

CHAPTER IX.—HISTORY OF WOMEN IN INDUSTRY IN THE UNITED STATES.

This volume, which forms the ninth part of the Report on Condition of Woman and Child Wage Earners in the United States, is based mainly upon data collected from sources hitherto not generally available. The figures of the United States Census reports are used for the tables showing the extent to which women have entered the industrial field and the industries in which they are found, but the text is based to a large extent upon material located primarily through the search set up by the American Bureau of Industrial Research. Old books, pamphlets, and newspaper files have been used freely, as well as reports of State labor and statistical bureaus, the reports of legislative committees, and publications of the Federal Government. Old newspapers, magazines, and pamphlets have been used with special freedom as being less accessible than the better-known State and Federal reports.

The study is concerned with six main groups of industries: (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 making, the paper and printing industries, the manufacture of metals of all kinds and of wood, clay, glass, and chemicals, and (6) trade and transportation.

REASONS FOR CHANGE FROM HOME TO FACTORY WORK.

In the first four of these groups women have always been employed, but the last two represent a real enlargement of their industrial field. Domestic service has been comparatively little affected by the changes of the last century, but the textile industries, the making of clothing, and the sewing trades, and to a considerable extent the industries involved in the manufacture of food and kindred products have been radically altered within that period. In all three, although in varying degrees, the women who formerly would have worked at home are now working outside their homes, under factory conditions.

For this change two main reasons are assigned—the introduction of machinery and the subdivision of labor; in addition several minor causes are given as having helped on the process. Of the two main

reasons the first and most effective was the introduction of machinery—the spinning jenny, followed by the power loom, in the textile industries, and the sewing machine in the sewing trades. These not only changed the conditions under which women worked in those particular industries, but by creating a fund or reservoir of surplus female labor, caused keen competition for employment and tended to force women into new fields.

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. * * * 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.¹

The second cause, closely connected with the first, for the movement of women from the home to the factory was the subdivision of labor rendered possible by the improvement of machinery. The making of an article was no longer one process demanding skill and training on the worker’s part, but a series of separate operations, each, perhaps, done by a machine so simple that a girl could learn to manage it. The employment of women in textile factories, whither they had merely followed the work which had been theirs from time immemorial, had accustomed the public mind to the idea of women in extradomestic employments, and the subdivision of labor increased the number of such pursuits open to them. In addition to these two main causes various temporary and local circumstances have hastened the movement of women into the industrial field. Sometimes, especially in the printing trades and in cigar making, women have been introduced as strike breakers. Naturally, the women who thus entered a new field would not be disposed to leave it simply because the strike was over. Naturally, also, the employers who had thus obtained a fresh supply of workers who were at once cheaper and more easily controlled than men would not be disposed to return to an entire dependence upon male labor. So each new occupation which women entered in this way became in a measure their own, and the list of trades in which they might be found steadily increased.

¹ Vol. IX, *History of Women in Industry in the United States*, p. 13.

Another local cause of a different kind has been the scarcity of male labor at a given time or place. This was particularly effective in the early days of the factory system when the absorption of men in agriculture left the textile industry, the principal exponent in those days of the factory system, mainly in the hands of women and girls.

Times of financial depression, when the usual wage earners of a family are either unemployed or working at reduced wages, have always been effective in increasing the number of women in industrial occupations. Wars, which at once reduce the number of men available for employment and increase the number of unsupported women and children, have a similar effect.

The result of these different causes working in varying combinations has been on the whole to increase the opportunities for self-support open to women. Also the relative importance of the occupations in which they are found has undergone a change.

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.¹

WOMEN IN THE TEXTILE INDUSTRIES.

The transformation from a hand industry carried on mainly by women and children working within their own homes to a highly organized machine industry carried on exclusively in factories has been more thoroughly worked out in the group of textile industries than in any others. They have accordingly been taken as typical, and a full fourth of the report is given to their development. Three periods are recognized—the home work and handicraft stage, lasting from the first settlement of the country to about 1787; the period of spinning machinery, lasting from the introduction of the spinning jenny in that year to about 1814; and that of the complete textile factory, which, beginning with the introduction of the power loom in 1814, has continued to the present day. In the first period women worked almost exclusively in their homes; in the second, although they had entered factories, much of the work was still given out to be done at home, while in the third stage home work ceased and the

¹ Vol. IX, *History of Women in Industry in the United States*, p. 20.

industries were brought wholly under the factory system.¹ It is with the third period that this study is specially concerned.

