeed, was not to "point a moral," but to "adorn a tale," and Miss Farley was undoubtedly thoroughly sincere in her statement: "We do not think the employers perfect; neither do we think the operatives so. Both parties have their faults, and to stand between them as an umpire is no easy task. The operatives would have us continually ring the changes upon the selfishness, avarice, pride, and tyranny, of their employers. We do not believe they possess these faults in the degree they would have us represent them; we believe they are as just, generous, and kind as other business men in their business transactions. Their own interest occupies their first thought, and so we find it elsewhere. * * *. We believe also that those who are so ready to point to the beam in another's eye should first cast out that which is in their own. What can we think of those who wish to make the Offering a medium for their avarice and ill will? We could do nothing to regulate the price of wages if we would: we would not if we could—at least we would not make that a prominent subject in our pages, for we believe there are things of even more importance."[d]

For the most part the discussions of the factory system contained in the Offering are to be found in the editorials, the contributions consisting of articles, poems, and stories descriptive of nature, of country life, of home and its charms—evidently written by homesick girls—and of Cinderella love stories, in which the factory girl marries the

[a] Voice of Industry, July 17, 1846. Miss Farley also charged that the company employed another person to take charge of Miss Farley's loom half the time while she attended to her duties as editor of the Offering. (Voice of Industry, Sept. 26, 1845.) According to Miss Farley's own statement, indeed, when she took the editorial position, she left her "regular place to be what is called a 'spare hand,' * * * which gave me [time] for what I had to do." (Robinson, Loom and Spindle, p. 130.)

[b] Lowell Offering, vol. 5, p. 100. See also [illegible], p. 204 (Nov., 1844).

[c] New England Offering, Lowell (Mass.), December, 1849, p. 376. This was the successor of the Lowell Offering.

[d] Lowell Offering, vol. 5, p. 284 (Aug., 1845).

rich young man. But frequent references to and pathetic tales of the ravages of consumption show the darker side.

There are, however, a few interesting descriptions of life in the factories and boarding houses of Lowell,[a] and two or three other articles which are worthy of note. Perhaps the most interesting article, for example, from the point of view of labor reform, in the entire Lowell Offering was published in the first volume under the title "A new society," signed simply "Tabitha." The subject is the dream of a factory girl, in which a little boy hands her a paper which contains an account, dated April 1, 1860, of the "Annual Meeting of the Society for the Promotion of Industry, Virtue, and Knowledge." The first resolution passed at this meeting was to the effect that girls should have the same advantage in the way of education as boys. Other resolutions were:[b]

Resolved, That no member of this society shall exact more than eight hours of labor, out of every twenty-four, of any person in his or her employment.

Resolved, That, as the laborer is worthy of his hire, the price for labor shall be sufficient to enable the working people to pay a proper attention to scientific and literary pursuits.

Resolved, That the wages of females shall be equal to the wages of males, that they may be enabled to maintain proper independence of character, and virtuous deportment.

The general spirit of the Lowell Offering, however, is better expressed by articles, such as that in the second volume, on "The dignity of labor," by the defense of the factory system given in the form of a dialogue in the July, 1844, number,[c] and by the verses, apparently written in answer to the critics of the factory system, in which the Lowell operatives were exhorted to

> Undo what slander's might has done,
> * * * * * and save
> Your name from quandry's grave,

by furnishing poetry and prose to the Offering.[d]

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[a] For example, in the "Letters from Susan," Lowell Offering, vol. 4, pp. 145–148, 169–172, 237–240, and 257–260; in the "Second year of factory life," Lowell Offering, vol. 5, pp. 97–100; in "A letter to Cousin Lucy," Lowell Offering, vol. 5, pp. 109–112; and in "A week in the mill," Lowell Offering, vol. 5, pp. 217, 218.

[b] Lowell Offering, vol. 3, p. 191.

[c] "It is true," said the factory girl, "that too large a portion of our time is confined to labor. But, *first*, let me remark, that this is an objection which can not be said to exist only in factory labor. * * * The compensation for labor is not in proportion to the value of services rendered, but is governed by the scarcity or plenty of laborers. * * * A factory girl's work is neither hard or complicated; she can go on with perfect regularity in her duties, while her mind may be actively employed on any other subject. There can be no better place for reflection, when there must be toil, than the factory." (Lowell Offering, July, 1844, vol. 4, p. 200.)

[d] Lowell Offering, vol. 3, p. 45.

In the editorials, however, though it was distinctly stated that, whatever might be "the evils connected with and growing out" of the factory system, they were not to be remedied, "though every sentence in our pages should be an anathema,"[a] and that "with wages, board, etc., we have nothing to do—these depend upon circumstances over which we can have no control,"[b] still the concrete problems of factory life were often discussed and suggestions made both to the corporations and to the operatives. In his "Valedictory" as editor, for example, the Reverend Thomas suggested the need of a library in each corporation for the use of the female operatives in the evening, "a better ventilation of the boarding houses," "diminution in the hours of mill labor, and the entire abrogation of premiums to overseers." He further recommended the payment of a small sum, 8 or 10 cents monthly, to a fund for the relief of the sick, and suggested that this might be deducted by the paymaster.[c] Early in her editorial career, too, Harriet Farley remarked that, in her opinion, "it is much easier to instill a feeling of self-respect, of desire for excellence, among a well-paid, than an ill-paid class of operatives."[d] The Lowell Offering even refused to indorse some of the romantic descriptions of factory labor put in circulation about this time. In a review of Dickens's American Notes, for instance, Miss Farley denied that "nearly all" the Lowell girls were subscribers to circulating libraries, and stated that, though the Offering "was got up by factory operatives," "the proportion of those factory girls who interest themselves in its support is not more than one in fifty." She added that the average hours of work were 12 a day.[e]

Nevertheless, Harriet Farley believed that most of the evils which were associated with the factory system, were not peculiar to it. "We are confined," she said, "but a life of seclusion is the lot of most New England females. We have but few amusements, but 'All work and no play' is the motto of this section of the Union. We breathe a close atmosphere, but ventilation is not generally better attended to elsewhere than in the mills. We are better and more regularly paid than most other female operatives. Our factory life is not often our all of life—it is but an episode in the grand drama, and one which often has its attractions as well as its repulsions."[f] And when in 1850 the Hon. Jere Clemens drew in Congress a comparison between the slaves of the South and the factory operatives

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[a] Lowell Offering, vol. 2, p. 280. From the "Valedictory" of Editor Thomas.
[b] Idem, vol. 3, p. 98. (Nov., 1842.)
[c] Idem, vol. 2, p. 280.
[d] Lowell Offering, vol. 5, p. 40 (Jan., 1843).
[e] Idem., vol. 3, p. 202. (Sept., 1844.)

of the North, Harriet Farley wrote in reply a pamphlet defending the factory system.[a]

FACTORY RULES.

It is evident that, though in response to the efforts of the manufacturers and especially to the offer of high wages, the factories of New England "filled with the young, blooming, energetic and intelligent of its country maidens,"[b] still, in spite of the testimony of the Lowell Offering, factory labor in the early years was not by any means ideal even in New England. Not only were the hours extremely long, but one of the factory regulations practically put the "black list" into force against all operatives, men or women, who joined in any organized resistance or even left their positions without a reason deemed satisfactory to the company. This rule was that employees must consider themselves engaged for a year,[c]

[a] Farley, Operative's Reply to the Hon. Jere Clemens, Lowell, 1850. The letter to Senator Clemens from a Lowell factory girl which was published in the New York Tribune, March 23, 1850, may also have been written by Miss Farley. The conditions of labor of factory operatives were much used during this period as arguments for or against the protective tariff, and a large amount of evidence was produced on both sides of the controversy, much of it of a questionable character. Articles upon the subject not cited in other connections are: "Condition of American factory girls," The New World (New York), April 29, 1843, and "Lowell," etc., New York Tribune. (Quoted in The Loom, Washington, D. C., May 21, 1846.)

[b] Lowell Offering, vol. 5, p. 239 (Oct., 1845). The further statement is there made that "the inhabitants of these places saw and recognized the worth of these girls; they associated with them, they publicly noticed them, they mingled with them; if they returned to their secluded homes they were, perhaps, thought more of rather than looked down upon." On the other hand, Sarah G. Bagley said, in a letter to the Voice of Industry (May 8, 1846): "Do they find admittance into the families of the rich? Certainly not! 'They are "factory girls."' No matter how virtuous or intelligent or how useful an operative may be—she may be a member of the same church with her employer and the teacher of his children in the Sabbath school, or the tract distributor of the ward in which he lives; she may gain admittance to the sitting room to inquire after her pupil or leave a tract; but if a party is to be given and the aristocracy of the city is to be present, she can not gain admission; her occupation—nay, her usefulness, excludes her." As early as 1840 Orestes Brownson, in an essay on "The laboring classes," stated that "intermarriage between the families of the wealthy factory owners and those of the operatives is as much an outrage on the public sense of propriety as it was in ancient Rome between the patricians and plebeians—almost as much as it would be at the South between the family of a planter and that of one of his slaves." (Boston Quarterly Review, Oct., 1840, p. 473.)

[c] This was not one of the Dover regulations in 1828, which provided merely for two weeks' notice of intention to leave in order that those who had faithfully performed their duties should be given a certificate of regular discharge at their own request. (Mechanics' Free Press, Jan. 17, 1829.) The Cocheco Company, at Dover, in 1834 made its employees sign an agreement that they would forfeit two weeks' wages if they left without giving two weeks' notice, that in case they were discharged for any fault they could not consider themselves entitled to be settled with in less than two weeks, that they would work for such wages as the company saw fit to pay, and also that they would not "be engaged in any combination whereby the work may be

and was probably originally the result of experience with homesick, discontented girls who left as soon as they had become really useful in the factory. It was apparently peculiar to the Lowell system of factory management, in which it was practically universal during the thirties and forties. At the Schuylkill factory near Philadelphia the rules provided only for two weeks' notice of intention to leave on the part of persons who were not, and a month's notice on the part of persons who were, renting tenements of the company, on penalty of forfeiting all the wages due; in the latter case all the wages due to any member of the family.[a]

The Lowell rule naturally became, with changing industrial conditions, increasingly burdensome. In case of a strike, of course, all the girls taking part were punished "by dismissal from employment and proscription, * * * a combination existing among the capitalists and agents of the different companies, against the operatives, to punish all combinations on the part of the latter."[b] But it was not merely labor agitators or strikers who were put upon the "black list." Any girl who was discharged or who left the mill before the expiration of the year without permission, which seems to have been difficult to secure, was blacklisted. In one case a girl weaver, discharged by an angry overseer because she left her loom to wash her hands, and two threads broke in her absence, though this was the first complaint against her, had her name placed upon the "black list."[c] In another case a girl who was said to have been discharged from one mill because she refused "to do the drudgery of the room in addition to her usual task, and for the same compensation," upon applying at another establishment for work, was told by "the individual to whom she made her application" that "she might go to work

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rejected or the company's interest in any work injured." (The Man, March 11, 1834; Luther, Address to the Workingmen, 3d ed., p. 36.) But in 1836 the Lowell Manufacturing Company stated in its rules that, "It is considered a part of the engagement that each person remains 12 months if required, and all persons intending to leave the employment of the company are to give two weeks' notice of their intention to their overseer, and their engagement with the company is not considered as fulfilled unless they comply with this regulation." (Luther, Address to the Workingmen, 3d ed., pp. 30-32.) Other Lowell companies had in the forties, and probably earlier, substantially the same rule, and provided that only persons who had complied with the regulations should be entitled to an honorable discharge "which will serve as a recommendation to any of the factories in Lowell." (Lowell Offering, vol. 4, p. 42; Miles, Lowell as It Was and as It Is, 1845, pp. 145, 146.) Practically the same rule was in force in the Hamilton Manufacturing Company's factory at Lowell in 1845. (Handbook to Lowell, 1848, pp. 42-45. Reprinted in Documentary History of American Industrial Society, Vol. VII, p. 186. See also Voice of Industry, Apr. 17, 1846.)

[a] Luther, Address to the Workingmen, third edition, 1836, pp. 47-60.

[b] Workingmen's Advocate, April 20, 1844. Quoted from the Boston Investigator.

[c] Voice of Industry, September 11, 1846. The Voice of Industry recommended that in such cases the overseers and agents should be prosecuted for "conspiracy and libel."

and continue if her former employers did not compel him to give her up. She remained three months ere the pursuers found her out; but when they did, she was compelled to leave, and is now (as far as corporation influence has to do) an outcast on the face of the earth."[a] In still another case a girl who left on account of ill health was said to have been denied pay for her work and "was sent off penniless to pay her board and find her way to her friends."[b]

In 1845 and again in 1850 this rule was complained of in memorials to the Massachusetts legislature. "The effects of this regulation," said the petition of 1850,[c] "are becoming every day more grievous, giving to the manufacturers great power over the operatives, and leading to oppression and wrong, forming a combination which destroys the independence of the operative class and places them almost absolutely within the control of the manufacturer. As an illustration, we briefly subjoin: Mary A—— engages to work for the M—— Company, in the city of Lowell. According to the 'regulations' she is considered engaged for one year; but, for some good reason, perhaps ill treatment from her overseer, she wishes to leave and applies for a 'regular discharge,' which is refused, and her name is immediately sent to all the other corporations as being upon the 'black list,' where, should she apply for work, she is denied, no matter how destitute her condition." The minority report of the committee stated that names, places, and dates were cited before the committee to show the unjust effects of this rule, but trusted to public opinion to correct the evil.

"The rule in regard to yearly employment appears to have gradually broken down with the change in the labor supply; but for it was substituted the rule that two weeks' notice of intention to leave should be given or two weeks' wages be forfeited,[d] and the "black list" was continued in force.

In 1864 Richard Trevellick complained that in several of the "eastern cities factory girls could not obtain employment without a certificate from the previous employer;"[e] and in 1869 three girls of the Cocheco Mills, Dover, N. H., who had drawn up a paper to be signed by the others, in which they expressed a determination to resist a reduction in wages, were discharged, and the other mills were all notified of the fact.[f]

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[a] Voice of Industry, February 14, 1847.

[b] Idem, June 19, 1848.

[c] Massachusetts House Document 183, 1850. Reprinted in Documentary History of American Industrial Society, Vol. VIII, pp. 151-160.

[d] Daily Evening Voice, November 29, 1860.

[e] Fincher's Trades' Review, August 13, 1864. Richard Trevellick was one of the most prominent labor leaders of his time.

[f] Workingman's Advocate, December 25, 1869.

The "premium system" furnished another ground of complaint. This system, said the Voice of Industry,[a] was merely an "inducement for the overseers to urge the operatives to their utmost ability, and sometimes beyond, to produce the most cloth at the least cost to the corporation, or in other words, a premium to defraud, wrong, and oppress the operatives to fill up the glutted coffers of capital." In January, 1847, the Manchester Female Labor Reform Association passed resolutions which seem to indicate that the system was new there and was in use during only part of the year, for, after saying that they would not tolerate it, they added: "If we do, we shall soon find ourselves working all the year round under the premium system."[b] It appears that at Manchester, in January, 1847, the overseers and second hands of the Stark Mills gave a jubilee to the operatives in celebration, apparently, of their increased earnings through the premium system. This plan of giving overseers premiums, a Manchester girl, writing in the Voice of Industry, likened to the saying of a fugitive slave: "Massa gives de drivers a stent and reward if he gets de most work done, and then massa gives us all a jubilee."[c] Even Miss Farley, in an editorial in the Lowell Offering,[d] complained mildly of the premium system.

One of the rules of a Dover factory in 1830 was that a fine of 12½ cents was to be exacted from anyone who was late to work,[e] and the employees of the Cocheco Manufacturing Company of that city in 1834 were obliged to sign an agreement providing, among other things, that they would "be subject to the fines, as well as entitled to the premiums paid by the company."[f] Fines for tardiness appear not to have been a feature of the general company rules at Lowell, but were probably imposed by the overseers of the rooms. But the Schuylkill factory (Philadelphia) had a rule that any hand who came to work a quarter of an hour after the mill had been started should be docked a quarter of a day, and that any hand who was absent "without absolute necessity" should be docked "in a sum double in amount of the wages such hand should have earned during the time of such absence."[g]

Absences from work in Lowell were permitted only on the consent of the overseer, and, unless there were spare hands to take their places, only "in cases of absolute necessity."[h]

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[a] Voice of Industry, January 2, 1846.

[b] Idem, February 12, 1847.

[c] Idem, January 8, 1847.

[d] Lowell Offering, vol. 5, p. 381 (December 1846).

[e] Mechanics' Free Press, January 17, 1829.

[f] The Man, March 11, 1834. Luther, Address to the Workingmen, third edition, 1836, p. 38.

[g] Luther, Address to the Workingmen, third edition, 1836, pp. 49, 50.

[h] Idem, pp. 42–43; Lowell Offering, vol. 4, p. 45, and Miles, Lowell as It Was and as It Is, 1845, pp. 145, 146; Handbook to Lowell, 1848, pp. 42–44.

All of these early manufacturing companies had rules providing for the discharge of employees for immoral conduct. The Dover Manufacturing Company in 1829 urged "a strictly moral conduct," "to preserve the present high character of our profession and give the enemies of domestic manufactures no cause of exultation," and stated that "gambling, drinking, or any other debaucheries will procure the immediate and disgraceful dismissal of the individual."[a] The Lowell Manufacturing Company in 1836, too, stated that it would not "continue to employ any person who shall be wanting in proper respect to the females employed by the company, or who shall smoke within the company's premises, or be guilty of inebriety or other improper conduct."[b] The Hamilton Manufacturing Company, of Lowell, in 1848 stated that it would not employ anyone who was either "habitually absent from public worship" or "known to be guilty of immorality."[c]

Attendance at "public worship" was often required as a condition of employment. The Dover Company in 1829 mildly "expected" that "self-respect" would "induce every one to be as constant in attendance on some place of divine worship as circumstances will permit."[a] But in 1836 the Lowell Manufacturing Company stated that it would "not employ anyone who is habitually absent from public worship on the Sabbath."[d] Other companies "required" that their employees should be "constant in attendance on public worship."[e] All but one of the companies appear to have allowed their employees to select their own church, and this one made no objection to employees attending other places of worship, but taxed all for the support of the church founded by the agent.

This rule, though not strictly enforced, was a cause of complaint. The free spirits among the girls objected to such supervision over their conduct, especially as it had nothing to do with their mill or boarding-house life. The expense, too, of pew rent, which varied "from three to six dollars per annum,"[a] with the extra expense of dress, was a tax which many of the girls could ill afford. It appears that there was in Lowell at that time no place of free worship, and Miss Farley urged the establishment of such a church.[f]

The Dover Manufacturing Company in 1829 forbade talking while at work, except on business, and also forbade "spirituous liquor, smoking, or any kind of amusement" in its workshops, yards, or factories.[a] The Schuylkill factory rules, too, provided that there

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[a] Mechanics' Free Press, January 17, 1829.

[b] Luther, Address to the Workingmen, third edition, 1850, pp. 40-45.

[c] Handbook to Lowell, 1848, pp. 42–44.

[d] Lowell Offering, vol. 4, p. 45; Miles, Lowell as It Was and as It Is, 1845, pp. 145, 146.

[e] Lowell Offering, vol. 3, p. 240.

should be no "smoking or spirituous liquors" in the factory, and also forbade employees "to carry into the factory nuts, fruit, etc., books, or papers, during the hours of work."[a] At Lowell the spinners and weavers were not allowed to read books or papers openly in the factory, but Mrs. Robinson records that as a "doffer" she read and studied in the intervals of her work.[b] In 1840 the Waltham girls were complaining of a rule that "any person * * * attending a dancing school shall be immediately discharged."[c]

Some of the companies made provision in their rules or otherwise for the care of the sick. As early as 1831 the employees of the Cocheco Manufacturing Company at Dover, for instance, had for several years consented to a deduction of 6 cents per month from their wages for a "sick fund," which was apparently managed by the company. In that year the fund accumulated was said to have amounted to $1,200 or $1,500.[d] A provision for deducting 2 cents each week from wages for the benefit of the sick fund was one of the rules of the company in 1834.[e]

At Lowell a hospital for the factory operatives was established in 1839, where the charges were $4 a week for men and $3 a week for women. If they were not able to pay, the corporation by which they were employed was responsible, they in turn being held responsible to the corporation.[f] The Hamilton Company and probably others, in 1848, also provided for a physician to "attend once in every month at the countingroom, to vaccinate all who may need it, free of expense."[g]

In some localities, especially in the early years of the factory system, it was the custom to lock in the operatives during working hours, and this was the cause of a number of serious accidents in cases of fire. In New England Seth Luther stated that "in some establishments the windows have been nailed down, and the females deprived of even fresh air, in order to support the 'American System.'"[h] This was the custom, too, in the factories at Ellicotts Mills, Md., where in 1829 it was, together with a reduction of wages,

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[a] Luther, Address to the Workingmen, third edition, 1836, pp. 49, 50.

[b] Robinson, Loom and Spindle, p. 46.

[c] Voice of Industry, January 30, 1846.

[d] State Herald: The Factory People's Advocate, January 27, 1831.

[e] The Man, March 11, 1834. Luther, Address to the Workingmen, third edition, 1836, p. 36. A similar sick fund was introduced in 1836 in one of the silk mills at Paterson, N. J., where the proprietor "started a protective society, whereby each hand pays 2 cents per week, and this small sum thus far has been sufficient to pay full wages to any one of the girls who were really sick and unable to work." (Workingman's Advocate, Feb. 20, 1836.)

[f] Miles, Lowell as It Was and as It Is, 1845, p. 207.

[g] Handbook to Lowell, 1848, pp. 42-44.

[h] Luther, Address to the Workingmen, third edition, 1836, p. 17, footnote.

the cause of a strike at the Union factory.[a] As late as 1836 a night fire at a worsted mill near Providence, which employed 600 hands and was run day and night, prompted to light the fact that the doors and lower windows were fastened. A terrible panic ensued among the women employees. Many were injured by jumping from upper windows, and there was even a rumor, which was afterwards denied, that some perished in the flames.[b] A little later in the same year a score of operatives were injured by jumping from the windows of a burning factory at Woonsocket.[c] Even more recently, too, poor provision in case of fire has been an evil of the textile factory system.

HEALTH.

The effect of factory labor upon the health of the operatives was early discussed and wide differences of opinion upon the subject developed.[d] At its first convention in 1834 the National Trades' Union devoted one session to "the condition and prospects of the females engaged in manufacturing establishments in this country."[e] In the course of this discussion Mr. Douglas, of Boston, asserted that "In the single village of Lowell, there were about 4,000 females of various ages, now dragging out a life of slavery and wretchedness. It is enough to make one's heart ache," said he, "to behold these degraded females, as they pass out of the factory—to mark their wan countenances—their woe-stricken appearance. These establishments are the present abode of wretchedness, disease, and misery; and are inevitably calculated to perpetuate them—if not to destroy liberty itself."

"Mr. D.," added The Man, in brackets, "entered into a description of the effects of the present factory system, upon the health and morals of the unhappy inmates and depicted, in a strong light, the increase of disease and deformity from an excess of labor, want of outdoor exercise and of good air, of the prevalence of depravity from their exposed situation, and their want of education, having

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[a] Free Enquirer, May 9, 1829. Copied from the Mechanics' Free Press, Philadelphia.

[b] Daily Evening Voice, February 3, 1836. Providence Daily Journal, February 3 and 5, 1836.

[c] Boston Weekly Voice, August 9, 1836.

[d] The Voice of Industry on April 17, 1845, referred to "the numbers of our daughters of New England, who are daily dying around us from excessive and protracted toil in our factories." But a correspondent of the New York Tribune (April 16, 1845) asserted that "two-thirds of the females have improved in health while employed in the mills." The same writer, however, asserted that the hours were only 10 a day, and added: "All New England, indeed all the North, bears on its face a tariff argument, but at Lowell it is condensed to a conviction."

[e] The Man, New York, September 17, 1834. Reprinted in Documentary History of American Industrial Society, Vol. VI, p. 217–224.

no time or opportunity for schooling; and observed that the decrepit, sickly, and debilitated inmates of these prison houses were marrying and propagating a race of beings more miserable, if possible, than themselves." He told about a New Hampshire girl who, after four months of overwork at Lowell, went home to die. Though Mr. Douglas's recommendation that there should be legislative regulation of the hours of labor precipitated an argument against the entire protective system, this description must be taken to represent the opinion of the labor leaders of that day upon the subject of factory employment.

The subject was again discussed by the National Trades' Union in 1835 and 1836,[a] and in an article on "Paper money" in the National Laborer[b] in the latter year appeared the following description: "The females, for want of domestic employment, must enter the factory, where a few years marching and countermarching to the sound of the bell, gives them such habits and weakness of frame that will forever unfit them for the healthful employment of the country. The thin cheeks and lank frames must for life abide the grating sound of the power loom."

In 1846 a correspondent of the Voice of Industry, commenting upon the stories describing Lowell as a paradise, said:[c]

I find the fair daughters of New England doomed to severer labor and a more humiliating dependence than the southern slave. I find them compelled to toil 13 hours a day, shut up in the impure air of cotton bastiles, with scarcely time to eat their meals. I find them crowded into corporation boarding houses, almost as thick as bees, with scarcely any accommodations adapted to the health and comfort of human beings, much less to the improvement and happiness of tender females. And I wonder not that there are but few girls who can stand such treatment for more than four or five years, before they have to leave the factories, with broken constitutions or a death disease among them. It is outrageous that our sisters should be tolled out of their beds at half past 4 o'clock in the morning, and kept in their prisons till 7 in the evening, sacrificing youthful vigor, health, and life in order that their oppressors may plunder from them a few more dollars of their hard earnings.

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[a] In 1835 a committee was appointed to inquire into the condition of factory operatives, and this committee reported in 1836 that "the health of the young females, in the majority of cases, is injured by unnatural restraint and confinement, and deprived of the qualities essentially necessary in the culture and bearing of healthy children." (National Laborer, November 12, 1836. Reprinted in Documentary History of American Industrial Society, Vol. VI, p. 262.)

[b] National Laborer, May 14, 1836.

[c] Quoted in the Mechanics' Mirror, 1846, p. 218.

A little earlier the following poem, written by Andrew McDonald, had appeared in the United States Journal:[a]

Go look at Lowell's pomp and gold
Wrung from the orphan and the old;
See pale consumption's death-glazed eye—
The hectic cheek—and know not why.
Yes, these combine to make thy wealth
"Lord of the Loom," and glittering pelf.

Go look upon the meager frame
Of girls that know not rest—nor shame;
Go gaze upon the orphan's doom,
The fittest earthly living tomb;
Go listen to the slavish bell,
That turns an Eden into hell.

The factory girls themselves, moreover, sometimes voiced their complaints as well as their aspirations for a shorter working-day, in poetry. A poem, for instance, entitled "The Early Called" and signed "Phoney," appeared in the Voice of Industry.[b] The following verses show the theme and foreshadow the death scene with which the poem ends:

It was morning, and the factory bell
Had sent forth its early call,
And many a weary one was there,
Within the dull factory wall.

And amidst the clashing noise and din
Of the ever beating loom,
Stood a fair young girl with throbbing brow,
Working her way to the tomb.

The chief causes of ill health complained of were the bad ventilation of both boarding houses and factories, the cotton dust, the hurried meals, and the long hours. One woman who testified before the Massachusetts committee on hours of labor in 1846 stated that there were 293 small lamps and 61 large lamps which were sometimes lighted in the morning, as well as in the evening, in the room where she, about 130 other women, 11 men, and 12 children worked.[c] In 1849 the total lack of ventilation in the mills and boarding houses of Lowell was made the subject of a report to the American Medical Association by Dr. Josiah Curtis. Of the mills he said: "The air in these rooms, which ought to undergo an entire change hourly, remains day after day, and even month after month, with only the precarious change which open doors occasionally give. There being no ventilation at night, the imprisoned condition of many of the

[a] Quoted in Voice of Industry, November 28, 1845.
[b] Voice of Industry, May 7, 1847.
[c] Massachusetts House Document No. 50, 1845, p. 3.

rooms in the morning is stifling and almost intolerable to unaccustomed lungs." He complained, too, of the number, "from four to six, and sometimes even eight," who "are confined during the night in a single room of moderate dimensions."[a] In the same year the physician of the Lowell hospital, established by the manufacturing corporations exclusively for the operatives, read a paper before the Middlesex District Medical Society, in which he stated that the records of the hospital from its organization in May, 1840, to May, 1849, showed that out of 1,037 patients, 327 had typhoid fever, a fact which he attributed to the lack of ventilation in the cotton mills.[b]

These evils, however, and others, had long before been recognized by the factory operatives themselves. In 1846 John Allen, in an open letter to the Hon. Abbott Lawrence, wrote:

> You work them so long that they have no time for daily bathing, as a protection to their health; you permit such short intervals of labor for meals that there is no opportunity given them to prepare with suitable clothing for the sudden change of temperature; * * * you compel them to stand so long at the machinery, without any proper exertion of the different muscles of the body, and such unnatural positions, that "varicose veins," dropsical swelling of the feet and limbs, and "prolapsus uteri," diseases that end only with life, are not of rare but of common occurrence.[c]

Another writer in the Voice of Industry in 1847 asserted that because of the long hours few operatives could endure factory life very long, and that consequently there were constant changes going on in the working force which were bad for the girls and bad for the employers, as they meant that a large portion of the work must be done by beginners. About the same time, too, a correspondent of the Harbinger asserted that the effect of factory labor on health was "very deleterious," that "it required a strong and healthy woman to work steadily for one year in the mill," that a very intelligent operative "informed us that she doubted whether the girls, if a period of years were taken, could make out much more than half of the full time," and that "the whole system is one of slow and legal assassination."[d]

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[a] Transactions of the American Medical Association, vol. II, 1848, p. 617.

[b] Massachusetts House Document No. 163, 1850. Only about five years before the publication of this paper Harriet Farley had written in an editorial in the Lowell Offering, long heralded as the factory girls' paper: "We know that the rooms are spacious and high—we know that the air is not dead and stagnant—the constant motion of hands and drums keeps it continually changing—we know that the mills are not too warm for comfort in winter, and that few places are cooler in the middle of summer." (Lowell Offering, vol. 4, p. 182.)

[c] Voice of Industry, September 18, 1846. Even Harriet Farley, in an editorial in the Lowell Offering, had recommended that a place for bathing should be furnished in every boarding house. (Lowell Offering, vol. 3, p. 192.)

[d] Quoted in Voice of Industry, December 11, 1846.

In 1852, moreover, the address of the Ten-Hours State Convention stated that, according to the most accurate information obtainable, the constitutions of the female operatives became "so much impaired in three or four years, on an average, that they are then obliged to abandon the employment altogether."[a]

The fact that the average number of years of employment was not more than four or five[b] was generally acknowledged. But the advocates of the factory system attributed this to choice on the part of the girls and not to ill health.

There was, indeed, considerable evidence brought forward by the advocates of the system to prove not merely that factory labor was not unhealthy, but in some cases that the girls were positively better in health for the regular habits of life which it necessitated. In 1841 Doctor Bartlett cited mortality statistics which, he said, "show positively, absolutely, undeniably, a state of things wholly and irreconcilably inconsistent with the existence of a feeble, deteriorated, and unhealthy population."[c] He acknowledged that a certain number of sick girls left the city to die at their homes, but said that the number was not large. He seems, however, to have taken no account of the fact that young people, much less liable to die than old persons or babies, furnished a larger proportion of the population of Lowell than of other places.[d]

As to the direct effect of factory employment on the health of the operatives, Doctor Bartlett cited statistics collected by him in 1836. Taking up first the figures for a spinning room, he said:[e]

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[a] The Hours of Labor. Address of the Ten-Hours State Convention to the People of Massachusetts, etc., 1855, p. 7.

[b] As the result of an inquiry made by the Rev. Henry A. Miles among the boarding-house keepers of Lowell in 1845 it was ascertained that the average stay in Lowell of 6,785 factory girls had been about four and a half years (Miles, Lowell as It Was and as It Is, 1845, p. 101). In the same year the report of the legislative committee on hours of labor gave the average time of employment of 203 females employed in Hooh Mill No. 2, at Lowell, as 4.28 years, and their average ages as 22.85 years. (Mass. House Doc. No. 50, 1845.) A competent witness before the house committee of 1850 on regulation of hours gave the average number of years of employment as three. (Mass. House Doc. No. 130, 1850.) And again in 1867 a woman operative, testifying before the legislative committee of that year, thought three years about the average time women were able to stand the work. (Boston Weekly Voice, March 7, 1867.)

[c] Bartlett, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, 1841, p. 10. Similar figures were quoted by Miles, Lowell as It Was and as It Is, 1845, pp. 113–120. But in 1850 the New York Evening Post, June 5, 1850, quoting an article in the American, asserted that the Lowell statistics proved the exact opposite, that the conditions there were unhealthy.

[d] This fact and its influence were brought out clearly in Corporations and Operatives, being an Exposition of the Condition of Factory Operatives, and a Review of the "Vindication," by Elisha Bartlett, M. D., By a Citizen of Lowell, Lowell, 1841, pp. 39–40.

[e] Bartlett, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, 1841, p. 20.

The whole number of girls employed in it was 55. Their average age was 18 years and 6 months. The average time during which they had worked in the mills was nearly 3 years. Of these 55, 41 answered that their health was as good as before, 3 that it was better, and 11 that it was not as good. Of these last the overseer remarked that 6 look well and that 5 are pale. The following is a summary of the overseer's remarks: "Looks well," 25; "rosy," 9; "fat," 2; "fat and looks well," 4; "looks healthy," 2; "very healthy looking," 2; "fat and rosy," 2; "fat and pale," 3; "thin," 2; "pale," 4. The table from a carding room of another mill gives the following results: Whole number of girls, 23; average age, nearly 23 years; average time of having worked in the mills, 2 years and 9 months; as well, 12; better, 8; not so well, 2. Another table made up within the last year, gives these results: Whole number of girls, 30; average time of having been in the mill, 23 months; health as good, 26; not as good, 7; better, 3; remarks of overseer—healthy and tolerably healthy looking, 31; not very healthy looking, 6.

In 1841, and again in 1845, similar statistics were collected, and the following table, copied from Doctor Curtis's report,[a] shows the results:

	1841.		1845.	
	Number.	Per cent.	Number.	Per cent.
Health better	170	8.81	164	[illegible]
Health as good	1,083	[illegible]	827	[illegible]
Health not as good	678	[illegible]	443	[illegible]
Whole number interrogated	[illegible]	100.00	1,424	100.00

In spite of the showing of these statistics and of the fact that even they did not take into account the girls who were at the time absent because of ill health, Doctor Kimball of Lowell, Doctor Wells, the city physician, and Doctor Bartlett all asserted that the persons who worked in the mills were actually healthier than those who did not,[b] and the Lowell correspondent of the New York Tribune asserted that the charges made in the petition of the operatives to the legislature "of unhealthiness from the excess of labor were found to be false," and "that the general health of the operatives was improved

[a] Transactions of the American Medical Association, vol. II, 1849, p. 514. This table was copied in Massachusetts House Document 153, 1850, Report of the Committee on Hours of Labor, where it was also shown that, according to the replies of 200 females working in the Boott Mill No. 2, Lowell, "14.29 per cent were in improved health, 27.09 per cent health not so good, and 58.62 per cent remained the same after working in the mills." Bartlett, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, pp. 11, 12, also discussed the figures above given for 1841, as did the Massachusetts Report on Hours of Labor, House Document No. 50, 1845, p. 18. The two Massachusetts house documents are reprinted in Documentary History of American Industrial Society, Vol. VIII, pp. 133-186.

[b] For the evidence of Doctor Kimball and Doctor Wells see Massachusetts House Document No. 50, 1845, pp. 11, 12.

by the regularity of labor, diet, etc."[a] "The general and comparative good health of the girls employed in the mills here," said Doctor Bartlett, "and their freedom from serious disease have long been subjects of common remark among our most intelligent and experienced physicians." This good health he attributed to regular habits, early hours, plain and substantial food, and work which "is sufficiently active and sufficiently light to avoid the evils arising from the two extremes of indolence and overexertion."[b] To this testimony of physicians the Rev. Henry A. Miles added:[c]

A walk through our mills must convince one by the generally healthy and robust appearance of the girls, that their condition is not inferior in this respect to other working classes of their sex. Certainly, if multitudes of them went home to sicken and die, equal multitudes of their sisters and neighbors would not be very eager to take the fatal stations which were deserted. The united testimony of these girls themselves, of the matrons of their boarding houses, and of the physicians of the city, can be reconciled with only one conclusion, and that only the prejudiced and designing will resist.

Harriet Farley in the Lowell Offering, too, asserted that factory labor was not unhealthy, that the physical laws "violated in the mills, are almost equally violated throughout New England,"[d] and that in many cases in which health was lost the girl was herself to blame. "Many also," she said, "especially seamstresses, shoe binders, straw braiders, have been accustomed to labor, sitting in nearly the same position, a greater number of hours than those employed in the mill, and in an atmosphere quite as warm, confined, and impure, unless it is contended that the smoke of a cooking stove is less impure than the dust of a cotton mill." She added:

A favorable circumstance in connection with factory labor is its regularity; rising, sleeping, and eating at the same hours on each successive day; the necessity of taking a few drafts of fresh air in their walks to and from work; and the lightness of the labor for, notwithstanding the complaints which have been lately made, the work allotted to one is light—were it not so there would not be so many hurrying from their country homes to get rid of milking cows, washing floors, and other such healthy employments.[e]

For much of the overwork she blamed the girls themselves, who were too eager to earn the largest possible amount of money and to enjoy social diversions. "We have known girls," she said, "to rise before the first bell on a summer's morning—do, from choice, their own chamber work—be at work in the mill, brushing, oiling, etc., ten minutes before 'the gate was hoisted'—stay, after 'the gate was

[a] New York Weekly Tribune, March 4, 1846.

[b] Bartlett, Vindication of the Character and Condition of the Females Employed in the Lowell Mills, p. 18.

[c] Miles, Lowell as It Was and as It Is, 1845, p. 127.

[d] Lowell Offering, vol. 3, p. 107.

shut down,' till the watchmen sent them out to their breakfast—then trot home as fast as possible—eat about five or six minutes—put on their Highland shawl, and bonnet, and go to knitting four or five minutes—then back to the mill, as soon as the gate is opened—and so on through the day. Five or six evenings every week are spent at meeting, or singing school, or something of the kind, and then when the Sabbath comes, it is aught but a day of rest. They will attend a morning prayer meeting at sunrise; then breakfast, and go to the Sabbath school; then to meeting again; then to an afternoon service, and after that to an evening meeting." She advised the girls, if they felt their health failing, to give up some of these "amusements and pleasures."[a]

Weak lungs among weavers Miss Farley attributed to "the almost universal practice of threading their shuttles with their breath," a practice which, she said, had become so common that, in some places, shuttles were made which could be threaded in no other way.[b] These shuttles which had to be threaded with the mouth were complained of again in 1867 by one of the women operatives who appeared before the legislative committee on hours of labor.[c]

On the other hand, a correspondent of the Voice of Industry said that all medical men must be aware of the evil effects of the long hours of labor upon the women employed in factories. "They know," he said, "that it is decidedly dangerous, especially to the female about the period when the vascous system is arriving at its full development and strength—that it produces scrofula, spinal complaints, white swellings, pulmonary consumption, etc. * * * They are themselves animated machines, who watch the movements and assist the operations of a mighty material force, which toils with an energy, ever unconscious of fatigue, a power requiring neither food nor rest, whence the avarice of employers and the stimulus of greater wages, working on those employed, leads to excessive exertions of which disease and death are frequently the result. I think that there is not a medical man of any standing, whose practice is amongst factory workers, but must subscribe to the assertion here made."[d] Moreover, even Harriet Farley admitted that the dust of the cotton was "poison" to some constitutions, and warned "all with weak and injured lungs to avoid the factories."[e]

The reduction of the hours of labor, of course, effected some improvement, for the long hours were, naturally, at a time when the need for cleanliness and pure air were nowhere properly appre-

[a] Lowell Offering, vol. 3, pp. 191, 192.
[b] Idem, p. 216.
[c] Boston Weekly Voice, March 7, 1867.
[d] Voice of Industry, April 3, 1846
[e] Lowell Offering, vol. 4, p. 191.

cluded, the chief cause of complaint. In 1867 the Daily Evening Voice[a] published a letter from "a working woman," in which she said that thirty years before she had been a factory girl at Lowell and had found the work easy except for the long hours. The constant standing, she said, frequently produced varicose veins. Her testimony was very similar to that of one of the women witnesses before the legislative committee on the ten-hour law of that year, who said that it was not so much the nature of the work as the length of time that broke down in a few years the constitutions of the women.[b] But in an earlier editorial in the Voice it was complained that the work allotted to women in factories was "almost always unhealthy."[c]

INTENSITY OF LABOR.

Though the hours have been decreased, the intensity of the work has been very greatly increased. Until about 1836 a girl weaver, for instance, tended, as a rule, only two looms,[d] and Mrs. Robinson says that in the early forties girls "were obliged to tend as many looms and frames than they could easily take care of, and they had plenty of time to sit and rest. I have known a girl to sit idle twenty or thirty minutes at a time."[e] It was customary, however, when a girl wanted to be absent for half a day, for two or three of her friends to tend an extra loom or frame apiece so she should not lose her wages.[f] Naturally, this custom suggested to the overseers the possibility of increased productiveness by increasing the number of looms or frames to be tended by one girl. Improvements in machinery, too, aided this movement, and by 1878 one girl tended six and sometimes eight looms,[g] while in the early nineties, when Mrs.

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[a] Daily Evening Voice, February 23, 1867.

[b] Boston Weekly Voice, March 7, 1867.

[c] Daily Evening Voice, October 4, 1865.

[d] One instance is on record, however, of a girl tending four looms in a Pawtucket factory as early as 1839. (Workingman's Advocate, New York, June 9, 1870.)

[e] Robinson, Loom and Spindle, p. 71.

[f] Idem, p. 81.

[g] Lucia Collins said in 1870 that they tended 6 or 7 looms. (The Revolution, January 13, 1870.) The treasurer of the Atlantic Mills at Lawrence gave, in 1878, the following statement of the increase in work: "In 1839 a girl tended 2 or 3 looms weaving cotton goods, running 100 picks a minute, equal to 240 or 324 picks a minute, as the aggregate result of her work upon the looms. In 1849 * * * a girl tended 4 looms, running 120 picks each per minute, making 480 picks as the aggregate, against 240 or 324; and in 1878 a girl now tends in the same mill 4 or 5 looms, running 155 picks each per minute, equal to 620 or 775 aggregate in her charge, being threefold, nearly, what it was in 1839, and not quite but nearly double what it was in 1849—that is, in weaving. Again, in 1849 a girl in the Atlantic Mills tended 4 sides warp spinning (a side is half of a spinning frame of 192 spindles), making 768 spindles. Some girls tended 6 sides, which make 384 spindles. In 1878 a girl tends 8 sides (a half of 176), making 704, or 10 sides, making 880. A girl now tends more than double the number of warp spindles that she tended in the year 1849. Again,

Robinson revisited the factory where she had worked, she found that the girls were obliged to tend so many looms and frames that they were "always on the jump and had no time to think."[a]

The first effort to increase the number of looms operated by one woman of which we have distinct record was the occasion of a strike and the second was at the time of a strike. The girls in the Amesbury mills had a "flare-up" in March, 1836, because they were told they must tend in future two looms instead of one, without any increase in wages.[b] They were doubtless woolen weavers. Cotton weavers probably tended two looms almost from the beginning. A little later in the same year the women weavers in a factory at Norristown, Pa., who were on strike against a reduction of wages, were offered "an additional loom, that they may make up, by increased labor, what they lose in prices."[c] The offer was condemned, however, by the strikers. In 1860 the same offer was made by the Dover company to its striking employees, but this time the increase was to be from six or seven to eight looms.[d]

In 1844 two looms appear to have been the "allotment," but girls often tended three or four.[e] Nevertheless, in 1846, Miss Bagley, disputing the statement that the girls were required to exert only a small amount of muscular strength, speaks of the operatives who were "required to tend four looms."[f] Another writer in the Voice of Industry in the same year remarked: "It is a subject of comment and general complaint among the operatives that while they tend three or four looms, where they used to tend but two, making nearly twice the number of yards of cloth, the pay is not increased to them, while the increase to the owners is very great."[g] Again, in the fall, a writer warned the operatives against taking a third loom, saying that the wages will be reduced "and you will be obliged to work harder, and perhaps take the fourth loom (as was tried by one corporation in this city) to make the same wages that you now do with

in 1849 a girl tended 8 cards, 2 railway heads, and 6 deliveries of drawings. In 1873 a girl tends 63 cards, 7 railway heads instead of 2, and 18 deliveries of drawings instead of 6. Again, in 1849 one girl tended 2 speeders of 20 spindles each, and 2 sides of a stretcher, 24 spindles, making 48 spindles. In 1873 one girl tends 2 speeders of 34 spindles, making 68 spindles, 2 speeders of 54 spindles, making 108 spindles, and 2 speeders of 72 each, making 144 spindles—being from two to three times as many spindles as she did in 1849." (Gray, Argument on Petition for Ten-Hour Law, 1873, pp. 21, 22.)

[a] Robinson, Loom and Spindle, p. 200.
[b] Boston Evening Transcript, March 25, 1836.
[c] National Laborer, October 22, 1836.
[d] The Revolution, January 13, 1870.
[e] Lowell Offering, vol. 4, p. 189.
[f] Voice of Industry, January 23, 1846.
[g] Idem, March 13, 1846.

ten."[7] The reference is apparently to the Massachusetts corporation which had attempted the preceding March to have each weaver tend four looms, at the same time reducing the wages "1 cent on a piece." The weavers promptly held a meeting and resolved that they would not tend the fourth loom except at "the same pay per piece as on three."[8] They apparently won their point, and the quotation above would seem to indicate that the four-loom system was not introduced at that time.

But in 1847 we find the Washington Manufacturing Company of New Jersey, with mills near Philadelphia, advertising in Lowell for "30 good female weavers" who "can make $1 a day on four looms; board at the rate of $1.12 per week." This company even offered to pay the traveling expenses of all operatives, without later deduction from wages.[9] In the same year a magazine writer stated that at the Pawtucket Mill, near Narragansett Bay, a weaver tended two, three, or four looms, but that, if the spinning had been well done, they did not occupy all her time. "The remainder she will spend according to her taste, either in solitary thought, in chatting with her associates, or in sitting down by her looms with a book, or with knitting or needlework in her hands."[10]

The effect upon wages of the increase in the number of looms tended by one weaver is shown in a letter by "a Lowell factory girl," which appeared in a Boston paper of November 9, 1844.[11] She said:

In May, 1843, the last month before the reduction of wages, I tended two looms, running at the rate of 140 beats of the lathe per minute. In twenty-four days I earned $14.52. In the next month, June, when speed and prices had both been reduced, I tended four looms at a speed of 100, and earned in 24 days $13.52, and I certainly, after the first few days, had an easier task than with two looms at the high speed. I increased my earnings every month a little, by the gradual increase of the speed, as I grew accustomed to it. In January, 1843, the speed was raised to about 118 and the price reduced still lower. I earned in that month, in 24 days on three looms, $14.60, and my work was in no degree harder. The speed was raised just as we could bear it, and often, almost always, at our own request, because with the increase of speed our pay increased. In June, 1843, I still tended three looms, and in 24 days earned $15.40, and in June, 1844, feeling able to tend four looms at a speed of about 120, I received $16.92 (equal to £3 10s. 6d.) in payment for 24 days' work. I affirm that I have not in any of these, or other months, overworked myself. I have kept gaining in

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[7] Voice of Industry, September 11, 1846.

[8] Idem, May 29, 1846. Reprinted in Documentary History of American Industrial Society, Vol. VIII, p. 231.

[9] Voice of Industry, June 25, 1847.

[10] Knickerbocker Magazine, December, 1847, vol. 30, p. 514.

[11] Scoresby, American Factories and Their Female Operatives, pp. 30, 31.

ability and skill, and as fast as I did so I was allowed to make more and more money, by the accommodation of the speed of the looms to my capacity. I am by no means the best weaver in the room where I work, though perhaps better than the average. I believe I have given no exaggerated picture of what has been the true average of girls. The other departments I suppose to have fared much as we in the weaving rooms.

This increase in the intensity of work, coming before any decrease in hours and accompanied by a decrease in the piece rate of wages, may have been in part the cause of the strong labor movement among the factory operatives of that day. Certain it is that no succeeding increase in the amount of machinery to be tended by one girl roused the same protest as this first increase from two to four looms.

The movement, however, toward increased strain and more concentrated attention in textile factory work progressed. In 1869 Jennie Collins, arguing for the 8-hour day, as Sarah G. Bagley a quarter of a century before had argued for the 10-hour day, said at a meeting of the New England Labor Reform League Convention:

I know what it is to stand up all day in a factory, and keep pace with the belts, and drums, and cylinders, and other parts of the machinery. Flesh and blood, no matter how worn-out and used up, must keep up with the great strength of steam. And I have seen those girls stand watching the clock, and when it struck the hour of noon, they would hurry down long flights of stairs, rush to their boarding houses, eat their dinners—or gobble them down—and be back again, up in the top story of the mill, within a quarter of an hour from the time they left."

It is evident, not only that no "golden era" ever really existed in the textile factories of this country, but that conditions of labor have, in some respects, at least as regards hours, improved since the days of the Lowell Offering. If with this improvement has come a gradual deterioration of factory districts and of factory population, the one legislative gain should not be overlooked. And it is interesting to observe that, while the famous Lowell Offering was in its day read by "literary folk" and is now only a historical curiosity, the movement which the now obscure Voice of Industry championed, apparently to a wide circle of factory operatives, has been in a considerable measure successful and is in full vigor to-day.

a American Workman, June 12, 1869.

CHAPTER III.

CLOTHING AND THE SEWING TRADES.

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CLOTHING AND THE SEWING TRADES.

GENERAL CHARACTERISTICS AND HISTORY.

In the making of clothing[a] both men and women have always had their part. Men have been tailors, making garments for their own sex, and, in the days when hand labor and the artisan system prevailed, men made boots and shoes, gloves, and many other heavy articles. In the early days of this country, however, women were employed probably to a considerably greater extent than in England in the manufacture of clothing. The men were needed for heavier work, and whatever tasks could possibly be performed by women were left to them. Nevertheless, men were almost exclusively employed in colonial days in the making of boots and shoes, of leather gloves, and of hats. As tailors, too, they had their place, even if that place was limited, owing to the comparatively small demand for tailored clothing.

