

APR 1 1940

UNITED STATES DEPARTMENT OF LABOR

FRANCES PERKINS, Secretary

WOMEN'S BUREAU
MARY ANDERSON, Director



WOMEN IN INDUSTRY

A SERIES OF PAPERS TO AID
STUDY GROUPS

Revision of Bulletin 91

By

MARY ELIZABETH PIDGEON



BULLETIN OF THE WOMEN'S BUREAU, No. 164

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1938

For sale by the Superintendent of Documents, Washington, D. C. - - - - - Price 15 cents



WOMEN'S SUFFRAGE

THE NATIONAL WOMAN SUFFRAGE ASSOCIATION

1848 N. BROAD ST. PHILADELPHIA, PA.

RECEIVED

APR 10 1871



APR 10 1871

CONTENTS

	Page
Letter of transmittal.....	v
Foreword.....	vii
List of references.....	viii
Part I.—The work of the wage-earning woman.....	1
(a) How she went to work and what she does.....	1
(b) The number of women employed.....	3
(c) What work in the factory means.....	5
(d) Early industrial work of women in this country.....	7
Part II.—The industrial world in which women work.....	9
(a) Changing civilizations.....	9
(b) Effects of the introduction of machinery.....	11
(c) Relation of women workers to the machine age.....	13
(d) Lives of the workers in the machine age.....	15
Part III.—Married women workers.....	17
(a) The number of married women gainfully employed.....	17
(b) The responsibility of married women for family support.....	19
(c) The double duties of married women workers.....	21
(d) Some effects of the employment of married women.....	23
Part IV.—Women and unemployment.....	25
(a) How unemployment affects women.....	25
(b) The extent of unemployment.....	27
(c) Some causes of unemployment.....	29
(d) Methods of minimizing unemployment.....	31
Part V.—Health standards for women's work—working conditions.....	33
(a) Service facilities and sanitary conditions in the workplace.....	33
(b) Special health needs in the workplace.....	35
(c) Industrial hazards: Injuries.....	37
(d) Industrial hazards: Disease.....	39
Part VI.—Health standards for women's work—working time.....	41
(a) Daily hours of work.....	41
(b) Hours of work in the week.....	45
(c) The night shift.....	47
(d) Vacations and sick leave with pay.....	49
Part VII.—Labor legislation for women.....	53
(a) Reasons for legislation and forces furthering it.....	53
(b) Hour legislation in various States.....	55
(c) Various types of labor legislation for women.....	57
(d) Certain effects of labor legislation.....	59
Part VIII.—What the wage-earning woman earns.....	61
(a) Outworn ideas as to women's wages.....	61
(b) Some factors affecting women's wages.....	63
(c) Women's wages and what they must buy.....	67
(d) The minimum wage and its effects.....	69
Part IX.—Various connections of women with the industrial and labor world.....	73
(a) Women in unusual occupations.....	73
(b) Women as "officials and managers".....	75
(c) Women's labor organizations and some of their leaders.....	77
(d) Women in official administrative labor positions and women who have furthered movements for workers.....	81
Part X.—Work of the Women's Bureau.....	83
(a) Antecedents of the Women's Bureau, and formation and personnel of the Bureau.....	83
(b), (c), and (d).....	85
Appendix.—Publications of the women's Bureau.....	Following 86

LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, May 27, 1938.

MADAM: I have the honor to transmit for publication an outline for group study of the subject of women in industry.

The Women's Bureau receives many requests for material on gainfully-employed women, arranged in such form as to be used easily for group study or for meetings. Since a wider knowledge among organizations of American women of the conditions and problems of women in industry is of great importance, this outline, originally published in 1931, revised in 1935, has again been brought up to date on account of the changes in matters affecting women.

The outline is the work of Mary Elizabeth Pidgeon, chief of the research division. This revision has been prepared by Rachel Fesler Nyswander, of the research division.

Respectfully submitted.

MARY ANDERSON, *Director.*

HON. FRANCES PERKINS,
Secretary of Labor.

v

FOREWORD

This bulletin has been prepared in response to a request for material in such form as to be used easily by study groups of certain organizations that desire to obtain information on the employment of women and the general conditions under which they work.

Ten aspects of the subject have been considered separately. Each of these is divided into four brief statements, to be read and discussed by four persons taking part in a meeting devoted to one phase of the subject.