HOURS AND THE EFFORT TO MODIFY THEM.

In the textile factories of the early days hours were exceedingly long. A day of 12 working hours seems to have been looked upon as reasonable and moderate, and this amount was often exceeded.

In 1826, 15 or 16 hours constituted, according to the Hon. William Gray, the working hours at Ware, Mass. * * * 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, making a day of 13½ hours. 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. But at the Eagle Mill, Griswold, Conn., it was said that 15 hours and 10 minutes actual labor in the mills were required.²

In New Jersey and Pennsylvania the hours were equally long. In 1835 the operatives of the Paterson cotton mills struck for a reduction of hours from 13½ to 11 per day, but their strike was only partially successful. In 1833 the operatives of Manayunk, Pa., complained of their long hours, 13 a day, exclusive of time for meals. From 12 to 13 hours a day actual working time seemed to be the general rule, with occasional variations in either direction.

The operatives fought against such hours by means of public protests, by strikes, and by appeals to their State legislatures for relief. The meetings of protests, speeches, and newspaper articles aided in creating a public sentiment against such conditions, but had no direct effect upon them. The strikers were sometimes successful, more often not; but even when they succeeded the gains thus secured were apt to be lost as soon as an industrial depression, or even a period of slack time, appeared. Legislative action seemed the only method of controlling the evil, and for years a campaign for a 10-hour law was waged.

For some time legislative action seemed as ineffective as the other methods which had been tried, for the early laws were so worded that they failed to accomplish their purpose. In 1847 New Hampshire passed a 10-hour law, and within six years Maine, Pennsylvania, New Jersey, and Rhode Island had followed her example. But most of these laws safeguarded the liberty of the individual by providing that, although 10 hours should constitute a day's work, any operative might, if he chose, contract to work for a longer time. The companies promptly discharged those who did not choose to

¹ The arts and crafts movement has done something toward reestablishing certain forms of textile work in the home, but it is not as yet sufficiently widespread to affect the general situation.

² Vol. IX, *History of Women in Industry in the United States*, pp. 62, 63.

make such a contract, and in some cases established a blacklist against them. There was an outburst of strikes, but the employers had the advantage of position, and these laws remained dead letters.

Then followed 20 years of confusion. The operatives never gave up the fight for a shorter day, and as it became evident that sooner or later they would secure effective laws, the employers in various localities made an effort to head off the movement by voluntarily reducing hours. Generally a day of 11 hours marked the extreme limit of concession; occasionally a day of 10½ hours was granted, but it was not usually long maintained. Gradually, however, effective legislation was secured and working hours were permanently reduced.

In general the hours of labor in Massachusetts, in spite of the lack of legislation, were reduced first, other States following. 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 hours a day, theirs came down to 12." 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.¹

INTENSITY OF WORK.

Apparently in the early days of the textile factories it was customary for woolen weavers to tend only one loom and for cotton weavers to tend two, but between 1830 and 1840 a movement to increase the number assigned to a single worker became apparent and has steadily progressed. A strike has been a common form of protest against such increases, but such strikes have rarely been successful. The increase was often offered under the guise of a favor.

In 1836 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." The offer was condemned, however, by the strikers. In 1869 the same offer was made by the Dover company to its striking employees, but this time the increase was to be from 6 or 7 to 8 looms.²

Similar increases in the number of machines to be cared for were made in the other departments, so that throughout both cotton and

¹ Vol. IX, *History of Women in Industry in the United States*, pp. 72, 73.

² *Idem*, p. 109.

woolen mills the women employees are working far more continuously, more rapidly, and under a much greater strain than was the case in the early days of the industry.

WAGES.

At first women could earn considerably higher wages in textile factories than in any other occupation open to them.

Before the introduction of manufactures, according to Aiken, 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.¹

In other words, by 1833 women might expect to earn from about \$6 to \$9 a month and their board. In the textile factories their wages were somewhat higher than this. From 1833 to 1850 it is said that their wages in such factories averaged about \$2 a week with board, which, including lodging, heat, light, and washing, was worth from \$1.25 to \$1.50 a week. This average changed but little until the time of the Civil War, when both wages and prices rose. Between 1860 and 1866 the wages of women spinners, weavers, warpers, speeders, spoolers, etc., were increased from 50 to 100 per cent. Retail prices, however, increased from a basis of 100 in 1860 to 202 in 1866, so that in spite of the nominal increase in wages there was a real and serious falling off in their purchasing power. Wages continued to rise until the early seventies, when came a pause, followed by a decrease in the late seventies.