In most of the trades included under the general term "clothing" the sewing machine has been, from the technical point of view, the great revolutionary force. It is the sewing machine and artificial power which have driven the clothing industries from the home to the shop, and, in some branches, to the factory. But, from the point of view of woman's work, the sewing machine is not a reason for employment, but merely determines conditions of employment. Sewing, whether by hand or by machine, has always been done by women. In some cases, it is true, machines have enabled women to sew on heavier materials than they could manage by hand, but, in general, machinery in the clothing trades has merely done, to a lesser degree, what machinery did in the textile trades—transferred the woman worker from the home to the factory. That the transfer has been less complete has been due primarily to the comparative simplicity and inexpensiveness of the machines.

In the clothing trades, however, there has entered in another element which is of comparatively slight importance in the textile industries; that is, a redistribution of work through division of labor. Division of labor, of course, exists in the textile industries, but the

[a] Under the term "clothing" as here employed are included all articles used for personal protection or adornment, and even umbrellas, parasols, canes, and pocket-books.

processes of weaving and spinning have never been split up into minute divisions, each division requiring a separate operative who does only that one thing. A piece of cloth has always been spun by one operative and woven by another, but a pair of shoes, which was formerly made by a single shoemaker, now requires about a hundred different operations, in some establishments each performed by a different person. This division of labor has gone hand in hand with the development of the wholesale trade and has been in the clothing industries what machinery was in the textile industries, the determining factor in the employment of the sexes. Machinery, it is true, has played its part, but it has been machinery accompanied by division of labor, which it made profitable.

Taking the clothing trades as a whole, doubtless owing to this division of labor, which has enabled women to perform part of the work formerly performed by men, the proportion of women workers has increased.[a] This increase is especially evident in the manufacture of boots and shoes, which, however, within recent years has fluctuated most decidedly in the relative employment of men and women, the proportion of women sinking in 1870 to less than half the figure for 1850.[b] In this industry, however, the statistics which are available are most unsatisfactory, for the great division of labor which produced the woman shoe binder occurred at the end of the eighteenth and beginning of the nineteenth century. The boot and shoe industry is the farthest advanced industrially of all the sewing trades. The glove industry follows and farther behind come the other sewing trades, in most of which the division of labor, except for the simple division into cutting and making, has been effected since the introduction of the sewing-machine in the middle of the nineteenth century.

Another difference between the clothing and the textile industries is the persistence in the former of home work and, in a lesser degree, of custom work. Even in the manufacture of gloves, which is rapidly following in the footsteps of the boot and shoe industry, a large number of home workers have always been and still are employed. And in the manufacture of ready-made garments the factory system has only recently made headway. Instead has developed the miserable half-way station of the "sweating system." Home work and the small-shop system have developed, in some of the clothing industries, peculiarly distressing conditions of labor which have borne always with crushing weight upon the women workers. That these condi-

[a] See Table XI, p. 269. It has decreased, however, in a surprising number and variety of clothing industries, including "clothing, men's," "clothing, women's, dressmaking," "clothing, women's, factory product," "hats and caps, not including wool hats," "millinery and lace goods," "shirts," "buttons," "umbrellas and canes," and "gloves and mittens."

[b] In 1850, however, women and girls were both included, and in 1870 only women.

tions do not by any means constitute a new problem, and are not merely an outgrowth of immigration with which they are now generally associated, appears definitely in studying the history of the garment trades.

Piece payment has always been almost the universal method of compensation in the garment trades, but in some branches it has been complicated by the contract, subcontract, and team systems, which have themselves developed new problems and evils. Moreover, the greater power of the individual over the output, due to her greater control over the machinery, has led to problems of overstrain with which nothing in the textile industries can compare.

The difficulties of women workers in the clothing trades have been further intensified by the fact that in most occupations little skill is required, and that of a kind generally possessed by women. Skilled dressmakers or milliners have always been able to command good prices for their work,[a] and in general, where skill or taste are required in the manufacture of clothing, they have been rewarded. But the great demand has been for women who could merely handle a needle or run a sewing machine, and the wages and hours in this work have been such that the acquisition of skill or taste have been practically impossible to the women who have once entered the treadmill. Apprenticeship, in the sewing trades at least, has always been a farce. As early as 1848 it was said that apprentices to the dressmaking business in New York were kept sewing and learning nothing until the very day before their apprenticeship expired, when a few hours were spent in giving them some general directions about cutting a dress, and they were discharged, "there being no room for journeywomen on wages in an establishment where all the work is done by apprentices for nothing."[b] Similar complaints have been common since that time.

These five elements, home work, the "sweating system," the contract and subcontract systems increasing the number of middlemen between producer and consumer, the exaggerated overstrain due to piece payment, and the fact that the clothing trades have served as the general dumping ground of the unskilled, inefficient, and casual women workers, have produced from the very beginning of the wholesale clothing manufacture in this country a condition of deplorable industrial chaos. The boot and shoe trade, it is true, early escaped through the factory system from this chaotic condition; the glove trade is rapidly following; in the manufacture of collars and cuffs some degree of order was comparatively early attained; and in the

[a] In 1830 Mathew Carey spoke of milliners and mantua makers as well paid for their labor. (Carey's Miscellaneous Pamphlets, No. 12, To the Editor of the New York Daily Sentinel.)

[b] New York Daily Tribune, Aug. 12, 1848.

manufacture of buttons, needles and pins, hooks and eyes, and a few other articles the machinery has been such as to necessitate organization; but in most of the other clothing industries industrial chaos and cutthroat competition among working women prevailed throughout the nineteenth century, and organization under conditions as favorable as those in the textile industries has only recently begun to be established.

To alleviate the distress of the women employed in the clothing industries, three remedies have been frequently tried: organization, cooperation, and charity. The first of these remedies is the subject of a special volume of this report.[a] Cooperation, usually organized and supported by philanthropists, has frequently been tried. As early as 1830 the New York Sun[b] suggested that the seamstresses should "organize themselves into societies and set up for themselves, purchasing materials and making garments for sale upon their own account." Some thirty years later a number of cooperative associations were organized to aid the struggling sewing women,[c] and twenty years afterwards some Chicago girls, members of the Knights of Labor, who were locked out by their employers for taking part in the Labor Day parade, formed upon their own initiative a company which they called "Our Girls' Cooperative Clothing Manufacturing Company."[d] Other instances of philanthropic or independent cooperation might be cited, but such enterprises have never been successful enough to make cooperation important in this connection.

Usually, however, philanthropic efforts to aid the women workers of the clothing trades have taken the form of societies organized for the purpose of furnishing work. At first these societies paid the prevailing rate of wages, and this policy has always been followed by some. The fact, however, that the prevailing rate was not a living wage, early brought forth criticism of the policy. In 1836 the committee on female labor of the National Trades' Union spoke scornfully of the members of "Dorcas Societies" who "subscribe themselves 'charitable ladies,' for giving a woman 12½ cents for making a shirt, equalled as they are in 'charity' only by the United States clothing department in the city of Philadelphia, which has ground the seamstress down to the above sum, 12½ cents, for the same article."[e]

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[a] History of Women in Trade Unions, Volume X of this report.

[b] Quoted in the Public Ledger, Philadelphia, March 26, 1836. The Public Ledger later itself urged the same measure. (Public Ledger, Sept. 16, 1848.)

[c] As examples, the "Ladies Cooperative Tailoring Association of Baltimore," and the "Female Cooperative and Beneficial Association of Woburn, Mass." (Daily Evening Voice, May 21, June 23, 1866; Fincher's Trades' Review, Sept. 8, 1866, Apr. 28, 1866. These were both labor papers.)

[d] Journal of United Labor, November 26, 1885.

[e] National Laborer, November 12, 1836. Reprinted in Documentary History of American Industrial Society, Vol. VI, p. 288.

The Provident Society of Philadelphia was frequently criticised for its wage scale,[a] as was the Boston House of Industry. The same evil has many times since been the cause of complaint, as, for example, in 1887, when a writer in the Industrial Leader asserted that he had found inmates of several charitable institutions in New York crocheting ladies shawls for $3 per dozen, or at 25 cents each, by which they could earn 12½ cents a day, it taking 2 days to make one.[b]

As early as 1830, however, efforts were made to establish in New York,[c] Philadelphia,[d] and other cities societies for the purpose of insuring "a reasonable compensation for the labor of the industrious female," and societies which paid wages above the average were established soon afterwards in Philadelphia and Baltimore. And in 1851 there was founded in New York the "Shirt Sewers' Union" which is said to have paid "satisfactory (far different from factory) prices to all in its employ."[e] Various "protective associations," too, sprang up in different parts of the country between 1845 and about 1870, and attempted to establish a scale of "fair prices." The Boston Needle Woman's Friend Society held its twenty-second annual meeting in 1860.[f] Similar organizations have been common within more recent years, but little has been accomplished.

HAND WORK IN THE GARMENT TRADES.

The history of the garment trades may be divided into two great periods, that of hand work and that of the machine. The first period, however, may itself be divided into two stages, that of handicraft or custom work and that of wholesale manufacture under the wage or piece-price system. These two stages of the first period are mentioned in the chronological order of their development, but the first, especially in custom work, has survived, not merely through the stage of wholesale manufacture, but also through the entire second period of machine work. During the colonial period nearly all of the clothing which was not made at home for family use appears to have been made to order or to have been sold by the maker or a member of her family.

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[a] The National Gazette, however, which may be characterized by the fact that it bitterly opposed the establishment of a public school system, complained in 1828 that there was a great scarcity of white domestics in Philadelphia because they had taken to sewing, having been induced to leave their places by the opportunities for employment furnished by the Provident Society. (National Gazette, Philadelphia, July 9, 1828.)

[b] Industrial Leader, July 9, 1887.

[c] Mechanics' Press, Utica, June 8, 1830. Quoted from the New York Evening Journal.

[d] Mechanics' Free Press, May 1, 1830.

[e] New York Daily Tribune, June 8, 1853.

[f] The Revolution, April 29, 1869.

DEVELOPMENT OF THE WHOLESALE TRADE.

In the clothing trades, unlike the textile industries, it was not machinery, but the development of the "ready-made" or wholesale business which made the women clothing workers wage-earners. Early in the nineteenth century, if not before, there began to be manufactured cheap ready-made clothing for soldiers and sailors and also "for the South." The first ready-made clothing of which we have record was "shirts for the Indians" which were made by at least one woman at Northfield, Mass., about 1725 for 8d. each, and "men's breeches" which were made for 1s. 6d. a pair.[a] But it was not until much later, when northern capital found profitable investment in furnishing clothing for southern slaves, that the business became of consequence. From the beginning it was centered in the cities, especially in New York and Philadelphia, and later in Boston.[b]

The heavy duty imposed by the tariff of 1816 (30 per cent) on ready-made clothing, and the even heavier duty of 1828 (50 per cent), greatly aided the development of the industry, and by 1831 there were 300 men, 100 children, and 1,300 women employed in tailor shops in Boston alone.[c] About the same time men's ready-made medium-grade clothing began to be manufactured in New York, and woman workers commenced to encroach upon the domain of the tailor—the only part of the garment manufacture which was traditionally man's field of labor. Even the trade of the tailor, however, at the time of a journeyman tailors' strike in New York in 1819 to prevent the employment of women, was said "two centuries ago" to have been "wholly performed by women," and it was added that "the interference of the males in the business gave rise to the odium that a tailor was only the ninth part of a man."[d]

References to the entrance of women into the tailoring business are frequent after 1830 when, the New York tailors having gone on strike, the Journal of Commerce, always a consistent employers' organ, thought it would be an easy matter to defeat them since "women may well do half which the men have been accustomed to do."[e] Again, in 1835, the United States Telegraph, commenting upon the unremunerative labor of women, suggested that they "take from the men the tailoring business, which is much better adapted to the females."[f] In the same year, too, the master tailors of Cincin-

[a] Temple and Sheldon's History of Northfield, p. 183.

[b] An advertisement appeared in a Boston paper in 1830 to the effect that "200 females can have employment on low priced work, by applying at J. Hooper's navy work shop, near No. 6 Congress square up stairs." (Daily Centinel and Gazette, Sept. 28, 1830.)

[c] Documents Relative to the Manufactures of the United States, Executive Documents, first session, Twenty-second Congress, vol. 1, p. 1030.

[d] Columbian Centinel, Boston, April 24, 1819.

[e] New York Journal of Commerce, October 12, 1833.

ned, Louisville, and St. Louis complained that the journeymen refused to work for those who employed women.[a] And during the trial of the journeymen tailors' conspiracy case in New York in 1836 it was charged that this union had on one occasion struck against an employer because he had employed a woman.[b]

In the New England States, in 1836, tailoring was said to be "in a certain measure governed by females,"[c] and in 1849, at the time of a tailors' strike in Boston, it was stated that wages had been reduced 37 per cent during the past five years, and that master tailors had further heightened the competition by employing women on many parts of the work hitherto performed by men.[d] As late, moreover, as 1864, the Merchant Tailors' Association of St. Louis denounced the society of journeymen tailors for having interfered with their employing women and thereby deprived "honest and worthy seamstresses of employment." The journeymen on this occasion, however, replied by saying that "the only action the jours take in the matter is that when a boss gives work to a woman he shall pay her the full price." But, they added, "we will resist by all lawful means in our power the efforts of our employers to introduce female apprentices by encouraging them to leave service and other employments more congenial to girls than mixing with men in a workshop from morning to night."[e]

It was originally, without doubt, the ready-made clothing business which made it possible and profitable to employ tailoresses, but later the division of labor brought them into certain kinds of custom work. Under the general term "garment workers," however, are included the makers of men's, women's, and children's clothing, shirts, etc.—tailoresses, seamstresses, machine operators, and dressmakers. And, with the single exception of men's clothes, which were the first of the ready-made garments, all of these articles were originally made mainly by women.

The manufacture of ready-made clothing had become by 1835 a thriving business, and during this year and the next, according to a call issued in 1844 for a national convention of tailors, "every country village within 100 miles of New York became as busy as a beehive with tailors and tailoresses," and enough was produced during those two years to last through 1837, 1838, and 1839.[f] The panic of 1837,

[a] United States Telegraph, July 4, 1835.

[b] Commercial Bulletin and Missouri Literary Register, St. Louis, December 13, 1836.

[c] New York American, June 15, 1836.

[d] National Laborer, November 12, 1836. "Report of committee on female labor of the National Trades' Union." Reprinted in Documentary History of American Industrial Society, Vol. VI, p. 285.

[e] New York Weekly Tribune, August 22, 1849.

[f] Fincher's Trades' Review, April 16, 1864. This was a labor paper.

[g] Workingman's Advocate, July 13, 1844.

indeed, combined with a tariff which, according to the New York Tribune, made possible "an active foreign competition, which filled the southern market with imported clothing, and so superseded that which had formerly been made up in and about New York," was disastrous to the business and threw out of employment a large number of women, causing an immense amount of suffering.[a] The tariff of 1842, however, is said to have in a great measure restored the southern clothing trade to New York, and by so doing to have raised the wages of seamstresses.[b]

In general, though the ready-made-clothing industry was an important business before the invention of the sewing machine, it was practically confined to men's and boys' clothing of the cheaper grades and to shirts, and the quantities manufactured were necessarily small, the work being all done by hand. As late as 1845 it was said that many women were employed in the tailoring business "but chiefly upon particular articles, and for the southern markets."[c] Army clothing, too, was early an important branch of the ready-made business, and in 1839 it was said that 800 women were engaged in this kind of work in Philadelphia.[d]

It is probable, though there are practically no statistics upon the subject, that during this period women retained all their former work, the lighter forms of sewing, and at the same time slowly encroached upon the domain of the man tailor. The hopelessly imperfect manufacturing census of 1820 gave under the heading "clothing," only 40 men, 6 women, and 13 "boys and girls," and under the heading "garments, men's," 16 men, 5 "boys and girls" and no women.[e] The makers of men's garments, at least, were probably tailors. In 1850, 68.7 per cent, and in 1860, 83.8 per cent of all the employees engaged in the manufacture of men's clothing (given as "clothiers and tailors" in 1860), were females.[f] Before the next census period, the use of the sewing machine had become general, and the second great period of the garment-making industry, the machine period, was fairly under way.

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[a] The Philadelphia Public Ledger, September 21, 1857, attributed the suffering among seamstresses in cities to "that vicious system of wholesale dealing, which during its expansion collects women by thousands from all parts of the country, and during its contraction, suddenly turns them out to starve."

[b] New York Daily Tribune, March 27, 1845.

[c] Journeymen Mechanics' and Laborers' Handbook, etc., of the United States, 1845, p. 219.

[d] Public Ledger, October 22, 1839. It was complained, moreover, that these women were paid in depreciated currency, thereby losing 10 per cent of their wages.

[e] American State Papers, Finance, Vol. IV, pp. 29–229.

[f] See Table XI, p. 168.

The history of this period, like that of the better-known period of the machine, is a tale of long hours, low wages, and exploitation. The "sweating system," indeed, in the broad sense of that term, was established in this country at the very beginning of the ready-made garment business and has developed simultaneously with that business. The contract system established stages and degrees of sweating, but a study of the sweating system would have to extend back at least as far as the beginning, in 1828, of Mathew Carey's agitation in the interests of that "numerous and very interesting portion of our population," the working women, of whom he estimated that there were in Philadelphia, New York, Boston, and Baltimore between 18,000 and 20,000.[a] At least 12,000 of these, he said, could not earn, by constant employment for 10 hours out of the 24, more than $1.25 per week.[b]

The disclosures made by Mathew Carey during the course of his investigation and agitation in behalf of the sewing woman seem, though quaintly worded, very modern in their substance. It was set forth, for example, in the resolutions passed at a meeting in Philadelphia on February 21, 1829, that "it requires great expertness, unceasing industry from sunrise till 10 or 11 o'clock at night, constant employment (which very few of them have) without any interruption whatever from sickness, or attention to their families, to earn a dollar and a half per week, and, in many cases, a half or a third of their time is expended in attending their children, and no small portion in traveling 8, 10, 12, or 14 squares for work, and as many to take it back when finished; and, as, moreover, there are few of them who are fully employed, they are thankful for two, three, or four shirts at a time at 12½ cents each."[c]

The committee appointed at this meeting reported:[d]

That they are convinced, from a careful examination of the subject, that the wages paid to seamstresses who work in their own apartments—to spoolers, to spinners, to folders of printed books—and in many cases to those who take in washing, are utterly inadequate to their support, even if fully employed, particularly if they have children unable to aid them in their industry, as is often the case; whereas the work is so precarious that they are often unemployed—sometimes for a whole week together, and very frequently one or two days in each week. In many cases no small portion of their time

[a] Mathew Carey, "To the Ladies who have undertaken to establish a House of Industry in New York," and "To the Editor of the New York Daily Sentinel," Miscellaneous Pamphlets, Philadelphia, 1831.

[b] Carey's Select Excerpts, vol. 13, pp. 138-142. Dated July 1, 1830.

[c] From Trade Advocate, Philadelphia, March 14, 1829.

[d] Carey, Miscellaneous Essays, pp. 260-272.

is spent in seeking and waiting for work, and in taking it home when done.[a]

A complete remedy for these conditions the committee considered as "perhaps impracticable," but some mitigation was hoped for. The Committee said:

> The mitigation must wholly depend on the humanity and the sense of justice of those by whom they are employed, who, for the honor of human nature, it is to be supposed, have not been aware of the fact, that the wages they have been paying were inadequate to the purchase of food, raiment, and lodging; and who, now that the real state of the case is made manifest, will probably, as they certainly ought to, increase those wages.[b]

"Those wealthy ladies who employ seamstresses or workwomen" were especially urged to give such wages as would not only yield "a present support" but "provision for times of sickness or scarcity of employment." Another important remedy suggested was, "to increase as far as possible the diversity of female employments, by which that competition which has produced the pernicious reduction of wages, would be diminished." Finally, it was recommended that there should be established "a society for bettering the condition of the poor."[c]

A year later, however, the New York Sentinel stated that no means had been discovered or adopted to mitigate the distress, and that conditions were as bad in New York as in Philadelphia. Many women in New York, said the Sentinel, were employed "in making duck pantaloons for a readymade clothes store for 4 cents a pair, and cotton shirts for 7 cents a piece. These women stated," said the Sentinel, "that, with the most unremitting industry, they could sew no more than three pair of pantaloons, or one shirt in a day; and that they were obliged to labor for this paltry pittance, or be entirely without employment. The storekeeper, for whom they wrought, could procure the services of emigrants wretchedly poor, or get his work done at the almshouse, and would give no higher wages. In consequence, the price of such work was reduced to

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[a] Spoolers and spinners are here mentioned as among the women whose wages were inadequate. Earlier, however, Mathew Carey had spoken of spinners and weavers in factories as well paid. (Carey, Miscellaneous Pamphlets, No. 12, "To the Editor of the New York Daily Sentinel," 1831, p. 5.) He is here, however, probably referring to home work, which appears to have survived in Philadelphia even to 1838, and in which the women workers were in direct competition with the factories.

[b] This remedy was spoken of by Frances Wright as "the last resource of suffering poverty and oppressed industry"—"the forlorn hope presented in the touching document signed by Mathew Carey and his fellow laborers." (Frances Wright, Lectures on Existing Evils and Their Remedy, pp. 5, 8 and p. 13.)

[c] This recommendation was again made in an "Address to the public," dated Philadelphia, August 20, 1829. Carey's Select Excerpts, vol. 3, pp. 357–360).

hourly a similar rate throughout the city."[a] In 1834, 806 women are said to have been discharged at one time from a New York clothing establishment.[b]

The average prices of tailoresses' work in New York in 1831 may be judged from Table B, which gives the bill of prices adopted at a meeting of the Society of Tailoresses on June 16, 1831, and also the bill adopted at a meeting of clothiers July 7, 1831.[c] The length of the list shows, too, the extent of the employment of women in tailor's work. In addition to the advances in wages, the tailoresses asked that all work taken to be made within ten days be considered as "customers' work" and that for such work they be paid 25 cents extra on each small job and 50 cents extra on all "coatees." The clothiers named various prices for "customers' work" all somewhat above regular prices, but not as much higher as asked by the tailoresses. For boys' and youths' clothes the tailoresses asked from 12½ cents to 37½ cents less than for men's.[d]

In Boston conditions were as bad as in Philadelphia and New York. The Rev. Joseph Tuckerman[e] recorded in 1830 that he had recently been told, "by a very respectable keeper of a slop shop, that he has for some time past had 50 applications a day from females for work with which he could not supply them; and the work sought by them, is, coarse shirts to be made at 10, 8, or even 6½ cents each; or laborers' frocks, or duck pantaloons, at the same prices." The average weekly wages for such work, when a woman was fully employed, he gave as but a dollar or a dollar and a quarter—less, apparently, than in Philadelphia. Rents, moreover, he stated to be higher in Boston than in Philadelphia, the common price of a room being a dollar a week.[f] "It is

[a] Mechanics' Free Press, October 25, 1830. From the New York Sentinel. The New York Sentinel was the first daily labor paper published in the United States. One New York tailor, who was supposed to have a contract with the United States Government in 1830, is said to have paid women 3 cents a piece for making trousers and 6 pence for making vests. (Mechanics' Free Press, Sept. 11, 1830.)

[b] Niles' Register, vol. 45, p. 415, 1834.

[c] Carey's Select Excerpts, vol. 4, pp. 9-10.

[d] Tuckerman, An Essay on the Wages Paid to Females, Philadelphia, March 25, 1830. This essay won the prize offered by Mathew Carey in November, 1830, of a gold medal of the value of $100 or a piece of plate of equal value, for the best essay "on the inadequacy of the wages generally paid to seamstresses, spoolers, spinners, shoe binders, etc., to procure food, raiment, and lodging; on the effects of that inadequacy upon the happiness and morals of those females and their families, when they have any; and on the probability that these low wages frequently force poor women to the choice between dishonor and absolute want of common necessaries." (Mechanics' Free Press, Chica, Nov. 28, 1829; Free Trade Advocate, Philadelphia, Nov. 28, 1829.)

[e] The Boston Workingman's Advocate stated in 1830 that the seamstresses of that city, though earning nominally more than in Philadelphia, 25 cents for a vest or a pair of pantaloons, and 50 cents for a jacket, were in reality, because of the higher price of rent and provisions and the longer winters in Boston, on a par with their Philadelphia sisters. (Quoted in Mechanics' Free Press, Sept. 18, 1830.)

not easy," he said, "to obtain a room either in a garret or cellar, and however small, inconvenient, and unfit to live in, at 50 cents per week. Nor are there many to be had for 62½, or 75 cents a week."[a]

Unemployment, moreover, appears to have been as great an evil in Boston as in Philadelphia. One large tailoring establishment in Boston, according to Joseph Tuckerman, "which has not unfrequently given employment to eight or nine hundred women, in the coarse work of a large tailoring establishment; and * * * during the business year of 1828, * * * employed, on an average, * * * 300 females every day; but * * * now, and for some months past, [has] not had work for more than an average of 170."[b] Even the fashionable milliners and mantua makers who were able to earn $1 a day were said to have very little employment.[c]

In Baltimore, too, in 1833 the wages of sewing women were declared "not sufficient for the genteel support of the single individual who performs the work, although she may use every effort of industry which her constitution is capable of sustaining," and the condition of widows with small children was described as most deplorable.[d]

In 1836 the president of the tailors' society of Baltimore wrote of widows who toiled night and day for 18¾, 25, and 37½ cents a day, and stated that he had seen one woman, who asked "in the humblest

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[a] Tuckerman, An Essay on the Wages Paid to Females, Philadelphia, March 25, 1830, p. 16. The usual rent in Philadelphia was frequently given as 50 cents a week.

[b] Idem, p. 30.

[c] Mechanics' Free Press, September 18, 1830. Quoted from the Boston Working Man's Advocate. In 1831 it was estimated that 60 milliners in Boston employed 420 women at 75 cents a day. (Documents relative to the manufactures of the United States, Executive Documents, Twenty-second Congress, first session, Vol. I, p. 151.)

[d] Baltimore Republican and Commercial Advertiser, September 20, 1833. The Industrial Dyeing Society of Baltimore, according to Mathew Carey, paid the following wages, which were higher than the prevailing rate (Carey: Appeal to the Wealthy of the Land, third edition, Essay V, p. 16):

	Cents
Linen shirts	75 to 87½
Gentleman's pantaloons	62½ to 75
Roundabouts	75
Linen collars	10
Unbleached cotton shirts, large	25
Unbleached cotton shirts, small	12½ to 12½
Bleached cotton shirts, large	31¼
Bleached cotton shirts, small	25
Gentlemen's shams	18¾ to 20
Children's suits of clothes	50 to 87½
Children's cloaks	62½
Children's mittens	10 to 12½
Women's and children's aprons	6¼ to 31¼
Women's plain dresses	43¾ to 50
Inmates	25 to 75

manner" for a little advance in pay, "is once dismissed and sent home "in tears."[a]

In Pittsburg, according to a letter from "A Tailoress" to the Pittsburg American Manufacturer, the tailors in 1830 paid for making a pair of pantaloons, which took about 15 hours, 25 cents, and for making a shirt "that takes a woman a whole day, if she attends to any other work in her family," 12½ cents. The American Manufacturer added that it had made inquiry and found that these statements were true.[b] And even as far west as Cincinnati there were said to be "many poor widows, who are destitute and suffering for the common necessaries of life, because they can not obtain work or a fair compensation for their labor." "At the present prices of sewing," said the Workingmen's Shield, "a woman can rarely realize more than 40 cents per day."[c]

The yearly receipts and expenditures of the average sewing woman were estimated by Mathew Carey as follows:[d]

Forty-four weeks, at $1.25		$55.00
Lodgings, 50 cents per week	$25.00	
Fuel, 25 cents per week, but say only 12½	6.50	
		32.50
Remains for victuals and clothes		22.50

In making this estimate he assumed that muslin shirts and duck pantaloons were made for 12½ cents each[e] and other work in the same proportion, though, he said, "these articles are often made for 10 cents—and even lower," that "an expert woman of considerable skill might make ten per week working at least 16 hours per day," and that one day a week was lost through sickness, unemployment, or the care of children.

Later, however, a committee of ladies "of respectability, intelligence, and competence to decide on the subject," whose names, nevertheless, were suppressed "from motives of delicacy," stated that expert seamstresses could not make more than eight or nine shirts

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[a] National Laborer, April 30, 1830.

[b] Quoted in the Workingman's Advocate, New York, December 18, 1830.

[c] Workingmen's Shield, Cincinnati, January 12, 1833.

[d] Carey's Miscellaneous Pamphlets, No. 12, "To the Editor of the New York Daily Sentinel, Philadelphia, 1831.

[e] In 1828 it was stated that the Provident Society paid 2c cents for making a shirt, estimated at 10 hours' labor. (Mechanics' Free Press, Sept. 6, 1828.) But in 1829 the Provident Society, the Government, and the keepers of "slopshops" are said to have paid only 12½ cents for making shirts and pantaloons. (Carey's Miscellaneous Essays, pp. 256–272. Report on Female Wages, Mar. 26, 1830.) During the winter of 1828–29 the Provident Society, it was said, gave employment to 1,000 or 1,100 females, but was unable, out of "its very limited resources" to furnish them with more than 4 or 5 shirts each, making 62½ to 75 cents a week. (Carey's Select Excerpts, vol. 3, pp. 367–380.)

or duck pantaloons a week, which at the highest price paid, 12½ cents, would amount to only $1.12½ per week, and that "cases very frequently occur of the above articles being made for 10, and even for 8, and sometimes for 6 cents." [a]

In the light of the statements of these 30 ladies, Mathew Carey made a new estimate of the receipts and expenditures of seamstresses. A woman without children and unemployed for any reason only six weeks in the year he estimated to have, if she made nine shirts a week, a surplus, after paying rent at 50 cents a week, of an average of 7 cents a day throughout the year for food, fuel, and clothing. A woman with children who could make, he estimated, only 7 shirts a week, would have, by the same reasoning, only an average of 4 cents a day for food, clothing, and fuel for herself and children. "Let it be distinctly observed," he added, "that far more than half the coarse shirts and duck pantaloons made in the Union, are made for 10 cents, or less, per piece." [b]

Again, in July, 1830, Mathew Carey wrote:

> Coarse muslin shirts and duck pantaloons are made at various prices, at 6, 8, 10, and 12½ cents each. More, I have reason to believe, are made below, than at 12½ cents. The Provident Society in Philadelphia, and the commissary-general, it is true, pay 12½ cents; but the shirts for the army are, I am informed, made in New York for 10 cents; the House of Industry, in Boston, pays but 10; and 10, I am persuaded, is a high average throughout the United States.
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> A skillful woman, constantly employed, working early and late, he said, could not make more than 9 shirts a week, which would amount to 90 cents, of which 50 cents went for rent, leaving only 40 cents, or less than 6 cents a day for food, clothing, fuel, and other necessities. And many of these women, he added, were not skillful, some were superannuated, some had children to be cared for, some were sickly themselves, and some had sickly husbands, while a large number could not procure more than two or three days' work in the week, and had to travel great distances for the work. [c]

In 1833 Mathew Carey made still another calculation of the receipts and expenditures of the seamstress. [d] Laying aside all consideration of unemployment, sickness, or lack of skill and rapidity, and taking as a basis the highest wages paid outside of the Impartial Humane Society of Baltimore and the Female Hospitable Society of Philadel-

[a] Mechanics' Free Press, June 19, 1830. Poulson's American Daily Advertiser, June 9, 1830.

[b] Mechanics' Free Press, June 19, 1830.

[c] Carey's Select Excerpts, vol. 18, pp. 138–142. Dated July 1, 1830.

[d] Carey, Appeal to the Wealthy of the Land, third edition, Essay IV, p. 16.

phia,[a] he made, for a woman without children, the following calculation per annum:

Nine shirts per week, $1.12½		$58.50
Rent, at 50 cents	$26.00	
Shoes and clothes, suppose	10.00	
Fuel per week, say 15 cents	7.80	
Soap, candles, etc., 8 cents	4.16	
Remain for food and drink 20 cents per week, or about 2⅞ cents per day	10.54	
		58.50

"But suppose," he said, "the woman to have one or two children; to work for 10 cents, which is not below the usual average; to be a part of her time unemployed, say one day in each week; and to make, of course, six, but say seven shirts"

Seven shirts, or 70 cents per week, is, per annum		$36.40
Rent, fuel, soap, candles, etc., as before	$47.96	
Deficit	11.56	
		36.40

"It may excite wonder," he said, "how the seamstresses, spoolers, etc., are able to support human nature, as their rent absorbs above two-fifths of their miserable earnings. The fact is, they generally contrive to raise their rent by begging from benevolent citizens, and, of course, their paltry earnings go to furnish food and clothing."[b] During one winter, he added, the Provident Society of Philadelphia had employed 1,000 seamstresses who could be given only 4 shirts a week, for which they received 50 cents. Some of them had to travel a distance of 2 miles "for this paltry pittance, and above half of them had no other dependence."[c]

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[a] The Female Hospitable Society paid, according to the Appeal to the Wealthy of the Land, third edition, Essay V, p. 10, the following wages:

	Cents.
Fine linen shirts	50
Next quality linen shirts	40
Fine muslin shirts	40
Next quality muslin shirts	37½
Next quality muslin shirts	31¼
Common muslin shirts	26
Coarse unbleached muslin shirts	18¾
Boys' shirts	15⅞
Drawers and duck pantaloons	18¾
Check shirts	10
Flannel shirts	34
Collars, separate from the shirt	6¼, 8, 12½
Quilting	75 to $1.25
Comfortables, according to the size, from	$2 to $2.50 and $3
Bed quilts, according to the size, from	$2 to $2.50 and $3

[b] Carey, Appeal to the Wealthy of the Land, third edition, Essay V, p. 18.

[c] Idem, Essay II, p. 8.

Nevertheless, in 1830, a writer in the Delaware Advertiser denied that there was any great amount of distress among sewing women. Single women, he said, could earn a minimum of about $39 a year at housework, and the distress, he therefore assumed, must be confined to widows. Further assuming that about one out of six of the population of Philadelphia was a married woman, that one-fifth to one-eighth of these were widows, that not more than one-half of the widows had children to support, that only about one-half of the latter had children under 8 years of age (for, he said, "a child may be readily bound out at 8 years of age, and therefore a woman need not be distressed by poverty if she has not children under that age"), that only about one in three women was thrown into indigence by the death of her husband, and that of these latter only about one-third were not members of any religious society which supported its own poor, he estimated that there were not more than 150 widows in Philadelphia who were in want on account of low wages.[a]

In answer to this, Matthew Carey stated "that above 1,100 females have applied weekly for work to the Provident Society, of whom probably a full third at least were widows with small children; and there are in the city of Philadelphia probably 5,000 or 6,000 women who depend on their needles for support, among whom is a due proportion of widows." Many of these women, he said, were unable, through age, infirmity, or other causes, to do housework, and many others had small children "whom maternal tenderness will not allow them to part with."[b] In answer to a letter of inquiry, he said elsewhere, the matron of the Provident Society wrote him that at least one-fifth of the women who applied for work during the winter of 1828-30 were widows, that two-thirds of them had children to support, that their compensation, while they took out work, averaged about 50 cents a week, and that few of them lived in the city, the greater part coming in for work from Kensington, Northern Liberties, and Southwark, the first place about 2 miles from the society's room. Assuming that only about one-sixth of the seamstresses of Philadelphia were supplied with work by the Provident Society, he estimated the number of widows depending on needlework for support as about 3,000.[c]

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[a] Quoted in Delaware Free Press, Wilmington (Del.), February 27, 1830.

[b] "To the Editor of the Delaware Advertiser." Quoted in the Delaware Free Press, February 27, 1830.

[c] Carey's Miscellaneous Pamphlets, No. 18, "To the Editor of the New York Daily Sentinel." At another time Mathew Carey stated that "there are as many destitutes generally as there are situations for them." And thousands of the seamstresses in New York, Boston, Baltimore, and Philadelphia, he added, "are unfit for this kind of employment—some from age, some from feebleness of constitution, some from having small children to support whom they can not bear to part with." (Carey's Select Excerpts, vol. IX, pp. 138–142. Dated July 1, 1830.)

were constantly employed; (2) that there was a large amount of unemployment among them, many of them being destitute of employment for half or a third of their time; (3) that were it not for the aid of benevolent societies many of them would be reduced to absolute pauperism; and (4) "that there is no grievance in this country that calls more loudly for redress, or is more severe in its operations, or more demoralizing in its consequences, than the paltry wages given for most species of female labor, not averaging, in many cases, more than one-third of what is earned by men for analogous employments."[a]

In support of his position, too, he quoted a statement of the Rev. Ezra Stiles Ely that "a common slave in the States of Virginia, Tennessee, and Kentucky is much better compensated for his labor by his necessary food, clothing, lodging, and medicine, than many respectable mothers and daughters in this city, who apply themselves diligently to their work two hours for every one occupied by the Negro in his master's service." And in conclusion he quoted a statement of the managers of the Female Hospitable Society "that the most wages that can be earned by the closest application to work, either from Government, societies, or tailors, will not average more than from $1 to $1.25 per week."[b]

Over and over again between 1828 and his death in 1839 Mathew Carey returned to his charges of the inadequacy of the wages paid to women in general and to sewing women in particular, carrying on through these years perhaps the most remarkable agitation for working women which this country has ever seen. His crusade, however, was conducted almost entirely alone. "While I have met," he said in 1830, "with as much apparent sympathy as would suffice for the forlorn tenants of l'Hotel Dieu, or the wounded and dying victims of Waterloo, I have not, with all my efforts, been able to secure in New York, Boston, or Philadelphia, one active, efficient, zealous, ardent cooperator to enter into the business, con amore."[c]

In Baltimore, as a result of these efforts, the Impartial Humane Society was formed, and later a similar association, called the Female Hospitable Society, was organized in Philadelphia. It was to these two societies that Mathew Carey dedicated in 1833 his "Appeal to the Wealthy of the Land, Ladies as Well as Gentlemen." "I have known," he there said, "a lady expend a hundred dollars on a party; pay thirty or forty dollars for a bonnet, and fifty for a shawl; and

[a] "To the Printer of the Delaware Advertiser." Quoted in the Delaware Free Press, February 27, 1830.

[b] Carey's Select Excerpta, vol. 13, pp. 188–192. Dated July 1, 1830.

yet make a hard bargain with a seamstress or washerwoman, who had to work at her needle or at the washing tub for thirteen or fourteen hours a day to make a bare livelihood for herself and a numerous family of small children."[a]

In this pamphlet Mathew Carey repeated and enlarged upon the facts which he had previously brought before the public, and added a number of other letters and statements supporting his position. A letter from a New York police magistrate, for instance, stated that the wages of women with children to support were so low that whenever their employment was interrupted they were obliged to pawn some article of wearing apparel, until they were reduced to absolute destitution and only charity stood between them and starvation. Another evil, he said, was that these women were obliged to send their children on the street to beg or to work at some light employment, which led to bad associations and frequently to crime. A letter from the woman secretary of the Female Hospitable Society, too, stated that of the women who applied to the society for employment not one in fifty was fit for domestic service. One-half, she added, were aged, and one-fifth of the whole infirm. About three-fourths were widows.[b]

Nine remedies were suggested in the Appeal to the Wealthy: (1) That public opinion be brought to bear in denouncing employers who "grind the faces of the poor;" (2) that "the employments of females be multiplied as much as possible;" (3) that the poorer classes be given exclusively "the business of whitewashing and other low employments, now in a great degree monopolized by men;" (4) that the provident societies be liberally supported and give liberal wages; (5) that women be taught fine needlework; (6) that they be taught cooking; (7) that schools for young ladies and infant schools be taught by women; (8) that ladies who can afford it give out their sewing and washing and pay fair prices; and (9) that provision be made by wealthy persons to send women to the interior of the State and to the West, where they are wanted as domestics, seamstresses, spoolers, spinners, and weavers in factories, etc.[c]

Little, however, seems to have been accomplished. The two societies to which the "Appeal to the Wealthy" was dedicated were founded and paid somewhat higher prices to seamstresses than were customary in Philadelphia and Baltimore. But on October 19, 1833, Mathew Carey again wrote that "after laboring on the subject since November, 1828, the conviction is reluctantly forced on me that the attempt is utterly in vain and that it is impossible to excite

[a] Carey, Appeal to the Wealthy of the Land, third edition. Preface, p. 4.
[b] Idem, Essay IV, p. 17.
[c] Idem, Essay XII, pp. 38, 34.

public attention to the subject." Not one of the 72 ladies and 75 gentlemen who had subscribed to the statements made in May, 1830, he complained, had "contributed a dollar or made the slightest effort to remedy the evils that press so heavily on this deserving and numerous class of society."[a]

The appeal to charity was a failure, but Mathew Carey never wholly abandoned the cause. Two years later he was credited with stirring up "broomstick strikes" in Philadelphia.[b] The truth seems to be, however, that he merely cooperated with the organized working women of Philadelphia by presiding at their meetings and writing letters to the press in their behalf.[c] He was frequently criticised, in fact, by the labor papers, for asking charity for the working women when justice was needed. Early in 1837, too, Mathew Carey and others issued a letter to the clergy of Philadelphia calling attention to the distress of the working women, which they attributed to "a complication of causes—the severity of the season, the unprecedentedly high price of the necessaries of life, the suspension of employment—in many cases from sickness * * * and probably more than the rest, from the utterly inadequate wages of certain species of female labor, by which a large portion of females, dependent on their needle for support, are absolutely pauperized."[d] Finally, in December, 1837, Mathew Carey and 21 other men issued a call[e] for another meeting to consider the inadequate wages of women, a call which evoked from the editor of the Public Ledger some pointed remarks about "wholesale dealers in ready-made clothing, who make fortunes out of [women's] unrequited labor."[f] This meeting was duly held with Mathew Carey in the chair,[g] but nothing further is heard of the movement, which could hardly have made headway against the general industrial distress of the following years.

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[a] Carey's Select Excerpts, vol. 18, p. 13.

[b] See History of Women in Trade Unions, Volume X of this report, pp. 40, 41.

[c] The Man, June 24, 1835. In his letter accepting the invitation of the working women to preside at their meeting, after reviewing his work in their behalf, he said, "I did hope that all that was necessary to produce a decided effort to meliorate your situation was to bring the subject in bold relief before the public. I was miserably mistaken, and finally abandoned the undertaking as impracticable. The present crisis is more favorable, and I do hope your efforts will be crowned with the success they merit."

[d] National Laborer, January 14, 1837.

[e] Public Ledger, Philadelphia, December 12, 1837; Carey's Select Excerpts, vol. 13, pp. 417, 418.

[f] Public Ledger, December 12, 1837.

[g] Carey's Select Excerpts, vol. 13, pp. 419–420. In 1839 there was a proposal made to incorporate "a manufacturing and clothing establishment" for the benefit of "poor and industrious females," which was to make clothing for the southern and western markets. (Public Ledger, May 8, 1839.)

LATER CONDITIONS OF LABOR.

During the next few years, as has already been seen, there must have been a large amount of unemployment and intense suffering in the garment trades. The extent and degree of this suffering can only be imagined, however, for, as has usually been the case, the period of most bitter stress found no articulate expression.

By 1843, however, when business was again on the upgrade, there were said to be widows in Cincinnati who supported their children by making shirts for 10 cents each, or pantaloons for from 15 to 17 cents. It was estimated that 9 shirts a week, making 90 cents, would be a large week's work.[a] In New York in 1844 the usual prices for making men's clothing were given as 30 or 40 cents for coats, 25 cents for pants and vests, and 12½ cents for shirts and drawers.[b] And in Boston, at a meeting of tailors and tailoresses in July, 1844, the following cases were cited, and "received with immense sensation:"[c]

A lady who lives at 44 Front street; she works at pantaloons for 12½ cents per pair, and can only make one pair in the day, and should the least fault be found she would only get what they pleased to give her. * * *

Hannah Silesy works for Andrew Carney; lives in Hatter's Square; she makes navy shirts at 18 cents a piece; has to work 14 hours per day to earn $2 per week; and at making striped shirts at 8 cents a piece, can only earn $1 a week and work hard.

John Harkins can testify to a lady who worked for John Simmons, Quincy Hall; made pantaloons at 25 cents per pair; can make five pairs in a week which would amount to $1.25. She is a first-rate tailoress.

Mrs. Oakes, 321 Ann street; she works for Gove & Lock; makes pants for 12½ cents per pair and shirts at 8 cents apiece. She can earn on an average $1.12½ cents per week.

When the problem again came to the front in New York, in 1845, the average wages of the sewing women were said by the Tribune to be $1.50 to $2 a week, though many, it was added, did not earn more than $1 a week.[d] Later in the year the Tribune gave the following summary of the wages paid for different kinds of work and the amount of time required for the various articles:[e]

For making common white and checked cotton shirts, 6 cents each. Common flannel undershirts the same. These are cut in

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[a] People's Paper, Cincinnati, August 24, 1843. This is exactly the estimate given by Mathew Carey thirteen years earlier. (Carey's Select Excerpts, Vol. 13, pp. 138–142.)

[b] Workingman's Advocate, April 6, 1844.

[c] People's Paper, Cincinnati, September 23, 1843 [1844]. See History of Women in Trade Unions, Volume X of this report, p. 58, for one other case cited.

[d] New York Daily Tribune, March 7, 1845.

[e] Idem, August 14, 1845.

such a manner as to make ten shirts in two pairs of sleeves. A common fast seamstress can make two of these shirts per day. Sometimes very swift hands, by working from sunrise to midnight, can make three. This is equal to 75 cents per week (allowing nothing for holidays, sickness, accidents, being out of work, etc.) for the first class and $1.12½ for the others.

Good cotton shirts, with linen bosoms, neatly stitched, are made for 25 cents. A good seamstress will make one in a day, thus earning $1.50 per week, by constant labor.

Fine linen shirts, with plaited bosoms, which can not be made by the very best hand in less than 15 to 18 hours' steady work, are paid 50 cents each. Ordinary hands make one shirt of this kind in 2 days.

Duck trousers, overalls, etc., 8 and 10 cents each. Drawers and undershirts, both flannel and cotton, from 6 to 8 cents, at the ordinary shops, and 12½ at the best. One garment in a day's work for some, others can make two.

Satinet, rosehaire, and broadcloth pants, sometimes with gaiter bottoms and lined, from 18 to 30 cents per pair. One pair is a good day's work.

Vests, 25 to 50 cents, the latter price paid only for work of the very best quality. Good hands make one a day.

Thin coats are made for 25 to 37½ cents apiece.

Heavy pilot-cloth coats, with three pockets, $1 each. A coat of this kind can not be made under 3 days.

Cloth roundabouts and pea jackets, 25 to 50 cents. Three can be made in 2 days.

There were other hardships, too. For example, it was stated by the Tribune that one woman, after having sought work for 2 days in New York, had finally taken garments to make by which she earned 50 cents as the result of her first week's work. But when she returned the work she was offered credit on the books, to be paid when the amount was sufficient.[a]

As for the conditions under which the sewing women of New York worked, the Tribune described them as squalid and unhealthy in the extreme, stating that—

These women generally "keep house"—that is, they rent a single room, or perhaps two small rooms, in the upper story of some poor, ill-constructed, unventilated house in a filthy street, constantly kept so by the absence of back yards and the neglect of the street inspector—where a sickening and deadly miasma pervades the atmosphere, and in summer renders it totally unfit to be inhaled by human lungs, depositing the seeds of debility and disease with every inspiration. In these rooms all the processes of cooking, eating, sleeping, washing, working, and living are indiscriminately performed.[b]

After paying the rent of from $12 to $15.50 for such miserable houses, added the Tribune article, only the scantiest food could be purchased, and nothing was left for clothing or fuel in winter. Even charity

[a] New York Daily Tribune, October 24, 1845. [b] Idem, August 19, 1845.

was shown to have been insufficient to meet the need during the winter season, when many of these women were out of employment.

The worst features of this state of things are its hopelessness and its constant tendency from bad to worse. Small as are the earnings of these seamstresses, they constantly tend to diminish. Hundreds of young women are daily attracted to the cities by vague hopes of doing better, or by the allurements of false friends; many are constantly coming over from Europe; thousands are left here by sailor husbands or fathers, or brothers, to get along as they can during their several protectors' absence on voyages; still more are left destitute by the sudden death of those to whom they had looked for support, by utter bankruptcy, or by flight or imprisonment on account of crime.[a]

Similar accounts of conditions in the garment trades were common during the next few years. In 1846 shirts were said to be made in New York at 4 cents each or 48 cents per dozen, one dozen being about 4 days' work.[b] In 1848, however, 8 cents was given as the piece wage for common cotton shirts and flannel undershirts in New York, and it was said that a seamstress could finish two or three in a day, making a weekly wage of from 72 cents to $1.08. Good cotton shirts were made for 25 cents each, but only one could be made in a day, giving $1.50 a week. The finest linen shirts, which required from 15 to 18 hours of steady work, were made for 50 cents each. For making trousers, overalls, drawers, and undershirts a shilling apiece was paid and one or perhaps two could be made in a day. For cloth pantaloons and vests 18 to 50 cents were paid and a woman could make on an average about one a day.[c] On the other hand, the sewing girls of Lansingburg, N. Y., are said to have earned in 1849, $3 a week,[d] and, according to one writer, women vest makers in New York in 1851 averaged $4.50 a week.[e]

The Shirt Sewers' Cooperative Union of New York, however, estimated in 1851 that there were 5,000 shirt sewers in New York City, many of them widows with children, who earned from $2 to $2.50 per week.[f]

And in the same year a Philadelphia paper is said to have published an article stating that in New York, Philadelphia, and most

[a] New York Daily Tribune, March 7, 1846. In 1846 the Michigan Journal suggested that the starving seamstresses of New York should come to that State, where their labor was much needed as domestics, to which the editor of the Voice of Industry sarcastically replied that "even in New York people do not think of starving while they have money enough to carry them from that city to Michigan." (Voice of Industry, Dec. 18, 1846.)

[b] The Harbinger, December 30, 1848. Quoted from Young America, New York.

[c] New York Daily Tribune, August 12, 1848.

[d] New York Weekly Tribune, October 6, 1849.

[e] Burns, Life in New York, 1851.