While this material will be all that is desired in some groups, the ingenuity of others will suggest further study. For this reason a few additional sources of information are suggested, with the idea that the leader or presiding officer for the day or period may select further readings or may read more widely and prepare some abstract of the material it is desired to present.

With practically every number here included, certain of the Women's Bureau bulletins will be found especially helpful for use in the selection of additional reading references or in the preparation of further material by the leader and those appropriate to each number will be suggested.

The Women's Bureau is not in a position to distribute its bulletins in unlimited quantities, but it will furnish without charge a copy or two for executive officers of club groups. Additional copies of Women's Bureau bulletins can be purchased at a nominal price from the Superintendent of Documents, Government Printing Office, Washington, D. C.; prices may be ascertained from the appendix of this bulletin.

The suggested bibliography that follows makes no effort to be complete or even very long but attempts merely to include a few of the more popular works that may be especially interesting or helpful. The Women's Bureau does not furnish the books listed and these must be secured from their publishers, or from libraries. State organizations taking up the study would do well to purchase a few copies for lending to readers at points where these cannot be obtained from local libraries.

LIST OF REFERENCES¹

- I. Bulletins of the United States Women's Bureau. (Those appropriate for each subject are listed thereunder.) See also the periodical published by the Women's Bureau: *The Woman Worker*.
- II. Books.
- Abbott, Edith. *Women in Industry*. D. Appleton & Co., New York. 1924.
American Woman's Association.
The Trained Woman and the Economic Crisis (1929 earnings). 1931;
Women Workers Through the Depression, 1934.
- Beard, Charles A. Editor. *Whither Mankind*. Longmans, Green & Co., New York. 1928.
- Beard, Mary R. Editor. *America Through Women's Eyes*. The Macmillan Co., New York. 1933.
- Bent, Silas. *Machine Made Man*. Farrar & Rinehart, New York. 1930.
- Branch, Mary Sydney. *Women and Wealth*. The University of Chicago Press, Chicago. 1934.
- Breckinridge, S. P. *Women in the Twentieth Century*. McGraw-Hill Book Co., New York. 1933.
- Chase, Stuart. *Men and Machines*. The Macmillan Co., New York. 1929.
- Commons, John R., and John B. Andrews. *Principles of Labor Legislation*. Harper and Brothers, New York. 1936 ed.
- Groves, Ernest R. *The American Woman*. Greenberg, New York. 1937.
- Henry, Alice. *The Trade Union Woman*. D. Appleton & Co., New York. 1915; *Women and the Labor Movement*. George H. Doran Co., New York. 1923.
- LaFollette, Cecile Tipton. *A Study of the Problems of 652 Gainfully-Employed Married Woman Homemakers*. Teachers College, Columbia University, New York. 1934.
- Stouffer, Samuel A., and Paul F. Lazarsfeld. *Research Memorandum on the Family in the Depression*. Social Science Research Council. Bul. 29, 1937.
- Wiese, Mildred J., and Ruth Reticker. *The Modern Worker*. The Macmillan Co., New York. 1930.
- Wolfson, Theresa. *The Woman Worker and the Trade Unions*. International Publishers, New York. 1926.

¹ It is suggested that the State organization buy a few copies to lend to local groups where public library facilities are not available.

WOMEN IN INDUSTRY

A SERIES OF PAPERS TO AID STUDY GROUPS

I. THE WORK OF THE WAGE-EARNING WOMAN¹

(a) How she went to work and what she does.

Woman's work is one of the oldest things in the world as we know it. From long before the dawn of written history the evidence of cave and burial place gives mute testimony to the patient labor of feminine hands. In the earliest days of human association of any permanent sort it was the woman around whom the little family group revolved.

When machines and factories came into being, the second following closely upon the heels of the first, a great part of the former occupations of the home went out of it. It was no longer good economy to hand-weave the family clothing when power looms could make the cloth so much faster and, in most instances, so much more cheaply. Woman changed in a few short years from producer to consumer, and her husband's income dwindled accordingly. In the old days she, as well as he, had been in truth a wealth creator. Now she must pay out the money he earned for the purchase of things that formerly she made. And his earning capacity did not increase at a sufficient rate to bridge the gap thus formed, nor could it keep pace with the rising cost of living.