Very little idea of the real value of the early wages is obtained from a statement of their amount in dollars and cents, since the purchasing power of money has changed so greatly since those days. Without going into an elaborate consideration of prices, a certain measure of the wage value can be obtained by considering the cost of board. The average wage of women textile operatives was \$2 and board, the latter being considered worth from \$1.25 to \$1.50 a week. In other words, after paying for board, which included lodging, heat, light, and at least part of her washing, the average worker found herself with something over half her week's wages in hand.

RELATIVE PROPORTION OF THE SEXES.

In the handicraft stage women and girls had the greater part in the manufacture of textiles, all the spinning and much of the weaving being in their hands. It is difficult to secure exact data for the period during which spinning machinery without the power loom

¹ Vol. IX, *History of Women in Industry in the United States*, p. 73.

was in use, but there is abundant evidence that in the early days of the complete textile-factory system women constituted the major part of the employees, and that relatively they have lost ground in the textile industries within the last 50 to 75 years. This movement has not been uniform throughout the different industries.

In 1816 a report rendered to Congress gave the following figures showing the age and sex distribution of cotton-mill operatives:

Males employed from the age of 17 and upward.....	10,000
Women and female children.....	66,000
Boys under 17 years of age.....	¹ 24,000

By 1831 women formed about 58 per cent of the cotton-mill employees—62.6 per cent of those who were not “children under 12 years,” who were not classified by sex. This proportion of women showed but little change up to the time of the Civil War. The rush of men into the army left numerous positions open to women in which they could earn more than in millwork, and at the close of the war the rapid opening up of the West had the same effect. The class of women from whom the famous mill girls of Lowell were drawn had left the mills, probably forever, and immigrants—men as well as women and more numerous than women—filled the vacant places. Along with this substitution of foreign for native operatives has come the introduction of increasingly complicated and difficult machinery, the operation of which “requires the care of men because it is beyond the physical and nervous capacity of women.” Consequently in the manufacture of cotton textiles there has been a slow but steady decrease in the proportion of women employed, the percentage they form of the total employees having fallen from 58 in 1831 to 40.2 in 1905.

In the manufacture of woolen goods men have always, under the factory system, formed a larger proportion than women of the total employees, but relatively they are more important now than in the early days. In Massachusetts in 1837 and again in 1845 the woolen-mill employees were nearly equally divided between the sexes, though men showed a slight excess. In 1850 the United States Census gave the proportion of female hands in all wool manufacture except hosiery and knit goods as 41.5 per cent; by 1905 their proportion was nearly the same, 40.1 per cent. In the manufacture of hosiery and knit goods the proportion of female workers has always been high but has fluctuated considerably. Before the introduction of machine knitting women had a practical monopoly of this branch, but with the use of machinery men entered it in considerable numbers. So far as known females have never formed

¹ Vol. IX, *History of Women in Industry in the United States*, p. 50.

less than half of the total employees, and usually their proportion has been nearer three-fifths. In 1905 they formed 66.4 per cent of the total number of employees. In the manufacture of silk and silk goods the proportion of women employed has on the whole increased, rising from 53.1 per cent in 1870 to 56.8 per cent in 1905. This gain seems to have been made wholly at the expense of children, the proportion of men having increased more than the proportion of women during this period.

The various minor textile manufactures differ in this respect, but, taking the whole group of textile industries, women have very evidently lost ground. In 1850 they formed 50.2 per cent of all employees in textile industries, while in 1900 they formed only 40.6 per cent. In this particular industry their presence in the factory has not meant that they are taking work from the men but that men are gradually taking work from the women.

SUMMARY OF SECTION.

Since the establishment of the complete factory system, beginning about 1814, the employment of women in textile factories has been common. During this period hours of labor have been diminished, but intensity of work has been greatly increased. The industry has passed almost wholly from the hands of native workers to immigrants or their children. The wages of women have shown a nominal increase; this has not meant wholly a gain, owing to a decrease in purchasing power; and the proportion of women employed in textile factories has shown a steady decrease, their places being taken by men.