[f] New York Daily Tribune, July 31, 1851.

of the principal eastern cities[a] there were places where shirts with bosoms and collars were made for 12 cents and pantaloons for 25 cents. The most expert workers could make in a day only two shirts or one pair of pantaloons.[b]

Finally, an investigation made by the Tribune in 1853, before the sewing machine had come into general use, disclosed "the existence of an amount of wretchedness, immorality, and crime—the consequence of their low earnings—truly appalling." This investigation included the garment makers, boot and shoe binders, and parasol makers. Though some thousands of "milliners, dressmakers, etc.," received, it was said, from $3.50 to $8 a week, putting them "beyond the dangers of temptation," hundreds of women tailoresses and seamstresses had an average yearly income, if fully employed, of only $91. In at least 30 establishments, it was said, the recognized scale of 18 cents each for summer coats, 30 cents for pantaloons, and 18 cents for light coats, would produce, in a working day of 12 hours, about 24 cents. Shirts, it was added, three of which were a hard day's work, were paid for at the rate of 8, 7, 6, and some as low as 4 cents each. At the rate of 6 cents each, it was estimated, taking into consideration the time needed to obtain and return the goods and other journeys to secure her pay, that a woman could not make over 50 cents a week.[c]

Other evils, in addition to low wages, were disclosed by this investigation. It was said, for instance, that many of the cheap "slop shops" required from their employees a deposit to the full value of the material taken out to be made up, a deposit which, it was added, was frequently not returned when work became scarce, and there was none to be given out."

Still another evil disclosed by the New York Tribune investigation of 1853 was the manner in which the reckoning was made, "66 cents to the dollar only being given." "Not only," said the Tribune, "do they make this deduction in prices scandalously low at the best, but it is very common to leave a portion of even these miserable earnings 'to account'—an account which, alas, is often totally repudiated. Imagine a poor creature paid at the rate of 5 cents a shirt, on which she has had to make a deposit of its value, being paid a portion and told to 'let the remainder stand over for a settlement,' and this regardless whether she may live at the Battery or in Fiftieth street. This latter is perhaps the most crying, oppressive, and disgusting tyranny of the entire villainous system, and one which is carried on to an

[a] Sewing women in San Francisco are said to have received in 1853 from $40 to $70 per month. (New York Daily Tribune, June 10, 1853.)

[b] Quoted in Fincher's Trades' Review, September 10, 1864.

[c] New York Daily Tribune, June 8, 1853.

incredible extent." By this system, it was said, many employers who pretended to pay good prices, reduced wages to the level of the worst employers. "We have known instances," said the Tribune, "where these professedly fair-priced houses have for successive weeks paid but 50 cents on account, and when work became scarce have postponed settlement day after day, till the patience of the claimant has been exhausted, and she has been compelled to give up her claim in self-defense, despairing of getting a final settlement, and neglecting in the meantime other employments."[a]

The clothing merchants during this period appear to have prospered. Mathew Carey asserted in 1829 that a comparison of the prices charged to the public for articles and the wages paid for their manufacture proved that wages might be raised sufficiently to insure comfort.[b] In 1836 the Philadelphia Public Ledger stated that "a common shirt, the material of which cost about 25 cents, and for making which a female receives about as much more, is sold by a merchant tailor for $3, or 500 per cent advance." Those who employed female labor, added the Ledger, were "deriving from it immense fortunes."[c] In the same year, too, the Pennsylvanian stated that while the seamstress was paid 8 or 10 cents for making a pair of duck pantaloons, the dealer sold them to the sailor for at least five times that sum, "for taking them from the seamstress and handing them to the sailor."[d] Orestes Brownson, too, commenting in 1840 upon the insufficient wages of the seamstresses, blamed the employer who, he said, "grows rich on their labor—passes among us as a pattern of morality, and is honored as a worthy Christian."[e] Four years later the New York Sun also referred to the merchants as "getting rich from the labor of the poor, because," it said, "as fair prices are paid for clothing, if seamstresses and tailoresses only received sufficient for their work to enable them to live, no complaint would be made."[f] And in 1849, at a meeting of journeymen tailors and tailoresses in Boston, it was said that 20 cents was paid in that city for making

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[a] New York Daily Tribune, June 8, 1842.

[b] Carey's Miscellaneous Pamphlets, No. 12, "To the Editor of the New York Daily Sentinel." Philadelphia, 1831.

[c] Public Ledger, March 26, 1836. The same charge was again made by the Ledger on September 16, 1836, and December 13, 1837.

[d] Pennsylvanian, February 16, 1836.

[e] Boston Quarterly Review, July, 1840, p. 368. "The Laboring Classes." Review of Carlyle's Chartism.

[f] Quoted in the Workingman's Advocate, August 17, 1844. The Workingman's Advocate, in reply, sarcastically remarked: "If they can only live, no matter whether they are doomed to a life of senseless, unnatural drudgery, to which a Southerner would disdain to subject his slaves! If they don't die of starvation, no matter if they do toil unceasingly and die a premature death!"

vests that sold for $1.75 to $2.50, 7 cents for pants and overalls sold for 75 cents to $1, and 7 cents for shirts sold for $1.50.[a]

On the other hand, in 1845, the Tribune attributed the low wages to the oversupply of woman workers, which created a competition before which the clothing makers themselves were helpless. "The female population of our city," said the Tribune, "as of almost every great city, considerably outnumbers the male, while employment, though deficient for both, is distributed in inverse ratio. There are thus many more seamstresses, or females wishing to be such, than are required in that capacity—probably twice as many as would find employment at fair wages. Under these circumstances, nothing can prevent low wages and a constant tendency to lower. The clothing makers for the southern trade are generally the target of popular hostility on account of low wages, and there can be no doubt that many of them are gripers. But if they were all the purest philanthropists, they could not raise the wages of their seamstresses to anything like a living price. Necessity rests as heavily upon them as upon the occupant of the most contracted garret. They can only live by their business so long as they can get garments made here low enough to enable them to pay cost, risk, and charges and undersell the seamstresses of some other section. If they were compelled to pay living wages for their work, they must stop it altogether. We must go behind them, therefore, to reach the heart of the evil we are considering."[b]

About the same time the New York Sun also asserted that one of the chief causes of the low wages paid to seamstresses was that "there are more laborers than the market for labor demands." "In a peculiar branch of industry," it added, "say in the making of clothing for the South, there is constant employment for 1,000 hands, while there are actually 2,000 ready and anxious to engage in it, if they could obtain anything like fair prices. The superfluous hands underbid each other, until the lowest term on which life can be supported is accepted."[c] For this reason the Sun saw no hope of an increase of wages through combination, but recommended that a greater variety of occupations be found for women, especially that they be employed as clerks in stores.[d]

The competition of immigrants, though continued as early as 1850, along with that of the inmates of almshouses, as one of the causes of the wretchedly low wages paid to seamstresses,[e] was not nearly as

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[a] New York Weekly Tribune, August 20, 1846. Quoted from the Chronotype.

[b] New York Daily Tribune, March 7, 1845. As early as 1835 the Radical Reformer and Workingman's Advocate stated that the bundle system was the cause of the sufferings of the working women, and that the employers were nearly as badly off as the employed.

[c] Quoted in the Workingman's Advocate, March 8, 1845.

[d] See Chapter VII of this volume, "Trade and Transportation," p. 288."

important a factor during this early period as during the past half century. In 1845 a large majority of the total number of sewing women in New York, which was estimated by the Tribune as about 10,000, were said to be American born.[a]

Very early, however, complaint began to be made of the competition of women who were not obliged to earn their living. As early as 1830 the Massachusetts Journal and Tribune attributed the bad conditions of woman's work, as well as other industrial evils, to "underbidding." "Those who have a home and all the necessaries of life," it said, "will underbid them (the poor women) for the sake of buying a new bolt, or a new feather," and added: "Every woman is bound to make it a principle not to do work for less than the very poor can afford to do it."[b] Another paper stated that in Boston "ladies who live in fine houses, elegantly furnished, whose kitchens swarm with servants, take in work at half price for those servants to do."[c] The Farmers', Mechanics' and Workingman's Advocate of Albany[d] called this, however, "a very inadequate account of the matter," and asserted that "the heartless avarice of employers is a cause of perpetual influence and untiring power, and to this can we look as the only sufficient cause of the evil."

Country competition was a cause of complaint in 1845. "We know instances," said the New York Morning News, "where shirt makers put their work out in the country in the winter at 11 cents each. The work is done by those who do not make it a means of living, but use it merely as an auxiliary to dress."[e] The Voice of Industry, too, stated in 1845 that "a gentleman told us, the other day, that he saw the daughter of a respectable farmer making shirts at 11 cents apiece, for one of the dealers. He asked her whether she thought it a sufficient price. 'No,' said she, 'if I were obliged to support myself, I could not do it by this work; but I merely employ my time which otherwise I should not use.'"[f]

In the same year the chairwoman of a meeting of working women in New York said that she knew several employers who paid only from 10 to 18 cents per day, and that one employer, who offered girls 20 cents per day, told them that if they did not take it "he would obtain girls from Connecticut who would work for less even than what he offered."[g]

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[a] Mechanics' Free Press, October 28, 1830. Quoted from the New York Sentinel.

[b] New York Daily Tribune, August 14, 1845.

[c] Carey's Select Excerpts, vol. 13, p. 332.

[d] Mechanics' Free Press, September 18, 1830.

[e] Farmers', Mechanics' and Workingmen's Advocate, Albany (N. Y.), October 20, 1830.

[f] Quoted in the New York Daily Tribune, March 27, 1845.

[g] Voice of Industry, June 26, 1845.

[h] Workingman's Advocate, March 8, 1845. Quoted from the New York Herald. Reprinted in Documentary History of American Industrial Society, Vol. VIII, p. 227.

By 1850 the cheap labor of the farmhouse is said to have been employed "in the getting up of clothing, shirts, stocks, hosiery, suspenders, carriage trappings, buttons, and a hundred other light things."[a] And again in 1853 women working for pin money were said by the New York Tribune to have been responsible for the low wages paid to needlewomen.[b]

Both division of labor and the true "sweating" or subcontract system had their origin, though only upon a small scale, during this period. A writer in 1851, for instance, complained of the subdivision of labor by which vest making had become a separate and distinct business, and intimated that the making of pantaloons and of coats were also independent branches.[c] This much division of labor, indeed, appears to have been made almost from the beginning of the wholesale trade. Some progress, too, was probably made in dividing up the work upon a single garment, but this movement was probably slight until after the introduction of the sewing machine.

As early as 1835 a resolution was passed by the National Trades' Union denouncing "the Government contractors" for "withholding" from "the females in their employ * * * a fair remuneration for their labor, and by those means enriching themselves at the expense of the poor helpless females,"[d] and in 1838 complaints of "combinations" of clothing dealers, by which wages were reduced, were made both in New York[e] and in Philadelphia.[f]

By 1844, moreover, and probably earlier, there were instances of the true sweating system. In that year it was recorded that a man and two women working together from 12 to 16 hours a day earned a dollar amongst them, and that the women, if they did not belong to the family, received each about $1.25 a week for their work, the man paying out of the remaining $3.50 about $1 a week for rent of his garret, and being obliged to pay this amount whether employed or not.[g] In 1853, moreover, the investigation of the clothing trade made

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[a] Mackay, Nine Years in America, 1850, p. 17.

[b] New York Daily Tribune, June 8, 1853.

[c] Burns, Life in New York, 1851.

[d] National Trades' Union, October 10, 1835. Reprinted in Documentary History of American Industrial Society, Vol. VI, pp. 267, 268. The preamble and resolution were as follows:

Whereas, This convention, having in view the interest of the working classes, whether male or female, and having reason to believe that the compensation paid for female labor, and especially for those employed on the Government work, is altogether inadequate to supply them with the necessities of life, and a great cause of the increase of crime, as daily evidence proves: Therefore,

Resolved, That we view with feelings of strong indignation the advantages taken by avaricious and hard-hearted employers, especially the government contractors, of the females in their employ, by withholding from them a fair remuneration for their labor, and by those means enriching themselves at the expense of the poor helpless females.

[e] New York Evening Post, March 9, 1836.

[f] Philadelphia Public Ledger, December 28, 1836.

[g] Workingman's Advocate, July 27, 1844.

by the New York Tribune disclosed the existence of a "middle system." For example, near one of the streets running from the Bowery to the East River an old Irish woman was found who had four girls at work for her, their compensation consisting solely of food for six days of the week. In another case a woman had hired four "learners," two of whom received only board and lodging, and the other two $1 a week each without food.[a] These were all evidently instances of the true sweating system.

THE MACHINE IN THE GARMENT TRADES.

GROWTH OF THE READY-MADE BUSINESS.

The introduction of the sewing machine gave a great impetus to the manufacture of medium-grade ready-made clothing. It was not, indeed, until after the invention of the machine that such clothing was made in large quantities. As soon as the sewing machine came into use, moreover, the ready-made-clothing business, which had already gradually encroached upon the field of custom work, lost its earlier earned and deserved title of "slop work" and became practically a new industry.

Gradually, too, it extended its dominion to higher and higher grades of work. Men's overcoats were among the more expensive articles which soon became popular, but gradually other articles were introduced. Boys' ready-made clothing was soon added to men's, and article after article of women's wear has yielded itself to this method of manufacture. In Philadelphia in 1858 the manufacture of men's clothing was the principal part of the business, but boys' clothing, shirts, collars and bosoms, and certain kinds of ladies' clothing, such as mantillas, corsets, etc., were made.[b] The manufacture of cloaks and mantillas as a wholesale business was said to have begun between 1848 and 1858.[c] As an important industry, however, the manufacture of women's clothing, principally cloaks, began early in the sixties, about the time that the Civil War, through the Government demand for clothing for soldiers and sailors, was giving another great impetus to the men's ready-made-clothing industry. The manufacture of women's suits was not begun, however, until early in the eighties, and underwear, which was manufactured in New York as early as 1868,[d] was not made in large quantities until after 1890.[e]

The introduction of the sewing machine and the growth of the ready-made business were also accompanied by two other important

[a] New York Daily Tribune, June 8, 1863.

[b] Woodley, Philadelphia and Its Manufactures, p. 223.

[c] Idem, p. 226.

[d] The Revolution, March 12, 1868, gives a description of an establishment in which plain underwear for ladies and children, corsets, and infants' robes were made.

[e] Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 600.

changes in the industry, first, the division of the labor involved in the manufacture of single garments, and second, the growth of the subcontract system. In tailoring the division of labor caused the introduction of women workers on certain parts of the high-grade work formerly performed by all-round men tailors—especially in "finishing." It has already been seen that the tailoring business had earlier been divided into the making of coats, vests, and pantaloons, each of which had become a separate trade. But now the making of each single garment began to be divided into a number of separate operations, requiring different kinds and degrees of skill. At the same time, moreover, the manufacture of ready-made clothing began to be "carried on by the journeymen tailors" between seasons.[a]

The subcontract system does not appear to have assumed a very important place until it was introduced about 1863 or earlier by contractors for army clothing. At first, moreover, the work for the subcontractors was practically all done in the home, except for the cutting, which appears always to have been done in shops. The only change, in many cases, was that the materials were passed through an extra set of hands in each transaction, and political chicanery appears to have been originally responsible for this unnecessary duplications of functions. The need for capital invested in sewing machines and later in power to run the machines, however, naturally produced a tendency to gather the workers in "sweat shops," in small establishments, and finally in factories, and the subcontractor as naturally became the "boss" of a group of workers, owning or renting on his own responsibility his shop and machinery.

STATISTICS.

During this second period of the garment manufacture, the proportion of women employed, upon the whole, decreased. Table XI shows that between 1850 and 1900 the proportion of women to the total number of employees engaged in the manufacture of both men's and women's clothing, "factory product," decreased, as did also the proportion engaged in dressmaking,[b] and after 1880 in the manufacture of shirts.[c] In 1905 women constituted 54.5 per cent of all

[a] Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 290.

[b] As early as 1871 there were said to be half a dozen dressmaking establishments in New York where the sewing upon dresses was almost entirely performed by men. (The Revolution, February 9, 1871.)

[c] See article by Miss Abbott and Miss Breckinridge in the Journal of Political Economy, January, 1906, vol. 13, pp. 14–40, on the "Employment of women in industries, Twelfth Census statistics." The conclusions there reached in regard to the movement from 1890 to 1900 in the clothing industry are that "(1) the employment of men and women is decreasing; (2) the employment of children is increasing; (3) the employment both men and women in the making of men's clothing is decreasing, though increasing in the manufacture of women's ready-made garments; (4) the num-

the employees engaged in the manufacture of men's clothing, 82.4 per cent of those engaged in the manufacture of women's clothing, not including dressmaking, and 77.4 per cent of those engaged in the manufacture of shirts."

WAGES AND CONDITIONS OF LABOR.

When the sewing machine was first introduced it was predicted that the needle would soon become a mere object of curiosity, and that there would be great distress among the sewing women owing to lack of employment. In view of this expected result, the need of opening up to women new occupations, such as bookkeeping and landing shops,[b] was urged. The first effects of the machine were, doubtless, an intensified struggle for work and a reduction of wages by a reduction in the piece rates. In 1864 it was said that the sewing machine had caused such a reduction of wages as to drive many a poor sewing girl almost to starvation or suicide.[c]

The period of transition from hand work to machine work, when the hand worker was brought into competition with the machine operative, must have been a painful time to the sewing women. As Virginia Penny said, sewing machines enabled women to do much work previously performed by men only, but soon nearly as many men as women were employed on them.[d]

Gradually, however, a readjustment of work and pay was effected through an enormous extension of the ready-made trade and a reduction of piece rates. Wages have always, owing to the seasonal character of the trade, been not only low but decidedly unstable. The rates of wages here given, however, were probably more often for hand work than for machine work. Though in this period the machine was the competitor of the needle, the years before 1880 were essentially years of transition and, consequently, in the part of

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ber of women in dressmaking is decreasing and the number of men increasing. It is impossible to explain these changes."

According to the Twelfth Census, 1900, Manufactures, Part III, Selected Industries (pp. 284 and 401), between 1890 and 1900 the development of the women's cloak and suit business was such as to cause the substitution of men for women on the better grades of work, but meanwhile women had almost entirely displaced men on the cheaper grades of work, owing to the fact that they would work for about two-thirds the wages paid to men. The rapid development of the shirt-waist and underwear business, too, had continued to increase the number of both sexes employed in the manufacture of women's clothing factory product.

[a] Derived from figures in Special Reports of the Census Office, Manufactures, 1905, Part I, pp. 6, 22. In men's clothing, "men's clothing, buttonholes" is included.

[b] The Una, February, 1854, Vol. II, p. 223.

[c] Daily Evening Voice, December 26, 1864. It should be remembered that Fincher's Trades' Review and the Daily Evening Voice were both labor papers, the former published in Philadelphia and the latter in Boston.

[d] Penny, Think and Act, 1868, p. 89.

the period of machine industry which it is here attempted to describe, hand work had only in part been superseded by the machine.

In 1863 the weekly wages of sewing women in Philadelphia ranged from $1.50 to $4.32,[a] and in New York wages were as low or lower. At a meeting of Brooklyn sewing women in 1863 one woman said that 10 to 12 cents per dozen was paid for making drawers in New York, but that a shop in Brooklyn had offered her 4½ cents per pair for drawers and army shirts, by which she could make 22 cents per day.[b]

In 1864 William H. Sylvis, in an address at the iron molders' convention, spoke of the 30,000 sewing women of New York, who by working day and night earned only from $1 to $3 per week.[c] And in the same year the case was cited of a New York woman who made drawers, sewed on the machine and estimated to have 1,800 stitches when finished, for 4½ cents a pair. From 7 a. m. to 9 p. m. a woman could make 4 pairs, or 18 cents a day. Another woman made larger drawers, 2,000 stitches, at 5½ cents per pair, furnishing her own thread, and could make only 2 pairs a day. As for hours, her remark was: "If I get to bed about daylight and sleep two or three hours, I feel satisfied." Still another woman made haversack pockets by hand at 1½ cents, or 12½ cents for 10 hours' work, furnishing the thread. Knapsacks, made by hand at 7½ cents each, yielded their makers 22½ cents a day if they began at 6 a. m. and worked until about 11 p. m. The following case was even worse:

A coarse flannel army shirt, large size, made by hand sewing. Collar, wristbands, and gussets, put on with double rows of stitching all around. The seams all felled, 3 buttonholes, buttons, and sleeve, requiring upward of 2,000 stitches. The woman who made this garment was 60 years of age. She has worked on these shirts since the war broke out, receiving 7 cents, each one of them being a good day's work for her. Younger women might make two or perhaps three in 12 hours, furnishing their own thread. This old lady occupied, with another woman, a damp, dark basement, where she strained her eyes in the daytime and sewed by the light of her neighbor's lamp during the evening. At the end of the week her net earnings, after paying for needles and thread, amounted to 39 cents in "currency."[d]

In Boston the wages of sewing women in 1864 were said to have been from $3 to $3.50 per week,[e] and in 1866, according to the report of the Massachusetts commission on hours of labor, though milliners, dressmakers, and tailoresses were well paid, the women engaged on

[a] See Table C, p. 268, Fincher's Trades' Review, November 21, 1863.

[b] Fincher's Trades' Review, December 12, 1863.

[c] Mass. January 16, 1864. Sylvis, Life, Speeches, Labors and Essays of Wm. H. Sylvis, p. 104. Wm. H. Sylvis was president of the Iron Molders' International Union and later of the National Labor Union.

[d] Idem, April 2, 1864.

[e] Daily Evening Voice, December 13, 1864.

coarse sewing received very low wages, earning only with difficulty over $3 a week. A Boston minister testified that he had known women to make coarse pantaloons for 84 cents a dozen and flannel shirts for 75 cents a dozen, being able to make only a dozen of either in a week.[a]

In other places conditions were equally bad. A "shoddy contractor" in Buffalo in 1864, employing 20 girls, paid them $2.75 to $3 a week, and it was said "the girls work two weeks for nothing".[b] In Detroit, in 1864, according to Richard Trevellick, seamstresses were paid $1 to make a heavy overcoat and 30 cents to make a vest or pair of pantaloons.[c] In Portland, too, women's wages were extremely low. A correspondent of the Portland Courier in 1865 said that he saw a woman at work on pants for an oilcloth establishment, for which she said she received 87½ cents a dozen, or a little more than 7 cents a pair. About three pairs, he estimated, could be made in a day, which would amount to about 22 cents.[d] The sewing women of Utica, N. Y., in 1866 were obliged, it was said, to pay for board $2.50 per week, and many of them did not earn more than that amount, working from 8 a. m. to 12 p. m.[e] Earlier in the year a letter appeared in the Utica Daily Herald from a woman who worked 18 hours a day, supporting a family of children by "making pants for merchant tailors for 31 cents apiece (when sold for $10)," and "coats for $1.50 or $2 that sell all the way from $20 to $50."[f]

By the end of the war period the wages of sewing women had risen, though not in proportion to the cost of living. According to Table D, wages in New York in 1866 ranged from $3 to $10, whereas in 1863 they had ranged from $2.50 to $8 per week.[g] Table E shows the estimated weekly earnings of sewing women in New York in 1868 to have ranged from $1.80 to $20, the latter sum earned only by pressed makers.[h]

In some instances, however, even money wages were as low as in 1830. In 1867 a speaker before a mass meeting in behalf of the Working Women's Protective Union of New York exhibited a pair of pantaloons for the making of which 20 cents was paid, a shirt for 8 cents, and drawers for 8 cents per pair, three pair of which, nothing 24 cents, could be made in a day.[i] The next year it was asserted

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[a] Daily Evening Voice, March 3, 1866.

[b] Mother's Union Review, August 15, 1864. It was not stated in this instance, as in many of those which follow, exactly what was meant by "making," whether it included all the work on the garment or a special subdivision of the work. Probably in most cases the garments were only cut out in the shops.

[c] Daily Evening Voice, March 6, 1866.

[d] Idem, November 6, 1865.

[e] Quoted in Daily Evening Voice, March 10, 1866.

[f] See Table D, p. 262. Daily Evening Voice, March 2, 1867.

[g] See Table E, p. 264. The Revolution, October 1, 1868.

[h] Daily Evening Voice, March 2, 1867.

that 50 cents a dozen was the price then paid in New York for making common overalls.[a] And in the same year a sewing woman, writing to a distinguished philanthropist, said that she had stitched satin vests for one employer at 8 shillings a vest, for the making of which he received 16 shillings, and that she had made shirts at a shilling each, and earned sometimes $1 a week, and sometimes 10 shillings.[b]

Shirts were said to be made in New York in 1868 at lower prices than in Europe, and vests for 12 cents. One speaker before a meeting at Mount Vernon, N. Y., asserted that if the sewing woman "got up at 4 o'clock in the morning and worked till 10 o'clock at night, they could earn 90 cents."[c] At another meeting a woman testified that she had made drawers for a Government contractor at 4 cents a pair, finishing five pairs a day, and buttonholes at 8 cents a dozen.[d]

Even in factories where underwear was manufactured wages were very low. In one such factory in New York in 1868 a woman 72 years of age was found working for $3 a week, and a little girl who claimed she was 13, but looked about 9, was working for the promise of $5 a month at the end of her four weeks' apprenticeship, and nothing in the meanwhile. In the same establishment, however, at cloak making, old hands earned as much as $10 a week.[e]

Wages in New York in 1869 were said to be "for heavy cloth pantaloons, lined, finished, and pressed (shop work), 18 to 24 cents a pair; for lined coats with three pockets and six buttonholes, $1 a dozen—8 cents each; for shirts, best quality, $1.50 a dozen; for shirts, second quality (retailing at $3 each), $1.25 a dozen; for shirts, third quality, 75 cents a dozen; for fancy flannel shirts, lapel on breast, turnover collar, cuffs, gussets, buttonholes, 6 cents each; for "jumpers" (blue overshirts) ending at waist in a band, with long sleeves, 50 cents a dozen."[f] Meanwhile, it was said that Portland women who were making clothing for New York houses got 25 cents apiece for woolen sack coats, from 12½ to 18 cents for pants, 40 cents for ordinary overcoats, and from 60 to 75 cents for the heaviest and best made overcoats.[g]

[a] The Revolution, February 19, 1868.

[b] Idem, August 13, 1868.

[c] Idem, September 24, 1868.

[d] Idem, October 29, 1868. Earlier in the year, however, a man wrote to the New York Sun that his wife had answered an advertisement for buttonhole makers in that paper, and had been given work to do at 6 cents a dozen, she finding the thread. She was a quick hand, he said, and could make a good buttonhole in every six minutes, or eight dozen in ten hours, amounting to 40 cents for a 10-hour day. When she told her employer that it was an utter impossibility to make them at that figure, he replied that he could get them made even cheaper. (The Revolution, Feb. 5, 1868.)

[e] Idem, March 12, 1868.

[f] Idem, April 22, 1869.

[g] Idem, May 27, 1869.

In 1870 the New York Times told of a woman in that city who made vests at 18 cents apiece for a wholesale house. By working 14 hours a day, including Sundays, she could make, it was said, $8 a month only. She paid $3 a month for her room, had two small children to support, and in January said she had eaten meat only once since Thanksgiving, and then it was given to her.

Another woman, a "finisher" of fine shirts, made about $2 a week, had a grandmother to support, and often lived for weeks on bread and water in order to provide a little broth every day for the old woman.[a] Again, in 1871, the Rev. Dr. Talmage in a sermon spoke of the sewing women and their hardships, and mentioned the case of one woman who was making garments at 8 cents apiece and could make but 3 a day, and of others who made coarse shirts at 6 cents each and found their own thread.[b]

Still another statement of weekly wages in New York in 1870 was to the effect that, though seamstresses in families received from $7 to $12, those engaged in wholesale work did not receive more than from $2 to $8.[c] In the same year Shirley Dare, a correspondent of the New York Tribune, made some inquiries among individual sewing women in New York. Out of 25 women interviewed she found that one received $5, seven $6, one $7, three $7.50, four $8, four $9, four $12, and one $15.[d]

In Boston, according to Miss Phelps's statement at a meeting in 1869, there were about 20,000 sewing women, about 8,000 of whom did not earn over 25 cents per day.[e] "The needlewoman's society," she said, "have been making inquiries on the subject and have taken manufacturers' figures, which are always favorable to themselves. Girls are employed on Federal, Washington, and other streets, in numbers of 40, 50, and 60 in a shop, at less than $3.50 a week. Sewing-machine operators average $2.50 a week in those shops. You can see them in those shops seated in long rows, crowded together in a hot, close atmosphere, working at piecework, 30, 40, 50, or 100 girls crowded together, working at 20 and 25 cents a day." Miss Phelps estimated that only about one-fourth of the working women of Boston worked by the week, and that of these only about one-tenth received over $3 a week.[f] The sum of $4 a week was

[a] Workingman's Advocate, January 22, 1870. Quoted from New York Times. The Woman's Journal, Boston and Chicago, February 19, 1870.

[b] Woman's Journal, Boston and Chicago, June 10, 1871.

[c] Ibid., February 26, 1870. Quoted from the New York Evening Post.

[d] See Table F, p. 303.

[e] Workingman's Advocate, May 8, 1869. In her testimony before the Massachusetts legislative committee on hours of labor, also, Miss Phelps stated that thousands of girls in "stitching stores" in Boston earned only 25 cents a day or less. (American Workman, May 1, 1869.) Miss Phelps was herself a working woman.

said to be the highest ever paid in tailoring and ready-made clothing establishments.[a] Another speaker, however, said that there were in the city 18,205 needlewomen, 200 of them receiving over $12 a week and the rest from $1.80 to $12, the average being $3 a week.[b]

"I have seen the time," said Aurora Phelps, "when I could not buy the soap and fire to wash my clothes. It is not always that we are improvident and shiftless. It is because our work is so fragmentary; because we have not facilities for getting employment at remunerative prices. Often when we go to the shop we have to wait one, two, three hours for work to be given us. We work for half an hour, an hour, two hours, and then have to wait again. When I was younger girls were taught full trades. They made pants, coats, overcoats, and then they learned to cut. Now one stitches the seam, another makes the buttonholes, and another puts the buttons on. And when the poor girl stitches up the seams and finds her work slack she goes from shop to shop, perhaps for weeks, before she can find the same kind of work. I have known a girl under such circumstances to go for a week on a 5-cent loaf of bread per day, or on that amount of crackers."[c]

A little later one speaker before a working woman's convention in Boston stated that she had known overalls to be given out for 6 cents a pair, at which price 20 cents could be earned in 10 hours. Though the German tailors were said to be receiving $10 to $16 per week for 15 or 18 hours' labor, women in the same field of employment and for the same hours earned, it was said, only from $2.25 to $7 per week. Custom shops, according to Miss Jennie Collins, generally paid good wages, but on ready-made work only starvation prices were paid.[d] And women working for contractors Miss Aurora Phelps had declared to be paid the poorest wages of all.[e]

The skilled tailoresses, of course, earned somewhat higher wages than the makers of shirts, overalls, and the cheaper grades of vests, trousers, and coats. A correspondent of the Boston Post in 1870 said that in New York a first-class sewing machine operator could earn $15 a week, though the majority did not earn half that.[f] According to another statement, too, tailoresses in New York earned from $6 to $10 a week.[g] In Boston in 1870 pantaloons that took a day and a half to make were made for $1.75, but the pantaloon and vest makers employed on this work (whose total earnings were

[a] American Workman, May 1, 1869. Testimony before Massachusetts Legislative Committee on Hours of Labor.

[b] Workingman's Advocate, May 8, 1869.

[c] American Workman, May 29, 1869.

[d] Idem, May 1, 1869.

[e] Quoted in the Woman's Journal, September 17, 1870.

[f] American Workman, February 11, 1871. Quoted from the New York Star.

almost precisely the same) were said to be unemployed about half of the year. The lowest price paid for board in Boston at this time, it was said, and that in an attic having as many beds as it could hold, was $4 per week, not including light, fire, or washing.[a]

Just as before the introduction of the sewing machine, too, the prices charged were all out of proportion to the wages paid. The New York Sun in 1868 told an instance of a woman who elaborately embroidered an infant's cape, spending 14 days on the work, to receive as compensation only $4. The cape, it was said, the material of which was worth $7, was afterwards sold by the merchant for $70.[b] And at a meeting of the Sewing Machine Operators' Union of New York in 1868 one woman testified that she had worked 72 hours on a piece of work for which she was paid $3.75 and which, when placed on sale, was priced at $36. The material, she said, could not have cost more than $25. Another woman had made a suit of boy's embroidered clothes, the materials of which cost about $6 and which was sold for $30, and had been paid 9 shillings. Still another had embroidered a chemise yoke and sleeves, the material of which cost less than $1 and which sold for $5, and had been paid $1.[c]

Not only were the wages paid exceedingly low, but in many cases even this pittance, on one excuse or another, was withheld. Sometimes it was said that the work was not satisfactory, sometimes that payment would be made when the amount had become sufficient, and sometimes other excuses and postponements forced the poor sewing women, as has already been seen, to make repeated trips at great cost of energy and time, in order to procure payment for work performed. Finally, perhaps, they were obliged to abandon the attempt and pocket their loss rather than continue to waste their time in fruitless efforts.

This latter evil, the swindling of sewing women out of part of their pay, was vigorously attacked by the Working Women's Protective Union of New York. During the first few months of its existence, this organization, with the assistance of several lawyers who volunteered their services, prosecuted "scores of employers" and compelled them "to pay the hard-earned pittances due to working women."[d] Nineteen such cases were prosecuted during the year ending in February, 1867. Before March 31, 1868, 636 complaints had been registered and the sum of $3,000 had been collected for the claimants.[e]

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[a] The Revolution, January 29, 1870.

[b] Quoted in The Revolution, January 15, 1868.

[c] The Revolution, October 29, 1868.

[d] Daily Evening Voice, March 2, 1867. From Fourth Annual Report of the Working Women's Protective Union of New York.

[e] Workingwoman's Advocate, June 13, 1868.

The requirement that the sewing women should furnish their own thread, which was said to have been first made when during the war the price of spool cotton rose from 4 to 8 and 10 cents,[a] was a common grievance.

Fines, too, were frequently the cause of complaint. A shirt maker working for one of the principal factories in Chicago, for instance, stated in a letter to the Workingman's Advocate that she had been fined $1.80 for stitching a dozen collars for eight shirts "two threads" nearer the edge than the prescribed quarter of an inch.[b]

Such were the conditions of women's work and wages in the garment trades during the early years of the sewing-machine era. Similar accounts of conditions during more recent years abound in comparatively accessible sources of information, but the story differs little from that here given of the earlier years. Wages have remained practically at the subsistence point, the rise during the first few years after the war being succeeded by a fall, so that by 1878 wages were little higher than they had been in 1860.[c] Since 1878, while wages by the hour, day, or week have decreased in most cases and remained constant in a few cases, and hours have been reduced by legislation, there has been a great increase in the speed and strain of work, which renders the industry more exhausting to its employees.[d]

GOVERNMENT WORK AND THE SUBCONTRACT SYSTEM.

How much of the work for which these wages were paid was done under the contract system it is impossible to say, but this system, as used in the manufacture of army clothing, was the cause of bitter complaint as early as 1863. Its immediate effect upon the Philadelphia sewing women is illustrated by the fact that in 1863, while women who obtained their work direct from the Schuylkill Arsenal received for making haversacks 12½ cents each, others employed by a contractor received only 5 cents. Even at the former price it was estimated that the women could not make more than 37 cents a day or $2.25 a week.[e]

Less than a year later a Philadelphia paper[f] stated that even the arsenal prices had fallen since the beginning of the war and that, on an average, the wages of sewing women had been reduced 30 per

[a] Fincher's Trades' Review, April 2, 1864.
[b] Workingman's Advocate, June 13, 1874.
[c] Pope, The Clothing Industry in New York, University of Missouri Studies, Vol. I, pp. 32–38.
[d] Industrial Commission Report, Vol. XV, p. 368.
[e] Fincher's Trades' Review, December 12, 1863.
[f] Idem, October 1, 1864.

cent while prices had increased at least 100 per cent. "As an evidence," said this paper, "of the fearful decrease of prices since the war broke out, we append a statistical table of wages received for work at the arsenal in 1861 and 1864 and the prices paid at the present time by contractors:"[a]

	Arsenal, 1864.	Arsenal, 1861.	Contractors, 1864.
Shirts	$0.17½	$0.12½	$0.08
Drawers	.12½	.10	.06 and .08
Infantry pants	.22½	.25	.17 and .20
Cavalry pants	.30	.50	.28 and .30
Lined blouses	.45	.50	.35
Unlined blouses	.40	.35	.25 and .30
Covering undress	.04	.02½	
Cavalry jackets	1.12½	1.00	.70 and .80
Overalls	.25	.20	.16
Bed sacks	.35	.20	.07

A few months later the following table of prices paid by the contractors and by the Government was given:[b]

	Arsenal prices.	Contractors' prices.
	Cents.	Cents.
Girths	18	4
Drawers	12	9
Trousers	30	17 and 20
Blouses	45	25 and 35
Cavalry jackets	120	40 and 50
Infantry coats	105	60 and 75
Great coats	90	40

The system, however, had evidently been adopted in private as well as in public work and with the same results. In 1864 Fincher's Trades' Review spoke of the subcontract system as "a new source of oppression * * * visited upon the seamstresses." "Time was," wrote the editor, "when whole-hearted and magnanimous employers gave out work to women in their own establishments, and paid remunerative prices; but of late a set of soulless subcontractors have sprung up, who contract for the entire work of an establishment, rent a cheap room in the suburbs, procure a lot of sewing machines, and employ young girls from 12 to 18 years of age, at just such prices as they choose to pay." Twenty-five, 50, or 100 girls were crowded together in these workrooms. "The proprietor," said Mr. Fincher, "paid the same prices to the subcontractor which he formerly paid to the women, and was relieved of expense for bookkeeper and clerk hire."[c]

"Middlemen" were again denounced in 1867 by a speaker before a mass meeting in behalf of the New York Working Women's Protective Union. "They contract with women," he said, "to get

[a] Fincher's Trades' Review, January 26, 1865.
[b] Idem, May 14, 1864.

work done at starvation prices, and then sell it to the wholesale dealers for five times the amount they paid for it."[a]

Moreover, though the chief complaints were made against the prices for Government work, and especially those offered by the contractors on Government work, it was said that wages were even lower on private work. A letter from "An American Working Woman" in 1864 stated that while for making infantry pants women received 20 cents, they received only 50 cents for making citizens' pants and could make three or four pairs of the former in the same time as one of the latter. "Nine-tenths of the employees," she said, "prefer Government work to that of citizens."[b]

Government contractors and subcontractors, however, were among the worst sweaters of the time. The Daily Evening Voice, in reviewing the work for 1864 of the Working Women's Protective Union of New York,[c] cited the case of a soldier's wife who was making drawers at 5¢ cents per pair for a Government contractor. They had to be made by hand and 6 pairs was a good day's work, giving her at best an income of 34½ cents a day. But if the work did not please her employers for any reason, real or fancied, they deducted 20 cents per dozen from her wages—a custom among the less honorable men in the business in order to increase their profits. A subcontractor was arrested in Philadelphia in 1864 on the charge made by several of his women employees of withholding their wages of "35 cents each for cavalry jackets."[d]

By 1865 it was said that in Philadelphia the contractors had "so persistently solicited the arsenal work" that they had obtained "all the work, except shirts, which have heretofore been given out to aged women." A bundle of shirts, obtained at the expense of these "poor old shirt makers" it was said, would yield, however, only $1.44 per week.[e] It was charged, too, that contracts for army clothing were obtained from the arsenal only by political influence or liberal bribes, and that these contractors "farmed out" the work "to the lowest bidder."[f]

In 1864 the women employed on Government work in Philadelphia sent a memorial to Congress asking for an increase of wages.[g] In the same year, too, the working women of New York appealed to the

[a] Daily Evening Voice, March 8, 1867.
[b] Fincher's Trades' Review, May 21, 1864.
[c] Daily Evening Voice, December 16, 1864.
[d] Idem, December 30, 1864. Quoted from Fincher's Trades' Review.
[e] Fincher's Trades' Review, January 28, 1865.
[f] Fincher's Trades' Review, May 7, 1864. In 1863 these women had held a public protest meeting against an order discharging all who were not near relatives of soldiers. (Fincher's Trades' Review, Aug. 8, 1863.)

Secretary of War for an increase of wages, saying that at the outbreak of the war the prices paid "were barely sufficient to enable us to obtain subsistence," but that since that time "women's labor has been reduced more than 30 per cent," while there had been an "unprecedented increase in all the necessaries of life." They asked for an increase in "the price of female labor until it shall approximate to the price of living," and that the contract system be so modified "as to make it obligatory upon all contractors to pay Government prices."[a] Some 10,000 signatures are said to have been obtained for this petition, and it was added that "thousands more would have signed, but refused, alleging as a reason that they were fearful of losing the small amount of work they were then getting from the contractors."[b]

The subcontract system was also the subject of a memorial to President Lincoln from the Cincinnati women engaged on Government work. They declared themselves "willing and anxious to do the work required by the Government * * * at the prices paid by the Government," but stated that they were "unable to sustain life for the prices offered by contractors." They cited as an example that the contractors were paid $1.75 a dozen for making gray woolen shirts, for which the women were paid only $1 a dozen. The same injustice, they said, was practiced in the manufacture of all other articles. "Under the system of direct employment of the operative by the Government," they added, "we had no difficulty, and the Government, we think, was served equally well."[c]

The Philadelphia working women employed in sewing for the Government finally sent a delegation to Washington, which waited upon President Lincoln and obtained from him a request to the Quartermaster-General that he would thereafter manage the supplies of clothing in such a way as to give the women remunerative wages.[d]

In Boston the special relief branch of the New England Auxiliary Association obtained Government contracts for clothing in order to furnish work to soldiers' widows at a fair price. The sewing women were given, it was said, not only the full benefit of the contract price, but in some instances much more. About 900 or 1,000 women were employed.[e]

No attention, however, appears to have been paid by the Government to the suggestion early made by Fincher's Trades' Review[f]

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[a] Fincher's Trades' Review, September 17, 1864.

[b] Daily Evening Voice, December 15, 1864.

[c] Idem, March 8, 1865. Fincher's Trades' Review, March 18, 1865. Reprinted in Documentary History of American Industrial Society, Vol. IX, pp. 72, 73.

[d] Fincher's Trades' Review, February 4, 11, 1865; Daily Evening Voice, January 28, 1865.

[e] Daily Evening Voice, March 3, 1865.

[f] Fincher's Trades' Review, May 14, 1864.

that the United States commissary department lead in the elimination of the subcontractor by establishing "subagencies in different parts of the city, where they would be accessible to the entire population of working women," and by making it "imperative upon the contractor," whenever it was necessary to employ outside help, "to pay the seamstresses general wages."[2]

THE HOME, THE SHOP, AND THE FACTORY.[3]

Though the garment trades are backward in their industrial development, their history shows a distinct movement away from the home, through the small shop, to the factory. For many years the ready-made business, except for the cutting of garments, was almost entirely a home industry. With the subcontract system came the sweat shop. But for several years past there has been manifest a distinct tendency away from the subcontract or sweating system toward the factory system. In 1901 Prof. John R. Commons reported[4] that, though 10 years before probably 90 per cent of women's ready-made garments were made by people who worked for contractors, at that time fully 75 per cent of such work had passed into the hands of "manufacturers." The manufacture of overalls, too, which was in the early years one of the most poorly paid of the home trades, has now become practically a factory industry. Men's coats and overcoats are also increasingly a factory product.

Minute division of labor and power applied to machinery have aided in bringing about the success of the factory system as compared with the small shop. Many of the small contractors' shops, however, were long ago equipped with power-driven machines. Division and organization of labor, therefore, aided on the one hand by the economies of large-scale production and on the other by laws regulating the sweating system must be held primarily responsible for the movement toward the factory system in the garment trades.

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[2] Fincher's Trades' Review, July 16, 1864. It was said that when in 1820 Mathew Carey "applied to the authorities at Washington for a small advance on their stipend wages paid to sewing women, he received for answer, that they could not introduce in any matter that would lead to raise the rate of wages." (Washington Free Press, Aug. 8, 1828.) The Secretary of War replied that "the subject is found to be one of so much delicacy and is so intimately connected with the manufacturing interests and the general price of this kind of labor in the city of Philadelphia that the department has not felt at liberty to interfere further than to address a letter to the commissary-general of purchases." (Quoted by Mathew Carey in "Public Charities of Philadelphia," Miscellaneous Pamphlets, Philadelphia, 1831.)

[3] For a full discussion of this topic see Men's Ready-Made Clothing, Volume II of this report, p. 483 et seq.

[4] Industrial Commission Report, Vol. XV, p. 322.

OTHER CLOTHING AND SEWING TRADES.

MILLINERY, STRAW AND LACE GOODS.

Milliners engaged in custom work, like dressmakers, have always been aristocrats among the clothing makers. The necessity for skill and taste has softened the competitive struggle and raised bargaining above the level of a mere struggle for animal existence. The difficulties in the way of acquiring this skill and taste have, however, enabled its possessors, not merely to establish for themselves a fairly advantageous industrial position, but to subdivide and distribute the work in such a way as to employ a large body of comparatively unskilled workers, who are engaged principally in the preparation of materials for the custom workers. As in the garment trades, the tendency of the millinery business has been away from custom work, and toward subdivision of labor and wholesale manufacture. Even among the custom workers subdivision of labor, by which skill was economized, early produced a class of workers similar to the basters or buttonhole makers of the garment trades.

In New York, in 1846, milliners are said to have worked from 10 to 12 hours a day for wages of from $2.50 to $3 per week, only "a good hand" commanding the latter price. They were divided into two classes, "makers" and "trimmers," and, though wages were about the same for both, the latter were more in demand and consequently suffered less from unemployment. A year's apprenticeship to the business was required for both, during which the girls, who were generally very young, received no money wages, often, it was said, working overhours for their board and lodging. The New York Tribune complained that during their apprenticeship they were kept regularly at sewing, and were not taught "anything in regard to gracefulness of outline, harmony of colors, symmetry of form and general adaptation * * * to each peculiar style of face," and that, consequently, at the end of the year they were "not much better milliners than when they began."[a] In the smaller custom shops, indeed, the employers doubtless furnished them as they do now, the greater part of the skill and taste required in the business.

According to Table XI, women have furnished since 1850 over 90 per cent of the employees engaged in "millinery, custom work," and the percentage has steadily increased. In the manufacture of "millinery and lace goods," however, the proportion of women employees, which was 85.1 per cent in 1905, appears, perhaps owing to the various methods of inclusion or exclusion of various branches of manufacture, to have decreased up to 1890 and then increased.

[a] New York Daily Tribune, September 16, 1846. Most of those engaged in the business were said to be Americans, with a fair proportion of English and French.

Only in 1890, however, did the proportion of women fall below 80 per cent of the total number of employees.

The manufacture of lace was an important industry for women early in the nineteenth century. Thus at Ipswich, Mass., in 1828, there are reported to have been 600 women employed in lace manufacture, and in the same year the Rhode Island lace school at Newport is said to have employed 500,[a] and in 1832, 700 women.[b] In Massachusetts, too, in 1831 more than 500 women were employed in this industry.[c] These women all worked at home, and lace making probably supplied in part, at this period, the need for home work created by the transfer of weaving to the factory.

The manufacture of straw goods, which was started by Miss Betsey Metcalf, of Dedham, Mass., in 1798, was also for many years a home industry of New England women, who made straw bonnets fast for their neighbors and then for the wholesale markets. At first native materials were used, but later, when foreign-grown materials, which were better in quality than the native, were introduced, factories were established. As long as this was a home industry it appears to have been carried on wholly by women, but in the factories men were employed for part of the work of bleaching. Women, however, still braided the straw.

In Massachusetts alone in 1827 there were reported to be 25,000 persons, nearly all females, engaged in the manufacture of straw hats, etc.[d] This, however, must have been an exaggeration, for in 1837 there were reported only 13,311 "female hands" and no "male hands."[e] In 1824 a school was established at Baltimore "for the instruction of poor girls in the various branches of straw plaiting."[f] The palm-leaf-hat manufacture, too, which commenced in 1826, was soon an important industry in New England, principally in Massachusetts. The hats, it was said, were "all made at the dwellings of the inhabitants, by girls from 4 years old and upward."[g] Near

[a] New York Evening Post, July 5, 1828.

[b] Niles' Register, January 21, 1832.

[c] Executive Documents, Twenty-second Congress, first session, Vol. I.

[d] Bishop, History of American Manufactures, 1864 edition, Vol. II, p. 295.

[e] Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1837, p. 199 et seq. The Documents Relative to the Manufactures of the United States, Executive Documents, Twenty-second Congress, 1st session, Vol. I (1832), however, reported over 18,000 women employed in this business in Massachusetts, and in many cases the number was not estimated, but it was simply reported that thousands of hats were made. Probably the vast majority of the women who made hats did so only in their leisure hours.

[f] Bishop, History of American Manufactures, 1868 edition, Vol. II, p. 304. This school was not successful.

[g] Niles' Register, June 18, 1831, vol. 40, p. 287.

Springfield, Mass., where the business of plaiting straw was a great industry in 1831, some women were said to have made as it 63 a day, but most of them made only $1 a day.[a] Twenty-five cents a yard was the piece rate.[b]

As late as 1850 a great share of the manufacture of straw bonnets is said to have been home work carried on by country women. Large establishments in New York and Boston had their agents continually traveling among the farmhouses distributing the straw and models and collecting the finished bonnets. In some districts it was said that all the females were engaged in this work.[c]

By 1835, however, the making of straw hats and bonnets was no longer exclusively a household occupation. One establishment in Boston in that year, for instance, is said to have employed constantly 300 females.[d] In 1834, too, we hear of one Boston establishment which employed about a hundred women in weaving straw.[e] And in 1835 an advertisement appeared in a New York paper for "40 first-rate straw-bonnet sewers" who were wanted at "Mrs. Oliver's straw-bonnet manufactory, 271 Bowery."[f]

Just what were the hours and wages in these early factories is not known, but in 1845 women straw bonnet makers in New York are said to have worked from 7 in the morning to 7 in the evening "with no intermission save to swallow a hasty morsel," and to have received wages, when fully employed, of from $2 to $2.50 per week. "They have," said the New York Tribune, "no rooms of their own, but board with some poor family, sleeping anyhow and anywhere. For those accommodations they pay $1.50 per week, some of the worst and filthiest boarding houses, however, charging as low as $1 per week."[g]

By 1868 the manufacture of straw hats for the southern market had become a somewhat important industry in Philadelphia, one establishment employing about 200 persons, mostly females. The average weekly wages for women in the industry were $4.60, and for men $7.50.[h] But in Boston in 1869 there were said to be from one to two hundred women making palm-leaf hats for men at 2 cents each after paying for the material. One woman, it was said, had worked at the business a week and earned only 87 cents.[i]

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[a] Niles' Register, July 2, 1831.