In most countries, in consequence, as in the United States, the women, whether producers or consumers, were forced to follow their old jobs out of the home and into the factory. They became again producers beside their husbands, but now in the additional capacity of wage earner and, in most instances, carrying a double burden because they could no longer combine their two jobs into the one continuous performance of running their households.

In the United States, according to the census of 1930, there were over 10,700,000 women workers gainfully employed. There are few occupations in which no woman ever has worked. In 12 manufacturing industries women operatives and laborers outnumbered men in both 1920 and 1930. These include the clothing industries as a whole, silk mills, knitting mills, cigar and tobacco factories, and candy making.

Having blazed the trail of remunerative employment outside the home, women have stopped short at practically no type of work, although many of the jobs they perform are similar to tasks that

¹ The following bulletins of the Women's Bureau will be of interest in connection with this subject: No. 3, Standards for the Employment of Women in Industry, 1928; No. 104, The Occupational Progress of Women, 1910 to 1930, 1933; No. 115, Women at Work, 1934; and No. 155, Women in the Economy of the United States of America, pt. I, ch. 1, 1937.

women had for ages been responsible for in the home. Now that we have outlived the era when the slogan "Woman's place is the home" was at the height of its popularity, women are found in occupations that not so long ago were unheard of or undreamed of as possible and practical ways for women to earn a livelihood.

Four or five decades ago the girl in business was a curiosity, a woman doctor or lawyer was an object of prejudice, and the woman professor was scoffed at as a bluestocking. In this country today are thousands of women in such vocations. There are even women who are managers and superintendents of factories, bankers and bank officials, chemists, inventors, engineers, architects, and judges. There are women chauffeurs, draymen, teamsters and expressmen, garage laborers, switchmen and flagmen on steam railroads, ticket and station agents, telegraph messengers, steam and street railway laborers, and large numbers of women working as telephone and telegraph operators; and there are enormous numbers of women in other ranks, working in factories that make cloth, garments, shoes, cigarettes, and countless other articles.

In almost every factory where men work there are some women employed, and in some kinds of establishments there are many more women than men. In the clothing industry as a whole and in corsets, shirts, collars and cuffs, gloves, and certain other branches, in 1930 there were more than twice as many women employed as men, and in knitting mills, and cigar and tobacco factories, there were nearly twice as many women as men.

I. THE WORK OF THE WAGE-EARNING WOMAN—Contd.

(b) The number of women employed.

The census of 1930 showed more than 10,700,000 women gainfully occupied on April 1 of that year. This is an enormous increase over the number so engaged on January 1, 1920—26 percent, which was much greater than had been expected. Nevertheless, of all the women in the country who were 10 years old or over, only a little more than one-fifth were gainfully occupied, and of every nine employed persons seven were men.

It is of interest to see what types of work have been engaging women to the greatest extent. Of every 10 women employed in 1930, 3 were in domestic and personal service, very nearly 2 were in clerical pursuits, something less than 2 in manufacturing, more than 1 in professional work. This accounts for 8 women or something over, and the occupations of the remaining 2 were scattered, with the largest numbers in trade and in agriculture and the group next in size, that called by the census "transportation and communication," the greatest woman occupation there being that of telephone operator.

When the last census was taken (1930), only a small proportion of all the women in paid jobs were in pursuits not followed by women for many years. The largest woman-employing occupation was that classified by the census as "servant," the next was the teaching profession, and stenographers and typists came third.

Among the various States, the proportional increase in the employment of women was greatest in California, where there were 94 percent more women so occupied in 1930 than in 1920. Florida came next with 76 percent, then Arizona with 63 percent, and there were increases of between 40 and 50 percent in Oregon, New Mexico, Michigan, West Virginia, and New Jersey. The smallest gains—less than 2 percent—were in South Carolina and New Hampshire, and fewer than 10 percent were added to woman employment in Arkansas, Massachusetts, Maine, Vermont, Georgia, and Rhode Island.

If we go back to 1910 to get a 20-year view, we find that in agricultural pursuits, which have employed very many women, their number has declined greatly. The same is true of mining, in which few women are at work. In every other group, however, women have made great strides. In fact, their numbers have trebled in clerical occupations and in public service (a relatively small group) and more than doubled in trade, the professions, and transportation and communication.