CLOTHING AND THE SEWING TRADES.

Most of the garment-making and sewing trades present a very different history from the textile industries, partly because machinery was not introduced until a much later date—the sewing machine was not in general use until after the middle of the century—and partly because when introduced it was of such a character that there was little or no economy in carrying on the work in factories. For the manufacturer, indeed, there was decided economy in giving out the work to be done at home, as this greatly reduced the fixed charges of the business. The great subdivision of labor which has developed as the trade in ready-made garments has grown diminishes the saving secured by home work, and the workers themselves in some trades have fought vigorously against giving out work, as lending itself to the sweating system and tending to reduce wages below the subsistence point. At present the sentiment of the workers and of the best class of employers is against home work, but in none of these trades has home work been entirely eliminated, although in the boot and shoe industry it is now very unusual.

BOOT AND SHOE MAKING.

Apparently in this industry there has been a real incursion of women into a field formerly occupied by men, but this incursion began at an early date.

About 1795, or earlier, * * * 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.¹

A few other branches of the work were sometimes turned over to women. In Brockton, for instance, they were employed in pegging boots and shoes, and in New York "fitting, which consisted of sewing the bootlegs together, putting in the lining and straps and generally making the boots ready for bottoming, was generally done by women and children at home." Binding, however, was their great occupation, and continued to be so until the introduction of the sewing machine, between 1855 and 1865.

This led to the introduction of the factory system, and at first to a great displacement of women workers, as the machines were heavy and difficult to operate. Between 1850 and 1860 the proportion of female workers in the industry fell from 31.3 per cent to 23.2 per cent, and by 1870 it had sunk to 14.1 per cent. This was their lowest point. Further improvements in machinery combined with extreme subdivision of work created numerous occupations well within woman's strength and ability, and each census since 1870 has shown an increase in the proportion women furnish of the total employees. In 1905 their proportion was a little over 33 per cent.

WAGES, EARNINGS, AND CONDITIONS OF WORK.

During the period of home work piece rates prevailed, and these varied according to the degree of competition. In the small shoe towns of New England apparently the binders received what they considered fair returns, but in the large cities there was constant complaint that they could not earn enough to live on. Moreover, they were subject to numerous petty impositions, such as charges for needles, silk and thread, the withholding of part of their earnings, etc. In 1853 it was estimated that an expert binder in New York, working from 14 to 17 hours a day, could net \$2.40 a week. "This was said, however, to be higher than the average price paid hundreds of girls and women in New York."

¹ Vol. IX, *History of Women in Industry in the United States*, p. 167.

Under the factory system earnings appear to have been much better and the general conditions at least fair.

As an occupation for women, boot and shoe making 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.¹

GARMENT MAKING.

In the manufacture of ready-made garments the factory system has only recently made headway, having as competitors both home work and the sweating system. On the whole the worker's progress seems to be from the home to the sweatshop and from the sweatshop to the factory, but the three stages are found existing side by side in the same industry.

Garment making includes a number of different industries in different stages of development, struggling with different problems of organization. Conditions in many of these industries have been notoriously bad from very early days.

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.²

Up to 1850 all garment making was done by hand and the ready-made garments were of the poorer and rougher quality. The garments were usually cut and given out for home making. Any woman who had an elementary knowledge of needlework might be a competitor for the work, and consequently rates were cut until earnings were often below the subsistence point. The larger part of this study deals with the almost incredibly low piece rates paid and the efforts to secure some improvement in this direction.

These efforts had only partial and temporary effects. The almost unlimited supply of potential home workers and the impossibility of any organization on their part kept wages down and increased hours of work in spite of all protests until the partial introduction of the factory system did away with the worst abuses of the home-work system, but the sweating system remained to make conditions in some branches all but intolerable for the workers. Of late years this system seems to have been losing ground.

¹ Vol. IX, *History of Women in Industry in the United States*, p. 174.

² *Idem*, p. 117.

Division and organization of labor, aided on the one hand by the economies of large scale production and on the other hand by laws regulating the sweating system must be held primarily responsible for the movement toward the factory system in the garment trades.¹

OTHER SEWING TRADES.