[b] Idem, August 27, 1831.

[c] Mosnoy, Nine Years in America, 1850, p. 16.

[d] Bishop, History of American Manufactures, 1868 edition, Vol. II, p. 393.

[e] New York Mechanics' Magazine, April 16, 1834. Quoted from the Banker Hill Aurora.

[f] New York Transcript, January 3, 1835.

[g] New York Daily Tribune, August 19, 1845.

[h] Broadley, Philadelphia and Its Manufactures, 1868, pp. 284, 413.

[i] American Workman, May 1, 1869; Workingman's Advocate, May 8, 1869.

In the sixties, machines for sewing straw braid were introduced, but the industry still remained practically in the hands of women. The braiding of straw has always been a hand process, aided by a few simple tools. The unhealthy nature of the business, by reason of the fine dust in the handling of dyed braids and the heavy work on the machines, was apparent by 1884.[a]

ARTIFICIAL FLOWERS.

In the manufacture of artificial flowers, which has been very little affected by industrial changes, the conditions of work, as far back as 1845, when the industry was new, were very similar to those of to-day. In 1845 the Tribune estimated that from 1,500 to 2,000 girls were employed in this occupation in New York City.[b] Some of them, who had served a five years' apprenticeship and had shown particular skill, could, if constantly employed, earn $3.50 per week, but the principal part of the work was done "by young girls from 11 to 13 years of age, 'apprentices,' as they are termed, who receive 75 cents, and a few $1 per week." "These 'apprentices,'" said the Tribune, "as soon as they are out of their time are told that there is no more work for them, and their places are supplied by fresh recruits who are taken and paid, of course, as apprentices. Every few days you may notice in the papers an advertisement something like this; 'Wanted—60 young girls as apprentices to the artificial-flower-making business.' These pretend that a number of girls have become journeywomen, and are consequently to be pushed out of work to make room for apprentices, who will receive but 75 cents or $1 per week."[c]

HATS AND CAPS.

As early as 1831 there were reported to be 3,000 women and 16,000 men and boys engaged in the manufacture of wool and fur hats in this country.[d] And in Massachusetts in 1837 there were 550 "male

[a] Fifteenth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1884, p. 74.

[b] It is difficult to reconcile this statement with the figures in Table XI, p. 251, which give 872 women in the manufacture of artificial flowers in the entire United States in 1850, these women constituting 85.7 per cent of all the employees in the industry. Even in 1870 there appear to have been only about 2,000 employees reported under "artificial feathers, flowers, and fruits" and "feathers, cleaned, dressed, and dyed," and only 54.8 per cent of these were women. The percentage of women employees is very much higher, doubtless because of different classification, in other years, but even in 1880 there were reported only 3,677 women in the industry. In 1871, moreover, an account in the New York *Star* (quoted in the American Workman, February 11, 1871) gave the number of artificial flower makers in New York City as 1,500 and their average wages as $5 per week.

[c] New York Daily Tribune, August 19, 1845.

[d] Journal of the Proceedings of the Friends of Domestic Industry, New York, October 26, 1831. Reports of committees, p. 39.

hands" and 204 "female hands" employed in making hats.[a] The proportion of women to other employees engaged in the making of "hats and caps, not including wool hats" has steadily increased since 1880, but appears, probably owing to changes in classification, to have decidedly decreased since 1860.[b]

Division of labor early made women and girls trimmers of men's hats, and their wages for this work usually appear to have been higher than for the trimming of women's hats. One manufacturer of wool hats in Danbury, Conn., in 1841, employed five men as makers and two women as trimmers.[c] In 1845, after a regular apprenticeship, which appears not to have been long, the girls in New York are said to have earned from $1 to $1.50 per day, at piece prices which ranged from 9 to 12½ cents per hat, the latter generally being paid for fine work. In the country, at the same time, the usual price was 8 cents.[d] In 1851, again, trimming men's hats was said to be one of the most profitable branches of industry open to women in New York, the average wages being $4.50 a week, and some hat trimmers making $1 a day.[e]

About 1845 a machine for forming fur-hat bodies was patented which caused a division of labor, and girls were introduced to feed the fur to the machine.[f] Later the sewing machine was introduced for binding hats, which had formerly been done by hand. As in most other industries, however, the sewing machine was usually operated by women.

One of the most poorly paid industries in which women have been engaged, however, has been cap making. From the very beginning this has been, in the broad sense of the term, a sweated industry. In 1845 there were said to be in New York City between one and two thousand women cap makers who earned on an average 2 shillings a day, and many not more than 18 pence. "They are literal," said the New York Tribune,[g] "into a dark back room in a second, third, fourth, or fifth story chamber, 30 or 40 together, and work from sunrise to sundown." A manufacturer of caps in New York stated

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[a] Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1837, p. 100 et seq.

[b] See Table XF, p. 253.

[c] Bailey and Hill, History of Danbury, Conn., p. 224. Until about 1837, women carded all the wool for hats by hand. (Idem, pp. 241, 242.) And in the early years of the industry women were employed in pulling out the coarse outer hairs from the skins from which the fur was afterwards cut by men preparatory to its use in the manufacture of fur hats. (William T. Brigham, Baltimore Directory, 1830, p. 81.)

[d] New York Daily Tribune, November 7, 1845.

[e] Byrne, Life in New York, 1851.

[f] Bailey and Hill, History of Danbury, Conn., pp. 223, 225.

[g] New York Daily Tribune, August 19, 1845.

in the same year that, without advertising, he had in one week 200 more applicants for work than he could furnish with employment.[a] Another statement was to the effect that the fur-cap makers of New York could not make, by 18 hours' work, over 30 cents a day,[b] and still another that the makers of men's and boys' caps, by working from 15 to 18 hours a day, made only from 14 to 25 cents.[c]

One of the evils especially complained of in this business was the dishonesty of some manufacturers who advertised for cap makers, gave out work to be paid for on approval, and when it was returned refused payment on the ground that the work was not satisfactory.[d] One writer told of a case in which a man gave out on trial 2 dozen caps each to 47 girls and not one of these received a cent for her labor.[e] This evil appears to have been alarmingly prevalent for a number of years. In 1849 a writer in the New York Tribune asserted that a large part of the glazed and cloth cap manufacturing business of New York was carried on by merchants who advertised for women to work on caps, promising them permanent employment and punctual payment, and, when the work was done, told them that the establishment paid only once a fortnight or once a month, that the bill was too small, or that the caps were badly made.[f] Again in 1850 an Irish traveler, in his description of America, warned Irish girls of this custom.[g]

By 1851, when there were said to be about 5,000 woman cap makers in New York, the Jews had almost monopolized the trade. In one room of a New York establishment it was recorded in that year that 80 girls were employed, while others took work home cut out and ready for sewing.[h] Wages were exceedingly low. In 1843 some Philadelphia cap makers went on strike because they could not make on ordinary work over 37 cents per day.[i] And in August, 1850, the Monthly Record of the Five Points House of Industry gave an account of a visit by the superintendent to a poor widow who was making boys' cloth caps "trimmed with braid, and bow, and buttons, lined

[a] Young America, New York, April 12, 1845.

[b] Workingman's Advocate, March 15, 1845.

[c] New York Daily Tribune, August 14, 1850.

[d] Idem, September 10, 1845.

[e] Burdett, Wrongs of American Women. Reviewed in the Voice of Industry, September 25, 1845. This account is cast in the form of a simple story, similar to "The Lamp Day" of the present generation, and describes the distressing conditions of the working women in New York in 1845. Mr. Burdett is said to have intended himself personally all the incidents in his book.

[f] New York Daily Tribune, August 7, 1849.

[g] Mannay, Nine Years in America, 1850, pp. 29, 30, 31.

[h] Burns, Life in New York, 1851. The number of women cap makers in New York must have been greatly exaggerated.

[i] Report of the Bureau of Industrial Statistics, Pennsylvania, 1880-81, p. 289.

with glazed muslin and wash leather, and with patent-leather front," for 2 shillings per dozen or 2 cents a piece. She said that she used to receive 2 shillings and 6 pence per dozen, but that the price had been reduced.[a]

The wages of women cap makers in Philadelphia in 1868, however, were said to be about $4 per week.[b] And in 1871 there were in New York, according to one account, 2,000 women cap makers earning from $6 to $8 per week.[c]

A home industry, comparatively little influenced by the sewing machine, cap making was for many years perhaps the very lowest of the clothing industries. The work has practically always been by the piece, and in 1871 it was stated that in Boston women, working in shops, carried home materials and worked two or three hours additional in the evening.[d] But in 1872 it was added that all were expected to work in the shop during the regular hours.[e] Gradually, however, division of labor and the use of power-driven machinery have made the manufacture of caps a shop or factory industry.

UMBRELLA SEWERS.

As shown in Table XI (page 253), in every census year except 1890 more than half of the employees engaged in the manufacture of umbrellas and canes have been women. In the earlier years, when canes were not included, the proportion was considerably higher. The work of women has always been principally the sewing together of the pieces of the umbrella covering, and umbrella sewers have been merely one wing of the great army of sewing women. Though shops in which men and women were employed in separate rooms were early common, much of the work was done at home, as in the other sewing trades.

The wages of umbrella and parasol sewers have always been low, for, though some skill and experience is required on the higher grades of work, apprentices can learn in a short time to do the common work. In 1866, when the wages of umbrella sewers in New York were reduced from 14 to 10 cents on each umbrella, it was stated that at the reduced rate the girls could obtain "only half of a subsistence."[f] The average earnings of parasol sewers in New York in 1846 are said to have been 25 cents a day, though some girls earned as high as $6 to $8 per week.[g] The New York Sun mentioned the case of a widow

[a] Quoted in Penny, Think and Act, 1869, p. 80.
[b] Moodley, Philadelphia and its Manufactures, 1868, p. 281.
[c] American Workman, February 11, 1871. Quoted from the New York Star.
[d] Report of the Massachusetts Bureau of Statistics of Labor, 1871, p. 269.
[e] Idem, 1872, p. 77.
[f] Public Ledger, December 1, 1866.
[g] New York Daily Tribune, March 16, 1846.

with three children, who at sewing parasols and umbrellas could not earn by the closest application more than 25 cents per day.[a]

A little later the New York Tribune said: "At the prices usually paid, the girls at this trade can make, some of them 20 shillings, some $3, and some who are extraordinarily smart, $4 and $5 a week. There are many who do not earn 20 shillings. These are to be found chiefly among that class who work on the commonest umbrellas, made of coarse muslins, cane frames, tin tips, etc." For covering with gingham the price was 10 cents for a 28-inch, 11 cents for a 30-inch, and 12 cents for a 32-inch umbrella. For covering with silk 11 cents was paid for the smallest size, 12 cents for the medium, and 13 cents for the largest, and for covering with common muslin 7 cents, 8 cents, and 9 cents. On parasols the work was said to require greater skill and experience, and some girls could not earn as much as on umbrellas.[b]

The hours in the shops at that time were usually 10 a day, and the girls who worked at the trade were generally Americans, with a few Germans and Irish. When the work was done at home the hours were doubtless longer. In many places the work was said to be regular throughout the year, but in others girls were employed to prepare for the auctions alone, and were discharged when the work was done. Girls under 15 or 16 were seldom employed, as a good deal of strength and skill were required to make the covers fit nicely.[c]

In 1851 umbrella sewers in New York are said to have made from $2.50 to $3 a week.[d] But two years later the New York Tribune, in investigating the needlewomen of New York, found that, while in summer the earnings of the parasol stitchers were about $2.50 a week, in winter when on umbrella work they earned only about $1.50 a week.[e] In Philadelphia in 1859 there were said to have been more than a hundred places where parasols and umbrellas were made, though there were only four or five large establishments. The manufacture employed directly, it was said, about 1,500 persons, and indirectly, in all of its branches, about 2,500. A large proportion of the employees were females, and their earnings averaged from $2 to $5 per week.[f]

By 1863 the sewing machine had reduced the piece rate paid umbrella sewers to from 6 to 8 cents per umbrella, and it was said that "by working steadily from 5 o'clock in the morning till 12 at night they could finish a dozen umbrellas per day. They had to pay,

[a] Quoted in the Workingman's Advocate, March 16, 1846.
[b] New York Daily Tribune, September 17, 1853.
[c] Burns, Life in New York, 1851.
[d] New York Daily Tribune, June 3, 1853.
[e] Freedley, Philadelphia and Its Manufactures, 1859, pp. 320–302.

however, out of their own pockets for all the thread and needles used by them. Generally their employers furnished them with these articles at a stated price, the amount for which was deducted from their wages, leaving them after six days' hard work, from early morning till midnight, $3 or $4."[a] According to another account, parasols and umbrellas were made in New York in 1867 for 50 cents a dozen, and eight could be made in a day.[b] In 1867, too, the low wages paid umbrella and parasol sewers were complained of before a mass meeting in behalf of the Working Women's Protective Union of New York.[c]

In 1870 a cut in wages of from 30 to 35 per cent resulted in a strike of 2,000 parasol and umbrella sewers of New York and the formation of a union.[d] At that time their wages for covering cotton umbrellas 2 feet long were 6¼ cents, for large umbrellas nearly 3 feet long, 11½ cents, and higher prices for silk umbrellas and parasols. To cover one of the small cotton umbrellas at 6¼ cents required three-quarters of an hour. When work was lively, which was only about four months in the year, it was said that an average of $8 a week could be earned, but at other times the wages averaged scarcely $5 a week. Though in 1845 it was said that apprentices could learn in a week or so, at this time a preparation of over a month, it was said, was required for the common work and of three or four months for proficiency in the higher grades.[e]

COLLARS AND CUFFS.

The manufacture of collars and cuffs was begun at Troy, N. Y., about 1825, and from the first most of the work, except the cutting, was done by women, at first entirely and even yet largely in their homes. The first manufacturer of collars was the keeper of a small dry goods store in Troy, who employed the wives and daughters of his neighbors and paid them in merchandise. The manufacture of cuffs and shirts was added in 1845, and for a time prior to the introduction of the sewing machine the manufacturers were unable to fill their orders on account of the lack of skilled operators.[f] But the introduction of the sewing machine enormously increased the output and the possibilities of the business and effected a revolution similar to that in the manufacture of ready-made clothing.

The use of sewing machines run by steam power, which was common in all the large collar and cuff manufacturing establishments in Troy

[a] Fincher's Trades' Review, October 17, 1868.
[b] Idem, November 21, 1868.
[c] Daily Evening Voice, March 2, 1867.
[d] Workingman's Advocate, February 12; April 16, 1870. American Workman, February 26, 1870.
[e] The Revolution, February 24, 1870.
[f] Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 309, 310.

as early as 1872, and the division of labor, have both tended to hasten the introduction of the factory system in the collar and cuff industry. As early as 1873 the Troy factories were said to have employed 2,000 girls.[a] Some of the various operations, however, were, at that time, regularly carried on in the homes of the neighborhood, and this has never entirely ceased. But the comparative concentration of the workers has long made organization more common in this industry than in most of the sewing trades.[b]

BUTTONS.

The manufacture of buttons is an industry quite different in character from the sewing trades. In colonial times, however, the covering of buttons was a somewhat important home occupation of women. Though in 1820 the imperfect census figures give only 36 men,[c] women, and 22 "boys and girls" engaged in the button industry,[d] by 1833 the manufacture of buttons and combs appears to have employed nearly a thousand women in Connecticut and Massachusetts.[e] Soon afterwards machinery for covering buttons was introduced. In 1837, however, there were reported in Massachusetts only 21 women and 42 men engaged in the manufacture of metal buttons and 190 women and 254 men engaged in the manufacture of combs.[f] According to Table XI, the manufacture of buttons employed 621 women in 1850, and women have constituted since that date not far from half of the total number of employees engaged in the business. By 1870, when women were said to be engaged in the manufacture of all kinds of buttons,[g] the business had become practically a factory industry.

The wages of women button makers in Connecticut in 1880 were about $3 per week and in 1887 about $6.38 per week.[h]

GLOVES.

The first gloves made in America were made in 1760, and in 1800 the manufacture of gloves in commercial quantities began at Johnstown, N. Y. Gloversville was founded in 1810, and in 1821 the total product of the two places was 4,000 dozens of gloves and mittens.[i] Practically from the beginning of the wholesale manufacture of

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[a] Workingmen's Advocate, December 27, 1873.

[b] See History of Women in Trade Unions, Volume X of this report, pp. 100, 107.

[c] American State Papers, Finance, Vol. IV, pp. 20-23.

[d] Executive Documents, Twenty-second Congress, first session, Vol. I.

[e] Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1837, p. 160 et seq.

[f] The Revolution, March 24, 1870.

[g] Twenty-sixth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1895, p. 524.

[h] Glove Workers' Journal, April, 1900, p. 43.

gloves in this country the work was divided and the sewing given out to women who worked at home. The cutting was generally done by men[a] in shops and later in factories, and then the materials were distributed by the manufacturers to the women of the surrounding region, to be collected again after they had sewed together the various parts. This division of labor was early established, and was not materially altered by the introduction of the machine and later of the factory system with machines driven by steam power.

At first, of course, the sewing was done by hand, but in 1853 the sewing machine was introduced into the glove manufacture.[b] The first machines used were heavy and cumbersome, but in 1856 a machine was introduced to make some grades of light work throughout, and soon afterwards the sewing machine became domesticated and the work was carried on by the women in their homes as before. There was, however, one exception. The wax-thread machine has never been, to any considerable extent, operated by women—and has been essentially a factory machine. Gradually, too, the factory system has encroached upon home work in the glove-making industry. But even yet, the sewing of gloves is, in the great glove-making centers of Gloversville and Johnstown, N. Y., to a certain extent home work. Many of the large factories there have delivery teams to distribute and collect the materials.

The economy of minute subdivision of labor, especially in high-priced work, has, however, caused the growth of the factory system at the expense of the domestic system. The introduction of steam power for running machines, which occurred about 1876,[c] has also assisted the growth of the factory system. In the factories the cutting and preparation of the skin is done by men, and men generally operate the heavy machines for wax-thread work and pairing, and usually turn the gloves. The rest of the work, divided minutely into special operations, has long been done, without much change of conditions, by women. In some localities, as at Gloversville, these women, even when working in factories, have always been required to own their machines and rent power of the manufacturers—a survival of the domestic system. In other places, however, as in Chicago, where the union is strong, this custom has been abolished.

Glove making has always been piecework and, though the industry is comparatively backward in its development, conditions have been very similar to those of the early years of the boot and shoe making industry.

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[a] The first manufacturer of gloves in commercial quantities in Johnstown is said, however, to have employed farmers' daughters to sew the gloves at their store and then to have distributed them to the farmers' wives to be sewed.

[b] Twelfth Census, 1900, Manufactures, Part II, Selected Industries, p. 703.

[c] Ibid., p. 702; see also pp. 709 and 710.

BOOT AND SHOE MAKING.

PERIOD OF HOME WORK.

It was division of labor which first brought women into the boot and shoe making industry. The introduction of machinery, indeed, later drove large numbers of them out of the business for a time. Types of machinery were soon evolved, however, which made again profitable a division of labor which could utilize the labor of women, and their restoration to the industry followed.

About 1795 or earlier, side by side with the development of the wholesale trade in boots and shoes, shoemakers or cordwainers, as they were called, began to hire their fellows and to gather them into shops where a rough division of labor was practiced. Soon afterwards they began to send the uppers out to women to be stitched and bound. From that time until the introduction of the sewing machine the binding of shoes manufactured for the wholesale market was practically a woman's industry, carried on at home. Localities differed largely, however, in the extent of the employment of women. In Massachusetts the shoe binders appear to have been exclusively women as early as 1810, but in Philadelphia, which was also a large shoe-manufacturing center, the trade remained in the hands of men until much later. A writer in the Philadelphia Mechanics' Free Press in 1829 spoke of the employment of women in shoe making as "derogatory to their sex."[a]

In general, however, by 1830, and in many localities earlier, the manufacture of shoes was divided into two parts—the work of the men in small shops and the work of the women in their homes. By 1837 the shoe binders of Lynn not only bound the edging but did all the inside and lighter kinds of sewing.[b]

There were, however, two more or less roughly marked stages in women's work at shoe binding. In the first stage the family was the industrial unit, the man shoemaker being assisted by his wife and daughters in the part of the work which they could easily perform—the sewing. Even when the shoemaker worked for a "boss," he brought home his materials and turned over the work of binding to the women of the family. Gradually, however, as the business developed, it became customary for the "boss" himself to give out the shoes to be bound directly to the women. The division of labor remained the same, but it was no longer controlled by the shoemaker, but by the "boss." The woman, too, instead of having their work and pay lumped with that of the head of the family—instead of being merely helpers without economic standing—now dealt directly with the employer and definitely entered the industrial field.

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[a] Mechanics' Free Press, August 8, 1829.

[b] Lynn Record, September 16, 1837.

In 1810 the total annual earnings of the female shoe binders of Lynn are said to have reached $60,000.[a] Twenty years later, however, their total earnings were given as only $60,000 annually.[b]

As for the number and proportion of women employed in the industry in these early years,[c] the first trustworthy figures are for Massachusetts in 1837, when 33,702 "male hands" and 15,360, or nearly 40 per cent, "female hands" were reported to be engaged in the manufacture of boots and shoes in that State.[d] But in Lynn, as early as 1828, there are said to have been employed in binding and trimming shoes some 1,500 women, approximately as many women as men being engaged in the business.[e] And during 1831 there were said to have been employed in the manufacture of shoes in Lynn 1,741 males and 1,775 females, at an average wage for both sexes of 41 cents per day. The large proportion of females employed was accounted for by the fact that no boots except for ladies and children were manufactured at Lynn.[f]

It must be remembered, in considering these early statistics, that the women employed in binding shoes worked irregularly in the intervals of their household duties and that, as a result, a larger proportion of women to men workers was required, and their actual rate of wages was correspondingly higher than their earnings. Nearly all of the working women in Lynn at this time were shoe binders. In 1834 the shoebinding business there was said to have "nullified almost every other species of female labor," and it was complained that "it is quite out of the question nowadays for any of the females to live out to do housework."[g]

At Brockton, and other places where men's boots and shoes were made, moreover, women were early taught the art of pegging and were employed in considerable numbers in this work.[h] Even after

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[a] Newhall, Centennial Memorial of Lynn, p. 62.

[b] Mechanics' Free Press, Lynn, March 18, 1830; Niles' Register, June 18, 1831.

[c] According to the figures given in the unsatisfactory manufacturing census of 1820 there were engaged in the manufacture of boots and shoes in the entire United States 937 men, 180 "boys and girls," and 105 women, or about 9 per cent women. (American State Papers, Finance, Vol. IV, pp. 20, 220, 981–987.) It is probable that the women shoe binders working at home were omitted.

[d] Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending April 1, 1837, p. 109 et seq.

[e] Lewis, History of Lynn, pp. 203, 204.

[f] Pinkham's American Daily Advertiser, February 28, 1832. According to the reports given in the documents relative to the manufactures in the United States, Executive Documents, Twenty-second Congress, first session, Vol. I, pp. 224–230, there were 1,444 men, 313 boys under 16 years of age, and 1,500 women and girls engaged in the manufacture of shoes in Lynn, in 1831. At Haverhill in the same year 302 men, 128 boys under 16 years of age, and 240 women were reported to be engaged in the manufacture of boots and shoes. (Idem, pp. 230, 234.)

[g] Essex Tribune, Lynn (Mass.), January 4, 1834.

[h] Kingman, History of Brockton, p. 602.

shoe-pegging machines were introduced girls operated the smaller machines which did the fine work.[a]

The bootmaking industry in New York in 1845 was described as divided into three branches—crimping, fitting, and bottoming. Of these, fitting, which consisted of sewing the boot legs together, putting in the lining and straps, and generally making the boots ready for bottoming, was generally done by women and children at home, though in some establishments it was said to have been "exclusively attended to by males."[b]

Women's wages in the boot and shoe industry during this domestic period of labor were much lower in the cities than in the small shoe-manufacturing towns like Lynn. According to the Rev. Ezra Stiles Ely, the wages of women shoe binders in New York and Philadelphia in 1830 were inadequate for their support.[c] And in 1836 the wages of women shoe binders in New York were said to have been, when they were paid the price promised, about 48 cents a day, out of which they were obliged to find silk, thread, and needles, leaving a balance of about 44 cents a day. But many employers, instead of paying 6 shillings[d] a dozen as promised, paid but 72 cents, "thus plainly pocketing 4 cents on a dollar of that which honestly belonged to the binder."[e] And in 1853 the binding of children's shoes in New York is said to have been paid for at the rate of two pairs for 3 cents or 18 cents a dozen pairs, and full-size shoes at the rate of 6 cents a pair or 4 shillings 6 pence a dozen. Working from 14 to 17 hours a day, an expert hand could not $2.40 per week. From this amount the cost of light and fuel was to be deducted. This was said, however, to be higher than the average price paid hundreds of girls and women in New York.[f] A little later it was added that, though the average wages of boot and shoe binders in New York were higher than of tailoresses, there were many who could not earn over $1.50 per week.[g]

At Lynn, however, the wages of women shoe binders were at first comparatively high. In his Sketches of Lynn[h] Mr. Johnson says that when the "gaiter boot" first came into fashion the price of binding ranged from 17 to 25 cents a pair and "a smart woman could bind four pairs a day, and sometimes even more." In 1833, how-

[a] Workingman's Advocate, December 4, 1830.

[b] New York Daily Tribune, September 5, 1845.

[c] Delaware Free Press, February 27, 1830. Quoted by Mathew Carey in his letter "To the Printer of the Delaware Advertiser."

[d] A shilling in New York at that time was equal to 12½ cents.

[e] The Man, June 10, 1836. See History of Women in Trade Unions, Volume X of this report, p. 44, for an account of a strike for 3 shillings a dozen for binding "southern slippers," and "other work in proportion."

[f] New York Daily Tribune, May 27, 1853.

[g] Idem, June 8, 1853.

[h] Johnson, Sketches of Lynn, or the Changes of Fifty Years, p. 138.

over, the wages of the Lynn shoe binders were being reduced, and early in the next year this fact was the cause of a strike.[a] One of the chief grounds of complaint, moreover, appears to have been that they were not paid in "ready money" but in orders on dry goods stores.[b] In 1837 and 1838, however, the wages of women shoe binders in Massachusetts are reported to have been from $2.50 to $3.50 per week.[c]

In 1842, when of the 40,000 women employed in manufacturing industries in Massachusetts, 15,000 were said to be engaged in the manufacture of shoes, the hardship to these women if wages were reduced or if they were thrown out of employment was used by the manufacturers as one of the arguments for a tariff on shoes and leather goods. "They cannot subsist," said the manufacturers, "if compelled to work in competition with the laboring females of Europe, who receive from 4 to 6 cents per day for their services. Men, when driven from one employment, may seek it in another; and if work can not be had at home, they may go abroad. If it can not be obtained on the land, it may be found on the sea. But it is not so with women. They are far more dependent and helpless; and when thrown out of employment, are involved in inevitable distress and suffering."[d]

THE FACTORY SYSTEM.

With the introduction of the sewing machine soon after 1850,[e] there began a new era—a revolution in the shoemaking business. Previously the only semblance of a factory in the industry was the shop of the "manufacturer" where the material was cut, and from which it was distributed to the shoemakers and binders. As late, moreover, as 1856 an article appeared in a Boston paper which said that the factory system was not needed in the manufacture of boots and shoes, and described the plan under which the work was even then extensively carried on. The leather, it was said, was cut in central establishments, and then distributed to the shoemakers who carried it home, sometimes many miles, to be made up. Thus the business was widely distributed.[f]

Even the advent of the sewing machine failed to do away entirely with home work. For, as the machines became a demonstrated suc-

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[a] Lynn Record, January 1, 1834.

[b] Boston Tribune, January 6, 1834.

[c] Sixteenth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1885, pp. 270, 272.

[d] Proceedings of the Convention of the Manufacturers, Dealers, and Operatives in the Shoe and Leather Trade in the State of Massachusetts, March 2, 1842, pp. 70, 71.

[e] The first machine used in Lynn was introduced in 1852, and an expert came from Philadelphia to instruct the first operator, who was a woman. (Johnson, Sketches of Lynn, p. 104.)

[f] Klingman, History of Braintree, p. 338.

own, they were simplified and reduced in price until they found their way into the household, so that, on certain kinds of goods, the old custom of home work continued on side by side with the new factory labor of women shoe binders. In 1858 boot and shoe making was said to be still mainly a home industry in Philadelphia, employing about 5,000 men and 2,000 women—the latter, who were not "fully employed," at an average wage of about $100 a year. "Since the introduction of sewing machines," it was said, "the manufacture of gaiter uppers has become a distinct branch, and gives employment to hundreds of females."[a]

The introduction of the sewing machine, however, between 1855 and 1865, caused an almost complete transformation in the boot and shoe making industry. Small "stitching shops" equipped with the new machines were at first opened. In Lynn these shops were sometimes small buildings standing by themselves, but more frequently the manufacturers fitted up rooms in the buildings where the men worked.[b] In 1864, the Lynn (Mass.) Reporter[c] called attention to "the quiet, steady revolution that is going on in the business of shoemaking, and particularly as that business is conducted in Lynn. Previous to the introduction of the original sewing-machines," it said, "which are now universally used for the binding and stitching of the uppers, but little or no improvement or even change had been made in the manufacture of shoes. * * * After a time women's nimble fingers were found inadequate to the demand, and sewing machines soon transformed the old-fashioned 'shoe binder' into a new and more expansive class of 'machine girls' whose capacity for labor was only limited by the capabilities of the machines over which they presided. * * * This was the beginning of the new era." The same article spoke of the rapid progress in the introduction of machinery that had been made within the past year or two, which had made it almost possible to say that hand work had already become the exception and machine work the rule.

The women did not, however, after the introduction of the factory system, succeed in retaining their work as completely as they had done in the textile industries. The machines were heavy and difficult to operate, especially the waxed thread sewing machine which was introduced about 1857,[d] and, as a result, were largely operated by men.

The first result of the introduction of machinery in boot and shoe making was, therefore, a decided falling off in the proportion of women employed. In 1850, in the manufacture of boots and shoes, 21.3 per cent of the employees, in 1860 only 27.2 per cent of the

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[a] Woodley, Philadelphia and Its Manufactures, 1858, p. 185.

[b] Johnson, Shoemaking Lynn, or the Changes of Fifty Years, p. 340.

[c] Quoted in Fincher's Trades' Review, March 26, 1864.

[d] See Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 790.

employees, and in 1870 only 14.1 per cent of the employees were women. By 1900, however, the proportion of women had risen to 33.0 per cent, higher than in 1850, when all "female hands," regardless of age, were included.[a] In 1905, moreover, the proportion of women was a little over 33 per cent.

The decrease in the proportion of women to men engaged in the industry should not, however, be attributed wholly to the displacement of women by men in stitching. Women still to a considerable extent were shoe binders. But the first machines used in the industry were for use exclusively upon the woman's part of the work. It was not until 1860 that the McKay machine caused as great a revolution in the work of the shoemaker as the stitching machine had caused in the work of the binder. The productive power of the binder, therefore, was for a time increased out of all proportion, as previously measured, to the productive power of the shoemaker, who was meanwhile aided only by minor improvements. The number of hands required in binding was accordingly decreased in proportion to the number required in other parts of the work. Similar readjustments have necessarily occurred in many other industries, but few have been made so conspicuous by the division of labor between the sexes.

It must be borne in mind, moreover, in considering these figures, that before the introduction of the factory system, which immediately followed that of the sewing machine, the women in the industry were home workers and few of them gave their entire time to binding shoes. A larger number, therefore, were required to accomplish a given amount of work than would have been needed under the factory system, even without the aid of machines.

As for the restoration of women to their former position of importance in the industry, it has been occasioned by three factors—improvements in machinery, which have reduced the amount of muscular strength required; the use of water and steam power, which became general between 1860 and 1870; and the further subdivision of labor. Within recent years women have taken the places of men in operating the lighter machines, while children now perform the work that women were doing heretofore.[b] Subdivision of labor, however, as, for example, the splitting up of the process of "heeling" into "nailing," "shaving," "blocking," and "polishing," has tended continually to introduce less skilled labor—first of women and then of children.

Another result of the introduction of machinery was, of course, the reduction of the piece rate of wages. In 1862 an "intelligent

[a] See Table XI, p. 203.

[b] Twelfth Census, 1900, Manufactures, Part III, Selected Industries, pp. 741, 742. See also, in this connection, Thirteenth Annual Report of the United States Commissioner of Labor, Hand and Machine Labor, 1898, Vol. I, p. 123.

shoe binder" informed Miss Virginia Penny that she did work then for 37 cents for which she had formerly received 75 cents.[a] The actual earnings of women who worked at home on boots and shoes were probably, indeed, even lower after the introduction of the sewing machine than they had been before, owing to competition and consequent unemployment. Miss Aurora Phelps stated before a meeting of working women in Boston in 1869 that, though the one thousand girls working at shoes in that city could, at the current rates, make $1 to $1.25 a day, they had to spend so much time waiting for work that they actually made only from 20 to 30 cents a day.[b] Later she stated that there were women in some shoe manufacturing towns who had to work at rates not exceeding 25 cents a day.[c]

Women home workers in the boot and shoe industry were subject, moreover, not merely to the low wages, but to other evil conditions common to the home workers in the clothing industries. In 1860, for example, a woman employed in Boston to make rosettes for shoes at 1 cent each, and who found it impossible to make over 40 in a day, complained that when they were done the commission merchant for whom she worked refused to pay for them. She added that she knew of three other good seamstresses whom he had refused to pay for the same work.[d] In 1865, too, the subcontract system was introduced among the women who worked on ladies' slippers in Haverhill. One woman under this system would take out all the work and hire girls to make the shoes.[e] This appears to have been part of the movement toward the "gang system" of labor, which was at that time gaining the ascendancy throughout the whole shoe manufacturing business.

In the factories, however, both wages and conditions were better. In 1869, for instance, it was said that the Daughters of St. Crispin in Lynn earned from $10 to $18 per week.[f] And two years later the women shoe fitters of New York, of whom there were reported to be about 1,500, earned from $10 to $18 and even $22 a week.[g] In Brooklyn, too, where it was said that the fitting shops were conducted entirely by women, who did the principal part of all the fine work on ladies', misses', and children's shoes that were made in New York and Brooklyn, the average wages of the stitchers were given as $10 per week.[h] But in Lynn in 1876 it was complained that reduc-

[a] Penny, Think and Act, 1867, p. 33.
[b] Workingman's Advocate, May 8, 1869.
[c] American Workman, May 29, 1869.
[d] Daily Evening Voice, February 10, 1860.
[e] Idem, March 1, 1865.
[f] American Workman, May 15, 1869.
[g] Idem, February 11, 1871. Quoted from the New York Star.
[h] Idem, July 8, 1871.

tions had been made in the wages of stitchers which made it "impossible for them to earn a living." [a]

In general, it may be said that the boot and shoe industry is the only one of the more important clothing industries in which an industrial cycle has been completed and the women workers have been definitely transferred from the home to the factory. Home work is usually, under modern conditions, the lowest round in woman's industrial ladder, and boot and shoe making under the factory system, though probably not superior as an occupation for women to boot and shoe making under the domestic system as practiced in the smaller shoe towns in the first half of the nineteenth century, is certainly superior to the same industry as practiced in the cities during the same period. As an occupation for women, boot and shoe binding has been rescued by machinery and the factory system from the degradation of the other sewing trades and has been placed upon a level with the textile industries. Wages, indeed, in boot and shoe factories, have been higher, upon the whole, than in cotton mills, and the competition of the foreign born has not been so great as in the textile industries.

[a] Workingman's Advocate, April 22, 1876. Quoted from the Lynn Record. The women shoe binders occasionally went on strike to resist reductions in wages, as, for example, in Rochester, N. Y., in 1866 (Boston Weekly Voice, May 31, 1868) and in Stoneham and Lynn, Mass., in 1872 (Third Annual Report of the Massachusetts Bureau of Statistics of Labor, 1872, pp. 434–437). For other figures relating to the wages of women in the boot and shoe industry, see the twenty-sixth, twenty-seventh, twenty-eighth, and twenty-ninth annual reports of the Massachusetts Bureau of Statistics of Labor and the Nineteenth Annual Report of the United States Commissioner of Labor, 1904.

CHAPTER IV.

DOMESTIC AND PERSONAL SERVICE.

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DOMESTIC AND PERSONAL SERVICE.

The occupations included under the term "domestic and personal service," though not properly industrial in character, have been of such importance as gainful pursuits for women, and have served so constantly as complementary to the industrial employments, that they deserve consideration in any history of women in industry. Women were probably "hired out" before they engaged in any handicraft, even the manufacture of textiles and clothing, for consumption outside of the family; that is, for pay. From the beginning of history, too, the opportunity to "hire out" has continually confronted the working woman and continually she has been admonished, when she complained that her conditions of work were hard and her pay inadequate, to betake herself to the kitchen, where the need for labor has always been loudly proclaimed. It is, then, of interest to trace, at least roughly, the history of women in domestic and personal service in order to see, if possible, how this group of open occupations has influenced her employment in the industrial field.

In the first place, it is interesting to observe that the group of occupations included in the census under "domestic and personal service" has materially decreased in importance so far as the employment of women is concerned since 1870, when the first statistics upon the subject were collected. In 1870, according to Table XII (page 254), women constituted 41.8 per cent, and in 1900 only 35 per cent of all the persons engaged in domestic and personal service.

SERVANTS AND WAITRESSES.

Few changes have been made in domestic service as an occupation for women. The great mass of servants and waiters have always been and still are women. Of the applicants for employment to the Society for the Encouragement of Faithful Domestic Servants in New York between 1826 and 1829, 1,050 were white males, 661 colored males, 7,630 white females, and 916 colored females.[a] About 82 per cent, then, were females. Though changes in classification have seriously affected the census figures on this point, Table XII shows that within

[a] Poulson's American Daily Advertiser, May 23, 1829.

recent years there has been a tendency for the proportion of women servants and waitresses to the total number of persons engaged in these occupations to decrease. The occupations of servants and waitresses have also tended to become of diminishing importance to women as compared with other pursuits. Table VI (page 247) shows that, while in 1890, 30.9 per cent of all the female breadwinners 15 years of age and over were servants and waitresses, in 1900 the percentage was only 24.2. Nevertheless, the fact that nearly one-fourth of all the women workers belonged, even in 1900, to this group of occupations, shows its great numerical importance.

The nationality of domestic servants, it is true, has changed considerably. It is probable, however, that new immigrants have always furnished the largest proportion of servants. At first, the great mass of these immigrants were English and Scotch, then Irish, later Germans, and still later Scandinavians. Between 1826 and 1830, of the applicants for employment to the New York Society for the Encouragement of Faithful Domestics, 3,601 were Americans, 8,348 Irish, 942 English, 2,674 colored, and 377 foreigners from various countries.[a] Nevertheless, one newspaper about 1830 remarked that "there is no class of persons in such demand in this country as good cooks, waiters, and chambermaids" and regretted that "among the motley emigration from Europe * * * there are not more servants well instructed." "Their wages," it added, "in New York, Boston, and Philadelphia, is at least double what they could obtain in any part of England, and four times the wages given in Scotland or Ireland."[b] In 1845, again, the New York Tribune estimated that of the 10,000 to 12,000 girls and women engaged in various forms of domestic labor in that city from 7,000 to 8,000 were Irish, about 2,000 German, and the rest American, French, etc.[c] It is evident that the great preponderance of foreigners in domestic service within recent years is no new phenomenon.

The conditions of labor of domestic servants have changed but little. In colonial days, it is true, girls were frequently apprenticed, until of age or married, to domestic service. Usually the indenture in such cases was silent upon the subjects who was to be taught, but occasionally it was specified that she should be taught "the trade, art, or mystery of spinning woolen and linen," and sometimes knitting and sewing. This indicates probably the greatest change which has occurred in the character of work performed by women servants. Their duties have become less of a manufacturing character and more purely personal. In colonial times a servant who was a good spinner

[a] Derived from figures given in Paulding's American Daily Advertiser, May 23, 1826, and the New York Mercury, May 18, 1830.

[b] Niles's Select Excerpts, vol. 1, p. 335.

[c] New York Daily Tribune, November 6, 1845.

was greatly prized and paid comparatively high wages, and a large part of the time of domestic servants was spent in manufacturing occupations of one kind or another. Gradually even sewing has been, in the great majority of cases, dropped from the list of duties of the domestic servant, and baking is now in a large and increasing proportion of families turned over to the professional baker. Such industries, too, as the manufacture of soap and the brewing of liquors have gradually been dropped from the duties of the domestic servant. The canning and preserving of fruits, vegetables, meat, and fish, too, are rapidly falling out of the range of domestic service.

Meanwhile, though there are no statistics to measure the change, it is probable that an increasingly large proportion of the women classified as "servants and waitresses" have been employed in the latter capacity under conditions quite different from those of the domestic servant. The waitress usually has fixed hours of labor and frequently, if not usually, rents her own room and goes out to her work just as does the saleswoman or clerk.[a]

The wages of domestic servants have increased in proportion to the increase of the opportunities opened to women for employment in other occupations. In 1820 a writer in the Mechanics' Free Press stated that for a period of at least thirty years the wages of female domestics had remained practically stationary, but that they had profited somewhat by the fall in prices which occurred during that period.[b] In New England, however, the opening of the cotton factories, especially those at Lowell, had caused a decided increase in the wages of women domestics. Wages in New England, which had averaged about 70 cents a week in 1808 and 80 cents in 1815,[c] ranged from $1.25 to $1.50 a week in 1840.[d] In New York the usual wages, which appear to have been between $4 and $5 a month in 1820,[e] were said to have been about $6 a month in 1835.[f] In Pottsville, Pa., the wages of servant girls in 1830 were $1 a week, and women who could

[a] In New York City in 1851 there were said to be a number of places where girls tended bars. (Burns, Life in New York, 1851.) And in 1866 waitresses in saloons in New York are said to have received $8 a week and what they could make, amounting in all to between $10 and $20 a week. (The Revolution, Oct. 8, 1868.) Negro women, probably, are now employed as waitresses in saloons more than in the earlier years.

[b] Mechanics' Free Press, October 17 and November 7, 1829.

[c] Niles' Register, Annual Report of the Massachusetts Bureau of Statistics of Labor, 1886, pp. 228, 229. In 1840, however, a writer in the Boston Workingman's Advocate, who signed herself "A Working Woman," complained that domestic servants were obliged to spend all their wages on clothing because "if a girl goes to a place but scantily furnished with clothes and those mean, she is regarded as an object for suspicion to point the finger at." (Quoted in the Mechanics' Free Press, Sept. 12, 1840.)

[d] Allen, Labor and Wages, p. 92.

[e] Workingman's Advocate, January 9, 1830. Quoted from the Christian Register, May 9, 1829.

[f] The Sun, June 24, 1835.

clean house and wash clothes could readily obtain 50 cents a day.[a] A writer in the Delaware Advertiser in 1830 stated that a servant in his family received 75 cents a week, or $39 a year, which, he said, was almost the lowest wages ever paid for housework.[b] Domestic servants, he added, were scarce.

On the other hand, it appears from the testimony of competent persons that in New York, at least, the supply of domestic servants about this time was actually greater than the demand. In the "Address to the Public," issued by the Philadelphia Society for the Encouragement of Faithful Domestic Servants at the time of its organization, and signed by Mathew Carey and seven others, it was naively said of the New York society: "But it appears that the society has so much improved the standing of this class that domestics with good characters (no others are allowed to be registered on the books) are more numerous than the demand for them requires; as it appears there were above 1,300 more applications of domestics than for them in the year 1828–29."[c] And in 1846 Horace Greeley stated in an editorial in the New York Tribune that household service in New York was nearly as much overdone as other lines of women's work. He estimated that not less than a thousand women willing to do housework were looking for places in that city. At the same time he acknowledged that American girls were unwilling to engage in domestic service, but thought them justified. "Yet when Yankee girls," he said, "unanimously prefer to encounter the stunning din, the imperfect ventilation, monotonous labor, and excessive hours of a cotton factory in preference to doing housework, he sees the latter is not yet what it should be."[d]

Whether or not there was a scarcity of domestic servants, their wages rose. In 1845 the wages of domestic servants in New York were said to be from $4 to $10 per month,[e] and in 1871 from $10 to $14.[f] In the latter year hotel chambermaids in New York, of whom there were said to be about 1,600, earned from $9 to $11; hotel waitresses, of whom there were about 1,000, from $11 to $16; and hotel cooks, of whom there were about 3,000, from $12 to $50 per month and board.[g]

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[a] United States Gazette, August 16, 1830.

[b] Quoted in Delaware Free Press, February 27, 1830.

[c] Poulson's American Daily Advertiser, May 21, 1829.

[d] New York Weekly Tribune, September 19, 1846.

[e] Idem, November 8, 1845.

[f] American Workman, February 11, 1871. Quoted from the New York Star.

[g] Idem. In 1853 the waiters at the Metropolitan House in New York City went on strike for $16 per month instead of $10, which they had been receiving. The proprietor promised to pay the advance "to all of them that remained after the 1st of May." But on that day they were all dismissed, and their places taken by "12 young girls, neatly attired," who "went through with their duties in a manner highly pleasing to the numerous guests of the house." (New York Daily Tribune, May 3, 1853.)

The domestic-servant problem, like many other labor problems, is not as new as is often supposed. Some eighty years ago societies were formed in New York, Philadelphia, and Boston "for the encouragement of faithful domestic servants."[a] The work of these societies was of two kinds, the provision of an employment office for domestic servants, and the awarding of prizes to servants who remained the longest time in one situation. The New York society, which was organized in 1826, gave at the end of the first year a Bible, at the end of the second $2, and a dollar additional for each succeeding year until the seventh, when the sum was raised to $10. The employers had the privilege of entering servants' names for these prizes.[b] The employment office of the society sent servants only to subscribers, and received applications only from servants who could produce satisfactory recommendations.

The unrepublican attitude of these "societies for the encouragement of faithful domestic servants" caused, naturally, considerable criticism. A writer in the Christian Inquirer of May 6, 1826, speaking of the New York society's "friendly advice to servants," issued apparently on the occasion of its first anniversary, remarked that "the advice seems better calculated for the meridian of London than that of New York." "The society," he said, "appear to think that there is a certain species of mankind, born for the use of the remainder; and they talk of improving them as they would a breed of horned cattle." He noted, with unfavorable comments, the following pieces of advice:

Never quit a place, on your own account, except on such occasions, that in sickness, or death, you think you did right.

Be moderate in your wages; many very good places are lost by asking too much.

If you can not pray as well as you would, be sure every night and morning to do it as well as you can.

Rise early, and your services will give more satisfaction.

Be modest and quiet, and not talkative and presuming.

Don't spend any part of the Sabbath in idleness, or walking about for pleasure.

Watch against daintiness.

Be always employed, for Satan finds some mischief still for idle hands to do.

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[a] The Philadelphia society was organized in 1828 and issued monthly reports as late as 1832 (Poulson's American Daily Advertiser, Apr. 7, 1832). Other employment offices existed at this time, but they were apparently no more formally conducted than those of the present day, and complaint was often made of them. It was even said that girls were sometimes sent from them to houses of ill fame. (Mechanics' Free Press, Feb. 22, 1829, "The Night Hawk," and Idem., June 6, 1830, "The Night Hawk.")

[b] Second Annual Report of the Managers of the Society for the Encouragement of Faithful Domestic Servants in New York, pp. 1, 2.

[c] Quoted in Workingman's Advocate, January 9, 1830.

Keep your temper and tongue under government; never give your employer a sharp answer, nor be in haste to excuse yourself.
Leave every place respectfully; it is your duty.

The "friendly advice," he said, also recommended certain passages from the Bible, exhorting servants to be obedient to their masters, and he gave the quotations. "All the foregoing passages," he added, "are evidently addressed to slaves, bondmen, and women, as Paul says, servants under the yoke." There seems, indeed, to have been ground for his assertion that the duties inculcated in the "friendly advice" were "too much on one side, tending more to the advantage of the hirer than the hired."[a] At the time of the formation of the Philadelphia society a writer in the Mechanics' Free Press gently suggested that a society to encourage "faithful employers" would be more likely to attain the desired end. "There is quite as much propriety," he said, "that those who employ should produce certificates of capacity, correctness, etc., as those who are employed. * * * From an experience of near 20 years as an employer, I am led to conclude there is in this country less to be complained of on the part of the employer than the employed."[b]

Complaint, however, was frequently made that, while the women were bemoaning their poor wages in other occupations, they refused to become domestic servants. "The fact," said the Boston Post in 1847, "about the low wages of females in Boston is all gammon. Girls can have good wages if they will labor—it is next to impossible to hire competent and faithful females to do household work here at any wages, and if, by chance, you obtain one of this description, who is so indifferent about performing her duties in a manner agreeable to the wishes of her employer, and so unreasonable in her requirements and arbitrary in defining her own particular line of work, that it is impossible to submit to her exactions long."[c]

In 1867 even the New York Working Women's Protective Union urged girls to "forsake unremunerative employments and accept positions in families," and boasted that upward of 50 had been induced to take this course.[d] That more did not do so was attributed by the New York Times to the "false pride which will not permit them to serve a mistress, but keeps them slaves to mantuas."[e] In 1870, too, the "Montana Immigrant Association" was urging the unemployed women of the cities to go West, where good housekeepers could command $75 to $100, and kitchen help from $50 to $75 a month.[f]

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[a] Quoted in Workingman's Advocate, January 6, 1830.
[b] Mechanics' Free Press, January 8, 1830.
[c] Quoted in the Harbinger, April 10, 1847.
[d] Daily Evening Voice, March 2, 1867. From Fourth Annual Report of the New York Working Women's Protective Union.
[e] Quoted in the Revolution, July 23, 1868.
[f] The Revolution, June 9, 1870.

It has already been seen that a number of writers, including Samuel Whitcomb and Horace Greeley, considered the position of a domestic servant unenviable. In 1869, too, the same complaints that are heard to-day were made of domestic service as an occupation for women. The girls, it was said, had no time to call their own, and were obliged to work 7 days a week and from 12 to 15 hours a day on the average. The kitchens were dark and unventilated and the servants' sleeping rooms cheerless, etc.[a] And in 1870, when the Boston Working Women's Association took up for discussion the subject of domestic service, it was concluded that the lack of social position and independence was at the root of the problem. "When work in the kitchen was made as honorable as music teaching," asserted one speaker, "and the domestic treated as respectfully as the music teacher, there would be no lack of girls who would go to service." Miss Jennie Collins complained that "if a girl goes into the kitchen she is sneered at and called the Bridget; but if she goes behind the counter she is escorted by gentlemen to the theater, dined, and called a lady." "The reason girls don't live in private families," she said, "is because they lose their independence there. They can't go out and buy a spool of thread until their appointed afternoon or evening comes around for it. When mistresses learn to treat their girls as human beings, they can get enough of them."[b]

LAUNDRESSES.