Among the occupations in which men have increased in number more rapidly than women in the 20 years prior to 1930 are those of farm laborers, factory foremen, janitors and cleaners, semiskilled work in chemical, electrical, paper, and certain textile factories, and

the skilled or professional pursuits of tailoring, certain occupations in the printing trades, musicians and music teachers, and artists, sculptors, and art teachers. Women have gained over men in certain jobs such as they have long held in some of the semiskilled manufacturing processes. They have gained also as stenographers and typists, bookkeepers and cashiers, office clerks, telephone operators, waitresses, and operatives in clothing, tobacco, clay, glass and stone, shoe, candy, and automobile plants. They also show greater increases than men as actors, as college professors, as keepers of hotels, restaurants, boarding and lodging houses, as real-estate agents, and as barbers and hairdressers. The period showed fewer women but more men becoming physicians and osteopaths.

It is significant, however, that census figures for the period 1900 to 1930 indicate that it was not after the world depression began that women formed the largest proportions of the total employed in certain of the most outstanding woman-employing industries and occupations. For example, in all manufacturing and mechanical industries as a whole, women formed the largest proportion of employees in 1900; this same year shows this true for servants and waitresses, for cotton manufacture and knitting mills. In textiles as a whole, in paper and printing, and in electrical machinery and supplies, it was in 1910 that women formed the largest proportion of those employed.

I. THE WORK OF THE WAGE-EARNING WOMAN—Contd.

(c) What work in the factory means.

Mary van Kleeck, the first director of the Woman in Industry Service of the United States Department of Labor, in describing what industry means to women workers, has said:

It seems to me that it means three things that we should emphasize here. First, it represents a chance to earn a living; how good a one it offers can be discussed later. Second, industry has constituted for women what one might call an endurance test. Third, it is an opportunity for women to join in the constructive upbuilding of a better order.

In the industrial world where women are engaged in an almost bewildering variety of occupations, there is a great deal of specialization. In fact, industrial processes have become so specialized that one person is seldom able to complete an entire article. It takes about 150 different operations to make a shoe, which used to be made entirely by one person's hands. Many other products of industry are subdivided almost as much in the process of manufacture. Consequently, today great groups of women make but one part of one thing or perform one little operation, doing the same thing over and over and over again. For example, a woman will do nothing but stitch cuffs on sleeves, piling them up rapidly—850 pairs a day. Or she may work intensively feeding and keeping up with a machine that cuts thousands of tin disks during her 9-hour schedule. Monotony of work has increased with subdivision in industry and the loss of craftsmanship. This development has been almost inevitable. Women are not given the same trade training and opportunities as are men, and so they are the ones who perform the most repetitious jobs and upon whom the burden of monotony falls most heavily.

Scientific study has indicated that what would be classed as light work may become, where continuously repeated, more damaging physically and psychologically than heavier work which affords some opportunity for variety. Speed, complexity of machinery, monotony of job, and noise seem necessarily to be associated with our modern industrial life. Since these causes of strain are with us to stay, the problem becomes one of planning hour schedules and other conditions of work so as to reduce the amount of fatigue.

Additional reading: From Women's Bureau Bulletin 115. Women at Work.

I. THE WORK OF THE WAGE-EARNING WOMAN—Contd.

(d) Early industrial work of women in this country.

The member assigned to this section of the program should secure, if possible, *Women in Industry*, by Edith Abbott. The suggested readings from which she can select are as follows:

Ch. I. The Colonial Period.

Ch. V. The Early Field of Employment [1808-1840].

Ch. VII. Early Mill-Operatives; Conditions of Life and Work.

THE WORK OF THE WATER-POWER WORKS COMMISSION

(a) Early industrial uses of water in the country.

The first industrial use of water was for the purpose of generating power. This was done in the form of water wheels and water turbines. The first water wheel was invented in the 12th century and the first water turbine was invented in the 18th century.

The first industrial use of water was for the purpose of generating power. This was done in the form of water wheels and water turbines. The first water wheel was invented in the 12th century and the first water turbine was invented in the 18th century.

II. THE INDUSTRIAL WORLD IN WHICH WOMEN WORK ¹

(a) Changing civilizations.

Many aspects of the age we live in are difficult to understand. Rapid changes are taking place in some communities, and these stand side by side with others where changes are less rapid and culture apparently is more stable. But the developments of today proceed on a large scale, and improved means of transportation and communication have carried us along so fast that the quick succession of changes in important centers often produces profound effects upon localities that are smaller and quite distant from the real causes of change.