There appears to be a general tendency for the factory system to supplant home work, but this tendency has developed much further in some industries than in others. The making of collars and cuffs has been transferred wholly to the factory. The manufacture of gloves is in Chicago a factory industry, but in New York a considerable amount of the work is given out to be done at home. Millinery and the manufacture of artificial flowers are entirely unstandardized. The making of hats and caps is confined to factories. Thus the situation varies from industry to industry, so that no general statement is possible.

RELATIVE PROPORTION OF THE SEXES IN SEWING TRADES.

On the whole the proportion women form of the total workers in clothing and sewing trades has shown a slight increase during the period for which comprehensive statistics can be secured, rising from 49.5 per cent in 1850 to 55.9 per cent in 1900. This has been coincident with a falling off in the proportion they form in most of the trades listed in 1850. Thus in that year they formed 63.7 per cent of the workers on men's clothing and 92 per cent of those engaged on millinery and lace goods as against 47 per cent and 83.2 per cent in the same trades in 1900. The increase in their proportion of the total seems due mainly to the inclusion in later censuses of trades which were so entirely home industries in 1850 as not to be included. Thus shirt making, which is not listed at all in 1850, employed 31,074 women wage earners in 1900, and women's clothing in its two branches of dressmaking and factory product, which does not appear in the 1850 census, had in 1900 a total of 97,701 women workers.

An examination of the data given shows some ground for believing that as the factory system becomes established in the different trades the same process is going on which has been so apparent in the textile trades—the gradual substitution of men for women.

OTHER GROUPS OF INDUSTRIES.

Domestic and personal service has never been organized to such a degree that it is considered an industrial pursuit. Its principal

¹ Vol. IX, *History of Women in Industry in the United States*, p. 155.

point of interest is its decreasing importance as a gainful pursuit for women. In 1870 it employed 58.1 per cent of all the female breadwinners 10 years of age and over, but by 1900 its proportion had sunk to 39.4 per cent.

The industries comprised under the heading "Other manufacturing industries" are treated very briefly. In general in the earlier part of the last century women entering any of these industries found hours as long as in the textile industries and wages lower. Often, too, they met with active hostility from the men of the different trades, who looked upon them as interlopers. Rather generally they came in as unskilled workers, taking the lowest-paid work in the industry. They have profited by the improved conditions brought about by labor organizations, legislation, and the good will of employers, but usually they still retain the less skilled and less profitable occupations.

In most of these industries women upon entering took, usually at a reduced wage, work which up to that time had been considered peculiarly men's. Cigar making is an exception to this generalization, since it had begun as a household industry carried on largely by women. The first result of the introduction of the factory system was to diminish the number of women employed in this industry to such a degree that when in the latter half of the nineteenth century women entered it in numbers, their entrance was bitterly opposed on the ground that they were taking men's work.

In entering the various occupations grouped under the heading "Trade and transportation," women secured a real enlargement of their field. As saleswomen, stenographers, typewriters, bookkeepers, and shippers and packers, they have entered occupations which in their mothers' days either did not exist or were looked upon as wholly unsuited for women. To the latter class belongs the work of saleswoman. Again and again in the early part of the last century the employment of saleswomen instead of salesmen was urged as a means of relieving the terrible pressure in most occupations open to women, but up to the time of the Civil War the proposal fell on deaf ears. Even in 1870 saleswomen were too small a body to be given separately in the census classifications; in 1900 they numbered 142,265. The long hours of service, the low wages, the frequent fines, and the strain of the continuous standing often required are such grave drawbacks that the suitability of women for the work has been seriously questioned. These and kindred objections, however, are gradually diminishing under the pressure of public opinion working partly through legislation, partly outside of it, and women appear to be permanently established in this vocation. Stenographers, typewriters, and bookkeepers as skilled, or, at worst, partially trained

workers have never been subjected to the almost unlimited competition which prevails among saleswomen, and their conditions as to wages, hours, and the like have been more favorable.

CONCLUSION.

The general impression left by a survey of the different industries in which women have followed or are following their work from the home into the factory is that on the whole the change has meant an improvement in the condition of the women workers.

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.¹

There appears to have been relatively little real displacement of men by women. There has been some, but in only a few industries. Having been forced out of their traditional sphere primarily by machinery and secondarily by men introduced as the result of the readjustment due to machinery, women have in some cases 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, many of which women have entered almost if not quite from the beginning and in which they have successfully held their own.

¹ Vol. IX, History of Women in Industry in the United States, p. 21.