Laundry work, though a declining occupation for women,[c] has always been one of considerable importance. Unfortunately statistics upon the subject date back only to 1870, when steam laundries had already for fifteen or twenty years been in operation. It seems probable, however, that before the advent of the steam laundry and the Chinese laundryman this industry was entirely in the hands of women, and that these two factors have combined to reduce the proportion of women from 91.5 per cent in 1870 to 86.3 per cent in 1900. But, though a slight displacement of women by men has taken place owing to the introduction of laundry machinery, the steam laundry has never more than partially superseded hand work, and in this women have always held their own.

As early as 1851 it was complained that capital had entered into competition with the washerwomen of New York, and that "six hundred arms are eagerly catching at every dirty shirt in the city."[d] Extensive laundries, it was said, had recently been established. "Only

[a] The Revolution, August 12, 1869.
[b] Idem, February 10, 1870.
[c] See Tables VI and XII, pp. 247, 254.
[d] Burns, Life in New York, 1851.

ably these were steam laundries. By 1853, at any rate, steam-laundry machinery was in operation at one of the big New York hotels, and it was said at that time that the plan of cleaning clothes by steam was not new. "One man and three women," said the account, "do all the washing for this hotel, amounting to from 3,000 to 5,000 pieces a day, and their labor is not half as severe as that of a woman who rubs the dirt out of two or three dozen pieces upon her hands or the washboards."[a]

The wages of laundresses, however, have been low. In Philadelphia in 1820 as low as 20 or 25 cents per dozen is said to have been paid women for washing and rough drying.[b] And in 1833 the Rev. Mr. Dupuy, of Philadelphia, wrote Mathew Carey that he knew of a case of a woman who received $16 per quarter for washing, and frequently washed 8 dozen clothes per week, she finding soap, starch, fuel, etc. This was at the rate of about 16 cents per dozen.[c] Laundresses in New York in 1851, however, are said to have received "8 shillings a dozen with buttons replaced,"[d] and in 1866 the washerwomen of Brooklyn went on strike, according to a contemporary labor paper, for $1.25 instead of $1 per day.[e] In Boston in 1860, moreover, washerwomen were receiving 15 cents an hour.[f] In the same year the laundresses of San Francisco, who were said two years earlier to have received from $30 to $40 per month,[g] began to protest against the competition of the Chinese.[h]

The wages of women workers in steam laundries have generally been lower and their conditions of labor much worse than those of independent laundresses, for the work in steam laundries is more monotonous and consequently more exhausting and the hours are usually longer. During the sixties, however, the laundry workers of Troy, N. Y., are said to have raised their wages from $2 or $3 to $5 and $14 a week. Their hours appear to have been, throughout the period, 12 or 14 a day.[i]

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[a] The Day, Providence, R. I., August 1, 1853.

[b] Carey's Miscellaneous Essays, p. 366. "Report on Female Wages," March 25, 1820.

[c] Carey, Appeal to the Wealthy of the Land, third edition, p. 4.

[d] Burns, Life in New York, 1851.

[e] Boston Weekly Voice, September 20, 1866.

[f] American Workman, May 1, 1869. Testimony before legislative committee on hours of labor. According to another statement their wages were 12½ cents an hour and in some cases they washed all day for 50 or 60 cents. (Workingman's Advocate, May 8, 1869.)

[g] Boston Weekly Voice, April 28, 1867.

[h] Workingman's Advocate, November 27, 1869.

[i] The American Workman, August 7, 1869. See also History of Women in Trade Unions, Vol. X of this report, pp. 100, 107.

MISCELLANEOUS OCCUPATIONS IN DOMESTIC AND PERSONAL SERVICE.

Of the history of women's work in the other occupations included under the general term "domestic and personal service" little can be said. Nursing, for which $2 per week was paid in Massachusetts in 1825,[a] and of which a woman nurse complained at a meeting of working women in New York in 1868 that, while she received $1 and $2 a day for her services, men nurses were paid $3 to $6 a day for the same work,[b] has now become a well-paid profession.

A number of other occupations included in this group, such as boarding and lodging house keeping, are practically independent businesses. It is interesting to note, however, that keeping taverns and even shops was one of the earliest women's occupations in this country. The women engaged in other occupations in this group, as in hairdressing, are in part independent entrepreneurs and in part wage-workers.[c]

The women included under "Laborers, not specified," however, are for the most part scrubbing and charwomen, and women who go out by the day for any and every kind of work. These women are usually untrained and unskilled even at needlework—merely day laborers, more or less casual. Many such women were thrown upon their own resources at the time of the Civil War, and one of them, who applied in vain for work to the New York Working Women's Protective Union, finally, said the report of that organization, went out upon the streets to shovel snow, at which she was fairly successful.[d] The wages of these women have always been low. In 1869 the scrubbing and charwomen of Boston were said to receive only from 30 to 40 cents a day.[e] According to another statement, however, many of this class of laborers received 12½ cents an hour,[f] and it is probable that their wages have always been higher, upon the whole, than those of the lowest class of sewing women, while they have doubtless been quite as regularly employed.

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[a] Eleventh Annual Report of the Massachusetts Bureau of Statistics of Labor, 1880, p. 366.

[b] The Revolution, October 1, 1868.

[c] Shirley Dare interviewed one hairdresser in New York in 1870 who received $6.50 a week for 10 hours a day labor. (New York Tribune, Feb. 20, 1870.)

[d] Daily Evening Voice, March 2, 1867. From Fourth Annual Report of the New York Working Woman's Protective Union.

[e] American Workman, May 1, 1869. Testimony of Miss Phelps before legislative committee on hours of labor.

[f] Workingman's Advocate, May 8, 1869.

CHAPTER V.

FOOD AND KINDRED PRODUCTS.

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FOOD AND KINDRED PRODUCTS.

The preparation of food and drink is certainly not a new occupation for women, and there can hardly be here any question of their displacing men. Indeed, in the manufacture of foods and beverages for sale men have displaced women, who produced merely for home consumption. Men rarely, for example, make bread for the use of their own families. They leave that to the women. But most of the bread baked for sale—baker's bread,—is and always has been made by men. The tendency, however, as shown in Table XIII (page 265), is decidedly toward the increased employment of women in the manufacture of "bread and other bakery products," the proportion of women to all employees having increased from 5.6 per cent in 1850 to 17.3 per cent in 1900. This same tendency is even more marked in the entire group of occupations included under "food and kindred products," the proportion of women employees having increased from 3.5 per cent in 1850 to 20.8 per cent in 1900 and to 22.5 per cent in 1905.[a] In the manufacture of "liquors and beverages," too, where the proportion of women is, however, very small, only 1.7 per cent in 1900, there has also been an increase from 0.8 per cent in 1850. There is, then, a tendency for women to resume in the wholesale food manufacture their traditional occupations as food and beverage preparers, an economic function which they have never relinquished in the home, where by far the largest amount of food consumed has doubtless always been prepared. The movement means merely that women are, after some delay and even yet hesitatingly, following another of their traditional occupations out of the home into the shop and factory.

The largest number of women engaged in any single industry of this group is found in the canning and preserving of fruits and vegetables, a business which began upon a considerable scale with the introduction, between 1840 and 1850, of methods of hermetically sealing cans, and was given a great impetus by the California gold fever and the civil war. Women were doubtless employed in this industry, and also in the canning of fish and oysters, from the begin-

[a] Derived from Special Reports of the Census Office, Manufactures, 1905, Part I, p. 28.

ning. In the canning of fruits and vegetables, however, the proportion of women to all employees appears to have slightly decreased since 1870, but to have increased since 1890. The preparation and canning of pickles, preserves, and sauces for sale has been, since early colonial times, a favorite occupation for women—in the early times as an independent undertaking and more recently as wage labor. In this occupation the proportion of women to all employees appears to have increased somewhat since 1850, but to have fallen off in 1870 and 1880.[a] In meat packing a few women were employed in 1850 and 1860 and a much larger number and proportion in 1870, perhaps owing to the addition to the business of can making. Not until after the Chicago strike of 1904 were women employed in the actual handling of the meat—in the sausage department in the Chicago stock yards. This is not their only occupation.

Many of the women employed in the canning industries, and most of those in meat packing, are engaged in tending and feeding the automatic machinery for making cans and in painting, labeling, and wrapping the cans after they are filled. The cans were originally made by tinners and their manufacture was a man's trade. But with the introduction of machinery, which became a factor in the business in the early eighties, women were introduced. Part of the machinery, indeed, appears almost from the first to have been operated by women and gradually, as it has been improved, their employment has increased until now nearly every operation is carried on by a machine tended by a woman.[b] As early as 1889 a large number of girls were employed in the Chicago stock yards in painting and labeling cans. In some establishments they were paid, it was said, $5 a week, but were expected to paint at least 1,500 cans per day of 9 hours. Little girls scoured cans, too, for $3 a week. In other establishments they were paid by the piece, at the rate of 5 cents a hundred cans. Some girls were said to handle as many as 2,500 cans a day, earning $7.50 a week. At Armour's packing house girls were paid from 3 cents to 5 cents per hundred for labeling and japanning cans, earning $3 to $5 a week.[c]

The next largest number of women are employed in the manufacture of confectionery, in which the proportion of women employees has increased enormously, from 19.3 per cent in 1860 to 47.2 per cent in 1900. The percentage, however, was the same in 1860 as in 1850. The increase has therefore all occurred since 1860, and

[a] See Table XIII, p. 266. The fall in 1870 and 1880 is at least in part accounted for by the fact that in 1850 all "females employed," regardless of age, were included.

[b] "The tendency within recent years has been to make the manufacture of cans a distinct industry, but carried on in connection with the actual canning of the foods." (Twelfth Census, 1900, Manufactures, Part III, Selected Industries, p. 454.)

[c] Macfarlane, White Slaves of Free America, 1888, pp. 70, 71.

was greatest between 1880 and 1890.[a] The wages of women in this occupation have always been low and their hours long. "Confectionery girls," said Virginia Penny in 1870, "in some of the best establishments in New York, spend 17, and some even 18 hours, attending to their duties, and receive only $2, and board and washing, $4.50, equal to 2½ cents an hour."[b]

In many of the industries included in this group the displacement of women by men is obvious. In colonial days, for example, brewing was an industry which belonged to the women of the household. In general, families manufactured their own beer, as well as their own bread, and peach brandy was a household manufacture of considerable value. More or less of it was regularly exported.[c] In 1850 only 0.5 per cent and in 1900 only 1.3 per cent of the employees engaged in making malt liquors were women. In cheese, butter, and condensed-milk making, too, men have obviously displaced women. The dairy maid is no longer. From 1870 to 1900 the proportion of women employees in this subgroup of industries decreased from 27.8 per cent to 8.1 per cent.[d] In the roasting and grinding of coffee and spices, however, the proportion of women has increased from 3.1 per cent in 1880 to 44 per cent in 1900.[e]

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[a] See Table XIII, p. 256.

[b] Penny, How Women Can Make Money, 1870, p. xiii. For the wages of women bakers and confectioners from 1871 to 1901 see the Twenty-sixth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1895, pp. 445-447.

[c] Bishop, History of American Manufactures, 1868 edition, Vol. 3, p. 264.

[d] In 1905 the cheese factories of New York, according to the state census returns, employed 718 men and 794 women. (Census of the State of New York for 1905, Albany, 1907.)

[e] See Table XIII, pp. 255, 256, for the statistics of these and other industries included under "food and kindred products" and "liquors and beverages."

CHAPTER VI.

OTHER MANUFACTURING INDUSTRIES.

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OTHER MANUFACTURING INDUSTRIES.

The presence of women workers in the industries already mentioned is not, broadly speaking, evidence of any invasion by them of man's sphere of employment or any restriction by them of men's opportunities. From time immemorial women have been engaged in spinning, weaving, sewing, domestic service, and the preparation of food and drink. The revolution in these occupations has been in the industries themselves, and has consisted primarily in their transfer from the home to the factory, and in the growth of a large scale wholesale manufacture dependent upon commerce and the trade and transportation industries. No such revolution has occurred in domestic and personal service, but the other industries already considered have been transformed, and with this transformation have come great changes in their conditions of labor.

There are, however, still other industries in which the presence of women can not be accounted for upon such a principle of division of labor between the sexes, and the most important of such industries, from the point of view of woman's work, are the subject of this chapter. In any history of industries, regardless of the sex of the employees, the occupations here considered would have to be much more extensively treated, for they employed in 1905 about 77 per cent of all the men engaged in manufacturing industries. Comparatively few women, however, less than 30 per cent of all those engaged in manufacturing industries, were employed in other occupations than the manufacture of textiles, clothing, and food, liquors, and kindred products.

TOBACCO AND CIGAR FACTORY OPERATIVES.

STATISTICS.

Women have always been employed in considerable numbers in the manufacture of tobacco. In 1820, in all the establishments from which returns were received, there were employed 617 men, 167 women, and 580 "boys and girls,"[a] or 11.6 per cent adult

[a] These figures are derived from those given in American State Papers, Finance, Vol. IV, pp. 20-223, and are doubtless based on very incomplete returns. The age division used is not there specified, and no distinction is made between boys and girls.

women. The proportion of women employed has, moreover, steadily increased. Women formed 13.9 per cent in 1850, as against 11.9 per cent in 1820, of all the employees engaged in the manufacture of tobacco; 15.9 per cent in 1860; 16.3 per cent in 1870; 23.4 per cent in 1880; 29.7 per cent in 1890; 37.6 per cent in 1900; and 41.7 per cent in 1905.[a] Within recent years, however, the displacement has been rather of children than of men.

Of the different branches of tobacco manufacture, Table XIV shows that the proportion of women engaged in the manufacture of "tobacco; cigars and cigarettes," has always been considerably smaller than in the manufacture of "tobacco: chewing, smoking, and snuff," and smaller in every year, except 1890, than in "tobacco: stemming and rehandling." The reason for this is that machinery has been employed to a far greater extent in the manufacture of "tobacco: chewing, smoking, and snuff," and has made it possible to employ unskilled labor.[b] Even of the women classified as engaged in the manufacture of cigars, a large number, and perhaps the majority, are employed in the preliminary process of "stripping" the tobacco leaves.

The largest total number of women, however, has recently been employed in the manufacture of "tobacco: cigars and cigarettes" in which in 1860 only 731 women were engaged, as compared with 2,000 women in the manufacture of "tobacco: chewing, smoking, and snuff." By 1870, however, the number of women cigar and cigarette makers had risen to 2,564 as against 4,860 women in the other division; by 1880 to 9,108 as against 10,776 in the other division, and in 1890 it jumped to 24,210, while the number in the other division slightly decreased. Though the proportion of women has, on the whole, increased in every branch of tobacco manufacture, the greatest change has evidently been in the manufacture of cigars and cigarettes.

The change shown by these statistics, however, is not the only one which has taken place. Cigar making was, in the beginning of the industry in this country, carried on by women as a household manufacture. The first domestic cigars are said to have been made in 1801 by a Connecticut woman,[c] and in the early years of the century nearly the whole of the Connecticut tobacco crop was "worked into cigars by the family members of the family of the

[a] See Table XIV, p. 256. It must be remembered that the figures for 1850 and 1860 are for all "female hands" regardless of age, and that those for 1905 (derived from Special Reports of the Census Office, Manufactures, 1905, Part I, p. 58), refer only to establishments conducted under the "factory system."

[b] Jacobstein, "The Tobacco Industry in the United States," Columbia University Studies, vol. 26, No. 3, pp. 140, 141.

[c] Abbott, Women in Industry, p. 199.

grower."[a] The manufacture of cigars by the families of tobacco growers has never, indeed, wholly ceased, at least in Pennsylvania. But these cigars were inferior in quality and finish to the imported and factory-made product, and the manufacture of cigars on farms early gave way before the skill of immigrants who made a better quality of product at less cost in city tenements.

Women, however, long before the introduction of the mold, had, to a certain extent, followed the industry into the factory. As early as 1810 there was an establishment at West Suffield, Conn., which employed 12 or 16 females in making cigars. Later the same establishment employed men also, but at first women only were employed.[b] In 1830, too, a cigar factory at Newburyport, Mass., employed "females only, from 30 to 40, many of them under 15 years of age."[c] And in 1832 there were employed in 11 tobacco and cigar factories in Massachusetts 238 women, 56 men, and 9 children.[d] In 1835, too, the women cigar makers employed in Philadelphia were invited to go on strike with the men and the latter stated that "the present low wages hitherto received by the females engaged in cigar making is far below a fair compensation for the labor rendered."[e] It was estimated in 1850 that one-third of the persons employed at the trade in Connecticut were women,[f] and a decade earlier there was said to have been a cigar factory in Cuba which employed 10,000 girls, all Indians and Malays.[g]

During the last half of the nineteenth century the proportion of women to the total number of employees engaged in the manufacture of "tobacco: cigars and cigarettes" increased rapidly. In 1860 they constituted only 9.1 per cent and in 1870 only 10.7 per cent of the total number of employees. Between 1870 and 1880 began the great increase, which has continued until, in 1905, 42.2 per cent of all the employees in the industry were women.[h] Although no uncertain number of these women were employed as strippers, it is evident that women have displaced men as cigar makers, just as men earlier displaced women.

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[a] Trumbull, Memorial History of Hartford County, Connecticut, Vol. I, p. 718.

[b] Idem, pp. 219, 220.

[c] Mechanics' Press, Utica, March 20, 1830. Quoted from the Newburyport Herald.

[d] Documents Relative to the Manufactures in the United States, Executive Documents, Twenty-second Congress, first session, Vol. I, pp. 391, 394, 397, 401, 407, 423, 441.

[e] Proceedings of the Convention and Citizens of Philadelphia on the Reduction of the Hours of Labor and Increase of Wages, Boston, 1835, p. 9.

[f] United States Tobacco Journal, 1900, special century edition, p. 31.

[g] Voice of Industry, September 11, 1845.

[h] See Table XIV, p. 260. The figures for 1905 are derived from Special Reports of the Census Office, Manufactures, 1905, Part I, p. 58.

CAUSES OF EMPLOYMENT OF WOMEN CIGAR MAKERS.

The causes of this movement were the character of the industry, immigration, the introduction of machinery, and strikes among men cigar makers. The work of a cigar maker is light and the skill required is only a certain manual dexterity, at which women easily excel. Cigar making, indeed, has always been in European countries a recognized occupation of women, and in countries where a government monopoly has existed has been almost exclusively woman's work.

In the same year that the molds were introduced from Germany—1869—thousands of Bohemian women cigar makers began to come to New York as the result of the war of 1866 between Prussia and Austria, during which the invading armies destroyed the cigar factories of Bohemia.[a] Before the big strike of 1877 more than half of the cigar makers in New York City were said to have been women, who worked crowded together in large factories, filthy tenements houses, and small shops.[b] Women, too, must have been employed in cigar factories in other places during this period, for in 1864 there were enough women cigar makers in Providence, R. I., to form an independent union.[c] It is not probable that these were home workers. In Philadelphia, where it was said in 1870 that more women were employed at cigar making than in New York, many Americans were employed, but in New York most of the women cigar makers were foreigners.[d] In 1871 it was said that 25 or 30 women cigar makers were employed in Boston, and that a hundred or more were working in Philadelphia, though only in one department of the trade and on a cheap grade of work.[e] In the same year it was said that a woman manufactured all the cigars stocked at Sheboygan, Wis.[f]

The use of the mold, which began about 1869, made it possible to employ unskilled women. As early as 1858 machines had been tried, but, it was reported, had "not as yet been found to work well."[g] A number of unsuccessful machines, indeed, were tried

[a] Cigar Makers' Official Journal, June 10, 1878. Industrial Commission Report, Vol. XV, p. 507.

[b] Union, October 15, 1877.

[c] Fincher's Trades' Review, October 8, 1864.

[d] Penny, How Women Can Make Money, 1870, pp. 442-444. These historical factors account for the large proportion of married women engaged in the manufacture of cigars. The Bohemian women have little prejudice against working after marriage. Moreover, women are held in the industry after marriage by the fact that wages are higher in this occupation than in most of the mechanical branches open to women.

[e] American Workman, September 30, 1871.

[f] The Revolution, May 25, 1871.

[g] Freedley, Philadelphia and Its Manufactures, 1858, p. 389.

during this period. The internal-revenue tax which went into effect in 1862, however, hastened the introduction of the factory system into an industry previously an independent trade, and aided the movement for the use of machinery, which in turn still further increased the tendency toward consolidation.[a] With the introduction of the mold comparatively unskilled labor was brought into the trade, and soon women formed the majority in establishments where molds were used.[b] It was in New York that women were first introduced in large numbers. There, too, the division of labor was first begun—the practice of rolling and filler breaking being each made a particular branch of the trade. By 1878, too, the stripping and bunch machines were used by some establishments in New York.[c] The suction table and machines for stripping and booking were introduced about the same time.

The decade from 1880 to 1890 saw the rapid introduction of machinery, the growth of the factory system of industry, and the transplanting of women cigar makers from the tenements to the factories. By 1895 it was said that hand work had almost entirely disappeared.[d] And more recently the United States Bureau of Labor reported that in many factories "only women and girls are employed on the bunch-making machines and suction tables, and the number of females is as high as 80 per cent of the total number of employees."[e]

Strikes, too, have played an important part. In 1869, for instance, a strike in Cincinnati resulted in the introduction of molding machines and women operatives.[f] But in 1877 another strike in the same city resulted in the removal of women from the shops. Two years later, however, it was said that there were from 300 to 500 women employed in cigar making in Cincinnati.[g] In 1879 a strike in St. Louis caused the introduction of girls.[h] A number of strikes, too, occurred about this time against the employment of women, but soon the union learned its lesson and accepted them as members.[i]

The big strike of 1877 in New York caused a considerable amount of substitution of women for men, and also of Americans for Bohemians

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[a] Cigar Makers' Official Journal, May 10, 1878. From First Annual Report of the Ohio Bureau of Labor Statistics, 1877, p. 199.

[b] Idem, February 10, 1878.

[c] Idem, March 10, 1878.

[d] Idem, October, 1895.

[e] Eleventh Special Report of the United States Commissioner of Labor, Regulation and Restriction of Output, 1904, p. 575.

[f] First Annual Report, Ohio Bureau of Labor Statistics, 1877, p. 201; Cigar Makers' Official Journal, May 10, 1878.

[g] Cigar Makers' Official Journal, January 10, 1879.

[h] Idem, October 10, 1879.

[i] See History of Women in Trade Unions, Volume X of this report, pp. 92-94.

women. Many American girls, it was said, acted as strike breakers, replacing Bohemian women.[a] At the end of this strike the employers pronounced the instruction of girls in the art of cigar making "surprisingly effective."[b] Nevertheless, some of these girls were apparently discharged as soon as the strike was broken, for in December, 1877, it was stated that one firm had discharged 50 girls and another 34 girls who had completed their apprenticeship at cigar making.[c] The New York Tribune reported in November the number of girls employed by eight of the largest firms, the total being under seven hundred.[d] The employers, however, asserted that the number was between three thousand and four thousand, and also claimed that the cigars made by these strike breakers were popular because of the label: "These cigars were made by American girls."[e] In 1878 it was said that there were nearly 4,000 women and girls employed in the cigar factories of New York.

In other cities fewer women were employed.[f] But in 1876, 13 cigar-making shops in Salem, Mass., employed 39 females and 6 males, and in Pawtucket, R. I., in the same year, seven shops employed 9 females and 25 males.[g] In 1878, too, they were at work also in Detroit, Philadelphia, and Westfield,[h] and by 1879 in New Orleans, Cincinnati, Baltimore, Chicago, and "many other places."[i] But in Cleveland in 1880 only 10 of the 300 or so cigar makers were said to be women, and they were from New York.[j] In 1881, however, President Strasser reported that at least one-sixth of all cigar makers were women, and that their employment was constantly increasing.[k] Two years later he said that there were over 10,000 women in the trade, and that the number was increasing at the rate of almost a thousand a year.[l]

In general, it may be said that the employment of women in cigar making has been due primarily to the character of the industry.

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[a] Cigar Makers' Official Journal, December 10, 1877. See History of Women in Trade Unions, Volume X of this report, p. 93. See also New York Daily Tribune, November 8 and 14, 1877.

[b] Cigar Makers' Official Journal, February 10, 1878. "The cigars made by the girls in one shop, however, were said by Mr. Strasser to be worthless." New York Daily Tribune, December 4, 1877.

[c] Cigar Makers' Official Journal, December 24, 1877.

[d] New York Tribune, November 24, 1877.

[e] New York sun, November 28, 1877. There were, it was admitted, from 12,000 to 13,000 workers.

[f] Cigar Makers' Official Journal, May 10, 1878.

[g] Idem, December, 1876.

[h] Idem, September 26, 1879.

[i] Idem, March 10, 1880.

[j] Idem, October 10, 1881.

[k] Labor and Capital, Investigation of Senate Committee on Education and Labor, 1883. Vol. I, p. 453.

When immigrant women went on strike they were replaced with comparative ease by American girls. When machines were introduced the proportion of women employees largely increased. It was, as always, the character of the industry which made it possible for employers to defeat strikes by introducing women. The machine and the large factory have gone hand in hand with the increased employment of women in cigar making, but it is not improbable that without these accompaniments a large part of this increase would still have taken place, and cigar making would have firmly established itself as a home industry. A larger proportion of women, it is true, are employed in the factories which use machinery than in those which do not,[a] and in the large factories than in the small.[b] But it seems probable that the quality of the product manufactured in part accounts for this, the best cigars being made principally by skilled men in small shops with little machinery and little division of labor. One of the chief reasons for this latter fact is that boys have always been apprenticed to the trade, while girls have merely been taught, as rapidly as possible, to operate machines turning out a cheap product.

LABOR CONDITIONS.

In considering the conditions under which women have worked in the manufacture of tobacco it is necessary to distinguish between the two methods, home work and factory work. Both have played an important part. The home work, too, of the early years of the cigar industry, which was carried on by thrifty farmers' wives, must be distinguished from that of the immigrant women who have plied their trade in city tenements. The New England and Pennsylvania women who made cigars in their farm homes, as Miss Abbott has pointed out,[c] were independent producers, owning their materials and the houses in which they worked, and selling their own product, while the tenement women were dependent upon an employer, not merely for their materials but also for house room in which to live and work. One of the features, indeed, of the period of the introduction of immigrant labor in cigar making in New York was the ownership by cigar manufacturers of large blocks of tenements which they rented out at high rates to their employees.[d] Sometimes, too,

[a] Haywood, Special Report of the United States Commissioner of Labor, 1901, pp. 660, 676. For an interesting discussion of the technique of cigar and cigarette making, see Twelfth Census, 1900, Vol. IX, Manufactures, Part III, pp. 971, 972.

[b] Twelfth Census, 1900, Special Reports, Employees and Wages, pp. 1033-1050.

[c] Abbott, Women in Industry, p. 197.

[d] At the time of the strike of 1877 many of the strikers were evicted by their landlord employers. (New York Daily Tribune, Nov. 2, 3, 5, 8, 9, 12, 19, 21, 22, 23, 24, 27, 28, 29, Dec. 4, 13, 1877.)

the employers ran company stores. These house-working women, like the garment workers, were merely wage-earners who were obliged to rent their own factories.[a]

Just as in garment making, the reason for the prevalence of home work has been the small amount of capital needed and the comparatively limited division of labor. The tools and molds were simple and inexpensive, and there was comparatively little to be gained by organization and system. The first division of labor appears to have been introduced by the skilled Bohemian women who taught their husbands, who followed them to this country and were accustomed only to rough farm work at home, the art of "bunch making," they themselves doing the more difficult work of "rolling."[b] Though this system of "team work," once introduced, was soon seized upon by employers as a means of economizing skilled labor by linking to unskilled girls or women as assistants to men, it was so simple that it gave the factory system no real advantage over home work. Men who were skilled cigar makers, too, soon learned to set their wives and children to the task of "bunch making." Thus a family system arose in which sometimes the women and sometimes the men were the most skilled workers, but into which, in either case, the children were irresistibly drawn.

Tenement cigar making on a large scale began in New York about 1869 with the Bohemian immigration and grew rapidly, in spite of the vigorous campaign against it begun about 1872 by the Cigar Makers' Union,[c] until by 1877 it had become firmly established. In that year it was stated by the United Cigar Manufacturers' Association, apparently an association of small manufacturers who were in sympathy with the strikers, that the greater number of cigars made in New York were the product of tenement manufacture.[d] The strike of 1877, moreover, which was directed largely against this system, was considered as a movement against the employment of women and children "who could not or would not work in shops."[e] Toward the end of this strike, however, the New York Sun stated that "the making of cigars in tenements is being gradually abandoned, and large factories are being started."[f] In 1882 it was estimated, in a circular issued by the Cigar Makers' Union, that out of from

[a] A few tenement workers, to be sure, have been independent producers, buying their own raw material and selling their product, but these have generally been men. Sometimes, however, families have worked together on this basis.

[b] Aldrich, Women in Industry, p. 109.

[c] Labor and Capital, Investigation of Senate Committee on Education and Labor, 1883, Vol. 1, p. 451.

[d] New York Sun, December 3, 1877.

[e] New York Daily Tribune, October 30, 1877. Quoted from the address issued by the United Cigar Manufacturers' Association.

[f] New York Sun, November 28, 1877.

18,000 to 20,000 persons engaged in the manufacture of cigars in New York, between 3,500 and 3,750 were employed in tenement houses.[a] In 1882 a law was passed in New York forbidding the manufacture of cigars in tenement houses, but this law was two years later declared unconstitutional. From about this time, however, partly because of the agitation of the union and its effect in the repugnance of the public to tenement-made cigars, and partly because of the development of the factory system, the manufacture of cigars in tenements began to decline.

The conditions under which the tenement manufacture of cigars has been carried on have always been extremely bad. In 1877 a New York Tribune reporter described a four-story tenement house in which Bohemians lived and worked, manufacturing cigars out of stubs and cabbage leaves, and also an "establishment" which employed about 1,000 persons, the system of employment being generally as follows: "A floor is rented to a family for $12 a month. This rental is paid by work, the children stripping tobacco, the mother bunching the cigars, and the father finishing them. The family in turn rents part of the floor to a packer, for $3 a week, and thus all get their livelihood. The firm [furnishes] the wrappers and the operators [furnish] the fillings."[b] In the same year the United Cigar Manufacturers' Association condemned as insanitary these tenement cigar factories, where the babies rolled on the floor in waste tobacco, and all the housework, cooking, cleaning of children, etc., was carried on in the room where cigars were made.[c]

In factories for the manufacture of tobacco and cigars, too, the conditions of labor early caused complaint. In Detroit in 1866 a committee of the Eight-Hour League and Trades' Assembly found many girls working in tobacco factories "placed in 'pigeon holes,' as they are called, one above another, where they toil from morning until night, breathing constantly the poisonous odor of tobacco in an atmosphere filled with the fine particles of the plant." They worked by the piece. The committee were especially struck with the ill health and the low state of morals of these girls, and expressed the opinion that "much of the prostitution which curses the city is the loathsome fruit of the depravity which dates its commencement at the tobacco factories."[d]

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[a] Thirteenth Annual Report, New York Bureau of Labor, 1893, Vol. I, p. 552. The next year Mr. Adolph Strasser testified that there were about 3,500 persons employed in tenement-house manufacture, of which 1,020 were males. (Labor and Capital, Investigation of Senate Committee on Education and Labor, 1885, Vol. I, p. 461.) This was probably an estimate for the entire United States.

[b] New York Daily Tribune, July 10, 1877.

[c] New York Sun, December 3, 1877.

[d] Daily Evening Voice, May 3, 1866. Quoted from the Detroit Daily Union.

A New York cigar factory, on the other hand, where women were employed on machines, was favorably described in 1870 by the Revolution, which always rejoiced in evidences of woman's expanding sphere of activity. In the first workroom, according to the account, was a long table holding, at intervals of about 3 feet, "the deft machine for cigar wrapping" with a young woman or girl "performing her light and compensatory labor of filling or wrapping cigars." In addition there were in this room two or three "chore girls." All of the girls, said the writer, "looked bright, intelligent, well dressed, well cared for." One of them said she had been used to running a sewing machine, but it had injured both her health and sight, and she considered that her present occupation "was much less laborious and 'wasting,' and, besides, she received nearly or quite twice the amount of wages that her former calling afforded." "By the new process," said The Revolution, "girls learn in a week to make as good and neat appearing a cigar as a man could turn out under the old system after working for months at the trade. None of these employees earn less than a dollar a day, while many receive double the amount and more. Upstairs again," continued the account, "where there are more women engaged with more tobacco, in the various stages of the incipient cigar, some are stripping, some are stemming, and some are assorting the 'right-hand' and 'left-hand wraps' as the leaf is parted from the spinal stem. Some are sitting at a machine 'cutting off the tucks,' as they call it, which is the last neat finish to the cigar, the severing, by measurement, of the rough bread end." In one place a little boy was found working beside a woman who might have been his mother. Both were new hands, and each earned $1 a day.[a]

The question of the effect of the tobacco industry upon the health of women workers does not appear to have been raised until the period of the growth of tenement cigar factories, which accentuated every possible evil condition of labor.

The wages of women cigar makers, until after the introduction of the mold, were high as compared with women's wages in other occupations, and as compared with the wages of other women in tobacco factories. Though small girls were employed as strippers in New York in 1871 at from $3 to $5 a week,[b] women cigar makers were said in 1868 to receive the same wages as men, from $12 to $22 in New York City and from $7 to $20 in Philadelphia.[c] In Boston, in 1871, too, it was reported that 25 or 30 women cigar makers were

[a] The Revolution, January 20, 1870.

[b] American Workman, February 11, 1871. Quoted from the New York Star.

[c] The Revolution, August 13, 1868.

employed at the same wages as men, for an average of 8 hours a day.[a]

The use of the mold, however, which enabled the manufacturers to employ unskilled labor, soon reduced wages. In 1877 the average wages of women cigar makers in New York were about $3 per week, and in one establishment the American girls went on strike because the employer refused to pay this amount and offered them piecework.[b]

In Salem, Mass., however, in 1876, the average weekly wages of females were said to be $6.[c] When women were used as strike breakers, too, they were generally paid less than men. In Rochester, before 1885, on the occasion of a strike, an employer claimed that the girls did the same kind of work as the men, and could be hired "for about 50 per cent less; and that is the reason," he frankly admitted, "we hire them."[d]

The mold, strike breaking, the lease system, and machinery have all tended to lower the wages of both men and women cigar makers. It is evident, however, not only that women have had little if anything to do with the lowering of wages, which would doubtless have been brought about by other factors if no women had ever been employed in the trade, but also that women themselves have suffered more from the reduction than men. At one time, when women cigar makers were skilled workers, they received the same wages as men, but the competition of the unskilled of their own sex has driven their wages down to less than half those of men.

As in all other skilled trades, too, women cigar makers have been seriously handicapped by lack of training. Women rarely serve an apprenticeship, primarily because their short trade life makes such education seem unnecessary both to them and to their parents. Where a trade union is powerful, however, apprenticeship has been made a condition of employment in the trade and women have been practically shut out. The Bohemian women of the seventies were thoroughly trained in their own country. But since their day few women have acquired skill as cigar makers, though the occupation seems peculiarly adapted to them and one in which they should be able to acquire proficiency equal to that of men.

PAPER AND PRINTING INDUSTRIES.

In their employment in the paper and printing industries it is sometimes considered that women have departed from their natural sphere of work and have invaded that of men. In many cases, however, women have been employed since the beginning of the industry,

[a] American Workman, September 30, 1871.
[b] Cigar Makers' Official Journal, December 24, 1877.
[c] Idem, December, 1876.
[d] Third Annual Report of the New York Bureau of Statistics of Labor, 1888, p. 18.

and, according to Table XV (page 257), the proportion of women to the total number of employees in the entire group decreased between 1850 and 1900, or, if the figures for 1850 be questioned, between 1870 and 1900. Meanwhile, however, the number of women engaged in this group of industries increased from 7,027 in 1850 to 73,879 in 1900. In 1905 the number had increased to 90,580, and the proportion to 25.9, or 1.1 per cent higher than in 1900.[a]

PAPER MAKING.

The chief decrease in the proportion of women appears to have taken place in the manufacture of paper and wood pulp, which was relatively a far more important industry for women in 1850 than it is to-day. It is noticeable, too, that in card cutting and designing and in the manufacture of envelopes the proportion of women has declined. Other industries, too, show the effect of the introduction of heavy machinery in the displacement of women by men.

In the making of paper and wood pulp women were employed during colonial times and the first decades of the nineteenth century, in cutting and sorting rags and in "parting packs," or separating the sheets between the different processes of pressing. In the first paper mill in Worcester County, Mass., 5 men and 10 or 12 girls were employed, and a few years later in another paper mill which employed 10 men and 11 girls, it was said that the wages of "ordinary workmen and girls" were about 75 cents a week, with board.[b] But in 1707, according to the report of a traveler,[c] women were employed in a paper mill in Pennsylvania at a dollar a week. In the early part of the nineteenth century a paper mill with one engine for grinding rags employed, says one account, about 7 men and 10 or 12 girls, the wages of the latter averaging about a dollar and a half a week, half paid in cash and the other half in board.[d]

About 1825 the Fourdrinier machine for making paper was introduced, and in 1829, out of some 50 paper mills in Massachusetts which were said to give employment to from 1,300 to 1,400 men, boys, and girls, 6 were on the machine principle.[e] In 1849 it was stated that in operating a machine 84 inches wide 2 men and 4 girls were required.[f] By 1825, moreover, the custom of paying the women employed in paper mills partly in board was probably done

[a] Special Reports of the Census Office, Manufactures, 1905, Part I, p. 40.

[b] Crane, E. H., "Early Paper Mills in Massachusetts." Collections of the Worcester Society of Antiquity, Vol. VII, pp. 121, 127.

[c] Duke de la Rochefoucauld-Liancourt, Travels Through North America, Vol. II, p. 550.

[d] Godley and others, Great Industries of the United States, 1872, pp. 206, 207.

[e] Merrimack Journal, November 10, 1826.

[f] Transactions of American Institute, 1849, p. 412. Quoted in Bishop, History of American Manufactures, 1868 edition, Vol. I, pp. 210, 211.

away with, for in that year, and again in 1835, their wages were given as from $3 to $4 per week.[a] In 1845 they were given as from $3 to $4.50,[b] and in 1860 as from $3 to $5 per week.[c] Since 1860, however, the development of machinery has been such that the proportion of women employees has steadily declined, falling from 43.5 per cent in 1850 to 25.7 per cent in 1870 and to 18 per cent in 1900.[d]

PAPER-BOX MAKING.

Another industry in which women must have been early employed is the manufacture of paper and fancy boxes. This industry, however, has only recently become of importance. In 1850 only 416 female hands were employed in the entire business. From that time on, however, the number approximately doubled in each decade up to 1890, though the proportion of women to the total number of employees has changed little since 1870.[e]

In the early years paper-box making was a home industry and was very poorly paid. Match boxes, it was said, were made in New York in 1845 for 5 cents per gross, or 1 cent for 30 boxes. The Tribune told of the case of a woman who was supporting her little children by this work and who said that if she walked 2 miles to a starch factory to obtain refuse at a penny a pail, for pasting the boxes, she could "make a little profit," but if she had to buy flour to make paste it was a losing business.[f] In 1851, too, paper-box making is said to have been a very bad trade, poorly paid, and carried on in attics.[g]

By 1858, however, the paper-box manufacture appears to have developed into a factory industry, run along much the same lines as to-day. A factory in Philadelphia, for instance, contained five stories. In the basement a man and boy covered the pasteboard with paper by means of a machine containing two rollers. On the first floor were the offices and warehouse. On the second the large boxes which required sewing were made and finished, and there was machinery for cutting. On the third were manufactured the largest boxes that did not require sewing. Here, too, was machinery for cutting, scoring, etc. On the fourth and fifth the small boxes were

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[a] Sixteenth Annual Report, Massachusetts Bureau of Labor Statistics, 1885, pp. 254, 262.

[b] Idem, p. 126.

[c] Idem, p. 166.

[d] See Table XV, p. 257. According to the incomplete census of 1820, 692, or 29 per cent, of the employees of paper mills were women, but 747, or over 30 per cent, were "boys and girls." (American State Papers, Finance, Vol. IV, pp. 29, 223, 290-297.) In Massachusetts, in 1837, there were 688 men and 805 women, or more women than men, engaged in the manufacture of paper. (Statistical Tables Exhibiting the Condition and Products of Certain Branches of Industry in Massachusetts for the Year Ending Apr. 1, 1837.)

[e] See Table XV, p. 257.

[f] New York Daily Tribune, August 19, 1845.

[g] Burns, Life in New York, 1851.

made and here the most perfect machinery was found. The upper stories were all subdivided, "and one part of each occupied by the men who cut and prepare the work; the other by the women and girls who finish the boxes."[a]

The manufacture of paper boxes and other fancy articles is said to have flourished in New York in 1869 and to have paid fairly remunerative wages to the employees, most of whom were females and boys.[b] In Boston the wages of paper-box makers in that year were, according to one account, from $3 to $4 per week,[c] and according to another account, from $2.50 to $3 per week.[d] Wages in New York, however, were probably higher, for in 1871 the New York Sun[e] said that there were in New York City 5,000 girls making paper boxes by the piece for average wages of $5 per week, $9 being the highest. But in Connecticut in 1874 the wages of women employed in paper-box making were reported as from $6 to $8 per week.[f]

As for other working conditions, they have probably changed little since the establishment of the factory system in the making of paper and fancy boxes.

MAP AND PRINT COLORING.

Before the invention of machine processes for this work many women were employed in coloring maps and prints by hand. This work required some taste and skill, and the women colorists were spoken of in 1839 as well paid for their labor.[g] In 1845, too, the New York Tribune gave a very favorable picture of this occupation. At that time there were said to be in New York City about 200 girls engaged in coloring maps. Their hours were not more than 8 or 9 a day, and their wages ranged from $3 to $5 per week. The work was done by the piece, the girls being paid from 3 to 10 cents a sheet, according to the quality of the work. A system of apprenticeship existed, the apprentices being paid about $1.50 a week. But only "a fair proportion" of apprentices were taken, and the trade was "not overstocked with laborers, as comparatively few who work possess sufficient nicety of hand and artistic knowledge to excel at the business." Much of the work was done by girls who had

[a] Frocality, Philadelphia and Its Manufactures, 1858, pp. 402, 403.

[b] American Artisan, August 4, 1869.

[c] American Workman, May 1, 1869.

[d] Workingman's Advocate, May 8, 1869.

[e] Quoted in the American Workman, Boston, February 11, 1871.

[f] Twenty-sixth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1895, p. 505.

[g] Casey, Miscellaneous Pamphlets, No. 13, "To the Editor of the New York Daily Sentinel."

studied painting and drawing. In 1858 one establishment in Philadelphia was said to employ 35 females in coloring maps.[a]

The coloring of lithographic prints was another similar occupation which was said to have employed in New York in 1845 200 or more girls. This work was generally done by the week, and the larger establishments paid from $2.50 to $3.50. In some establishments, however, wages had been pushed down by an oversupply of lithographers. "In those poorer establishments, if we are rightly informed," said the Tribune, "a great portion of the work is performed by apprentices who get at best very poorly paid and sometimes not at all."[b] The busy season was about midwinter, when preparations were going forward for St. Valentine's Day, and the highest wages were paid at that time. The girls engaged in this occupation, as well as in map coloring, were said to be generally well educated.

In 1851 there were reported to be in New York 2,000 females engaged in coloring prints. Experts, according to the account, could earn as high as from $3 to $4.50 a week on the commonest work, but the average wages were not more than $2.50 a week.[c]

By 1860, however, the introduction of stencil plates had thrown a large number of the map and print colorers out of employment.[d]

BOOKBINDING.

Book folding and stitching were among the early occupations of women wage-earners, and appear to have been little above the sewing trades as regards wages. In 1829 Mathew Carey referred to the "folders of printed books" in Philadelphia as among the women who received only $1.25 per week.[e] A little later, too, the Rev. Ezra Stiles Ely stated that women's wages for folding and stitching books, both in New York and in Philadelphia, were utterly inadequate for their support.[f] Two years later 16 bookbinders in Boston employed 60 men, 30 boys, and 90 women, the latter at 50 cents a day.[g]

In 1834, however, a Boston bookbinder stated that it was an error to say that girls in bookbinderies did not average over $2.50 a week. The average, he said, was about $3, and many girls could earn $4 a week for 10 hours' labor a day. Wages, he said, were higher than

[a] Frankley, Philadelphia and Its Manufactures, 1858, p. 181.

[b] New York Daily Tribune, August 26, 1845. In 1831 two lithographing and 15 engraving establishments in Boston employed 16 men, 10 boys, and 30 women. (Executive Documents, Twenty-second Congress, first session, Vol. I.)

[c] Burns, Life in New York, 1851.

[d] Penny, Think and Act, 1869, p. 18.

[e] Free Enquirer, December 19, 1829; Carey, Miscellaneous Essays, p. 267.

[f] Delaware Free Press, February 27, 1830. Quoted by Mathew Carey in his letter "To the Printer of the Delaware Advertiser."

[g] Executive Documents, Twenty-second Congress, first session, Vol. I.

in the tailoring trade.[a] In Philadelphia in 1835 wages ranged from $1 to $3.00 per week.[b] In 1835, moreover, the master bookbinders of Philadelphia, in response to public agitation, recognized the 10-hour system and resolved upon $3 a week as a minimum wage for women.[c] And in the same year, according to an employing bookbinder of New York, the wages of the women there ranged from $2.50 to $7.50 per week on the same kind of work, the amount depending on the industry of the particular woman.[d] Nevertheless, the women had gone on strike, declaring the wages insufficient for their support.

In 1845, according to the Tribune,[e] there were from 2,500 to 3,000 girls engaged "in the respectable binderies," of New York City, at wages ranging from $1.50 to $5 or $6 a week. The average appears to have been from $2.50 to $3.50 a week. The folding was, of course, at this period, all done by hand, as was the stitching. The hours were from 7 in the morning to 6 in the evening, with an hour for dinner. The Tribune article stated that "in the large establishments the girls are generally separated from the men who work at bookbinding, and are kept in tolerable order." According to the Tribune, too, most of the women bookbinders lived in comparative comfort, the majority boarding with relatives or friends and thus being "better fed, lodged, and cared for than those girls who have to live at the cheap public boarding houses." The price paid for board was given as $1.75 to $2 a week, and extra for washing. The chief evils complained of were that in some establishments the work was "dribbled out by piecemeal, so that the girls on the average do not work more than half the time," and that "the skillful worker just through her apprenticeship is too often cast adrift to make room for raw hands."

The piece rates paid in large establishments were: For folding single 8vo. sheets, 2 cents per hundred; for double 8vo., 3½ cents; for double 12mo., 5½ cents, and for stitching common work 2½ cents per hundred sheets.[f] The rates were so arranged that the weekly wages for folding and for stitching were about the same.

[a] Boston Transcript, May 30, 1834. See also the Sixteenth Annual Report of the Massachusetts Bureau of Statistics of Labor, pp. 269, 272, 276, and 310, for the wages of women book sewers and folders in 1837, 1838, 1840, and 1860. In 1837 and 1838 the wages of book folders were given as from $3.25 to $5.50 per week and of book sewers as from $3 to $6 per week. In 1840 the folders were reported to receive about $4 per week and the sewers from $4 to $5. In 1860 the folders ranged from $4 to $7 per week and the sewers from $5 to $8 per week.

[b] Table G, p. 263, gives the number of women employed, the wages, and the hours in the bookbinderies of Philadelphia in 1835 as ascertained by a committee of the master bookbinders.

[c] Radical Reformer and Workingman's Advocate, Philadelphia, July 4, 1835.

[d] New York Journal of Commerce, June 24, 1835.

[e] New York Daily Tribune, August 20, 1845.

[f] New York Tribune, August 20, 1845.

A regular apprenticeship to book folding and stitching appears to have been customary. But in some establishments, it was said, girls were engaged as apprentices and told they must work 6 weeks for nothing, and then at the end of the 6 weeks were discharged to make room for new apprentices.[a]

In 1851 a small army of book folders was said to be employed in the Bible House and Tract Society's buildings in New York and in other large bookbinderies. Wages ranged from $2 to $6 a week, the average being about $3.50. Book sewers, it was said, could earn from $5 to $5.50 per week.[b] A couple of years later a writer in the New York True National Democrat[c] proposed that bookbinding should be practically given up to women.

A book-folding machine was introduced before 1858,[d] but the work, which had formerly been done by hand with only a knife to lay the fold, was still performed by girls, though the number needed for a given amount of work was greatly reduced. The sewing of books by machinery was not introduced until within comparatively recent years, and has never displaced the binding frames on the higher grades of work. This, too, saved labor, but resulted in no change as regards the sex of the workers.

Wages remained low. In 1863 book sewers in New York were said to receive about $3 a week.[e] In 1868, however, one girl testified before a meeting of working women in New York that at book folding she could earn $4 to $5 a week, working moderately, and that girls at hard work could earn from $8 to $9. A deaf-mute binder said that she made $6 a week.[f] Virginia Penny, too, stated about 1870 that a gilder in a bookbindery received $6 a week, or $1 a day of 10 hours, equal to 10 cents an hour.[g] And in 1871 the New York Star[h] said that 7,000 girls worked in New York bookbinderies for wages of from $3 to $8 per week. The folders and stitchers, however, by hard labor, were said to earn from $9 to $9 per week. In Boston, moreover, in 1870, women employed by bookbinders are said to have earned only $2 per week.[i]

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[a] New York Daily Tribune, August 22, 1845.
[b] Burns, Life in New York, 1851.
[c] Quoted in The Una, September, 1853.
[d] Freedley, Philadelphia and Its Manufactures, 1858, p. 178.
[e] Fincher's Trades' Review, November 21, 1863.
[f] The Revolution, October 1, 1868.
[g] Penny, How Women Can Make Money, p. xiii.
[h] Quoted in the American Workman, February 11, 1871.
[i] American Workman, May 1, 1869.

PRINTING AND PUBLISHING.