In his introduction to a collection of articles by a number of thinkers who are trying to understand modern life, Charles A. Beard, formerly a professor at Columbia University, New York, classifies civilizations into three types: The agricultural, which may be slave, feudal, peasant, or freehold; the premachine urban, which includes handicraft and mercantile pursuits and political capitals; and the mechanical and scientific, such as is found in our great industrial cities. The last-mentioned type of civilization he further explains as follows:

* * * machine civilization * * * differs from all others in that it is highly dynamic, containing within itself the seeds of constant reconstruction. Everywhere agricultural civilizations of the premachine age have changed only slowly with the fluctuations of markets, the fortunes of governments, and the vicissitudes of knowledge, keeping their basic institutions intact from century to century. Premachine urban civilizations have likewise retained their essential characteristics through long lapses of time. But machine civilization based on technology, science, invention, and expanding markets must of necessity change—and rapidly. The order of steam is hardly established before electricity invades it; electricity hardly gains a fair start before the internal combustion engine overtakes it. There has never been anywhere in the world any order comparable with it, and all analogies drawn from the middle ages, classical antiquity, and the Orient are utterly inapplicable to its potentialities, offering no revelations as to its future.²

An interesting contrast between an agricultural and handicraft civilization and a civilization of the machine age is given in a comparison made by Stuart Chase of life among the Mexican Indians with that which is developed when machines are introduced. He says in part:

* * * Houses are built of local materials, clothing is largely home grown and spun, food comes from the neighboring fields and groves, recreation is a local product in which all participate, while over the whole economic process broods a spirit of authentic craftsmanship giving rise to some of the loveliest pottery, glasswork, masonry, and weaving which the world knows. Nobody has much; a bad harvest may cause real suffering; you and I would be pro-

¹ The following bulletins of the Women's Bureau will be of interest in connection with this subject: No. 104, *The Occupational Progress of Women, 1910 to 1930, 1933*; and No. 115, *Women at Work, 1934*.

² *Whither Mankind: A Panorama of Modern Civilization*. Edited by Charles A. Beard and containing articles by 16 other modern thinkers. Longmans, Green & Co., New York, 1928, p. 15.

foundly uncomfortable adjusting our bathroom, steam-heat, butter-plate complexes to actual living in one of these villages; but there is enough to go around, in the basic biological sense of the term, leisure to enjoy life, economic independence within the exigencies of climate and food supply * * *.

Now let us perform a drastic and—mindful of these kindly Indians—a somewhat ghastly surgical operation. Let us graft upon this community the technic which James Watt set in motion when he solved the problem of the steam-engine a century and a half ago. Invested capital comes sweeping into the country and with it interest, profits, and wages. Corporations spring like mushrooms. A lumber company takes over the forest and fuel supply. Contractors undertake the building of houses. Mining concerns exploit the silver, copper, and gold of the surrounding mountains. Factories proceed to the manufacture of textiles, agricultural implements, boots and shoes. * * * Self-sufficiency lies in ruins; the region is clamped into world machine economy, drawing its supplies of physical goods from the five continents and supplies of credit from New York and London.

The Indians will have a higher standard of living, more things, and a perplexing amount of new kinds of trouble. They cease to direct their own economic destinies and go to work for a boss. Money wages supplant their sometime more direct means of subsistence. From diversification they turn to specialization; from cottage craftsmanship to work on the assembly line or in the machine shop.³

³ Chase, Stuart. *The Nemesis of American Business*. Harper's Magazine, July 1930, pp. 130-131.

II. THE INDUSTRIAL WORLD IN WHICH WOMEN WORK—Continued

(b) Effects of the introduction of machinery.

In America the machine age began to have a decided effect in the sixties. Mass production got firmly under way about the beginning of the present century. Since 1899 energy has grown twice as fast as population.

The development of an industrial era has had many and varied effects, and has changed the whole fabric of human existence in countless ways, the ramifications of which often are difficult to untangle and to understand; it has intensified its joys and magnified its evils.