As early as 1815 there were said to have been employed "in a printing house near Philadelphia, two women at the press, who could perform their week's work with as much fidelity as most of the journeymen."[a] In 1831, moreover, a writer in the Banner of the Constitution stated that he had himself seen "young girls very adroitly superintending the printing of sheets by a press worked by horse power."[b] Five years later "one of the girls employed to work on the machine presses of Mr. Fanshaw," of New York, "had part of her hand taken off by its becoming entangled in the machinery."[c] And in 1845 the New York Tribune reported that girls were employed on most of the power presses run in book offices, as the labor on these machines was light.[d] Again, in 1858, it was said that in Philadelphia, where power presses were in use in all the leading establishments, "many of the employees who tend presses are females, whose earnings average $4 per week."[e]

In New York, too, in 1863, women press feeders, it was said, sometimes received $4 a week.[f] But 5 years later one girl testified before a meeting of working women in New York that she made $6 a week feeding a press in a printing office 10 hours a day.[g] And in 1870 Shirley Dare interviewed one woman press feeder in New York, who said she received $7 per week for 10 hours' labor a day.[h] The girls employed in feeding presses at the Government Printing Office, moreover, had gone on strike in 1863 for $8 a week, but finally returned for $7, which was apparently an advance over previous wages.[i] In this case boys acted as strike breakers.

Women were not employed as proof readers until long after they had been successfully employed as press feeders. About 1870 the proprietor of one of the largest publishing houses in the country assured Virginia Penny that he knew of no case of a woman acting as proof

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[a] Thomas, History of Printing in America, 2d ed. (Archaeologia Americana, Vols. V and VI), Vol. I, p. 355.

The incomplete manufacturing census of 1820 reported as engaged in printing and publishing 54 men, 12 women, and 55 "boys and girls." (American State Papers, Finance, Vol. IV, pp. 29-223.)

[b] Banner of the Constitution, May 4, 1831.

[c] Public Ledger, October 24, 1836.

[d] New York Daily Tribune, September 15, 1845.

[e] Freedley, Philadelphia and Its Manufactures, 1858, p. 178. The Sixteenth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1885, pp. 276 and 281, gives the wages of women press feeders in 1880 as from $5 to $6 per week, and in 1840 as from $2.50 to $3.50 per week.

[f] Fincher's Trades' Review, November 21, 1863.

[g] The Revolution, October 1, 1868.

[h] New York Tribune, February 25, 1870.

[i] Fincher's Trades' Review, December 26, 1863.

reader. Nevertheless, the Boston Stereotype Foundry reported that it employed three young ladies to read proof, and paid them from $3 to $5 per week for 9 hours a day. A woman was also employed as proof reader at the Bible House, at $5 or $6 a week.[a]

As printers women were employed at a much earlier date than is generally supposed. Miss Abbott has found that even in the eighteenth century there were one or more women printers in eight different States—Massachusetts, Connecticut, Rhode Island, Pennsylvania, New York, Maryland, Virginia, and South Carolina—and, further, that these women were both compositors and worked at the press.[b] Most of these women, like the nieces of Benjamin Franklin in Philadelphia, appear to have been engaged in independent business, though some of them may have been wage-earners. From the beginning the employment of women has been much more common in the "book and job" branch of the business than in newspaper offices.

In 1830 the Boston Courier referred to the employment of women as printers in the "establishments for book printing" of that city as "an evil of recent growth." The number so employed, it was said, was "sufficient to lessen very considerably the calls for journeymen and to dishearten all who, as apprentices, were ambitious of distinguishing themselves as faithful and skillful printers."[c] In the same year Joseph Tuckerman asserted that, "in consequence of the improved machinery which is now used in printing, and by the substitution of boys and girls for men in the work of printing offices, there are at this time, or within the past summer there have been, in our city, between two and three hundred journeyman printers who have been able at best to obtain but occasional employment in the occupation in which they have been educated."[d] In 1831, too, the editor of a Boston paper estimated that 200 women were employed in printing in that city.[e]

Employment in printing offices, indeed, appears to have been at this early date a somewhat important occupation for women in New England. It was mentioned in 1834 by the women strikers at Lynn as a possible alternative employment to shoe binding,[f] and a strike of printers occurred in Boston in 1835 on account of the employment of women in setting type.[g] By 1836, too, a committee of the National

[a] Penny, How Women Can Make Money, pp. 30, 41.

[b] Abbott, Women in Industry, p. 248.

[c] Boston Courier, August 26, 1830.

[d] Tuckerman, An Essay on the Wages Paid to Females, Philadelphia, March 25, 1830, p. 18.

[e] Quoted in the Banner of the Constitution, May 4, 1831.

[f] Liberator, January 3, 1834.

[g] History of Women in Trade Unions, Volume X of this report, p. 16.

Trades' Union referred to printing, in the New England States, as "in a certain measure governed by females."[a]

Wages, though low, were somewhat higher than in the garment trades. But in 1834 there were said to be hundreds of girls in Boston employed in printing offices, bookbinderies, etc., who earned only about $2.50 a week, and were obliged to pay out of this $1.50 a week for board.[b]

In other parts of the country, however, the employment of women printers was not common until many years later. Nevertheless, a Philadelphia paper frankly congratulated the Bostonians on having found in female labor a means of cheapening the cost of composition in printing. Attributing the destitution of "20,000 females" in northern cities to "the American system," which, it said, had thrown out of employment their husbands and fathers, this paper stated that there was no reason why the printing business should not be turned over to them. And, since "the labor of females can not command more than half the wages that men can," it "would have a powerful influence in reducing the expenses of printing."[c] The next year the Typographical Society of Philadelphia was agitated over a rumor that one of its members intended to employ women as compositors, but the rumor was denied. In 1835, however, a similar rumor caused the Washington society to send a circular letter of inquiry to the societies in Philadelphia, Boston, New York, and Baltimore.[d]

An attempt was made in New York during the thirties to introduce women into printing offices as compositors, but the practice was soon abandoned,[e] and it was not until about 1853 that the movement for the employment of women typesetters began to assume importance outside of New England. In that year girl typesetters were employed on the New York Day Book,[f] and a strike for higher wages among the journeymen printers of Pittsburg resulted in the employment of women and girls as compositors upon the two principal daily penny papers of that city, the Chronicle and Dispatch.[g] Early in the next year, 1854, it was said that female compositors were employed in the offices of three Cincinnati daily papers "which stood

[a] National Laborer, November 12, 1836.

[b] Boston Transcript, May 27, 1834.

[c] Banner of the Constitution, May 4, 1834.

[d] See "A Documentary History of the Early Organizations of Printers," by Ethelbert Stewart, Bulletin of the Bureau of Labor, No. 61, p. 884.

[e] New York Daily Tribune, September 15, 1849.

[f] The Era, August 1, 1853. In 1868, however, the editor of the Taxpayer claimed the honor of having been the first printer in that city "to instruct and employ female compositors." The Revolution, Oct. 8, 1868.

[g] Idem, October, 1853.

out against the demands of the printers' union," and that the Louisville Courier had announced its intention to try the experiment.[a]

In Philadelphia a strike occurred in August, 1854, in accordance with a resolve of the printers' union, on account of the employment of women. According to one account, the Philadelphia Daily Register had employed two women as typesetters in a separate office,[b] and according to another, girls were employed in the jobbing department.[c] Shortly before this time trouble had occurred at Mount Vernon, Ohio, on account of the refusal of a printer employed on the Home Visitor to give necessary instructions to a girl employed on Mrs. Amelia Bloomer's paper, the Lily, which was printed in the same establishment. It was found that the employees of the office had signed an agreement never to work with or instruct a woman, and they were promptly dismissed and their places filled by four women and three men.[d] Strikes on account of the employment of women and resolutions of trade unions denouncing their employment soon became common. A long discussion of the "woman question" at the national convention of 1864 resulted in turning the subject over to the local unions, and it was not until 1869 that the national union admitted women to full membership.[e]

About this time, too, Miss Annie E. MacDowell started in Philadelphia the Woman's Advocate, all the work on which, including the typesetting, was done by women. Not being able to find a male printer in Philadelphia who was willing to instruct a woman, she is said to have imported one from Boston.[f] A writer in the Revolution in 1871, who signed himself Ned Buntline, stated that nearly seventeen years before, when he published a paper in Philadelphia, he had "hired women compositors from her office, at full union men's wages, and they did their work well and promptly."[g]

By 1861, partly, without doubt, as a result of the Civil War, the introduction of women printers began to attract considerable attention. There other causes of the employment of women were, however, prominent. The first and most conspicuous was the possibility, already mentioned, of using them as strike breakers. The second and probably most important was the fact that women would do the same work as men for lower wages. The third was the influence of the newly invented typesetting machines.

[a] The Una, January, 1854.

[b] Daily, Woman's Right to Labor, p. 88.

[c] Ninth Annual Report of Bureau of Industrial Statistics of Pennsylvania, 1880-81, p. 276.

[d] New York Daily Tribune, April 25, 1854.

[e] See History of Women in Trade Unions, Volume X of this report, pp. 103-108.

[f] The Revolution, June 8, 1871.

[g] Idem, May 4, 1871.

The entrance of women printers into newspaper offices was usually, perhaps, as strike breakers and often at lower wages than were paid men. In Boston in 1864, for example, at the time of a printers' strike, women were substituted for men at lower wages.[a] In 1866, however, when the Boston Traveller decided to reduce wages, it was said that though the original intention had been to so reduce that the women should receive less than the men, it was finally decided to reduce both alike.[b] And in 1870 it was reported that since the strike of 1864 women had been employed on the Boston Transcript and Traveller on full hours and had received men's wages, averaging $18 per week earnings.[c] The women printers on the New York World, moreover, who were originally employed as strike breakers,[d] and of whom there were 25 in March, 1868, were paid the same wages as men, 40 cents per thousand ems for day work and 50 cents for night work, and some of them were able to earn from $15 to $20 per week, in spite of the fact that, as they had only been tried for three years, they were in experience scarcely out of the period that with a man would have been apprenticeship.[e] Women, however, after a three years' trial, were declared by the World not to be as good as men,[f] and were finally discharged and men substituted.[g] Usually, indeed, in such cases either the women were discharged or their wages were reduced.

A printers' strike in Rochester, (ox., in 1864, caused the employment of women compositors. But in this case, though the employers had pledged themselves to give permanent employment to the girls, they are said to have been discharged as soon as men could be procured.[h]

In the same year the employment of one female printer on an Albany paper caused a strike and bitter denunciation, by the employer concerned, of the union for "waging warfare upon women who are driven by their necessities to seek employment in printing offices."[i] To this a writer in Fincher's Trades' Review replied that the trouble was not too little work for women, but too much work and too low wages, and that the trade unions had always sympathized with them and constituted their only hope of relief.[j]

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[a] Daily Evening-Voice, December 3, 1864. In one establishment, however, according to the Voice, when the girls found that they were being employed at a 25 per cent reduction from the wages paid even men "scabs," they refused to work for less than the men, and the employer in question was obliged to pay them equal wages."

[b] Labor, January 6, 8, 1866.

[c] Woman's Journal, January 29, 1870.

[d] Workingman's Advocate, November 4, 1867.

[e] The Revolution, March 19, 1868.

[f] Idem, October 1, 1868.

[g] Idem, October 8, 1868.

[h] Fincher's Trades' Review, June 1, 1861.

[i] Idem, May 7, 1864.

In San Francisco women were substituted for men as compositors as the result of a printers' strike in 1869. In January of that year it was said that female compositors set up the San Francisco Californian.[a] And in December, 1870, there were reported to be 7 female compositors on the San Francisco Call, 10 in the office of the "Woman's Cooperative Printing Union," and several on the Pioneer, the woman's journal.[b]

A strike at Worcester, Mass., in 1865, also led to the employment of women side by side with men at the same wages, sometimes $16 a week, in one of the newspaper offices of that city.[c]

Strikes, however, were not the only cause of the substitution of women for men as printers. The comparative cheapness of woman's work, as has already been intimated, was a powerful factor. When the Western Publishers' Association in 1864 passed a resolution recommending "the employment of female help whenever it can be done conveniently,"[d] the typographical union declared that the publishers favored the employment of women merely on account of its economy, and urged women printers not to work for lower wages than men.[e] In the same year, however, the Western Publishers' Association established a school in Chicago for the instruction of women, where in July 40 or 50 women were said to be employed at $4 a week. About the same time the proprietor of one of the Chicago dailies boasted that he had "placed materials in remote rooms of the city and secretly instructed girls to set type."[f] In 1869 the employing printers of New York followed the example of the Western Publishers' Association and passed a resolution "that the master printers of this city, recognizing the importance of female labor in our composing rooms, do agree to employ females as compositors," upon which the Workingman's Advocate, in conformity with the trade-union

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[a] The Revolution, January 28, 1869.

[b] Workingman's Advocate, December 10, 1870; The Revolution, January 12, 1871.

[c] The Revolution, January 20, 1870.

[d] The Printer, July, 1868. At a printers' convention held in Springfield, Ill., about 1860, resolutions were adopted declaring that the employment of women as compositors had been found "a decided benefit as regards moral influence and steady work, and also as offering better wages to a deserving class," and that therefore this association recommended "to its members the employment of females wherever practicable." (Daly, Women's Right to Labor, p. 82.)

[e] Idem, August, 1864.

[f] Fincher's Trades' Review, October 1, 1864. A writer in Fincher's Trades' Review, commenting upon the competition of girls introduced by this school, said: "The thing has been tried before, and the boys have generally managed to take the whole of them, printers in a single campaign, and set them up for life as housekeeping. That's the device for such emergencies. Marry 'em or find husbands for them." (Fincher's Trades' Review, June 4, 1864.)

policy, urged the women to demand the same rate of pay as the men whom they supplanted had received.[a]

The object of the employers was undoubtedly to secure cheaper and more docile labor, and in this they were evidently successful. In November, 1865, it was stated that the men printers were to be discharged from the Boston Courier office and women put in their places. "The compositors of the Courier," said the Daily Evening Voice, "have been receiving lately, since they were 'cut down,' 40 cents a thousand ems; the girls are to receive but 25 cents per thousand 'ems' for leaded matter, and 30 cents for solid matter. * * * The women, * * * by this scale of prices, will be able to earn about $7 a week by working 10 hours a day at an unhealthy trade, which breaks down most printers before they reach the middle age of life."[b] Early in 1866, too, another Boston daily is said to have discharged its men printers and introduced women.[c] In 1869 the girls employed in printing offices in Boston were reported to earn $4 a week.[d]

In 1868 various estimates placed the number of women compositors in New York at from 200[e] to 500.[f] At first they had been paid, it was said, the same wages as men, from 40 to 50 cents per thousand ems, but at that time they received only from 25 to 45 cents, the average being about 35 cents.[f] Women compositors were at that time employed in the office of the Brooklyn Eagle, and one of them, who had been fifteen years at the business, is said to have made, at 37 cents a thousand, about $18 a week. A speaker at a meeting of the women's union in New York in 1868 said that "in many printing offices, both in this city and in Brooklyn, many ladies were getting 30 cents a thousand."[g] The "Women's New York Typographical Union, No. 1," however, established as its scale of prices 40 cents per thousand ems,[h] and was said by 1869 to have raised wages in several large establishments, notably the Independent, which had increased the pay of its women from 35 to 40 cents per thousand ems.[i]

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[a] Workingmen's Advocate, February 25, 1869.

[b] Daily Evening Voice, November 16, 1865. Fincher's Trades' Review also spoke of the opening up of the printing trades to women as far from being a humanitarian measure, one which subjected girls "to torture, trials, and temptations, that may prove their ruin physically and morally." (Fincher's Trades' Review, October 1, 1864.)

[c] Idem, January 13, 1866.

[d] American Workman, May 1, 1869.

[e] The Revolution, October 15, 1868.

[f] Idem, March 19, 1868.

[g] Idem, October 8, 1868.

[h] Idem, March 18, 1869.

A little later, however, it was said that "the female compositors employed by the American Tract Society of New York have petitioned for the same rate of pay as the men receive."[a] And in 1871 there were reported to be in New York about 200 "female compositors," who worked "by the piece, at prices 20 per cent lower than the men."[b] In 1876, the wages of women compositors were said to be 30 cents per thousand ems or $10 a week. For the latter fixed sum they were expected to set nearly 6,000 ems per day.[c] It is evident that woman worked for less than men, and this fact constantly tended to influence employers to hire women printers.

Machinery, too, had some influence over the introduction of women printers. In 1865 a contest between the Alden typesetting machine operated by two women and a compositor from the New York World resulted in nearly twice as many ems by the machine as by the man.[d] The influence of the machine, however, has been slight, partly because women have not the endurance to compete with men in speed, but primarily because the union has controlled the machine.

As early as 1865, according to Mr. Malcolm Macleod, organizer of the machinists' union, the typesetting in many printing offices in New York was done principally by women,[e] most of them, it was later added, from New England.[f] And in 1870 women compositors were said to have been "for years successfully employed by the Harpers, and—with the exception of the offices of the daily morning papers, where their physical education has not left them the strength to endure night labor—in nearly all the book and paper offices in the city; and the work that they are able to do equals both in quantity and quality that done by men."[g]

In other places, too, women printers began to be employed. Miss Susan B. Anthony stated in October, 1868, that she had received some 14 applicants for women typesetters, including one from the Orange (N. J.) Journal for a forewoman to manage the office, and one from the Galveston (Tex.) Courier for six compositors and one forewoman.[h]

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[a] Workingman's Advocate, June 25, 1870; The Revolution, July 28, 1870; The Woman's Journal, Boston and Chicago, June 17, 1870. About this time it was asserted that the large religious publishing houses generally refused to employ women compositors. (The American Workman, July 2, 1870.)

[b] American Workman, February 11, 1871. Quoted from the New York Star. In 1870 a female compositor in the office of the Bridgeport Standard is said to have earned more at a piece rate than any of the half dozen men who set type in the office. (The Woman's Journal, Boston and Chicago, June 18, 1870.)

[c] Ames, Sex in Industry, 1876, p. 85.

[d] The Printer, July, 1865.

[e] Gaston's Trades' Review, February 1, 1865.

[f] Daily Evening Voice, December 23, 1868.

[g] The Revolution, May 12, 1870.

[h] Idem, October 29, 1868. Miss Anthony was editor of The Revolution.

About the same time the Woman's Typographical Union of New York refused the request of a Galveston, Tex., editor, for a number of women compositors, on the ground that the wages offered were less than the established price in that city.[a] A little later there were other instances of the employment of forewomen. One was employed, for instance, in this capacity on the Christian Register of Boston in 1870,[b] and another on the Janesville (Wis.) Gazette in 1871.[c] In the latter year women compositors were said to have been driven from the Chicago Mail by the men.[d]

In entering upon the printing trade, however, women were continually hampered by lack of training, and to this lack must be attributed, in part, their comparatively low wages. It was early complained that women were not allowed to learn everything connected with the business, but were confined to setting a few different kinds of type. This, it was said, was one of the causes of their low wages.[e] And, when women compositors were declared by the New York World not to be as good as men, the women replied that they would be as good if they were allowed to serve an apprenticeship.[f] About the same time a speaker at a meeting of the Women's Typographical Union of New York said that women did not expect the same wages, as they "had not had the same chance to learn as the men, who were apprenticed to the trade."[g]

In Boston, even, where women had long been employed, the lack of apprenticeship was spoken of as a handicap. In 1865 the city printing of Boston is said to have been obtained by an employer who secured it by substituting girls and boys for men. "We would like to know," wrote the editor of the Daily Evening Voice, in comment, "if the city government of Boston will be satisfied with having their work botched by female printers who serve no apprenticeship other than to learn the position of type in a case, and the mechanical operation of standing them on end?"[h]

Primarily, in order to supply this need for a systematic training for women printers, the Working Women's Association of New York proposed in 1868 to establish a "female printing office," on the cooperative plan.[i] The next year, indeed, there was a Woman's Cooperative Printing Union in San Francisco, which was appealing to the

[a] Workingman's Advocate, November 7, 1868.
[b] American Workman, June 16, 1870.
[c] The Revolution, February 2, 1871.
[d] Idem, May 25, 1871.
[e] Idem, March 19, 1868.
[f] Idem, October 1, 1868.
[g] Idem, October 8, 1868.
[h] Daily Evening Voice, March 2, 1865.

public to buy shares. "The object of the selling shares," said the San Francisco Mercury,[a] "is to obtain capital to purchase more material, in order that more women may be employed, and more young girls can learn typesetting. Constant applications are made for positions, which must be rejected, owing not to want of work, but to want of type."[b] It is not known what was accomplished by the San Francisco Union, and nothing appears to have been done in New York.

Early in 1869, however, Susan B. Anthony, at the time of a strike of Typographical Union No. 6, of New York, made an appeal to a meeting of employing printers for aid in the establishment of a school for girls in the art of typesetting. "Give us the means," she wrote, "and we will soon give you competent women compositors." Naturally "her views seemed to meet with the approval of the meeting."[c] But, also naturally, this move roused the anger of the Typographical Union against Miss Anthony. It does not appear, however, that anything further was done in New York at this time in the direction of founding a school to teach women typesetting.

The proportion of women to the total number of employees engaged in the group of occupations included under "printing and publishing"[d] has, however, steadily increased since 1870, when it was 9.1 per cent. until in 1900 it was 17.6 per cent, and in 1905, 20.3 per cent.[e] Not including 1,281 in "Printing and publishing, not specified," in 1870, the number of women employed increased from 1,589 in 1870[f] to 37,614 in 1905. It is evident that this is one of the industries in which women are gaining at the expense of men.

MISCELLANEOUS INDUSTRIES.

In many other manufacturing industries women have long been employed. As early as 1820, 361 women, 10,467 men, and 1,083 "boys and girls" were reported to be engaged in the manufacture of various metal products, not including clocks, clock cases, and watches, which reported 23 women, 103 men, and 7 "boys and girls." There were reported also under lumber and woodworking trades 36 women, 2,300 men, and 240 "boys and girls." Fifty-six women, 2,809 men, and 116 "boys and girls," moreover, were given under chemical industries; 4 women, 547 men, and 121 "boys and girls" under clay and pottery industries, not including glass; and 39 women, 3,161 men, and 1,009 "boys and girls" under leather industries, not includ-

[a] Quoted in The Revolution, September 2, 1869.

[b] An earlier notice of this "union" occurs in The Revolution, July 15, 1869.

[c] The Revolution, February 4, 1868.

[d] See Table XV, p. 258, and Special Reports of the Census Office, Manufactures, 1905, Part I, p. lxxxi.

[e] See Table XV, p. 258, footnote *.

[f] See Table XV, p. 258, footnote *.

ing boots and shoes. No women, however, appear to have been employed at that time in glass works.[a]

METAL WORKERS.

A large increase in the proportion of women employees has occurred since 1850[b] in the manufacture of "metals and metal products other than iron and steel." A slight increase occurred between 1890 and 1905 in the group "iron and steel," which can be traced to the division "steel works and rolling mills," and is probably wholly in the tin-plate department, where women work at separating the sheets after the pickling process. But the proportion of women to the total number of employees in the group "metals and metal products other than iron and steel" increased from 3.4 per cent in 1850 to 14.2 per cent in 1905. Within this group the chief industries employing women are the manufacture of jewelry, in which the proportion of women employees increased from 7.4 per cent in 1850 to 30.6 per cent in 1900, and the manufacture of watches, in which the proportion of women increased from 14.8 per cent in 1860 to 50.5 per cent in 1900. There was a great increase, too, from 2.9 per cent in 1850 to 22.7 per cent in 1900, in the proportion of women employees engaged in the manufacture of clocks.[c]

In the manufacture of metals the work of women has generally been polishing, filing, soldering, tending the lighter forms of machinery, and weighing and packing the lighter articles. Their increase is due to a combination of labor-saving machinery and minute division of labor.

One of the early occupations of this kind in which women were said to be engaged was the rubbing of type in order to smooth it after it had been cast in a mold. The type was rubbed by hand on a flat stone. Little skill was required and the work was very monotonous. As early as 1831 the type and stereotype founders of Boston employed 83 men, 29 boys, and 55 women. The wages of the latter were reported to be from 42 to 50 cents a day.[d] In 1851 women type rubbers in New York were said to be paid from $1.50 to $2.50 per week.[e]

Women were early employed in polishing metals of all kinds, and by 1868 there were enough women metal burnishers in New York to form a "Female Burnishers' Association."[f] In 1867 it was said that

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[a] American State Papers, Finance, Vol. IV, pp. 30–238, 291–297.
[b] See Table IX, p. 350.
[c] See Table XVI, p. 368.
[d] Executive Documents, Twenty-second Congress, first session.
[e] Burns, Life in New York, 1851.
[f] Workingman's Advocate, June 13, 1868.

the silver burnishers in Philadelphia received a cent apiece for table-spoons, of which they could do only 30 or 35 a day, making about $1.80 per week.[a] But in 1868 the New York metal burnishers complained that, on account of a reduction in wages of 30 to 45 per cent upon all kinds of work, they were able to make only from $3 to $10 a week, whereas they had formerly made from $14 to as high as $20 a week.[b] A little later in the year a woman metal burnisher said at a meeting of Working Women's Association No. 2 of New York that she could make with slow work $8 and working very hard $20 a week.[c] And in 1870 women burnishers in New York were said to receive from $6 to $17 a week.[d]

As early as 1867 women were employed by one gas manufacturing establishment in New York on the finer sorts of brass filings. But the employer in this case objected to having his name given because he thought "his male operatives would desert him were it known that a part of their work is now done by women."[e]

In 1867, too, the Morse Twist Drill and Machine Company of New Bedford employed 24 female machinists in filing of a light nature, testing light machines, grinding drills, and other miscellaneous tasks. This was said to be "a new branch of trade" opened "to female labor." The women were employed in a department by themselves and were said to earn good wages.[f] And in 1870 Mrs. Robert Dale Owen stated in an address before "Sorosis" that "in the soldering of tubes for steam engines and the like there is great scope for female labor, and young girls are employed to bind the tubes with wire preparatory to the soldering. This is not very hard work and is very remunerative."[g]

In 1872, moreover, women were commonly employed in weighing and filing printed money in the mints,[h] and in the manufacture of nails and tacks. In a nail factory at Taunton, Mass., in that year "numerous women and children" were said to be "steadily employed." They apparently operated machinery, for it was stated that a girl running a machine for making leather-headed tacks could turn out 120,000 tacks a day.[i] They probably also sorted and packed the nails and tacks and made paper boxes. The proportion of women in

[a] Fincher's Trades' Review, November 21, 1863.

[b] Workingman's Advocate, June 13, 1868.

[c] The Revolution, October 1, 1868.

[d] The Woman's Journal, Boston and Chicago, February 26, 1870. Quoted from the New York Evening Post.

[e] Daily Evening Voice, March 2, 1867. From the Fourth Annual Report of the New York Working Women's Protective Union.

[f] Scientific American, January 26, 1867, p. 63.

[g] The Revolution, March 24, 1870.

[h] Trowbridge and others, Great Industries of the United States, 1872, p. 163.

[i] Idem, pp. 1077, 1078.

all hardware manufacture, however, declined between 1850 and 1880. In 1850, 12.5 per cent of the employees were females, and in 1860, 11.8 per cent. In 1870, 8.1 per cent were women and 0.6 per cent children, and in 1880, 5.8 per cent were women and 0.3 per cent children.[a] In the latter year it was said that women were employed chiefly in packing the smaller articles of hardware, and sometimes also in tending light machinery and as clerks in offices.[b] In 1874 women brass finishers in Connecticut were reported to receive from $1.50 to $10.50 per week.[c]

Watch and clock making, as long as they were hand trades, requiring a high degree of skill, were carried on exclusively by men. The introduction of women was originally due to two causes: First, the fact that the industry in this country was founded on the basis of the interchangeability of parts, which rendered possible and desirable the extensive use of machinery[d] and the minute subdivision of labor; and, second, the difficulty and expense of procuring skilled watchmakers. It was found that by the subdivision of labor and the employment of comparatively simple machinery cheaper and less efficient help could be employed to advantage. The women were generally employed in the lighter work and in running the simpler machines. As has already been seen, the proportion of women employed in both these industries has increased rapidly, as the division of labor and the development of machinery have progressed.

As early as 1858 a writer in the True National Democrat[e] called attention to watch and clock making as "admirably adapted to the female sex," and about the same time women began to be employed in this industry. The Elgin Watch Factory, which was founded in 1867, employed from the first a large number of women. On March 26, 1868, indeed, an article appeared in the New York Tribune which stated that of the 250 employees but were women, chiefly farmers' daughters of the neighborhood. They received, according to this article, from 90 cents to $1.15 per day, while the men earned $2 per day and upward.[f] It was not stated, however, that the work of men and women was of the same character. In 1872, moreover, both

[a] Tenth Census, 1880, Manufactures: Special Report on Manufactures of Hardware, Cutlery, and Edge Tools, p. 8.

[b] Twenty-sixth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1895, p. 597.

[c] The investigation of hand and machine labor in 1898 showed that while under the hand method only 4 operations out of 347 were performed by females, under the machine method females performed or assisted in performing 317 operations out of 881, or 35.95 per cent of the whole number. (Thirteenth Annual Report of the United States Commissioner of Labor, 1898, Hand and Machine Labor, Vol. I, p. 196.)

[d] Quoted in The Dial, September, 1863.

[e] Quoted in the Revolution, April 9, 1868. The average wages of women in the Elgin Watch Factory in 1895 were $2.53 per day.

sexes were employed in the Howard watch factory at Roxbury, Mass. The women tended the machines which made the screws,[a] and, doubtless, did other work.

As to the employment of women by the American Watch Company, the Tenth Census (1880) made the following statement, the first of the two paragraphs being quoted from the report of Prof. James C. Watson at the international exhibition of 1876:

"There are many important operations in the manufacture of watches by this method where the delicate manipulation of female hands is of the highest consequence, and it ought to be mentioned here that for this labor the amount of wages paid by the company is determined by the skill and experience required, not by the sex of the operative."[b]

Upon much of the work either sex might be employed, but it may be of interest to note some of the items of work upon which women are usually engaged, viz, the cutting and setting of pillars, the drilling of pin and screw holes in plates, the cutting of the teeth of wheels and pinions, the leaf polishing, the gilding, the making of hairsprings, the setting of springs, the making of pivot jewels and balance screws, the putting of movements together, and the fitting in of roller jewels and jewel pins. Besides the machine shop and general work and superintendence, some items of work usually performed by men are the punching and press work, the brazing, enameling, firing, and lettering of dials, the plate turning, fitting, and engraving, the fitting of wheels and pinions, the uprighting and end shaking, the stoning and oxidizing prior to gilding, the rosette turning, cutting of scape wheels, milling of pallets, balance making and handling, and the final work of finishing and adjusting."

It is evident that by 1880, when women constituted 36.4 per cent of the employees engaged in watch making, as compared with 14.8 per cent twenty years earlier,[c] the industry had practically assumed its present form. Since that date, however, women have, to a certain extent, been substituted for men through further subdivisions of labor and changes in methods. The process of assembling, for instance, which was for years almost exclusively men's work and which required expert watchmakers, has been subdivided and in part assigned to women. This change was made at a comparatively early date at Waltham, but was not effected at Elgin until the strike of 1897–98.

WOOD, CHEMICAL, CLAY, AND GLASS WORKERS.

The proportion of women to the total number of employees in the group of industries "leather and its remanufactures," was precisely the same in 1850, 1870, and 1905.[d] In the manufacture of furniture,

[a] Greeley and others, Great Industries of the United States, 1872, pp. 78, 79.

[b] Tenth Census, 1880, Manufactures: Special Report on Manufactures of Interchangeable Mechanism, p. 62.

[c] See Table XVI, p. 258.

[d] See Table IX, p. 250. The figures for 1850 were, of course, for all females employed, including girls under 16.

including cabinetmaking, repairing, and upholstering, the proportion of women appears to have declined from 7.3 per cent in 1860, or 8.8 per cent in 1870, to 3.7 per cent in 1900.[a] This decline is due to the use of machinery and other labor-saving devices in the work usually performed by women.

Women have long been employed in various ways in upholstering. In the days of hair-seated furniture they prepared the hair, and even wove the haircloth. Later they still prepared the hair cushions. As early as 1853 it was said that in New York they could earn from $3 to $6 per week preparing the hair for the seats of railroad cars.[b] And in 1864 100 females were said to have been employed at Poughkeepsie, N. Y., in pitting seats in cane-bottomed chairs.[c]

Women have also long been employed in considerable numbers in the manufacture of chemicals. In 1872, in an establishment at Providence, R. I., where cream of tartar was made, it was said that 46 girls and 8 men were employed.[d] The proportion of women to the total number of employees in this entire group of industries, however, though it rose to 14.1 per cent in 1900, has usually been under 10 per cent.[e] The proportion of women has increased decidedly, however, in the manufacture of druggists' preparations and patent medicines.[f] Most of the women in this group have been employed in labeling and packing.

The proportion of women to the total number of employees engaged in the manufacture of "clay, glass, and stone products," though small, shows a decided increase, all of which has occurred since 1880.[g] This increase has been mainly in the group "pottery, fire-clay, and fire-clay products," in which the proportion of women employees increased from 1.8 per cent in 1880 to 10.3 per cent in 1900, and in the manufacture of glass, in which the proportion of women employees increased from 1.7 per cent in 1870 to 6.7 per cent in 1900.[h]

As has already been seen, the manufacturing census of 1820 did not report any women as engaged in the manufacture of glass. In a description, moreover, of the Bethany Glass Factory, at Bethany, Pa., in 1829, it was stated that 40 men and 8 boys were employed, but women were not mentioned.[i] But in 1830 it was said that the New England Glass Bottle Company at East Cambridge, Mass., employed some 80 men and boys and about a dozen girls. The latter

[a] See Table XVI, p. 260. The documentary relative to the manufactures in the United States (Executive Documents, Twenty-second Congress, first session, pp. 197, 147, 203, 498) showed over 200 women employed in shoe factories in Massachusetts in 1831.

[b] New York Daily Tribune, June 29, 1853.

[c] Fletcher's Trades' Review, May 28, 1864.

[d] Greeley and others, Great Industries of the United States, 1872, p. 1173.

[e] See Table IX, p. 250.

[f] See Table XVI, p. 256.

[g] Hazard's Register, February 1829, Vol. III, p. 135.

were engaged in covering with willows the carboys, demijohns, etc.[a] The Boston and Sandwich Glass Company employed in 1831, moreover, about 130 men, 46 boys under 16 years of age, and 6 women. The latter were engaged in painting glass and were paid $1.20 per day.[b] There is, however, no evidence of the employment of any women in the Dyottville Glass Works near Philadelphia where, in 1833, 300 men and boys were employed.[c] There the demijohns appear to have been covered with wicker by men, with boys as apprentices. In 1844, however, we again hear of women in the industry, this time in a glass factory at Pittsburg where the demijohns were covered by girls "belonging to the families of the blowers."[d]

In 1846 the wages of women glass makers are reported to have been 44.8 cents per day, in 1850, 55.7 cents per day, and in 1856, 50 cents per day.[e]

By 1880 women and children were employed in the packing and boys in the gathering of glass, especially of glassware. Out of 741 females over 15 years of age in that year employed in glass works, 513 were employed in glassware manufactories, most of the others being employed in the manufacture of green glass.[f]

Since 1880, however, the number of women has nearly doubled in each decade, and they have come to be largely employed in the finishing and decorating departments as well as in packing. But between 1900 and 1905 there was a slight decrease in the number of women and children employed in the packing and finishing departments and an increase in the number in the decorating department. The total result was a slight decrease in the number of women employed in the industry but an increase in their wages, due to the fact that the decorators are higher paid than the packers or finishers.[g]

The development of the various kinds of glass manufacture,[h] especially the manufacture of light and fancy articles, together with division of labor, have brought women into the glass industry.

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[a] Delaware Free Press, May 8, 1830; Mechanics' Free Press, Office March 13, 1830. Quoted from the Lowell Journal.

[b] Executive Documents, Twenty-second Congress, 2nd session, Vol. I, p. 124.

[c] Boston Courier, May 6, 1833.

[d] The New World, December 7, 1844.

[e] Sixteenth Annual Report of the Massachusetts Bureau of Statistics of Labor, 1885, pp. 283, 302, and 306.

[f] Tenth Census, 1880, Manufactures: Special Report on the Manufacture of Glass, by L. P. Weeks, p. 5.

[g] Special Reports of the Census Office, Manufactures, 1905, Part III, p. 838.

[h] In 1906 a New York glass worker stated that in one establishment in that city where art-glass lamp shades were made two girls were employed to wrap copper foils around the glass, and added that they entered the art-glass trade about two years ago. In New York City they entered the silvering room (room for making mirrors), he said, about five years before.

WOMEN IN OTHER INDUSTRIES.

Women have been employed in many other industries. The number engaged in the manufacture of electric apparatus and supplies increased from 72 in 1850 to 6,158 in 1900, and from 5.7 per cent of all the employees in 1880 to 15.1 per cent in 1900. An even more remarkable increase in the proportion of women employees has occurred in the making of soap and candles. In 1850 women constituted only 5.5 per cent of the persons engaged in this industry and in 1900 37.8 per cent.[a] The first of these industries (the manufacture of electric apparatus and supplies) is, however, a new industry for both men and women, and consequently the women employed have not displaced men, unless it be considered that they have displaced potential men. The making of soap and candles is an industry which formerly belonged primarily to women as part of the routine of maintaining the home; it is one of the numerous industries which, when carried on in the home for household consumption, has been part of woman's burden, and when carried on for sale or as a wholesale business has been appropriated by man.

In 1851 in one establishment in New York, out of 30 hands employed in packing soap, 20 were girls. The business of fancy soap making and the preparation of perfumery was said to employ in that year from 600 to 700 girls in New York City and from 3,000 to 5,000 in the country. In the city the average wages were given as $4 a week and in the country as about $3 a week.[b] In 1870 buckles were said to be made mostly by women. The thick wires were bent, according to a description given by Mrs. Robert Dale Owen before "Sorosis," by machinery and were worked by women into the required form, the teeth being afterwards sharpened and pointed.[c]

At Kowhallville, Conn., in 1871, 800 girls are said to have been engaged in making rifle cartridges.[d] And in 1874, out of about 160 hands employed by the American Lead Pencil Company, Hudson City, N. J., about 80 were women.[e]

The saddlery business in the New England States, like the manufacture of brushes and whips, was referred to in 1836 by a committee of the National Trades' Union as "in a certain measure governed by females."[f] And in 1851 it was said that in New York "a large number of females," were employed at very fair wages in the manufacture of leather goods.[g] They appear to have been engaged in

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[a] See Table XVI, pp. 258, 259.

[b] Burns, Life in New York, 1851.

[c] The Revolution, March 24, 1870.

[d] Ibid., February 16, 1871.

[e] Swasey and others, Great Industries of the United States, 1872, p. 737.

[f] National Laborer, November 12, 1836. Reprinted in Documentary History of American Industrial Society, Vol. VI, p. 285.

[g] Burns, Life in New York, 1851.

sewing by hand the lighter materials. It was many years later before sewing machines were used in the business, but when, about 1863, the wax-thread machine began to be used in the manufacture of harness[a] it was doubtless operated by men. In 1871, however, a "lady" saddlery and harness dealer in Chicago is said to have employed more than a hundred women upon "blankets, nets, wraps, etc."[b] And in 1876 sewing girls engaged in the manufacture of leather were said to make $4 a week in Kentucky and $9 a week in California.[c] In the tanning of leather the introduction of machinery has recently caused a substitution of women and girls for men, the proportion of women to the total number of employees in the division "leather, tanned, curried, and finished" increasing from 0.9 per cent in 1890 to 2.3 per cent in 1900, or from 264 in 1890 to 1,173 in 1900, an increase of 344.3 per cent.[d]

In the manufacture of rubber and elastic goods a large proportion of the employees have always been women. In 1850 females constituted 60.7 per cent of all the workers in the industry. One india rubber factory in New York in 1858 is said to have employed between 200 and 250 hands, about 120 of whom were women. The hours were from 7 a. m. to 6 p. m. and wages from $2.50 to $6 a week for the girls, boys, and apprentices, and from $5 to $12 a week for the men. The young women, according to the account, were employed in cutting the rubber into gumcoats and pressing the edges together to form the seams, and they worked in large well-ventilated and well-lighted rooms.[e] In 1890 the proportion of women employees in the industry appears to have decreased to 35.2 per cent, and it has fluctuated considerably since that time, but has always remained over 35 per cent of the total number of employees.

The match industry, though small numerically in its employment of women, is important because of the danger, which it has always involved in this country, of phosphorus poisoning. The number of women employed, according to the census figures, increased from 540 in 1850 to 1,120 in 1880, and then decreased to 793 in 1900, increasing again, however, to 1,248 in 1905. Meanwhile the proportion of women to the total number of employees decreased from 52.9 per cent in 1850 to 38.7 per cent in 1900,[f] but rose to 39.2 per cent in 1905.[g] The introduction of improved machinery is responsible for

[a] Hopew, One Hundred Years of American Commerce, Vol. II. "The Harness and Saddlery Trade," by Albert Mordeck.

[b] The Revolution, May 20, 1871.

[c] Young, Labor in Europe and America, 1875, p. 774. (United States Bureau of Statistics, Treasury Department.)

[d] Twelfth Census, Manufactures, 1900, Part I, p. xxxiv, and Part III, Selected Industries, pp. 713, 714.

[e] New York Daily Tribune, June 17, 1858.

[f] See Table XVI, p. 250.

[g] Special Reports of Census Office, Manufactures, 1905, Part I, p. 13.

the decrease. Formerly hand work was used in most of the processes, and little or no skill was required. In 1866 a committee of the Eight-Hour League and Trades' Assembly of Detroit found a large number of girls, many of them not over 10 and some even as young as 7 years, employed in match factories in that city. All worked by the piece, doubtless packing the matches in boxes. They were fined if late, but were obliged to stay in the factories, even when not employed, to be ready for the work when it was furnished.[a] In 1872 girls were generally employed to box matches and men to dip them. The Swift and Courtney and Beecher Company in its three establishments was said to employ about 400 hands, the chief portion of whom were women and girls. Machines for cutting the wood were run by men.[b] From the beginning of the industry, doubtless, a larger proportion of women and children than of men have been engaged in work which has subjected them to the danger of "phossy jaw."[c]

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[a] Daily Evening Voice, May 3, 1866. Quoted from the Detroit Daily Union.

[b] Crosby and others, Great Industries of the United States, 1872, pp. 1239, 1230.

[c] See "Phosphorus poisoning in the match industry in the United States," by Dr. John B. Andrews, Bulletin of the Bureau of Labor, No. 80, p. 33.

CHAPTER VII.

TRADE AND TRANSPORTATION.

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GENERAL CONSIDERATIONS.

Though the number of women engaged in the manufacturing industries is still far greater than in trade and transportation, the most rapid increase within recent years has occurred in the latter group of industries. In 1870 nearly 20 per cent of all the females 10 years of age and over engaged in gainful occupations were in manufacturing and mechanical pursuits and only 1 per cent in trade and transportation, but in 1900, while the proportion of women in manufacturing and mechanical pursuits had increased to 24.7 per cent, the proportion in trade and transportation had increased to 9.4 per cent.[a] The increase of women in trade and transportation industries was more marked, too, among native-born than among foreign-born women.[b] As for the proportion which women formed of the total number of persons engaged in trade and transportation, this increased from 1.8 per cent in 1870 to 10.1 per cent in 1900.[c]

There is not in every case a clear line of distinction between occupations in the group "trade and transportation" and the group "manufacturing and mechanical pursuits." Thus most of the "packers and shippers" are probably employed in manufacturing establishments. Many of the occupations classed under trade and transportation require a greater degree of education, skill, or knowledge of the world than is usually demanded in manufacturing pursuits, and therefore they require more schooling, and seem to be held in better social repute. In this sense the entrance of women into them may perhaps be designated as an industrial advance; although it must be said that the social advantage gained is by no means uniformly accompanied by any great wage advantage.

The trade and transportation industries are peculiar, too, in that their development upon a large scale is comparatively recent, having followed in the train of the commercial expansion of the latter half of the nineteenth century. Just as wholesale manufacture, together with its handmaids, machinery and division of labor, caused the industrial revolution and brought women in large numbers into fac-

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[a] See Table IV, p. 240. [b] See Table V, p. 246. [c] See Table XVII, p. 258

trains, as wholesale trade for widely scattered markets, with its handmaids—the railroad, the steamship, the telegraph, and the typewriter, has caused a commercial revolution and is bringing women in increasingly large numbers into the occupations included under "trade and transportation." The continual overcrowding, moreover, of women's occupations, intensified from time to time by the invention of labor-saving devices, has tended to accentuate this movement, the end of which is not yet to be seen. The history of the employment of women in trade and transportation is, however, short and comparatively well known.

This group of occupations has been divided into two classes, (A) those in which the majority of persons engaged are probably wage-earners, and (B) those in which the majority are probably engaged in independent business. Of the latter class by far the largest number of women are "merchants and dealers (except wholesale)" and the next largest are "hucksters and peddlers." In the former occupation the proportion of women has increased, but in the latter it has decreased.[a] The occupations classed under B, however, do not properly form part of this study. Of those in class A the most important, as employing the largest number of women, are the first five in Table XVII, "saleswomen," "stenographers and typewriters," "clerks and copyists," "bookkeepers and accountants," and "telegraph and telephone operators."

SALESWOMEN.

One of the favorite remedies proposed by Mathew Carey for the low wages of women milliners and seamstresses was to employ them in retail shops, for which employment, he said, "they are admirably calculated."[b] And in 1825 the United States Telegraph made the following suggestion for the relief of the distressed working women: "Let them stand behind counters and attend to such parts of the retail trade as is least laborious. Here at once would be a great source of employment, which would tend to equalize wages, and in other respects be advantageous to the public."[c] In 1840, however, "few if any females" were said to be employed as clerks in stores in this country.[d]

The subject was again taken up in 1845, when one of the speakers at a meeting in behalf of the working women of New York

[a] See Table XVII, p. 289. For a description of the hucksters women who were common in New York in 1845, see the New York Daily Tribune, Sept. 13, 1845. In 1851, too, hucksters' women were familiar sights on the business streets of New York. See Burns, Life in New York, 1851.

[b] Carey, Appeal to the Wealthy of the Land, third edition, p. 33.

[c] United States Telegraph, July 4, 1825.

[d] Mechanics' and Inventors' Guide, etc., in the United States, 1840, p. 250.

recommended, according to the New York Herald,[a] that the working women memorialize the merchants in dry-goods establishments to employ women. She stated, too, that there were "various other branches of business in which men were employed for which females alone were suitable and intended," and suggested that the men in these occupations "go out to the fields and seek their livelihood as men ought to do and leave the females their legitimate employment."

The employment of women in dry-goods stores was also advocated at this time by the New York Sun and the Tribune. "Let them send committees to those stores," said the Sun, "in which women should be employed and are not, to ask dealers to dismiss their men to manly occupations and save for society a thousand women from want and temptation."[b] The Tribune even went so far as to suggest a boycott of those shops which did not employ women. "All our stores," it said, "mainly visited by women should be attended by women. It is a shame that fine, hearty lads, who might clear their 50 acres each of western forest in a short time, and have a home, a farm, a wife, and boys about them in the course of ten years, should be hived up in hot saleserooms, bending down tapes and ribbons, and cramping their genius over chintzes and delaines. They should know better; but, if they do not, our women of intelligence and means should take compassion on their less fortunate sisters and for their sake refuse to trade where they can not be waited on by females."[c] Thus was the principle of the Consumers' League, recently used to protect saleswomen and others from bad working conditions, originally suggested as a means of introducing women into the very positions in which they have needed that protection.

As late as 1851, however, there were few shopwomen in New York, and the time when they should be employed was looked forward to as the millennium of the working woman. A shopgirl was referred to by one writer as "more fortunate than the great majority of her sex," and the picture of "the strong youth, frittering away his strength and consecrating his manhood behind the counters of our retail shops" was pronounced as "sad to contemplate" as that of the woman overtaxing her strength by working 14 or 15 hours a day.[d] A little later the New York True National Democrat, comparing this country and England with Europe in the matter of the employment of women in stores, stated that "50,000 retail stores in our large cities and towns ought to afford employment and good wages for 100,000 women."[e] About the same time the New York

[a] Quoted in Workingman's Advocate, March 8, 1845.
[b] New York Daily Tribune, March 7, 1845.
[c] Burns, Life in New York, 1851.
[d] Quoted in The Una, September, 1853.

Tribune, later joined by the Times,[a] renewed its agitation in favor of the employment of saleswomen, charging that "the effeminacy of the half-men who come into competition" with women in their narrow range of occupations was one of the causes of their low wages, and advising wealthy women to "decline to buy at shops and stores waited on by men."[b]

For some reason, however, few women appear to have been employed in stores until the time of the civil war. The hours of work in shops in New York in 1853 were from 7 in the morning until at least 6 and often until 10 or 11 at night, with half or three-quarters of an hour for dinner.[c] During and immediately after the war, however, the agitation in favor of the employment of women as clerks in stores where women were the purchasers was renewed by Miss Anna E. Dickinson,[d] the Rev. Henry Morgan of Boston,[e] and others. In 1868 the American Artisan spoke of the precarious status of dry-goods clerks "who occupy places * * * that should be filled by female clerks."[f] About this time women began to displace men in retail shops and before many years the efficacy of such employment to remedy low wages and long hours had been tested by experience.

By all of these early advocates of the saleswoman as opposed to the salesman it seems to have been assumed that when women entered the stores they would step, so to speak, into the shoes of the men clerks who had gone "to the fields" or "out west." The factor overlooked by them was that, when women replace men, the standard of wages in the occupation tends to be reduced to the level of women's wages in other occupations. Once women were introduced in the stores, however, not only did this tendency become apparent, but the work soon proved itself so attractive, as compared with other women's occupations, that the pressure of numbers served further to reduce wages. The hours, too, though they have been gradually shortened, have always been long, and it soon became evident that the constant standing, which had been required of men, was injurious to women. Other evils, too, appeared. The history of saleswomen, then, like the history of other classes of working women, early becomes a story of hard work, long hours, and low wages.

Even in 1865, when employment in stores was still being urged as a desirable outlet for women from the sewing and other congested trades, complaint was made of the competition of partly supported girls. "In agreement with the testimony of a lady," said the Daily

[a] Hunt's Merchants' Magazine, Vol. XXXIII, p. 700.
[b] New York Daily Tribune, June 24, 1853.
[c] Fincher's Trades' Review, November 26, 1853.
[d] Ibid., March 11, 1865; Daily Evening Voice, April 3, 1866.
[e] Daily Evening Voice, February 15, 1866.
[f] American Artisan, August 1, 1868.