For example, large-scale manufacture has meant excessive concentration into urban areas, with consequent congested living conditions. The census of 1930 shows that in many States the proportional increase in the population of the chief industrial cities has far outrun the corresponding increase in the population of the State as a whole. Side by side with this effect have come developments in transportation and communication that are among the marvels of the times. Thousands of workers and their families can travel distances more vast and view scenes more manifold than the people of a century ago ever could have dreamed of. The perfection of certain types of machinery has resulted in eliminating whole categories of heavy labor under which human beings formerly were subjected to incessant slavery.

The former labor supply was inclined to be immobile and the earlier processes of living proceeded at a somewhat leisurely tempo; but a myriad of changes have come with such speed that it frequently has proven difficult—sometimes quite impossible—to adjust an economic system, a set of business practices, and a method of living to these new conditions with sufficient rapidity to prevent the occurrence to large numbers of people of serious and sometimes long-continued hardships of various types. The many benefits have been followed too frequently by evils that are taking much time, careful planning, and continuous effort to reduce them.

Certain favorable attributes of the machine age are given by one of our keen thinkers as follows: A shortening of hours in the day (perhaps not in the year, as there formerly were more fêtes and holidays); a raising of real wages; a lowering of prices; and an improving of the social and political status of the worker. The unfavorable attributes he lists as—initiation of repetitive labor, which tends to reduce to a dead level of uniformity; production of cheap, plentiful, and uniform commodities, frequently with the sacrifice of quality and variety; creation of a tendency toward some class antagonism; encouragement of wastefulness, since products are made for sale rather than for use and are made for cheapness rather than for lasting

qualities.⁴ He adds that the machine age found the masses of men living upon the land and has herded them into cities; it made peasants, serfs, domestics, and artisans alike into wage earners; it superseded the medieval guilds and drove the descendants of the artisans into factories, stores, and offices; it found the intellectuals living on the bounty of wealthy and powerful patrons and it evolved a class of persons who capitalize their wits, commercialize their talents, or engage in work within the bounds set by modern business; it found a ruthless hereditary aristocracy ruling and replaced them by more impersonal capitalists.

Two effects of machine civilization on the lives of the workers deserve especial emphasis: The loss of economic independence and the loss of joy in an expert completed task. In regard to the first, Stuart Chase says:

When the workman left his cottage and his shop for the factory he lost his economic independence. He gave up his own tools and operated tools owned by somebody else. He ceased to control his own time and his own job. So long as the force which owns the factory has no interest in labor save as a commodity, the workman is distinctly worse off than before.⁵

As to the second point, loss of the satisfaction that grows from a completed work well done, two writers may be quoted. Prof. John R. Commons has said in substance that—

In general it is fair to say that the factory system has depressed the economic status of artisans and elevated the position of laborers. The experiences of the shoemakers illustrate this. The extension of markets and the gradual adoption of machinery both tended to degrade the quality of the work done by journeymen cobblers. Prices were reduced in a competitive market and artisans found themselves in an impossible rivalry with factory-made goods and with the products of semiskilled workers who were able and willing to live at a lower standard. Machinery hastened the process of substituting laborers for artisans.

On the same point Stuart Chase says:

* * * the old artisan saw the product of his skill culminating immediately before his eyes. Satisfaction came as he worked. The modern designer may not see the tangible product of his labor for months; indeed, may never see it. Satisfaction is delayed or completely thwarted. Similarly much specialized work of the highest skill is only one tiny part of a great process, and often the worker has no picture of the whole process or where his task fits into it. The machine has thus operated to split the psychological unity of work and result and to take away a greater or lesser amount of the craftsman's completed satisfaction.

⁴ Condensed from: Borsodi, Ralph. *This Ugly Civilization*. Simon & Schuster, New York, 1929.

⁵ Chase, Stuart. *Men and Machines*. The Macmillan Co., New York, 1929, p. 329.

II. THE INDUSTRIAL WORLD IN WHICH WOMEN WORK—Continued

(c) Relation of women workers to the machine age.

In the development of the machine age women took their part, and they followed the industries out of the home and into the factory. The transition had a profound effect upon the whole position of women. The real change for them was not the work itself but the manner in which the work was performed and the change from an unpaid occupation to a paid one. In other words, with the development of the factory system women were transformed from the breadwinner taken for granted in the home to the paid breadwinner outside the home.