Evening Voice,[a] "a gentleman informed us that he knew of young women, whose parents had ample means for their maintenance, now employed behind the counters of first-class stores for very moderate compensation, while others in the same employ must of necessity endure grievous privations and self-denials, because the same compensation in their case is utterly inadequate to their proper support."

A method of keeping down wages was to hire young girls to be taught the business, paying them little or nothing, and then to discharge them as soon as they began to expect more pay. The Philadelphia Saturday Night asserted in 1866 that in almost every retail establishment in that city it was the custom to procure the services of a young girl six months for nothing under the pretense of teaching her the business—though she was a useful hand at the end of one month—then give her $2 a week for six months and $3 a week the second year, and discharge her the third year to make room for new comers who cost nothing. It was said $5 a week was the highest rate paid the oldest and best hands in the majority of stores.[b]

In New York wages appear to have been somewhat higher, but the hours were very long. A saleswoman in a first-class dry goods store in New York in 1868 testified that she made $7 a week working from 8 in the morning until 9 at night.[c] Another saleswoman said she worked from 7 until 9 five nights a week and on Saturdays from 7 until 11 for $6 a week.[d] About the same time it was said that, while "a saleswoman in one of our Broadway stores will receive eight or ten dollars per week * * * a man, at the same counter, who does much less to influence trade, receives fifteen or twenty dollars."[e]

Saleswomen in Boston in 1869 are said to have received from $5 to $7 a week, only the cleverest earning the latter sum. Unless they lived with their parents (the cost of board was about $5 a week, leaving, obviously, for the more poorly paid, nothing for clothing or incidental expenses of any kind. At the same time they were required, of course, to dress better than seamstresses or factory operatives.[f]

By 1870 the saleswomen of New York were sufficiently numerous to form an organization for the purpose of self-protection,[g] and in

[a] Daily Evening Voice, April 7, 1865.
[b] Quoted in the Workingman's Advocate, September 8, 1866.
[c] The Revolution, October 1, 1868.
[d] Idem, February 19, 1868.
[e] Idem, May 13, 1869. Quoted from the Boston Daily Advertiser.
[f] Idem, July 21, and August 4, 1870.

June of that year the women employed in stores on Sixth and Eighth avenues, Grand and Catherine streets asked the aid of the Clerks' Early Closing Association in inducing their employers "to follow the example of the Broadway shopkeepers and close their establishments at 7 p. m. except on Saturday evenings." They were accustomed, they said, to stand on their feet continually, not being allowed to sit down, from 8 a. m. to 11 p. m.[a] It appears from the accounts that the employees of the Broadway shopkeepers were mainly men and had secured a reduction of hours through the Clerks' Early Closing Association.

Even before this time the physical harm to women of long standing behind counters began to attract attention. In Philadelphia, where more girls were employed than in any other city, a large number were said to be suffering from diseases induced by long standing. One employer in that city, however, had already broken through the time-honored rule of the trade and allowed his girls to sit down behind the counters.[b] In Boston, too, complaint of this rule arose in 1869. Because for the girls to sit down, said a writer in the Boston Daily Advertiser,[c] would make trade appear dull, they were required to stand from 8 a. m. to 6 p. m. with the exception of an hour for dinner. It was suggested that the constant standing position was probably as injurious as the use of the sewing machine.

In New York where the same excuse was made for compelling saleswomen to stand all day, viz, that if they were seated it looked as if trade were dull, it was suggested that the names of all employers who forbade standing all day should be published in order that they might be patronized.[d]

By the end of the seventies agitation began in favor of legislation providing that saleswomen should be furnished seats and be allowed to use them, and also in favor of laws limiting the hours of labor. The enactment of such laws and the growth of great department stores with their hundreds of working women, constitute the two great changes since the sixties and seventies in this class of occupations. From 1880 to 1900, though the number of saleswomen increased from 7,402 to 142,265, the proportion to the total number of employees changed only from 23.1 to 23.3 per cent.[e]

STENOGRAPHERS, TYPEWRITERS, CLERKS, COPYISTS, BOOKKEEPERS, AND ACCOUNTANTS.

Even before the invention of the typewriter women were employed to a certain extent as copyists. In 1870, for instance, they are said

[a] The Revolution, June 3, 1869. American Workman, June 11, 1870.
[b] Penny, Think and Act, 1869, p. 87.
[c] Quoted in the Revolution, May 13, 1869.
[d] The Revolution, July 15, 1869.
[e] See Table XVII, p. 259.

to have been employed in Washington to copy speeches and other documents for Members of Congress, and in other cities lawyers employed them to copy briefs and various legal documents. In January, 1871, a statement appeared in the Revolution[a] that many lawyers in the city would be willing to give work to competent women copying clerks if their orders could be filled on short notice. It was further suggested that 8 or 10 women clerks should combine to rent an office in the lower part of the city in order to secure this business. For this work women were paid in some cases from 3 to 4 cents for every hundred words, and in other cases from 8 to 31 cents a page.[b]

Though women were said to be sometimes employed to write from dictation at a salary of about $600 a year,[c] their first experience as stenographers appears to have been in the transcribing of notes taken by men. Thus in 1869 the stenographer of the surrogates' court, New York, wrote a letter to the Revolution calling attention to "phonographic reporting" as an industrial field open to women "in which the pay is remunerative, but into which they do not seem much inclined to enter." For several months past, he said, he had had all his shorthand notes taken in court transcribed by a girl, to whom he had paid the same wages as to a man, and who had proved very efficient.[d]

As long, indeed, as the use of stenographers was confined to court work and to the reporting of long public speeches—work which is still generally done by men—women gained little foothold in the business. As industries, however, have expanded and commerce has grown, the tendency toward concentration and the adoption of labor-saving devices in trade as well as in manufacture have created a great demand for stenographers, typewriters, clerks, and copyists for ordinary business work—a demand largely filled by girls. This demand and supply have arisen practically within a generation, and a new and comparatively promising field of employment has been opened to women.

Women clerks began to be employed about the same time or even earlier than women copyists. In 1864 they were first employed in the Treasury Department to clip or trim the notes, which soon afterwards was done by machinery. The women, however, remained, doing other kinds of work, and gradually their number increased—most of the new ones being, for a time, war widows or orphans. By 1880 they had proved their efficiency and were recognized by act of Congress and their salaries were fixed at $900 per year. Men clerks at that time received from $1,200 to $1,800 a year. In 1870, however,

[a] The Revolution, January 27, 1870.
[b] Penny, How Women Can Make Money, p. 50.
[c] Idem, p. 1.
[d] The Revolution, January 28, 1869.

Congress legislated that women clerks should be graded like men and should receive the same salaries. As late as 1868, however, no women were employed in the Congressional Library, or in any department except the Treasury, Post-Office, and War.[a]

As bookkeepers and accountants the employment of women was suggested as early as 1846, when one of the speakers at a meeting held in behalf of the working women of New York stated that "there were hundreds of females in this city who were able to keep the books as well as any man in it."[b] And in 1853 a writer in the New York True National Democrat said that, "as accountants and bookkeepers, females would stand unrivaled."[c]

It was not, however, until the sixties that women began to gain a foothold in this occupation, and then at much lower salaries than were paid to men. It was said, for instance, in 1868, that when a New York merchant found himself in need of a bookkeeper he employed a woman for $600 a year, whereas he had paid her predecessor, a man, $1,800.[d] By 1870 several women were said to be employed as bookkeepers in New York at salaries of from $16 to $20 a week.[e] Another writer added, however, that men of the same capacity and acquirements as these $16 to $20 women bookkeepers would demand from $25 to $40 per week.[f]

Soon afterwards the increased demand for stenographers and bookkeepers caused the starting of business schools where women could receive training for such work. In 1871 S. S. Packard of New York offered to educate 50 young women free for business.[g] Other schools were opened to women and at first gradually, then rapidly, they entered this new field of employment.

In 1870 there were reported to be employed in this group of occupations, including "stenographers and typewriters," "clerks and copyists," and "bookkeepers and accountants," only 8,982 women. In 1880 the number increased to 28,608, in 1890 to 168,868, and in 1900 to 238,982.[h] Meanwhile the proportion which women formed of the total number of persons engaged in these occupations rose from 3.3 per cent in 1870 to 5.7 per cent in 1880 and to 15.0 per cent in 1890. In 1900, 75.7 per cent of the stenographers and typewriters, 13.9 per

[a] The Revolution, April 16, 1868.

[b] Workingman's Advocate, March 8, 1846. Quoted from the New York Herald. Reprinted in Documentary History of American Industrial Society, Vol. VII, p. 336.

[c] Quoted in The Una, September, 1853.

[d] The Revolution, February 19, 1868.

[e] Woman's Journal, Boston and Chicago, September 17, 1870. Quoted from the Boston Post.

[f] The Revolution, October 20, 1870.

[g] Ibid., February 25, 1871.

[h] See Table XVII, p. 259. The figures for 1870 and 1880 also include saleswomen, of whom there were 7,462 in 1890 and 142,265 in 1900.

cent of the clerks and copyists and 28.6 per cent of the bookkeepers and accountants were women.[a]

TELEGRAPH AND TELEPHONE OPERATORS.

As telegraph operators women were employed almost, if not quite, from the beginning of the business. In 1868 fifteen young women were said to be employed in one office in New York,[b] and later in the year the American Telegraph Company was reported to have in its employment about 80 female operatives, nearly half of them in New York. Their salaries varied from $30 to $50 per month, while male operators received an average of $75 per month and several over $100.[c] In 1870 the salaries of women telegraph operators were reported to be from $15 to $20 per week.[d] But in 1871 good operators, it was said, received $30 a month and first-class operators $70.[e]

In 1869 Cooper Union of New York, in conjunction with the Western Union Telegraph Company, established a free school for teaching telegraphy to women. This was said to have been the first attempt in this country to give women a regular training as telegraph operators.[f] Thirteen pupils graduated from this school at the end of one term in 1871. Some pupils, it was said, graduated at the end of three months.

By 1870 women were said to have proved "a great success" as telegraph operators.[g] Even in San Francisco at that time a young woman had charge of one of the Western Union branch offices and a number of others were learning to operate the telegraph.[h] And in 1871 two women telegraph operators of New York built a city telegraph line, opened offices on Broadway and in other places, "purchased a portion of the Manhattan Company's wires," and started out to "cooperate with all the opposition lines."[i]

From 1870 to 1900, telephone and telegraph operators were grouped together in the census reports on occupations. The number of women employed in the group has increased enormously, as has also the per cent which they form of the total number of persons engaged in these occupations. In 1870 only 350 women were reported, and in 1900, 21,880. Meanwhile the proportion of women, as compared with the total number of persons engaged, increased

[a] See Table XVII, p. 259.
[b] The Revolution, July 30, 1868.
[c] Idem, December 10, 1868.
[d] The Woman's Journal, Boston and Chicago, February 26, September 17, 1870.
[e] The Revolution, June 29, 1871.
[f] Idem, February 18, 1869.
[g] Idem, December 30, 1870.
[h] Idem, September 8, 1870.
[i] Idem, March 16, 1871.

from 4.3 per cent to 29.3 per cent.[a] Since 1900, two special reports on the telephone and telegraph systems of the United States have been issued by the Bureau of the Census, for the years 1902 and 1907. The data in them are not strictly comparable with the preceding census figures, because employees are classified merely as male and female, with no distinction as to age, and because the number of operators reported is an average for the specified years, as reported by the companies, while the data from 1870 to 1900 are made up from the number of persons who individually gave their occupations as telephone and telegraph operators. On the other hand, telephone operators are reported separately, and it at once becomes evident that the great increase in the group, telephone and telegraph operators, is in the number of female telephone operators; for in 1902 there were 37,333 reported, with but 2,525 male operators, while by 1907 the number of female operators had increased to the surprising figure of 70,038, while only 3,576 male operators were reported.[b] Corresponding figures are not available for women telegraph operators. In 1902, however, the commercial companies employed an average of 2,914 female operators and 10,179 male operators. This must represent a considerable increase over the number in earlier years.[c] In the same year the railway telegraph and telephone companies reported 30,336 operators and dispatchers, but did not report as to sex.[d] Undoubtedly the employees in this branch of telegraphy are largely male.

[a] See Table XVII, p. 259. Girls under 16 years of age are excluded.
[b] United States Census: Special Report on Telephones, 1907, p. 71.
[c] United States Census: Special Report on Telephones and Telegraphs, 1902, p. 102.
[d] Idem, p. 104.

APPENDIX.

TABLE I.—PERCENTAGE OF BREADWINNERS IN THE FEMALE POPULATION 10 YEARS OF AGE AND OVER, BY GEOGRAPHICAL DIVISIONS, 1870, 1880, 1890, AND 1900.

[The figures for 1900, 1890, and 1880 are from Special Reports of the Census Office: Statistics of Women at Work, 1900, page 13; those for 1870 are derived from the Ninth Census, 1870: Population and Social Statistics, pages 670 and 719-[illegible].]

Geographical division.	1870.	1880.	1890.	1900.
Continental United States	14.7	16.0	19.0	20.6
North Atlantic Division	18.1	18.7	23.4	24.9
South Atlantic Division	23.0	21.4	20.3	25.0
North Central Division	9.2	10.4	14.4	16.2
South Central Division	17.9	18.1	19.6	20.6
Western Division	9.3	10.0	15.4	16.8

TABLE II.—PERCENTAGE OF BREADWINNERS IN THE FEMALE POPULATION 15 YEARS OF AGE AND OVER, FOR CONTINENTAL UNITED STATES, CLASSIFIED BY AGE, RACE, AND NATIVITY, 1890 AND 1900.

[From Special Reports of the Census Office: Statistics of Women at Work, 1900, page 24.]

Race and nativity.	15 to 24 years.		25 to 34 years.		35 to 44 years.		45 to 54 years.	
	1890.	1900.	1890.	1900.	1890.	1900.	1890.	1900.
All classes	30.0	32.0	17.2	19.6	13.2	16.5	12.5	14.2
Native white, both parents native	17.7	20.1	11.4	13.0	9.2	11.6	9.6	11.5
Native white, one or both parents foreign-born	35.0	37.5	16.2	22.5	12.0	15.0	10.0	12.0
Foreign-born white	60.4	58.9	18.8	18.8	12.6	13.6	10.5	11.2
Negro	45.0	47.8	37.0	41.3	37.5	41.0	37.8	42.2
Indian and Mongolian	16.7	15.0	18.4	13.2	16.9	16.2	16.8	17.0

Race and nativity.	55 to 64 years.		65 years and over.		Age unknown.		Total.	
	1890.	1900.	1890.	1900.	1890.	1900.	1890.	1900.
All classes	12.0	13.2	8.5	9.0	30.8	24.2	18.9	20.6
Native white, both parents native	8.9	10.2	6.5	7.0	28.2	13.3	12.4	14.5
Native white, one or both parents foreign-born	10.7	10.0	9.2	6.2	31.1	23.1	25.2	25.4
Foreign-born white	8.8	9.8	6.0	6.2	37.5	26.8	19.8	19.1
Negro	37.2	41.0	25.2	25.5	42.1	28.3	36.5	40.2
Indian and Mongolian	18.9	17.6	13.8	13.6	10.0	6.5	16.2	19.5

TABLE III.—PERCENTAGE OF BREADWINNERS IN THE FEMALE POPULATION 15 YEARS OF AGE AND OVER FOR THE UNITED STATES (AREA OF ENUMERATION), CLASSIFIED BY RACE, NATIVITY, AND MARITAL CONDITION, 1890 AND 1900.

[From Special Reports of the Census Office: Statistics of Women at Work, 1900, p. 23.]

Race and nativity.	Single.		Married.		Widowed.		Divorced.	
	1890.	1900.	1890.	1900.	1890.	1900.	1890.	1900.
All classes	36.5	31.5	4.6	5.6	29.3	31.5	49.0	55.3
Native white, both parents native	27.5	31.4	2.2	3.0	24.7	26.4	42.6	47.5
Native white, one or both parents foreign-born	44.3	46.1	2.4	3.1	30.8	32.8	47.0	52.9
Foreign-born white	70.1	69.1	3.0	3.9	21.3	20.7	41.6	51.4
Negro	60.5	60.5	22.7	26.0	62.6	67.0	70.8	82.2
Indian and Mongolian	25.9	18.5	8.6	15.7	28.2	29.0	(a)	42.4

a Per cent not shown where base is less than 100.

TABLE IV.—NUMBER AND PER CENT IN EACH OCCUPATION GROUP OF FEMALES 10 YEARS OF AGE AND OVER ENGAGED IN GAINFUL OCCUPATIONS, BY GEOGRAPHICAL DIVISIONS, 1870, 1880, 1890, AND 1900.

[The figures and percentages for 1880, 1890, and 1900 are from the Twelfth Census, 1900: Special Report on Occupations, pages xcii, xciii, and xcvi. The figures for 1870 are from the Ninth Census, 1870: Population and Social Statistics, pages 670, 671.]

Occupation groups and geographic divisions.	1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
All occupations:								
Continental United States	1,836,288	100.0	2,647,157	100.0	4,005,532	100.0	5,319,397	100.0
North Atlantic Division	657,830	100.0	976,075	100.0	1,428,459	100.0	1,846,510	100.0
South Atlantic Division	412,170	100.0	558,970	100.0	721,883	100.0	987,480	100.0
North Central Division	312,165	100.0	637,060	100.0	1,023,847	100.0	1,397,031	100.0
South Central Division	271,001	100.0	429,814	100.0	710,529	100.0	971,921	100.0
Western Division	20,026	100.0	45,289	100.0	124,625	100.0	185,295	100.0
Agricultural pursuits:								
Continental United States	396,968	21.6	594,510	22.5	769,845	19.2	977,336	18.4
North Atlantic Division	2,089	.3	4,845	.5	20,671	1.4	26,681	1.4
South Atlantic Division	164,751	39.7	284,003	47.4	332,846	38.9	736,910	76.9
North Central Division	6,206	2.5	13,908	2.0	41,324	4.1	100,009	7.2
South Central Division	202,694	64.1	290,368	70.2	275,013	38.7	382,000	40.7
Western Division	588	2.8	1,186	2.6	8,999	6.0	15,090	7.3
Professional service:[a]								
Continental United States			177,255	6.7	311,687	7.8	430,597	8.1
North Atlantic Division			76,970	7.9	160,671	11.2	181,025	9.8
South Atlantic Division			10,111	2.1	29,633	3.5	39,121	4.0
North Central Division			74,278	13.1	134,647	13.2	176,901	12.8
South Central Division			12,414	2.3	27,249	3.8	42,544	4.4
Western Division			6,139	14.1	17,480	14.1	30,920	16.9
Domestic and personal service:								
Continental United States	1,066,672	58.1	1,181,300	44.6	1,667,698	41.6	2,095,449	39.4
North Atlantic Division	407,983	59.6	487,449	44.6	656,772	40.4	801,717	37.6
South Atlantic Division	200,511	48.5	259,254	46.5	330,614	45.8	350,163	35.6
North Central Division	244,025	65.3	350,850	57.3	495,837	48.7	507,508	36.7
South Central Division	109,174	40.3	330,826	54.1	257,552	36.6	360,890	37.1
Western Division	15,092	75.3	24,659	53.8	48,210	38.8	65,105	35.1
Trade and transportation:								
Continental United States	19,828	1.1	64,098	2.4	228,421	5.7	503,347	9.4
North Atlantic Division	13,369	2.0	39,590	4.0	112,477	8.7	254,920	13.8
South Atlantic Division	1,783	.4	6,767	1.2	17,628	2.4	59,039	6.0
North Central Division	2,351	.7	13,430	2.1	71,076	7.4	154,047	10.9
South Central Division	974	.3	3,171	.6	20,936	1.6	25,694	2.6
Western Division	101	.7	1,171	2.6	9,408	7.6	32,772	18.0
Manufacturing and mechanical pursuits:[a]								
Continental United States	352,930	19.2	631,034	23.8	1,027,928	25.7	1,312,668	24.7
North Atlantic Division	232,369	35.2	365,102	37.7	535,086	32.0	598,092	32.1
South Atlantic Division	25,097	6.3	40,250	8.3	80,223	12.4	163,180	16.5
North Central Division	60,661	14.6	123,740	20.0	240,460	23.6	263,240	21.8
South Central Division	12,270	4.8	23,059	5.6	29,441	4.5	49,620	5.9
Western Division	2,764	13.6	12,220	27.0	30,403	24.4	41,170	22.0

a In 1870 the classification was "Agriculture," "Professional and personal service," "Trade and transportation," and "Manufactures, mechanical and mining industries." It was found impracticable to attempt to separate those employed in professional service from those employed in personal and domestic service, and the table therefore for 1870 now embraces under the heading "Domestic and personal service" those women engaged in what are commonly known as professions. The number of these so engaged is [illegible], except for the occupation of teacher, which includes 84,048 women, out of the total of 1,066,672 women in the combined group, or [illegible] per cent of all women gainfully employed.

TABLE V.—PER CENT IN EACH OCCUPATION GROUP OF NATIVE AND FOREIGN BORN FEMALES, 10 YEARS OF AGE AND OVER, ENGAGED IN GAINFUL OCCUPATIONS, 1880, 1890, AND 1900.

[From the Twelfth Census, 1900: Special Report on Occupations, page xcv.]

Occupation group.	Native-born.			Foreign-born.		
	1880.	1890.[a]	1900.	1880.	1890.[a]	1900.
All occupations	100.0	100.0	100.0	100.0	100.0	100.0
Agricultural pursuits	28.7	22.8	21.1	1.8	4.4	4.7
Professional service	7.5	9.1	9.6	2.0	2.0	2.0
Domestic and personal service	31.4	37.3	30.0	60.8	55.8	53.3
Trade and transportation	2.2	6.0	9.9	3.8	7.8	7.2
Manufacturing and mechanical pursuits	33.2	24.6	23.8	31.8	29.8	33.0

a Corrected figures. See Twelfth Census, 1900: Special Report on Occupations, p. lxvi, for explanation.

TABLE VI.—PER CENT IN EACH OCCUPATION GROUP AND IN SELECTED OCCUPATIONS OF FEMALE BREADWINNERS 16 YEARS OF AGE AND OVER, FOR THE UNITED STATES (AREA OF ENUMERATION), CLASSIFIED BY RACE AND NATIVITY, 1890 AND 1900.

[From Special Reports of the Census Office—Statistics of Women at Work, 1900, page 101.]

Occupation.	Native white. Both parents native. 1890.	Native white. Both parents native. 1900.	Native white. One or both parents foreign-born. 1890.	Native white. One or both parents foreign-born. 1900.	Foreign-born white. 1890.	Foreign-born white. 1900.	Negro. 1890.	Negro. 1900.	Total. 1890.	Total. 1900.
All occupations	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agricultural pursuits	14.8	10.6	1.7	2.8	5.4	5.8	44.2	43.8	16.9	18.2
Agricultural laborers	3.8	6.0	.8	.5	.4	.6	35.5	37.5	9.8	9.9
Professional service	16.2	13.1	9.2	9.9	3.0	3.0	1.0	1.3	8.1	8.6
Teachers and professors in colleges, etc.	12.7	11.4	7.5	8.2	1.8	2.0	.9	1.2	6.0	6.5
Domestic and personal service	32.1	30.4	30.5	30.0	60.7	63.0	56.5	53.5	42.8	39.2
Barbers and hairdressers	.1	.1	.1	.2	.1	.1	.1	.1	.1	.1
Boarding and lodging house keepers	1.3	1.7	.8	.9	1.3	1.7	.2	.2	.9	1.2
Hotel keepers	.2	.1	.1	.1	.2	.2	(a)	(a)	.1	.2
Housekeepers and stewardesses	3.6	4.3	1.6	2.4	2.9	3.5	.9	.8	2.3	2.9
Janitors and sextons	(a)	.1	.1	.2	.3	.5	.1	.2	.1	.2
Laborers (not specified)	.9	1.3	.3	.4	.6	1.0	4.5	6.5	1.4	2.2
Laundresses	1.5	3.3	4.8	2.0	3.2	5.0	17.3	19.6	5.6	6.6
Nurses and midwives	1.0	2.4	.8	1.7	1.7	3.4	.8	1.3	1.1	2.2
Servants and waitresses	23.8	17.7	25.1	20.9	48.1	48.0	30.2	27.9	30.9	26.2
Other domestic and personal service	.2	.2	.2	.3	.4	.3	.2	.2	.2	.3
Trade and transportation	5.7	12.6	11.1	17.6	4.5	7.2	.3	.8	6.0	9.9
Agents	.3	.4	.1	.2	.1	.2	(a)	(a)	.1	.2
Bookkeepers and accountants	1.7	2.9	3.4	3.7	.5	.7	(a)	(a)	1.1	1.5
Clerks and copyists	2.4	2.1	3.3	2.5	.8	.9	(a)	(a)	1.7	1.7
Merchants and dealers (except wholesale)	.6	.6	.7	.7	1.0	1.7	.1	.1	.7	.7
Packers and shippers	.1	.4	.4	.8	.1	.3	(a)	(a)	.2	.4
Saleswomen	1.7	3.3	3.7	5.0	.8	2.0	(a)	(a)	1.5	2.9
Stenographers and typewriters	1.0	2.5	.9	3.0	.3	.7	(a)	(a)	.8	1.7
Telegraph and telephone operators	.1	.7	.4	.8	.1	.3	(a)	(a)	.2	.4
Other persons in trade and transportation	.2	.4	.3	.5	.1	.5	[illegible]	.2	.2	.4
Manufacturing and mechanical pursuits	29.0	27.0	47.8	40.7	28.8	31.1	2.9	2.8	26.8	25.1
Bookbinders	.2	.3	.3	.4	.2	.2	(a)	(a)	.2	.2
Boot and shoe makers and repairers	1.1	.6	1.3	1.5	.4	.5	(a)	(a)	.8	.8
Box makers (paper)	.1	.3	.4	.4	.2	.2	(a)	(a)	.1	.3
Confectioners	.1	.1	.2	.3	.2	.2	(a)	(a)	.1	.2
Glovemakers	.2	.2	.1	.2	.1	.1	(a)	(a)	.1	.1
Gold and silver workers	.1	.1	.2	.2	.1	.1	......	(a)	.1	.1
Paper and pulp mill operatives	.3	.1	.6	.4	.2	.2	(a)	(a)	.2	.2
Printers, lithographers, and pressmen	.3	.3	.6	.6	.1	.1	(a)	(a)	.2	.3
Rubber-factory operatives	.1	.1	.3	.3	.2	.2	(a)	(a)	.2	.1
Textile-mill operatives	6.3	5.5	10.8	7.5	10.2	9.7	.1	(a)	6.7	5.8
Carpet-factory operatives	.2	.1	.5	.3	.4	.3	(a)	(a)	.3	.2
Cotton-mill operatives	1.5	2.4	3.2	1.8	5.2	5.4	(a)	(a)	2.3	2.1
Hosiery and knitting-mill operatives	.6	.7	1.0	1.0	.6	.7	(a)	(a)	.5	.6
Silk-mill operatives	.3	.5	1.2	1.0	.7	.9	(a)	(a)	.5	.6
Woolen-mill operatives	.6	.4	2.1	1.5	1.1	1.0	(a)	(a)	.6	.6
Other textile-mill operatives	.9	.6	2.1	1.6	2.0	1.7	(a)	(a)	1.2	.8
Textile workers	19.9	16.3	26.3	20.1	13.7	14.9	2.3	2.1	15.8	13.8
Dressmakers	9.5	8.0	11.8	10.5	6.6	6.5	.9	1.1	7.8	7.2
Hat and cap makers	.2	.1	.3	.3	.2	.2	(a)	(a)	.2	.1
Milliners	2.7	2.5	2.9	2.7	1.0	1.1	(a)	(a)	1.8	1.9
Seamstresses	5.3	3.1	5.8	3.5	2.8	3.0	1.3	1.0	3.8	2.5
Shirt, collar, and cuff makers	.3	.7	.6	1.1	.4	.6	(a)	(a)	.4	.6
Tailoresses	1.2	.8	3.3	2.2	2.5	2.9	(a)	(a)	1.7	1.3
Other textile workers	.2	.3	.7	.6	.3	.5	(a)	(a)	.3	.3
Tobacco and cigar factory operatives	.5	.5	1.0	1.0	.6	.9	.5	.4	.7	.8
Other manufacturing and mechanical pursuits	1.7	2.3	3.8	4.0	1.9	3.5	.1	.3	1.9	2.6

a Less than one-tenth of 1 per cent.

TABLE VII.—PER CENT, BY CONJUGAL CONDITION, OF FEMALES TEN YEARS OF AGE AND OVER ENGAGED IN SPECIFIED OCCUPATIONS, 1890 AND 1900.[a]

[From Twelfth Census, 1900: Special Report on Occupations, page ccxxii.]

Occupations.	1890.				1900.			
	Single.	Married.	Widowed.	Divorced.	Single.	Married.	Widowed.	Divorced.
All occupations	[b]70.5	[b]12.0	[b]15.7	[b]0.9	68.2	14.5	16.1	1.2
Agricultural pursuits	[b]60.1	[b]13.8	[b]25.8	[b].8	46.8	23.2	29.0	1.0
Agricultural laborers	[b]67.6	[b]22.7	[b]10.4	[b].4	64.4	26.7	8.2	.6
Farmers, planters, and overseers	9.0	13.0	76.4	1.6	9.1	16.0	73.4	1.0
All others in this class	40.2	20.7	37.4	1.7	35.0	20.7	40.1	2.1
Professional service	87.9	6.9	4.6	.6	87.5	7.4	4.5	.6
Musicians and teachers of music	80.0	11.9	6.9	1.2	79.6	12.3	6.7	1.2
Teachers and professors in colleges, etc	92.0	4.5	3.1	.4	92.2	4.6	2.9	.4
All others in this class	64.0	20.0	12.7	1.4	64.4	21.2	12.6	1.7
Domestic and personal service	70.0	12.8	16.3	1.0	60.2	15.4	18.5	1.0
Boarding and lodging house keepers	13.2	24.2	60.1	2.5	14.0	30.3	55.7	4.0
Housekeepers and stewardesses	40.1	15.2	42.4	2.3	52.5	18.3	25.7	2.5
Laborers (not specified)	60.8	25.8	21.4	1.3	49.7	26.3	23.4	1.6
Laundresses	33.6	31.0	33.2	1.6	32.1	33.3	34.2	2.4
Nurses and midwives	30.0	13.1	55.1	1.9	56.7	12.7	27.0	1.0
Servants and waitresses	81.6	8.2	9.3	.7	78.9	9.1	10.9	1.1
All others in this class	28.5	24.6	44.5	2.4	27.6	30.6	39.1	2.7
Trade and transportation	82.2	7.1	10.7	.7	85.5	8.8	5.0	.7
Bookkeepers and accountants	92.8	4.1	2.6	.6	95.0	3.0	2.0	.5
Clerks and copyists	90.8	4.5	4.4	.3	90.2	3.9	4.8	.9
Merchants and dealers (except wholesale)	25.0	26.7	48.2	1.2	26.2	29.3	44.7	1.8
Packers and shippers	92.0	3.5	3.2	.3	93.5	4.3	2.0	.6
Saleswomen	92.0	4.3	3.3	.4	92.2	3.4	3.8	.6
Stenographers and typewriters	94.5	2.1	2.4	.7	95.0	2.4	2.0	.6
Telegraph and telephone operators	96.6	0.7	2.3	.6	92.2	5.0	2.6	.5
All others in this class	60.0	16.5	21.7	1.5	60.0	18.5	20.0	1.7
Manufacturing and mechanical pursuits	78.0	13.7	8.4	.9	77.7	11.8	9.4	1.1
Bookbinders	94.0	2.3	2.9	.2	93.4	2.6	3.7	.3
Boot and shoe makers and repairers	82.8	11.4	4.8	1.5	82.7	11.6	4.7	1.0
Box makers (paper)	94.0	3.0	2.1	.3	93.7	3.6	2.5	.3
Cotton-mill operatives	82.7	12.6	4.4	.3	75.8	19.3	4.6	.4
Dressmakers	73.0	13.1	11.6	1.4	66.1	19.3	14.8	1.8
Hosiery and knitting-mill operatives	85.0	6.8	4.6	.5	86.2	6.0	3.3	.4
Metal workers[c]	92.3	5.9	3.2	.4	85.7	7.2	3.6	.6
Milliners	71.8	17.4	9.6	1.3	76.3	12.1	7.4	1.2
Printers, lithographers, and press-women	90.1	5.7	3.5	.2	90.2	5.5	3.1	.6
Seamstresses	72.1	16.0	10.6	1.3	71.2	16.7	10.6	1.6
Shirt, collar, and cuff makers	87.2	6.1	6.1	.6	86.5	7.7	5.0	.5
Silk-mill operatives	92.8	4.6	2.5	.1	92.0	5.2	2.5	.3
Tailoresses	79.8	9.5	10.0	.7	80.3	8.8	7.1	.8
Textile-mill operatives (not otherwise specified)[d]	80.5	10.2	8.7	.6	83.5	9.8	5.8	.5
Tobacco and cigar factory operatives	86.7	10.5	5.5	.3	70.9	16.4	6.8	.8
Woolen-mill operatives	84.8	10.7	4.1	.4	83.3	12.1	4.4	.5
All others in this class	83.2	8.0	7.8	.5	81.0	10.7	7.0	.7

[a] Includes unknown.
[b] Based upon corrected figures. See Twelfth Census, 1900: Special Report on Occupations, p. lxvi, for explanation.
[c] Includes all workers in iron and steel and other metals.
[d] Includes carpet-factory operatives and other textile-mill operatives.

TABLE VIII.—PER CENT OF WOMEN 16 YEARS OF AGE AND OVER IN ALL MANUFACTURING INDUSTRIES, COMPARED WITH MEN 16 YEARS AND OVER AND WITH CHILDREN UNDER 16 YEARS, BY GEOGRAPHICAL DIVISIONS.

[From the Twelfth Census, 1900: Manufactures, Part I, page xxxviii. The percentages for 1860 and 1850 are from the Ninth Census, 1870: Industry and Wealth, pages 831, and relate to all "Male hands" and all "Female hands," as no distinction of age was made.]

Geographical divisions and year.	Per cent in each class of total for each division.			Per cent in each division of total for United States.			
	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Men 16 years and over.	Women 16 years and over.	Children under 16 years.	Total.
United States:							
1900	77.4	19.4	3.2	100.0	100.0	100.0	100.0
1890	78.3	18.9	2.8	100.0	100.0	100.0	100.0
1880	73.0	19.4	6.7	100.0	100.0	100.0	100.0
1870	76.8	15.8	5.8	100.0	100.0	100.0	100.0
1860	70.3	20.7					
1850	76.7	23.3					
New England States:							
1900	69.9	27.6	2.6	16.1	25.2	14.9	17.8
1890	68.1	29.2	2.7	16.8	28.8	18.5	19.9
1880	65.0	28.6	6.4	20.8	34.5	32.1	23.7
1870	65.7	28.4	5.9	21.4	40.3	27.1	25.7
Middle States:							
1900	74.4	23.4	3.1	35.8	45.2	35.3	37.3
1890	76.7	21.6	2.8	37.2	43.7	37.7	38.5
1880	70.1	23.0	6.9	39.5	46.3	43.5	41.7
1870	77.9	15.9	6.2	38.0	39.0	41.2	39.2
South Atlantic States:							
1900	80.7	13.7	5.6	13.0	5.1	25.5	12.3
1890	81.7	12.7	5.6	10.1	4.5	19.1	9.7
1880	81.3	9.9	8.8	9.0	4.2	16.8	8.2
1870	84.6	7.5	8.9	10.0	4.4	19.7	9.1
North Central States:							
1900	83.2	14.5	2.3	29.8	26.6	20.2	27.7
1890	86.0	11.8	2.2	31.6	17.0	23.3	29.2
1880	85.1	8.8	6.1	27.3	10.7	28.5	23.6
1870	89.0	6.3	4.6	27.6	9.5	16.9	23.8
South Central States:							
1900	89.8	8.1	2.1	3.5	.9	4.5	3.2
1890	89.3	7.9	2.8	2.4	.8	3.8	1.6
1880	92.1	5.7	4.2	1.9	.5	4.0	1.0
1870	97.4	1.5	1.1	1.8	.1	1.2	.8
Pacific States:							
1900	81.8	14.5	1.0	2.0	2.0	1.6	2.7
1890	87.0	12.1	2.0	2.8	1.6	1.8	2.5
1880	89.4	8.4	2.2	2.1	.8	.9	1.8
1870	91.0	3.3	1.0	1.7	.3	.6	1.1

TABLE IX.—AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS, BY GROUPS OF INDUSTRIES, 1850 TO 1905.

[This table is derived from the Ninth Census, 1870: Industry and Wealth, pages 394-639; the Twelfth Census, 1900: Manufactures, Part I, pages 3-17, and the Special Reports of Census Office: Manufactures, 1905, Part I, page lxxviii. The figures for 1880 to 1905 are for "Women 16 years of age and over," those for 1870 are for "Females above 15," while those for 1850 and 1860 are for all "Female hands," regardless of age. The form of inquiry differed somewhat for each census (see Twelfth Census, 1900: Manufactures, Part I, page lxi), but it is not believed that these differences have affected materially the general results as here given. Though the industries given, 1850, 1860, and 1870, however, were classified with the greatest possible care, the difference in the nomenclature used at the different periods was so great that, apart from the untrustworthiness of the early census figures, the results can be considered as only roughly indicative of the facts. The figures for 1905, it must be remembered, however, relate only to establishments conducted under the factory system.]

Industry groups.	1850.		1860.		1870.		1880.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	225,200	23.3	270,897	20.7	323,770	13.8	531,639	19.4
Textile industries a	96,787	50.2	110,285	53.4	126,080	45.0	224,489	44.8
Clothing industries b	117,460	62.6	131,053	45.0	135,460	37.1	276,023	46.7
Food and kindred products	910	2.6	2,089	4.0	8,017	7.0	24,270	15.6
Liquors and beverages	53	.9	46	.8	99	.4	191	.8
Tobacco and cigars	1,076	13.0	3,728	15.0	7,704	16.3	20,850	23.4
Paper and printing	7,027	25.3	11,443	27.3	18,325	24.2	27,792	24.0
Iron and steel and their products	1,288	1.7	2,534	1.6	5,000	1.6	3,886	1.2
Lumber and its remanufactures	2,310	2.1	3,620	2.6	5,771	2.1	7,024	2.2
Chemicals and allied products	417	4.4	773	4.7	2,163	3.1	2,730	4.2
Clay, glass, and stone products	787	2.0	837	1.7	1,433	1.3	2,215	1.7
Metals and metal products other than iron and steel c	730	3.4	1,743	5.3	4,003	5.4	8,761	10.6
Vehicles for land transportation	64	.4	188	.1	210	.4	291	.9
Shipbuilding	13	.1	1	(d)	6	(d)	----	(d)
Other manufacturing industries e	7,471	5.0	12,824	6.2	22,294	7.8	26,119	6.5

Industry groups.	1890.		1900.		1905.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	803,686	17.0	1,029,296	18.4	1,065,884	19.5
Textile industries a	279,351	47.0	306,890	45.6	311,709	45.4
Clothing industries b	320,092	56.3	361,436	55.9	345,075	64.8
Food and kindred products	38,031	16.7	61,086	23.5	79,894	22.5
Liquors and beverages	447	1.0	1,035	1.7	1,101	1.7
Tobacco and cigars	38,116	37.7	50,020	37.4	65,301	41.3
Paper and printing	66,431	22.5	78,062	24.9	97,599	25.0
Iron and steel and their products	7,301	1.5	13,777	1.9	15,210	2.3
Lumber and its remanufactures	13,537	2.4	17,020	2.6	16,573	2.3
Chemicals and allied products	8,547	11.3	14,200	11.1	17,401	9.7
Clay, glass, and stone products	6,125	2.5	10,336	3.0	10,968	3.8
Metals and metal products other than iron and steel c	16,590	12.6	25,337	14.7	30,452	14.2
Vehicles for land transportation	1,312	.7	2,290	.7	2,350	.6
Shipbuilding	9	(d)	34	(d)	65	.1
Other manufacturing industries e	29,448	6.5	52,408	8.0	53,073	13.3

a This is not the census group "Textiles," as given in the Twelfth Census, 1900, Manufactures, but includes all the industries of that group with the exception of those here classified under "Clothing industries." For the industries included see Table X.

b For the industries included in this group see Table XI. In 1905 "Clothing, women's, dressmaking," "Millinery, custom work," "Boots and shoes, custom work and repairing" and "Dyeing and cleaning" were omitted as not carried on under the factory system.

c "Needles and pins" and "Hooks and eyes," which are included in the census group, are here omitted, as they are included in "Clothing industries."

d Less than one-tenth of 1 per cent.

e This group includes all industries not classified in the other groups, but is not the same as the census classification "Miscellaneous industries," which includes a number of industries here classified under "Clothing."

TABLE X.—TEXTILE INDUSTRIES: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 TO 1900.

[This is not the census group "Textiles" as given in the Twelfth Census, 1900, Manufactures, but includes all the industries of that group with the exception of those considered in the next section of this report under "Clothing industries." The figures from 1870 to 1900 are for "Women, 16 years of age and over," while those for 1850 and 1860 are for all "Female hands" regardless of age. The numbers employed from 1850 to 1870 are as given in the Ninth Census, 1870, Industry and Wealth, pages 394-[illegible], and from 1880 to 1900 as given in the Twelfth Census, 1900, Manufactures, Part I, pages [illegible]. The percentages, too, are derived from figures there given. The form of inquiry differed somewhat for each census (see Twelfth Census, 1900, Manufactures, Part I, p. [illegible]), but it is not believed that these differences have affected materially the general results as here given.]

Industries.	1850 Number.	1850 Per cent.	1860 Number.	1860 Per cent.	1870 Number.	1870 Per cent.	1880 Number.	1880 Per cent.	1890 Number.	1890 Per cent.	1900 Number.	1900 Per cent.
Total	60,797	50.2	110,263	52.0	120,095	43.2	201,130	44.8	269,593	47.0	302,390	40.5
Awnings, tents, and sails[a]	12	1.4	35	4.5	63	4.3	300	52.1	1,190	25.1	1,701	30.0
Bags, other than paper[b]	822	13.5	210	22.7	1,260	26.0	2,129	53.1	3,347	47.8	[illegible]	[illegible]
Batting and hose, linen[c]			160	67.6					188	67.5	152	39.1
Carpets and rugs, other than rag[d]	3,800	37.0	9,274	41.6	4,310	35.1	8,262	42.1	13,020	45.6	15,998	52.1
Carpets, rag[e]					110	11.3	56	12.2	191	10.6	209	21.1
Cloth, sponging and refinishing[f]			2	10.7			13	10.9	1	1.1	9	[illegible]
Clothing, horse[g]			50	96.0			102	67.1	222	66.1	200	55.0
Cordage and twine[h]	15	80.5	700	10.0	770	21.1	1,380	27.3	5,010	40.5	5,707	40.6
Cotton goods[i]	59,001	62.0	75,000	62.9	67,070	53.7	91,145	49.1	108,000	49.0	105,000	41.0
Cotton, compressing											5	.9
Cotton waste[j]									7	27.2	61	18.0
Cotton, batting and wadding			60		70							
Cotton, thread, twine, and yarn[k]			2,461		3,506	12.0						
Cotton coverlets			10									
Cotton thread carding				53.0								
Cotton lamp wicks			20									
Cotton mosquito netting			21									
Cotton table cloths			9									
Tapes, binding and webbing[l]	95	70.5	200									
Thread	50	67.5										
Dyeing and finishing textiles[m]	72	7.0	457	14.6	683	10.3	2,500	12.7	2,275	11.4	3,306	14.5
Dyeing cotton and woolen goods	730	11.0	301	11.1	1,203	16.7						
Curtains			[illegible]	50.0								
Felt goods[n]							223	15.3	268	29.8	356	21.5
Flags and banners[o]			35	42.7			125	58.8	194	64.0	311	61.1
Flax, dressed[p]	102	19.5	[illegible]		15	1.7	25	7.3	242	41.2	9	4.8
Hammocks							45	69.7	81	69.0	175	73.7
Hand-knit goods							1,178	70.3	137	90.1	303	90.5

a In 1870 and 1880 includes "Awnings and tents" and "Sails" separately enumerated, and in 1870 includes "Awning and sacking bottoms" and "Sails."

b Includes 16 establishments in 1880, 27 in 1890, and 33 in 1900, reported as "Bagging, flax, hemp, and jute;" 18 in 1880 and 37 in 1890 reported as "Bags, other than paper." In 1860 "Bags," "Bagging," "Cotton bags," and "Flour bags;" and in 1850, "Bagging, rope, and cordage," and "Cot bags."

c No returns for 1850 and 1870. "Hose, children's," in 1860. In 1870 there were [illegible] "Men 16 years and over" employed in one establishment, but no women or children.

d Includes in 1850 "Carpets" and "Carpet weaving," in 1860, "Carpets," in 1870, "Carpets other than rag." All the 37 actual women employed in 1850 were [illegible].

e Probably included under "Carpets" and "Carpet weaving" in 1850 and 1860.

f Not given in 1870 or 1850. "Cloth finishing" in 1860.

g Not given in 1870 or 1850. "Horse covers" in 1860.

h Includes in 1860 "Cordage," "Cotton cordage," and in 1850 only "Twine." In 1850 it is in part included in "Bagging, rope, and cordage," which is here included in "Bags, other than paper."

i In 1900 includes [illegible] establishments reported as "Cotton goods" and [illegible] as "Cotton small wares." "Cotton small wares" in 1900 includes miscellaneous small articles made from cotton in whole or in part, such as tape, webbing, braids, etc. In 1850, "Cotton."

j No females employed for this industry in 1880.

k "Cotton batts, thread, lines, twine, and yarn" in 1860.

l "Tapes and binding" and "Webbing" in 1860 and only "Webbing" in 1850.

m "Bleaching and dyeing" in 1870, "Dyeing and bleaching," "Engraving, calico," and "Calico printing" in 1860, and "Dyers" and "Bleachers and dyers" in 1850.

n "Calico printing" in 1850; "Calico printers" in 1860.

o Not given in 1850 and 1870. Fourteen "Male hands" reported in 1860, but no "Female hands."

p Not given in 1870 and 1850.

q In "Flax dressing" in 1860 there were [illegible] "Males" and no "Female hands" reported. The returns were for "Flax dressers and spinners" in 1850.

TABLE X.—TEXTILE INDUSTRIES: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 TO 1900—Concluded.

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Hosiery and knit goods a	1,400	51.1	9,328	68.5	7,090	51.0	17,707	61.7	40,457	69.5	53,866	64.2
Jute and jute goods b							962	57.6	730	30.5	2,064	55.5
Linen goods c			311	63.0	720	44.0	295	44.0	256	50.4	1,767	54.4
Thread, linen c			310	54.5			750	78.6				
Mats and matting d			3	2.4	10	10.0	12	4.2	53	1.6	300	29.1
Embroidery			76	86.3								
Carriage trimmings			9	15.0	170	36.2						
Cotton lace	31	47.0	10	10.7								
Fringe, gimp, and tassels	661	70.9										
Hemp hose			1	14.3								
Nets and seines e			47	77.0	38	48.8	115	64.9	614	88.2	640	80.1
[illegible] and fishing tackle					75	15.0						
Fly nets			74	94.1								
Oakum f									4	22.8	30	15.3
Oilcloth, enameled g	3	.3	28	15.6		1.2	8	.4	4	.4		
Oilcloth, silk h												
Oilcloth, oil			22									
Oilcloth, floor					15		1		4		15	3.8
Regalia and society banners and emblems i	73	61.3	43	56.6	227	67.2	570	60.4	1,091	60.0	1,120	51.1
Shoddy			149	31.4	171	27.1	490	28.7	805	40.1	890	21.0
Silk and silk goods k	8	62.0	1,611	66.2	2,358	62.9	16,380	52.4	30,024	58.0	30,707	52.8
Silk, sewing and twist l	551	65.0	1,000	77.1	1,708	65.9						
Upholstering materials m	100	40.0	257	58.1	40	24.7	270	36.7	392	27.0	1,016	32.8
Haircloth n			311		151							
Prepared moss												
Woolen goods o	14,0[illegible]	33.0	16,1[illegible]	38.[illegible]	27,621	35.4	27,[illegible]72	3[illegible].0	30,469	38.[illegible]	26,6[illegible]	36.0
Wool carding and cloth dressing p	22	2.0	350	10.2	175	5.8						
Woolen yarn q			502	51.1								
Cloth sponging												
Cotton and woolen goods r	1,891	31.0					21,583	47.8				
Weaving and [illegible] s	152	90.1			2	7.4						
Worsted goods			1,273	60.7	7,109	55.4	9,170	50.5	30,032	46.7	25,530	46.0
Cotton ginning t			85	2.2					90	4.3	11	.1
Wool pulling u			13	9.1								
Wool scouring v			1								74	10.3

a "Hosiery" in 1850, 1860, and 1870.
b "Flax and linen goods" in 1870. Not given in 1850.
c "Linen thread" was in 1890 included in "All other industries," and in 1900 included in "Linen goods."
d "Mats and rugs" in 1870 and 1850 and "Mats" in 1860. In 1890, [illegible] "Male hands" but no "Female hands" were reported.
e "Nets, [illegible] and seines" in 1870; "[illegible] lines, nets, and [illegible]" and "Nets" in 1860; not given in 1850.
f Included in other classifications in 1850. Not given in 1870. No female, but [illegible] "Male hands" reported in 1860. No female but [illegible] "Male hands" reported in 1880.
g In 1860 there were [illegible] wage-earners, but no women or children employed. Not given in 1880. "[illegible] and enameled cloth" in 1860. "Oilcloths" in 1870.
h In 1870 no women or children, but 2 "Male hands" reported. In 1860 no female, but 1 "Male hand" reported. Probably included in "Oilcloths" in 1850.
i In 1860, [illegible] "Male hands" but no "Female hands" were reported.
j "Regalia, banners, and flags" in 1870. "Regalia" in 1850.
k "Silk goods, not specified" in 1850; "Silk, and fancy goods, fringes, and trimmings" in 1860; "Silk cloth" in 1870.
l "Sewing silk" in 1850.
m In 1870, 1860, and 1850 reported as "Upholstery materials" in 1860, "Curled hair."
n After 1870 this was included in "Upholstering materials." In 1850 no females, but [illegible] "Male hands" were reported under "Prepared moss." Not given in 1890.
o "Woolen, carding and fulling" in 1850.
p "Wool carders" in 1850.
q In 1860, [illegible] "Male hands" but no "Female hands" were reported under this designation.
r "Mixed textiles" in 1850. Not given in any year except 1850 and 1880.
s "Weavers" in 1850. Not given in 1860 or after 1870.
t No report received for this industry in 1850, 1870, and 1880. In 1890 there were [illegible] "Men, 16 years and over," [illegible] "Women, 15 years and over," and [illegible] "Children, under 16 years," engaged in "Cotton, cleaning and [illegible]," for which schedules were received in 1890, and which was included in "All other industries" in 1890. In 1900 there were 6 "Women, 16 years and over" in "Cotton compressing," as well as [illegible] "Men, 16 years and over" and 11 "Children, under 16 years." No women were reported from this industry in any other year, though there were reported in 1860, [illegible] wage-earners; in 1880, [illegible] wage-earners, and in 1890, [illegible] "Hands employed."
u Included in other classifications in 1850 and 1870. "Wool, cleaning and pulling" in 1860 and 1870. Not given in 1870. In 1860 there were reported [illegible] "Men, 16 years and over" but no women or children. In 1850 there were reported 11 "Male hands" but no "Female hands."
v Included in other classifications in 1850 and 1860. Not given in 1870. Possibly included in "Wool, cleaning and pulling" in 1860 and 1850.

TABLE XI.—CLOTHING INDUSTRIES: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 TO 1900.

[This table includes nine of the industries given in the Twelfth Census, 1900: Manufactures, in the group "Textiles," four of those given in the group "Leather and its finished products," eight of those given in the group "Miscellaneous industries," and five of those given in the group "(Food) leather." The figures from 1880 to 1900 are for "Women, 16 years of age and over," those for 1870 for "Females above 15," while those for 1860 and 1850 are for all "Female hands" regardless of age. The numbers employed from 1850 to 1870 are as given in the Ninth Census, 1870: Industry and Wealth, pages [illegible], and from 1880 to 1900 as given in the Twelfth Census, 1900: Manufactures, Part I, pages 3-17. The percentages, too, are derived from figures there given. The form of inquiry differed somewhat for each census (see Twelfth Census, 1900: Manufactures, Part I, page [illegible]), but it is not believed that these differences have affected materially the general results as here given.]

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	116,450	49.5	127,374	45.0	110,440	37.0	203,809	40.2	320,012	51.4	401,497	52.0
Clothing, men's a	61,500	63.7	92,560	80.5	90,[illegible]	64.3	80,906	50.4	85,067	44.9	86,670	45.0
Clothing, women's, dressmaking b			4,074	93.2					47,109	87.0	40,000	83.7
Clothing, women's, factory product c			4,850	86.5	10,247	87.1	22,253	83.8	23,019	80.9	50,500	67.0
Clothing, children's					155	86.2						
Furnishing goods, men's d	527	16.5	[illegible]	10.3			9,560	85.0	16,110	86.0	22,386	83.7
Hats and caps, not including wool hats e	8,920	61.1	1,249	20.1	8,206	30.0	4,387	31.6	6,290	32.5	11,192	37.0
Hat and cap materials f			16	10.3	186	13.4	255	23.2	470	30.0	340	40.0
Wool hats g							1,497	26.7	1,291	29.0	[illegible]	[illegible]
Millinery and lace goods h	3,405	61.0	697	67.6	5,160	81.7	5,245	80.1	8,152	74.0	11,028	75.7
Millinery, custom work i	5,085	96.2							16,407	96.4	24,457	97.5
Artificial feathers and flowers j	372	85.7			4,112	64.8	3,077	82.4	5,218	69.7	4,187	[illegible]
Shirts							23,100	80.5	26,925	81.0	25,974	80.7
Corsets k	60	90.1			2,091	87.2	7,107	89.1	8,162	85.2	11,046	82.5
Crinoline l					16	67.0						
Dyeing and cleaning							400	31.0	1,018	38.6	2,128	30.2
Buttons	621	26.1	425	56.1	930	45.0	3,082	60.4	3,120	56.0	4,180	37.6
Umbrellas and canes	1,702	60.4	1,410	94.0	1,783	69.1	3,000	51.6	2,194	47.9	3,171	56.7
Umbrella furniture			69	92.0	290	40.5						
Fur goods n									3,089	36.4	3,966	40.0
Furs, dressed o	601	55.0	797	51.0	1,536	65.5	3,160	60.0	1	1.0	88	30.2
Gloves and mittens o	1,400	35.0	300	98.3	3,224	71.2	6,740	66.9	5,100	62.3	6,708	57.0
Boot and shoe, cut stock							1,432	43.1	3,708	24.8	3,218	27.0
Boot and shoe findings p	10	11.0	42	18.0	1,510	40.6	552	37.5	1,082	40.1	1,170	21.0
Boot and shoe uppers							156	43.8	910	40.0	21	35.0
Boots and shoes, factory product q	32,500	30.3	36,874	28.2	11,716	14.7	25,122	23.0	30,810	20.8	17,100	33.0
Boots and shoes, custom work and repairing							924	3.5	497	3.5	377	1.3
Boots and shoes, rubber							1,967	32.5	5,971	46.0	5,902	40.0
Pocketbooks r	101	20.0	227	31.6	261	36.0	196	30.1	545	36.0	774	50.1

a Includes 22,184 establishments in 1900 and 13,290 in 1890, reported as "Clothing, men's, custom work, and repairing," 6,740 in 1880 and 4,549 in 1890 reported as "Clothing, men's, factory product," and 934 in 1900, and 905 in 1890 reported as "Clothing, men's, factory product, buttonholes." Given as "Clothes and tailors" in 1870.

b Not separately given for this industry in 1850. Not given in 1870 or 1880. "Millinery and dressmaking" in 1890.

c "Clothing, women's," in 1880; "Clothing, ladies'," in 1860; not given in 1850.

d "Suspenders" only in 1860 and 1850. Not given in 1870.

e In 1900 includes [illegible] establishments reported as "Fur hats," and [illegible] "Hats and caps, not including wool hats." "Hats and caps" in 1870, 1860, and 1850.

f "Hat materials" in 1870. "Ladies' trimmings," "Hat bodies," and "Hat tips" in 1860; not given in 1850.

g Not separately given in 1870, 1860, or 1850. Probably included under the general title "Hats and caps."

h Includes in 1870 "Millinery;" in 1860 "Millinery goods," "Lace work," and "Straw bonnet bleaching;" and in 1850 "Bonnets, straw braid, etc."

i No reports received for this industry in 1880. Probably included in "Millinery," "Millinery goods," etc., in 1870, 1860, and 1850.

j Includes in 1900 "Artificial feathers, flowers and fruits," and "Feathers, cleaned, dressed and dyed." Not given in 1860. "Artificial flowers" in 1850.

k "Hoop skirts and corsets" in 1870; not given in 1860.

l "Umbrellas and parasols" in 1860; "Umbrellas" in 1850.

m Included in other classifications in 1880. Not given in 1870, 1860, or 1850.

n "Furs" in 1860; "Furriers" in 1850. The census gives no explanation of the 1890 figures.

o "Gloves" in 1850.

p "Boot and shoe findings" and "Shoe pegs" in 1870; "Shoe findings," "Shoe and boot tips," and "Shoe stiffeners" in 1860; "Shoe pegs" in 1850.

q "Boots and shoes" in 1870, 1860, and 1850.

r "Pocketbooks, portmonnaies, and wallets" in 1860.

TABLE XI.—CLOTHING INDUSTRIES: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 TO 1900—Continued.

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Belt clasps and slides			7	50.0								
Skirt supporters			10	47.6								
Needles and pins a	207	78.1	163	64.5	220	54.6	380	35.8	591	42.9	1,019	43.3
Hooks and eyes	4		57	48.7	67	36.2	93	27.0	90	44.0	129	43.0
Hairwork b	65	63.0	87	30.8	940	55.8	997	79.8	1,080	78.0	936	85.2

a Includes "Needles" and "Pins," separately given in 1900, and only "Pins" in 1860.
b "Wigs and hair work" in 1860; "Wigs and curls" in 1850.

TABLE XII.—DOMESTIC AND PERSONAL SERVICE: NUMBER OF WOMEN 16 YEARS OF AGE AND OVER AND PER CENT WHICH WOMEN FORMED OF TOTAL NUMBER OF PERSONS GAINFULLY EMPLOYED, IN SPECIFIED OCCUPATIONS AT EACH CENSUS, 1870 TO 1900.

[The figures and percentages for 1900 and 1890 are taken, except where otherwise mentioned, from the Twelfth Census, 1900: Special Report on Occupations, pages cxxxvi-cxxxvii; the figures for 1880 and 1870, and the statistics from which the percentages for those years are derived, from the Eleventh Census, 1890: Population, Part II, pages clv-clvi.]

Occupations.	1870.		1880.		1890.a		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	982,[illegible]	41.8	1,074,823	31.5	1,320,124	36.1	1,953,467	33.9
Servants and waitresses b	760,653	86.1	870,377	74.9	1,230,123	81.6	1,165,561	84.7
Housekeepers and stewardesses							146,929	91.7
Nurses and midwives	11,350	93.4	14,867	96.1	41,396	87.9	108,691	89.0
Laborers (not specified)	16,077	7.8	c31,272	2.8	60,321	2.6	104,016	4.1
Janitresses and sextons	103	5.3	711	7.7	3,393	10.9	8,016	14.1
Watchmen, policemen, firemen, etc.					270	.4	879	.7
Hostlers							140	.6
Laundresses	57,218	61.6	107,185	87.9	216,631	87.2	328,935	86.8
Barbers and hairdressers	1,123	4.0	2,902	6.5	2,770	3.3	5,440	4.2
Boarding and lodging house keepers	7,082	56.2	12,313	64.0	32,593	73.6	59,455	83.4
Hotel keepers	886	3.8	2,136	6.0	5,250	12.0	8,533	16.0
Restaurant keepers d	714	1.4	2,100	2.0	4,537	5.3	4,846	14.3
Saloon keepers							2,085	2.5
Other domestic and personal service e	690	3.0	4,195	10.2	5,975	27.9	6,737	19.5

a The figures for 1890 relate to "Females 15 years of age and over."
b In 1890, 1880, and 1870 includes "Housekeepers and stewardesses."
c The Eleventh Census, 1890: Population, Part II, page clvi gives the number of women in this occupation group in 1880 as 51,443.
d In 1890, 1880, and 1870 includes "Bartenders" and "Saloon keepers."
e In 1880 and 1870 includes "Watchmen, policemen, firemen, etc."

TABLE XIII.—FOOD AND KINDRED PRODUCTS: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 TO 1900.

[This table includes all the industries in the group "Food and kindred products" and in the group "Liquors and beverages," as given in the Twelfth Census, 1900, Manufactures. The figures for 1900 are for "Women, 16 years of age and over," those for 1870 are for "Females above 15," while those for 1850 and 1860 are for all "Female hands," regardless of age. The numbers employed from 1850 to 1870 are as given in the Ninth Census, 1870: Industry and Wealth, pp. [illegible], and from 1880 to 1900 as given in the Twelfth Census, 1900: Manufactures, Part I, pages [illegible]. The percentages, too, are derived from figures there given. The form of inquiry differed somewhat for each census (see Twelfth Census, 1900, Manufactures, Part I, page [illegible]), but it is not believed that these differences have affected materially the general results as here given.]

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total { Food / Liquors	910 / 30	2.4 / 1.8	3,010 / 45	4.0 / .5	6,567 / 99	7.8 / .4	22,120 / 131	16.4 / .3	45,021 / 977	10.9 / 1.0	61,030 / 1,706	20.6 / 1.7
FOOD AND KINDRED PRODUCTS.												
Bread and other bakery products *a*	370	5.0	535	6.3	540	6.9	2,910	9.9	4,077	12.9	10,440	17.6
Cheese, butter, and condensed milk *b*	10	21.8	4	27.3	1,370	22.8	1,332	15.8	725	8.8	1,038	8.4
Chocolate and cocoa products *c*	37	60.0	5	25.0	97	42.7	112	60.7	440	58.4	422	46.1
Coffee and spice, roasting and grinding *d*	12	8.1	6	0.8	100	5.6	408	10.1	911	26.9	2,480	34.0
Confectionery	247	15.0	402	11.9	1,022	21.8	2,657	30.5	6,250	35.0	16,440	47.9
Cordials and sirups *e*					85	10.8			39	22.5	130	33.9
Fish, canning and preserving *f*					98	98.5			801	15.8	4,032	19.9
Flavoring extracts *g*							104	37.8	140	20.0	109	43.2
Flouring and grist mill products	60	.4	60	.2	301	.7	12	.2	300	[illegible]	307	.4
Food preparations *h*			61	90.7	398	60.5	512	25.9	1,150	[illegible]	2,433	[illegible]
Fruits and vegetables, canning and preserving					3,483	56.0	10,408	40.5	16,712	41.2	19,432	21.1
Glucose							6	.4	6	.5	27	.6
Lard, refined *i*							30	3.5	14	12.3	25	4.0
Oleomargarine							16	7.0	4	[illegible]	44	6.0
Oysters, canning and preserving *i*									1,300	30.8	1,120	32.8
Pickles, preserves, and sauces *k*	50	62.5		—	128	30.1	708	21.7	1,709	30.0	3,009	35.8
Rice, cleaning and polishing *l*			910	40.7			91	18.0	[illegible]	1.0		
Slaughtering and meat packing, not including retail butchering *m*	9	.2	16	.9	292	2.4			1,003	2.9	2,502	4.3

a "Bread, crackers, and other bakery products" in 1890; "Bread and crackers" in 1870 and "Baked" in 1860.

b Includes 113 establishments in 1870 and 104 in 1880 reported as "Cheese and butter, urban dairy products," [illegible] in 1880 and [illegible] in 1890 reported as "Cheese, butter, and condensed milk, factory product," and 10 establishments in 1890 reported as "Butter, reworking." In 1850 and 1860 includes [illegible] "Cheese" [illegible] establishments in 1870 and 8 in 1880. In 1890 includes 2 "Cheese" and 1 "Milk, condensed," establishments.

c "Chocolate" in 1870 and 1880, "Chocolate" and "Cocoa" in 1850.

d Includes in 1870 "Coffee and spices, ground," "Coffee and spices, [illegible]," and "Coffee and spice, roasting," and in 1860 "Coffee and spice," "Spice" and "Spice mills."

e Includes in 1870 "Liquors, cordials," "Sirups, other than sorghum," and "Sorghum sirup." No returns in 1850. In 1880 there were 10 "Men, 16 years and over" in [illegible] establishments, but no women or children reported. In 1860 there were reported 29 "Male hands" but no "Female hands."

f "Fish, cured and packed" and "Fish and oysters, canned" in 1870. Included in other classifications in 1880. No returns in 1850 and 1860.

g Includes in 1870 only "Mustard, ground"; in 1880 only "Mustard," and in 1890 only "Vegetable extracts." No females were reported in these years; in 1870 there were 27 "Males above 16" and 2 "Youths" in 15 establishments in 1880, 17 "Males" in 4 establishments, and in 1860, 71 "Males" in 21 establishments.

h Includes in 1870 "Food preparations, animal," "Food preparations, vegetable," and "Food preparations, vermicelli and macaroni," in 1860 "Rice flour," "Hominy," "Pearl barley," and "Macaroni and vermicelli," and in 1850 there were no returns.

i Included in other classifications in 1880.

j "Preserves and sauces" in 1870; "Pickles and preserves" in 1860; no returns in 1850.

k "Rice cleaning" in 1880; "Rice mills" in 1870; in 1850 there were 200 "Male hands" reported in 1 establishments but no "Female hands"; no returns in 1870.

l Includes 212 establishments in 1880 and 240 in 1890 reported as "Sausage," 283 in 1880 and 611 in 1890 as "Slaughtering and meat packing, wholesale," and 200 in 1880 and 902 in 1890 as "Slaughtering, wholesale, not including meat packing." In 1870 "Butchering," "Meat, cured and packed (not specified)," "Meat, packed, beef," and "Meat, packed, pork," and in 1860 "Pork and beef packing." The figures for 1850 are from the Twelfth Census, 1900, Manufactures, Part III, Special Reports of Selected Industries, p. 387. In 1850 there were 20,113 "Men, 16 years and over," and 1,159 "Children under 16," but no women reported.

TABLE XIII.—FOOD AND KINDRED PRODUCTS: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 to 1900—Concluded.

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Sugar and molasses refining a	12	.7			40	1.0			256	3.5	196	2.6
Vinegar and cider b			11	2.2	7	.3	41	5.6	105	5.8	136	7.5
Provisions			790	10.7								
LIQUORS AND BEVERAGES.												
Bottling c					1	1.0			68	1.9	180	1.8
Liquors, distilled d	20	.6	13	.2	6	.1	16	.2	2	.1	61	2.2
Liquors, malt e	11	.5	21	.3	39	.3	30	.1	250	.8	604	1.5
Liquors, vinous			4	8.8	83	2.2	27	3.6	96	2.5	61	5.2
Malt f							8	.3			4	.2
Mineral and soda waters g	10	3.2	7	1.0	16	.7	27	1.0	100	1.7	805	3.4

a Includes in 1900 and 1890 "Sugar and molasses, beet," which in 1880 was included in "All other industries." In 1870 includes "Sugar and molasses, refined cane," "Sugar and molasses, beet and grape," and "Sugar and molasses, sorghum." In 1860 includes "Sugar and molasses," "Sugar and molasses, refining," and "Molasses, refined." In 1880 there were [illegible] men 16 years and over and 20 children under 16, but no women reported. In 1890 there were also [illegible] women, [illegible] men, and [illegible] children reported under "Sugar and molasses, raw cane." In 1860 there were reported as employed in the three classes given [illegible] "Male hands" but no "Female hands." The figures for 1850 were given under "Sugar refiners."

b In 1870 includes "Vinegar" and "Cider," separately given. In 1900 includes "Vinegar," "Cider," and "Cider, refined." No returns for 1850.

c In 1870 "Bottling, malt liquors and mineral waters;" in 1890 "Liquors, bottled;" and in 1860 "Cider bottling." No reports received for this industry in 1880. In 1850 there were [illegible] and in 1860 there were [illegible] "Male hands" but no "Female hands" returned.

d Includes in 1860 "Liquors, distilled" and "Liquors, rectified;" in 1850 "Distilleries" and "Distilleries, rectifying."

e In 1870 includes also "Small beer." "Breweries" in 1860.

f In 1860 there were [illegible] "Men, 16 years of age and over," but no women or children returned from [illegible] establishments in 1870, [illegible] "Male hands above 15" and [illegible] "Youths" but no women returned from [illegible] establishments; in 1860, [illegible] "Male hands" from [illegible] establishments, and in 1850, [illegible] male "Maltsters" from [illegible] establishments.

g "Mineral water" in 1860 and "Mineral water and pop" in 1850.

TABLE XIV.—TOBACCO: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 to 1900.

[This table includes simply the industries given in the group "Tobacco" in the Twelfth Census, 1900: Manufactures. The figures from 1850 to 1880 are for "Women, 16 years of age and over," those for 1870 are for "Females above 15," while those for 1850 and 1860 are for all "Female hands," regardless of age. The numbers employed from 1850 to 1870 are as given in the Ninth Census, 1870: Industry and Wealth, pp. [illegible], and from 1880 to 1900 as given in the Twelfth Census, 1900, Manufactures, Part I, pages [illegible]. The percentages, too, are derived from figures there given. The basis of industry differed somewhat for each census (see Twelfth Census, 1900, Manufactures, Part I, page [illegible]), but it is not believed that these differences have affected materially the general results as here given.]

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	1,078	15.0	3,27[illegible]	22.9	7,201	18.6	20,1[illegible]	23.4	30,[illegible]	29.7	35,[illegible]	32.[illegible]
Tobacco, chewing, smoking, and snuff a	1,078	15.0	2,0[illegible]	15.5	b 1,[illegible]	24.5	10,790	32.6	10,60[illegible]	46.5	11,[illegible]	39.[illegible]
Tobacco, cigars and cigarettes c			351	9.2	d 3,[illegible]	16.7	9,709	17.[illegible]	20,21[illegible]	27.8	27,792	32.6
Tobacco, stemming and rehandling e							500	39.9	1,631	32.4	4,097	41.7

a "Tobacco and snuff" in 1860. "Tobacconists" in 1850.
b The Twelfth Census, 1900, Manufactures, Part III, Selected Industries, page [illegible], gives [illegible].
c "Tobacco and cigars" and "Cigars" in 1870; "Cigars" in 1860; not given in 1850.
d The Twelfth Census, 1900, Manufactures, Part III, Selected Industries, page [illegible], gives [illegible].
e Not given in 1850, 1860, or 1870.

TABLE XV.—PAPER AND PRINTING: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 to 1900.

[This table includes all the industries given in the group "Paper and printing" in the census of manufacturing industries of 1900. The figures for 1880 to 1900 are for "Women, 16 years of age and over;" those for 1870 are for "Females above 15," while those for 1860 and 1850 are for all "Female hands," regardless of age. The numbers employed from 1850 to 1870 are as given in the Ninth Census, 1870: Industry and Wealth, pages 393–406, and from 1880 to 1900 as given in the Twelfth Census, 1900: Manufactures, Part I, pages 3–17. The percentages, too, are derived from figures there given. The form of inquiry differed somewhat for each census (see Twelfth Census, 1900: Manufactures, Part I, page lxi), but it is not believed that these differences have affected materially the general results here given.]

Industries.	1850. Number.	1850. Per cent.	1860. Number.	1860. Per cent.	1870. Number.	1870. Per cent.	1880. Number.	1880. Per cent.	1890. Number.	1890. Per cent.	1900. Number.	1900. Per cent.
Total	7,027	23.2	11,343	20.8	18,425	27.2	29,762	24.0	50,881	32.6	78,929	24.8
Bags, paper a			6	64.3	290	46.4	693	60.3	659	54.4	605	46.1
Bookbinding and blank book making b	1,100	45.7	2,782	57.9	3,175	41.2	4,621	45.5	5,762	40.1	7,862	40.1
Paper rulings c												
Boxes, fancy and paper d	415	67.8	1,026	68.1	3,089	66.7	6,940	70.1	12,890	67.0	18,102	65.2
Cardboard e							107	26.6	19	8.1	219	24.9
Card cutting and designing f	22	62.0	75	42.0	115	61.7	12	15.0	20	10.1	54	16.6
Cards, playing	158	70.2	22	64.6	178	64.3						
Signs and show cards			27	17.8								
Engraving and diesinking g			16				61		30		29	
Engraving, steel, including plate printing h	67				209		160		280		1,059	
Engraving, wood							50		8		8	
Engraving and stencil cutting		23.0		6.0	6	11.0		13.5		10.6		10.6
Lithographing and engraving i	52		70				863		1,462		2,146	
Chromos and lithographs					50							
Photolithographing and photoengraving j									76		119	
Maps and atlases k	16		10		16							
Envelopes	401	56.7	552	66.2	627	75.6	849	78.7	1,707	73.4	2,040	69.4
Checkbooks and cards, embossed			22	34.1								
Stationery l	120	66.0	27	9.0								
Labels and tags m			15	55.6			85	25.7	119	26.1	201	34.5
Paper and wood pulp n	3,060	40.7	4,102	40.3	741	23.7	7,549	20.7	6,752	11.6	7,060	10.0
Paper, printing					4,803							
Paper, wrapping					400	25.7						
Paper, writing					2,353							
Paper goods not elsewhere specified o									455	66.0	12,070	41.8
Paper hangings p	2	2.5	40	7.0	115	12.7	120	8.0	243	8.9	402	11.4
Paper hats and paper collaring q	30	6.0	14	28.0								
Paper patterns r			6	100.0			31	80.9	202	85.2	219	60.0
Collars and cuffs, paper					1,600	50.5	280	66.8	250	55.8		

a Not given in 1850.

b "Bookbinding" in 1850; "Bookbinding and blank books" in 1860; "Book-binders and blank books" in 1870.

c 1 "Male hands" but no "Female hands" reported in 1850.

d "Boxes, fancy" and "Boxes, paper" in 1870; "Boxes, paper" in 1860; "Boxes, band and fancy" in 1850.

e Not given in 1870 or 1850; 21 "Male hands" but no "Female hands" employed in 1860.

f "Cards, other than playing" in 1870; "Card cutting," "Cards, enameled," and "Cards, fancy" in 1860; "Paper cards" in 1850.

g In 1860, 3 "Male hands" but no "Female hands" were reported under "Diesinkers."

h "Engraving" in 1870; "Engravers" in 1860.

i "Lithography" in 1860 and "Lithographers" in 1850.

j Included in other classifications in 1860; in 1880 reported as "Photolithographing and engraving."

k In 1860 includes "Maps," "Map mounting and coloring," and "Charts, hydrographic." In 1850 includes only "Maps."

l "Stationery" in 1850.

m "Tags" in 1860; not given in 1870 or 1850.

n [illegible]

o [illegible]

p From Twelfth Census, 1900: Manufactures, Part I, Table 2, page 84. In Table 1 of the same report, page 12, the number is given as 2,095, but this does not include "Collars and cuffs, paper," which in 1900 was included under "All other industries" in Part I.

q "Wall paper" in 1850.

r "Paper patterns" in 1860.

s "Dress patterns" in 1860; not given in 1870 or 1850.

TABLE XV.—PAPER AND PRINTING: AVERAGE NUMBER OF WOMEN WAGE-EARNERS, ETC.—Concluded.

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Printing and publishing a	1,317	16.8	2,383	11.0	3,400	8.1	6,776	11.0	19,020	13.0	26,706	17.0
Printing materials b	......	......	9	8.0	......	......	7	1.7	160	23.2	32	6.7
Stereotyping and electrotyping c	......	......	......	......	16	2.9	34	5.0	67	5.2	121	5.0

a In 1900 includes 6,020 establishments reported as "Printing and publishing, book and job," 27 as "Printing and publishing, music," 16,866 as "Printing and publishing, newspapers and periodicals;" in 1890 includes 4,[illegible] reported as "Printing and publishing, book and job," 79 as "Printing and publishing, music," 12,[illegible] as "Printing and publishing, newspapers and periodicals," and 27 as "Printing [illegible]" in 1880 includes 1 reported as "Postal cards" and 3,[illegible] as "Printing and publishing;" in 1870 includes [illegible] establishments reported as "Printing and publishing (not specified)," [illegible] as "Printing and publishing, book," 1,[illegible] as "Printing and publishing, newspaper," and [illegible] as "Printing and publishing, job;" in 1860 includes 1,[illegible] establishments reported as "Printing and publishing" and 2 as "Music printing;" in 1850 includes [illegible] establishments reported as "Printers, lithographic and copperplate," and [illegible] as "Printers and publishers." The Special Report of Census Office, Manufactures, 1905, Part I, page [illegible], credits "Printing and publishing, not specified," in 1870 and gives the number employed in that year as 1,[illegible] and the proportion as 7.[illegible] per cent.

b "Printing materials" in 1900, in 1880 includes "Printers' inks, furniture, and rollers," "Block letters," and "Type, wooden." In 1870 there were reported from [illegible] establishments [illegible] "Males above 16" and [illegible] "Youths," but no women, and in 1860 there were reported from [illegible] establishments under "Block letters" [illegible] "Male hands," but no "Female hands."

c Not given in 1850. In 1860 there were reported [illegible] "Male hands," but no "Female hands."

TABLE XVI.—SELECTED INDUSTRIES INCLUDED IN OTHER MANUFACTURING INDUSTRIES, BY GROUPS: AVERAGE NUMBER OF WOMEN WAGE-EARNERS AND PER CENT WHICH WOMEN FORMED OF THE TOTAL NUMBER OF WAGE-EARNERS AT EACH CENSUS, 1850 TO 1900.

[This table includes special industries, other than those shown in the preceding tables, in which over 5,000 women were employed, in 1900, and also "Hand-stitching goods not elsewhere specified," "Soap and candles," and "Stone goods not elsewhere specified," all given under "Miscellaneous industries" in the Twelfth Census, 1900; "Matches," given under "Chemicals and allied products," in the Twelfth Census, 1900; and "Clocks," given under "Metals and metal products other than iron and steel," in the Twelfth Census, 1900. The figures for this table, from 1850 to 1880, are for "Women 16 years of age and over;" those for 1890 are for "Females above 15," while those for 1850 and 1860 are for all "Female hands," regardless of age. The numbers employed from 1850 to 1890 are as given in the Ninth Census, 1870; Industry and Wealth, pages [illegible], and from 1880 to 1900 as given in the Twelfth Census, 1900; Manufactures, Part I, pages [illegible]. The percentages, etc., are derived from figures there given. The form of inquiry differed somewhat for each census (see Twelfth Census, 1900; Manufactures, Part I, page [illegible]), but it is not believed that these differences have affected materially the general results as here given.]

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	5,026	10.8	19,612	16.5	26,107	10.8	22,260	11.7	52,961	22.1	60,728	[illegible]
Druggists' preparations, not including patent medicines a	......	......	......	......	438	9.0	......	......	700	10.5	6,540	33.9
Patent medicines and compounds b	101	10.2	996	34.3	431	22.7	1,180	20.6	2,670	25.3	6,000	30.4
Pottery, terra cotta, and fire-clay products c	38	1.8	84	3.7	300	12.2	700	5.3	3,021	16.5	4,494	10.1
Glass d	67	1.7	201	2.8	710	3.0	771	3.0	1,990	4.3	3,602	3.7
Jewelry e	290	8.1	613	11.6	1,399	13.[illegible]	1,990	8.7	[illegible]	21.[illegible]	[illegible]	20.[illegible]
Watches f	......	......	150	16.[illegible]	502	39.[illegible]	1,810	[illegible]	5,410	40.6	8,173	66.[illegible]
Clocks	300	8.0	10	4.4	85	6.9	603	16.[illegible]	710	14.[illegible]	1,371	28.[illegible]
Electrical apparatus and supplies	......	......	......	......	......	......	77	10.[illegible]	4,105	19.[illegible]	6,158	15.1
Fancy articles, not elsewhere specified g	......	......	27	10.[illegible]	147	15.[illegible]	354	28.[illegible]	1,735	28.7	3,[illegible]	51.[illegible]
Photographic apparatus, [illegible] h	......	......	19	25.[illegible]	22	63.7	107	28.[illegible]	318	23.[illegible]	2,100	29.[illegible]

a [illegible] given in 1860 and given in 1850 as "[illegible]."

b "Medicines, [illegible]" in 1850; "Medicines, drugs and chemicals" in 1860.

c "Pottery and earthen ware" in 1870; "Pottery and stone ware," "[illegible] ware," and "[illegible] ware" in 1860; "Pottery" and "[illegible]" in 1850.

d Includes in 1870 "Glass, cut," "Glass, plate," "Glass, stained," "Glassware (not specified)," and "Glass, window;" in 1860, "Glass," and "Glass, plate," for the latter [illegible] "Male hands" and no women being reported from one establishment; in 1850, "Glass," and "Glass cutters," for the latter [illegible] "Male hands" and no women being reported from [illegible] establishments.

e "Silversmithing, jewelry, etc.," in 1850.

f "Watches, watch repairing and materials" in 1860; not given in 1850.

g Not given in 1850; in 1860 there were reported under "[illegible]" [illegible] "Male hands" but no "Female hands," and in 1850 under "[illegible]" [illegible] "Male hands" but no "Female hands."

h Includes in 1870 "[illegible]" and "[illegible]," and in 1860 only "[illegible]." Not given in 1850.

i Includes only "[illegible]" in 1860 and "[illegible]" in 1870. Not given in 1850.

TABLE XVI.—SELECTED INDUSTRIES: AVERAGE NUMBER OF WOMEN WAGE-EARNERS, ETC.—Concluded.

Industries.	1850.		1860.		1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Photography a	17	10.5	33	11.9	452	10.1	380	21.7	2,038	26.0	3,116	26.0
Rubber and elastic goods b	1,659	60.7	873	35.7	2,539	45.6	2,298	30.4	4,896	44.8	7,317	35.9
Soap and candles c	150	6.5	210	8.8	382	8.0	358	5.5	1,382	15.2	2,099	21.8
Matches	340	52.0	638	51.8	1,052	42.6	1,129	60.5	812	50.9	799	38.7
Furniture, including cabinetmaking, repairing, and upholstering d	1,721	7.8	2,341	8.0	5,051	8.8	3,953	3.5	8,890	4.7	8,732	9.7
Straw goods, not elsewhere specified e	.....	.....	6,509	89.6	12,501	61.9	7,867	65.5	389	72.2	79	33.7

a "Photographs" in 1870 and 1860 and "Daguerreotypes" in 1850.
b "India rubber and elastic goods" in 1870; "India rubber goods" in 1860 and 1850.
c Includes in 1890 "Soap and candles" and "Candles, adamantine and wax;" in 1880 "Soap and candles," "Candles, adamantine," and "Candles, wax," and in 1850 "Chandlers."
d Includes in 1870 "Furniture, not specified," "Furniture, chairs," and "Upholstery;" in 1860 "Furniture, cabinet, school, and other," "Upholstery" and "Willow furniture and willow ware," and in 1850 "Cabinet ware" and "Upholsterers."
e "Straw goods" in 1870 and 1860; not given in 1850.

TABLE XVII.—TRADE AND TRANSPORTATION: NUMBER OF WOMEN 16 YEARS OF AGE AND OVER AND PER CENT WHICH WOMEN FORMED OF TOTAL NUMBER OF PERSONS GAINFULLY EMPLOYED IN SPECIFIED OCCUPATIONS AT EACH CENSUS, 1870 TO 1900.

[The figures and percentages for 1900 and 1890 are taken, except when otherwise mentioned, from the Twelfth Census, 1900, Special Report on Occupations, pages cxxxii–cxxxvii; the figures for 1880 and 1870, and the statistics from which the percentages for these years are derived, from the Eleventh Census, 1890, Population, Part II, pages cii–cvi.]

Occupations.	1870.		1880.		1890.		1900.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Total	19,643	1.8	63,060	5.2	228,553	6.8	481,159	10.1
A. Saleswomen	.....	.....	7,462	23.1	.....	.....	142,265	23.3
Stenographers and typewriters c	8,082	3.3	8,016	5.2	166,825	16.9	85,086	75.7
Clerks and copyists c							81,000	12.0
Bookkeepers and accountants c							73,458	28.8
Telegraph and telephone operators	350	4.3	1,291	6.8	8,495	16.2	21,980	29.3
Packers and shippers	149	8.2	477	6.5	6,147	25.4	17,052	28.7
Agents	16	.3	314	1.2	4,863	2.8	10,498	8.3
Messengers and errand and office boys	30	.5	49	.4	1,962	1.8	2,433	3.4
Steam railroad employees	88	(d)	420	.2	1,112	.3	1,608	.3
Foremen and overseers	.....	.....	.....	.....	975	2.7	3,418	9.6
Commercial travelers	38	.4	272	1.0	611	1.0	948	1.0
Draymen, hackmen, teamsters, etc. b	70	.1	.....	.....	221	.1	361	.2
Porters and helpers (in stores, etc.) f	.....	.....	2,026	5.1	816	1.5	460	.9
Boatmen and sailors	34	.1	67	.1	151	(d)	153	.2
Street railroad employees	5	(d)	1	(d)	11	(d)	35	.1
Hostlers e	5	(d)	.....	.....	29	(d)	78	.1
B. Merchants and dealers (except wholesale)	8,622	2.8	11,217	3.1	35,431	3.7	36,629	4.4
Hucksters and peddlers	1,393	4.0	2,750	5.5	7,152	3.8	2,708	3.5
Officials of banks and companies	68	.3	.....	.....	207	.6	1,271	1.7
Undertakers	20	2.0	70	1.4	151	.8	328	2.0
Bankers and brokers	20	.2	133	.7	409	1.4	263	.4
Merchants and dealers (wholesale) g	.....	.....	.....	.....	.....	.....	261	.6
Livery stable keepers	15	.1	38	.2	47	.4	102	.3
Other persons in trade and transportation	565	1.9	1,590	2.4	2,473	1.9	5,015	4.1

a The figures for 1890 relate to females 15 years of age and over.
b The Eleventh Census, 1890, Population, Part II, page c, gives the total number of women engaged in "Trade and transportation" in 1880 as 59,589.
c In 1880 and 1870 included in "Bookkeepers, clerks, and salesmen."
d Less than one-tenth of 1 per cent.
e No women reported as engaged in this occupation in 1880.
f No women, but 2,214 were reported in this occupation in 1880.
g In 1890, 1880, and 1870 included "Merchants and dealers" (wholesale).

TABLE I.—SOME STRIKES IN TEXTILE FACTORIES ON ACCOUNT OF REDUCTION IN WAGES, 1829 TO 1876.[a]

Year.	Locality.	Per cent of reduction.	Authority.
1829	Taunton, Mass.		Columbian Centinel, Boston, May 9, 1829.
1833	Manayunk, Pa.	20	Pennsylvanian, Philadelphia, Aug. 28, 1833.
1834	Philadelphia, Pa.	25	The Man, New York, Apr. 22, 1834.
1834	Dover, N. H.		The Man, New York, Feb. 20, 1834, from Boston Transcript.
1834	Lowell, Mass.		Do.
1836	do	12½	Boston Transcript, Oct. 3, 1836.
1836	Springfield, Mass.	12½	National Laborer, Oct. 29, 1836.
1836	Norristown, Pa.		National Laborer, Sept. 24 and Nov. 5, 1836.
1839	Chester Creek, Pa.		National Laborer, Nov. 5, 1836.
1842	Lowell, Mass.	(c)20	New York Daily Tribune, Jan. 3, 1843, from Lowell Courier; Washington Spectator, Dec. 30, 1842.
1843	Springfield, Mass.		Eleventh Annual Report Massachusetts Bureau of Statistics of Labor, 1880, p. 6.
1844	Allegheny, Pa.		Workingman's Advocate, Aug. 17, 1844.
1848	Fall River, Mass.		Eleventh Annual Report Massachusetts Bureau of Statistics of Labor, 1880, p. 8.
1849	Cohoes, N. Y.		New York Daily Tribune, Sept. 3, 1849.
1850	Philadelphia, Pa.	10	Report Bureau of Industrial Statistics of Pennsylvania, 1880-81, p. 275.
1853	Blackstone and Adams, Mass.	(d)	Eleventh Annual Report Massachusetts Bureau of Statistics of Labor, 1880, pp. 14, 16.
1858	Newburyport, Mass.	(d)	Eleventh Annual Report Massachusetts Bureau of Statistics of Labor, 1880, p. 19.
1858	Springfield, Mass.		Do.
1858	Salem, Mass.	12	Weekly Day Book, New York, Apr. 3, 1858.
1859	Paterson, N. J.		Daily Evening Voice, Jan. 19, 1859.
1867	Maynard, Mass.	(e)10	Eleventh Annual Report Massachusetts Bureau of Statistics of Labor, 1880, p. 22.
1867	Allegheny, Pa.	(f)	Boston Weekly Voice, Sept. 12, 1867; Workingmen's Advocate, Sept. 14, 1867.
1869	Fall River, Mass.	18	Eleventh Annual Report Massachusetts Bureau of Statistics of Labor, 1880, p. 24.
1869	Dover, N. H.	12	The Revolution, Dec. 30, 1869.
1874	Fall River, Mass.	10	Baxter, History of Fall River Strike, 1875.
1874	Philadelphia, Pa.	15	Workingman's Advocate, Feb. 28, Mar. 7, 1874.
1876	do	10	National Labor Tribune, Nov. 18, 1876.

[a] This is not a complete list of such strikes.
[b] Also in board.
[c] Previous reduction.
[d] For increase.
[e] Woolen mills.
[f] From $4 to $3 per week.
[g] 1 cent per yard to carpet weavers.

TABLE II.—PIECEWORK RATES ASKED BY THE TAILORESSES' UNION OF NEW YORK AND THE RATES OFFERED BY A SMALL NUMBER OF THE EMPLOYING TAILORS, JUNE AND JULY, 1831.

[From Carey's Select Excerpta, Vol. 4, pp. 5 to 10.]

Articles.	Tailoresses' prices.	Employers' prices.
Coatees of cloth:		
Single breast	$2.00	$1.75
Double breast	2.25	2.00
Coatees of sattinet:		
Single breast	1.75	1.25
Double breast	2.00	1.50
Coatees of bombazine, pongee silk:		
Single breast	2.00	2.00
Double breast	2.25	2.25
Coatees of merino cloth:		
Single breast	2.00	1.75
Double breast	2.25	2.00
Frock coats of the above-named thin goods:		
Single breast	2.00	(a)
Double breast	2.25	(a)
Coatees of Circassian, bombazette, gros-de-Naples, or Nankeen:		
Single breast	1.75	1.50
Double breast	2.00	1.75
Frock coats of the above	(a)	(a)
Hunting coats with flaps:		
Single breast	2.00	1.75
Breast pockets on hunting coats extra	.25	
Double breast, extra	.25	.25
Cloth round jackets:		
Rolling collars	1.50	1.50
Second quality		.75
Padding sleeves, extra	.37	

[a] Same as coatees.

TABLE B. PIECEWORK RATES ASKED BY THE TAILORESSES UNION, ETC. Cont'd.

Articles.	Tailoresses' prices.	Clothiers' prices.
Satinet round jackets:		
Fine	$1.25	$0.75
Second quality	1.00	.50
Coatees of angola or linen		
Single breast	1.50	1.25
Double breast	1.75	1.38
With breast pockets outside	2.00	1.50
Pea coats:		
Kersey or cloth, fine—		
With rolling collars	2.50	2.00
Standing collars	1.75	1.50
Second quality:		
Rolling collars	1.75	1.50
Standing collars	1.50	1.00
Baboon jackets, kersey or cloth:		
Standing collars	1.25	.88
Rolling collars	1.50	1.12
Monkey jackets:		
Kersey or cloth	1.00	.75
Lion skin or coating	.75	.62
Baboon or pea jackets, lion skin or coating	1.00	.75
Round jackets:		
Bombazine, pongee, silk, or merino cloth—		
Single breast	1.00	.75
Double breast	1.25	1.00
Gingham, bombazette, or lasting—		
Single breast	.75	.63
Double breast	1.00	.88
Brown linen, linen and cotton drillings, nankeen, etc.		
Single breast	.75	....
Double breast	.87	.68
White linen and white jean		
Single breast	.87	.63
Double breast	1.00	.75
Beaverteen—		
Single breast	1.00	.50
Double breast	1.12	.88
Fustian, negro cloth, etc.		
Single breast	.50	.38
Double breast	.62	
Cloth for navy or marines, trimmed	1.00	.62
Coatees, cloth for navy or marines	2.00	1.75
Pantaloons:		
Common cassinet cloth	.50	.44
Common satinet	.50	.38
Fine satinet	.75	.50
Bombazine, lined	1.00	.75
Merino cloth or cassimere	1.50	.75
Merino cloth, plain	.75	.50
Gingham and bombazette, lined	.75	.58
Gingham, brown linen drilling, cotton drilling, nankeen, cassinet, plain	.50	.38
Fine brown drilling, grass linen, moleskin, gingham, bombazette, etc	.62	.50
Beaverteen or thin king-up cord	.75	.50
Coarse king-up cord	.50	.38
Duck	.37	.25
Duck, 1 seam and 2 pockets	.25	.18
Cossack cotton or negro satinet	.50	.37
Drawers of all descriptions	.19	.19
Vests:		
Cloth, velvet, bombazine, or silk—		
Rolling collar	.75	.50
Standing collar	.63	.50
White Marseilles and Valencia		
Rolling collars	.75	.50
Standing collars	.62	.50
Coarse swansdown, worsted, and all other coarse cotton goods		
Rolling collars	.63	.50
Standing collars	.50	.37
Cloaks, of cloth:		
Without cape, plain collar	2.00	1.25
With one cape, extra	.25	.25
Each additional cape, extra	.25	.25
Caped collar, extra	.25	.25
With sleeves, extra	.50	.50
Cloaks of camblet:		
Without cape, plain collar	1.25	....
With or without cape, corded collar	....	1.00
Each additional cape, extra	.25	....
Caped collar, extra	.25	....
Wings or side holes	1.50	1.12
With sleeves	1.62	1.25
Common camblet, plaid—		
Without cape, plain collar	.75	....
With or without cape, plain collar	....	.63

TABLE C.—WAGES OF SEWING WOMEN IN PHILADELPHIA IN 1863.

[From Fincher's Trades' Review, Nov. 21, 1863.]

Article or occupation.	Amount.	Unit of work.	Estimated weekly earnings.
Shirts a	$0.60	Per dozen	$2.40
Fine shirts	1.00	do	
Flannel shirts	$0.04-.06	Each	$2.10-1.32
Overalls	.60	Per dozen	
Large cloaks	.40	Each	2.40
Small cloaks	.25	do	3.00
Capes	.36	Per dozen	2.10
Corsets			2.50-3.00
Buttonholes on coats			4.00
Dressmaking			3.10
Linen coats	.18-.20	Each	(b)
Vest makers			1.50-1.60
Sewing-machine operators	.03	Stitching 60 yards	

a In some establishments if a button was left off a shirt 25 cents was said to be deducted from the pay.
b Two could be made in 10 hours' work, but the girls had to buy their own thread at 15 cents a spool, one spool being enough for two coats.

TABLE D.—WAGES OF WOMEN IN NEW YORK IN 1863 AND 1866.

[From the Fourth Annual Report of the Working Women's Protective Union, quoted in the Daily Evening Voice, Mar. 2, 1867.]

Occupation.	1863.	1866.
Cloakmakers	$5.00	$8.00
Shirt makers' operatives	$6.00-8.00	$7.00-9.00
Boys' clothing	4.00-5.00	4.00-5.00
Cuff and collar operators	6.00-7.00	8.00-9.00
Umbrella sewers	3.00	6.00
Burnishers	3.00	4.00-5.00
Military work	6.00-7.00	4.00-6.00
Buttonhole makers	5.00	3.00
Dressmakers	3.00-5.00	3.00-5.00
	8.00	10.00
Fur sewers	3.00-6.00	4.00-7.00
Machine operators	5.00-7.00	7.00-10.00
Vest makers	2.50-5.00	4.00-6.00

TABLE E.—WAGES REPORTED AS PAID INDIVIDUAL WOMEN IN NEW YORK IN 1868.

[From reports given by the women at a meeting of the Working Women's Association, No. 2, as given in The Revolution, Oct. 1, 1868.]

Article or occupation.	Price.	Unit of work.	Estimated weekly earnings.	Hours.
Ladies' cloth cloaks	$2.00	Each	$11.00	
Lace collars	.22	Per dozen	3.00	12
Machine operators			$5.00-8.00	10-11
Fine sewers			4.00-6.00	
Men's flannel shirts	.90	Per dozen	7.20	
Dressmaker			7.00	11
Men's silk hats			9.00-11.00	
Men's overcoats			12.00	12
Overcoat basket			12.00-15.00	
Hoopskirts			7.00-8.00	13
Vests	.50	Each	5.00	
Sewing finishers			3.00-5.00	10-11
Men's striped shirts	.45	Per dozen	3.60	
Umbrella makers			8.00	
			15.00	
Parasol maker			20.00	
Kid-glove maker			10.00-12.00	9
Corset maker	1.50	Per dozen	5.00	
Straw-hat sewer	$0.04-.06	Per hat	5.00-6.00	
Babies' embroidered jackets	1.50	Each	6.00	

TABLE F.—WAGES REPORTED AS PAID INDIVIDUAL WOMEN IN NEW YORK IN 1870.

[Reported by "Shirley Dare" as given to her by the women themselves, New York Tribune, Feb. 20, 1870.]

Occupation.	Wages per week.	Hours per day.
Tailoress	$6.00	9
Do.	6.00	9½
Seamstress	9.00	10
Do.	6.50	10
Do.	6.00	10
Operator	8.00	12
Do.	6.00	8
Do.	6.00	10
Operator on cloth	9.00	10
Cloak maker	7.00	10
Dress and cloak maker	9.00	10
Dressmaker	8.00	10
Do.	12.00	10
Do.	16.00	10
Lace maker	6.00	9
Do.	7.50	10
Fur sewer	5.00	10
Feather worker	6.00	9
Hat trimmer	12.00	12
Hat maker	8.00	10
Shoe fitter	12.00	10
Do.	12.00	10
Glove sewer	7.50	8
Do.	7.50	8
Do.	6.00	8

TABLE G.—NUMBER OF GIRLS EMPLOYED IN BOOKBINDERIES OF SPECIFIED FIRMS IN PHILADELPHIA, PA., WITH AVERAGE HOURS EMPLOYED PER DAY, PIECEWORK RATES, AND AVERAGE WEEKLY EARNINGS, 1835.

[From the Radical Reformer and Workingman's Advocate, July 7, 1835, p. 70.]

Name of employer.	Average number of girls employed.	Piecework rates— Per 100 sheets 8vo.		Per 100 sheets 12mo. and 18mo.		Hours worked per day.	Average earnings per per week.
		Folding.	Stitching.	Folding.	Stitching.		
DeSilver, Hogan & Lindsay a	30	$0.02	$0.02	$0.02½	$0.02½	7-9	$3.25
Kates & Co. a	15	.01½	.02	.02½	.02½	7-9	3.25
Thomas Clark	5	.01½	.02	.02½	.02½	7-9	3.25
Carpenter & Robinson	15	.01½	.02	.02½	.02½	7-9	3.25
R. P. DeSilver	10	.02	.02	.02½	.02½	7-9	3.50
H. Gaskill	12	.01½	.02	.02½	.02½	7-9	3.75
Jas. Boyles	20		.02	.02½	.02½	7-9	3.50
I. Locken	5	(b)	(b)	(b)	(b)	7-9	3.00
E. W. Miller	6			.02½	.02	7-9	3.25
D. Clarke a	5	.02	.02	.02½	.02½	7-9	3.25
C. Peters a	7	(b)	(b)	(b)	(b)	6-8	3.00
J. Holmer	6	.02	.02	.02½	.02½	7-9	3.25
A. & R. Edgar	4	(b)	(b)	(b)	(b)	10	3.50
H. W. Pomroy	10	.02	.02	.02½	.02½	8	3.75
Jas. Crissy	5	.02	.02	.02½	.02½	8	3.00
Geo. W. Mentz & Son a	6	.02	.02	.02½	.02½	7-9	4.00
Carey, Lea & Co.	5	.01½		.02½		10	2.50
H. P. Blorey c		.01½		.02			$1.00-2.00
L. Clark	2	.02		.02½	.03		

a Employ one or more girls in folding, who are paid from $3.50 to $4 per week and who work from 8 to 10 hours per day.

b Paid by the week.

c Pays 3 cents per 100 for stitching pamphlets, 800 of which is a good day's work.

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B.

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