The skills of the earlier age gave way to new skills. Handwork included spinning, weaving, woodworking, pottery making, glass blowing, and the household arts. But the new skills are mainly such as have not belonged primarily to women—for example, engine driving, track inspecting, garage work, prospecting and drilling, steel construction. Other new skills woman has more readily acquired, although they differed vastly from her former pursuits—for example, stenography, telephone and telegraph operating, machine-printing work, medical science, laboratory research.

In relation to her household tasks, an industrial age produces many devices for lightening labor and simplifying life. These include such things as vacuum cleaners, refrigerators (electric or other type), sewing machines, canned food, and many other appliances and commodities that lighten household labor. It must be remembered, however, that many women must go outside the home to earn money, and if the labor of the wage-earning days is too exhausting, the added work that must be done at home may be, despite the new labor savers, a greater burden than it was in the years when the entire life of women was lived at home under the old conditions. Furthermore, there are many wage-earning women who can afford to buy but few of the labor-saving devices.

Stuart Chase outlines three stages through which factory machines have progressed:

First, they supplied more power to the skilled worker. They increased his output but left his job substantially unchanged.

Second, they subdivided the manufacturing process, allowing unskilled or semiskilled workers to feed them, remove the output, and carry on the few repetitive motions which their tending required. * * *

Third, they replaced the unskilled worker with their own steel fingers, doing the feeding, processing, packaging, themselves. The skilled man comes back into the picture as inspector, repairer, adjuster of delicate controls. His job is interesting, nonrepetitive, requires intelligence.

It is the second and least satisfying of these stages that makes up the bulk of the work of women in factories today. When women go from the home to the factory they become peculiarly liable to

industrial exploitation. The industries in which they first tend to be employed are likely to pay very little. Unaccustomed to price scales outside the home, unfamiliar with the new life, unconnected with organizations that could educate and benefit, the woman worker has neither the knowledge nor the facilities to secure adequate pay and safe work conditions. Low wages and poor conditions go hand in hand. It is for this reason that, although much is being done in some places to improve the work surroundings for women and to provide for them conditions making for health, they still too often are subject to the earlier conditions described by Mr. Chase as follows:

* * * The initial effect of the machine age was to hurt the worker physically and mentally. It killed him, maimed him, infected, poisoned, and above all bored him as perhaps no other culture has ever done. This effect still obtains in altogether too many areas, particularly in countries which are just developing the factory system and in backward regions of highly mechanized nations.⁶

In summing up the rapid movement in this new age, Professor Beard has this to say:

* * * Science and the machine have changed the face of the earth, the ways of men and women on it, and our knowledge of nature and mankind. They break down barriers before us and thrust us out into infinity. Not even the Living Buddha escapes their impact, for ships, railways, motors, and airplanes carry visitors to disturb the calm of his contemplation. * * * Old rules of politics and law, religion and sex, art and letters—the whole domain of culture—must yield or break before the inexorable pressure of science and the machine. Women, perhaps even more than men, find it difficult to steer by ancient headlands. Accustomed by long necessity to functions that conserve life, they suddenly discover that the modes of conservation are multiplied by science and the machine into endless complexity. * * *

* * * [But] by understanding more clearly the processes of science and the machine mankind may subject the scattered and perplexing things of this world into a more ordered dominion of the spirit.⁷

⁶Chase, Stuart. *Men and Machines*. The Macmillan Co., New York, 1929, p. 166.

⁷Whither Mankind: A Panorama of Modern Civilization. Edited by Charles A. Beard and containing articles by 16 other modern thinkers. Longmans, Green & Co., New York, 1928, pp. 403-404.

II. THE INDUSTRIAL WORLD IN WHICH WOMEN WORK—Continued

(d) Lives of the workers in the machine age.

With the growth of the present era of machinery and large-scale production there came for many workers extreme specialization in their tasks, the strain of speed in carrying out their operations, and the monotony of continuous rapid performance of one process. As one writer puts it:

* * * the impersonal beat of machinery has made demands, never before approximated, upon the men and women who serve it. In the textile industry, for example, the rate of production is determined by the speed of machines. * * * Human beings are subordinated * * * to the motion of machinery.³

A brief paragraph from Stuart Chase in regard to some of the activities in Henry Ford's factory illustrates the extreme specialization that takes place in most modern industries:

The chassis-assembly line of Mr. Ford goes (or did for model T) at the rate of 6 feet a minute. It contains 45 stations or operations. At station No. 1 mudguard brackets are fastened to the frame; at station 10 the motor is installed. The man who puts on a bolt does not put on its nut; the man who puts on the nut does not screw it home. At station 34 the motor receives its gasoline. At 44 the radiator is filled with water; at 45 the finished car arrives in John Street.

The effect of such work tends to take away the worker's pride in his individual job. As Mr. Borsodi has said in substance:

The factory makes it almost impossible for individual workmen to develop their own personalities; condemns those capable of creative effort to repetitive work.

The modern worker is a creature of routine, which changes hardly at all from day to day and from year to year, a cog in huge factory systems of production and distribution.

Or to quote from another writer along similar lines:

* * * the machine is opposed to individuality. It is ruthless, routine, patterned, and precise. It has no use for many of the qualities and attributes of man, who created it. It has no way to employ that enthusiasm and effervescent imagination which were the wellsprings of its invention.

Along the same lines Arthur Dakin, principal of the Baptist college in Bristol, England, said in a recent address:

* * * Years ago a man's work was probably next to the home the greatest single factor in the development of personality. Today it is not so. For one thing, the nature of work has changed. It no longer brings the same satisfactions. It leaves parts of personality entirely without exercise, and, moreover, often the higher parts of personality. In many situations, for example, only a minimum call is made upon a man's judgment. The reasoning processes are scarcely required at all. Thousands are never called upon to make any decision or to display any sort of initiative, with the result that work has

³Chenery, William L. *Industry and Human Welfare*. The Macmillan Co., New York, 1922, p. 153.

become less vitally connected with character, and consequently it is in the leisure hours especially that the development of personality must be cared for.

Long hours of the sort of monotonous work required in many women's jobs in factories today leave the worker weary and lacking in initiative.

* * * A recent study of the Psychological Institute of Paris concludes that adding machines and other calculating devices constitute a distinct danger to the nervous system if operated for more than two hours a day. A picked number of intelligent girls were given monotonous cross-stitching work. They learned quickly and their initial output was very large. After a while, however, it fell below the output of the girl of average intelligence. They had been slowly bored to inactivity.

R. L. Cruden, analyzing labor conditions in Detroit, concludes that "monotony * * * stifles initiative and may operate as an industrial boomerang. Men with alert minds report that after eight hours of it they can not settle down to read or to think." They must find some emotionally violent form of escape in jazz, gin, the movies, tabloid murders, cross-country motoring.

Perhaps it was instinctive for the members of the premachine age to resent the rapidly changing times, but their opposition could not delay the march of the machine age. A celebrated American poet, Stephen Vincent Benét, has thus described the fight against the advent of the newer times put up by one group :

They shot the railway train when it first came,
And when the Fords first came, they shot the Fords.
It could not save them. They are dying now
Of being educated, which is the same.
One need not weep romantic tears for them,
But when the last moonshiner buys his radio,
And the last, lost, wild-rabbit of a girl
Is civilized with a mail-order dress,
Something will pass that was American
And all the movies will not bring it back.

To the frequently sordid pictures of what too often has happened to the worker with the introduction of machinery, there is hope of the relief that can be supplied by improving the conditions of work and life, by understanding the needs of new situations, by the action of informed public opinion, wise legislation, and more effective management to prevent abuses. Mr. Chase sounds an optimistic note as to the present age :

* * * The life of any modern individual is theoretically open to more variety, but practically may be less varied, than that of an individual in other cultures. The machine is probably the greatest destroyer of standards which the world has ever seen. The temporary standards which have sprung up to fill the gap are all too often ugly and unpleasant. But there is no certainty that they will last. Indeed, the only certainty is constant change, so long as technology maintains its present pace.

* * * [But] Ask the traveler if he would prefer to live out his years in the Wales of the eighteenth century, or as a citizen of the modern British Empire. Unless he is an incurable sentimentalist he will prefer the varied life of the modern man to the limitations of the premachine man.

III. MARRIED WOMEN WORKERS ¹

(a) The number of married women gainfully employed.

According to the 1930 census, there were in that year over 3,000,000 married women workers. This means that only slightly over 1 married woman in 10 is gainfully occupied, though well over 3 in 10 widowed and divorced women and 5 in every 10 single women are so employed.

It must be pointed out that the 1920 census publications classed widowed and divorced women and those with status unknown in the group with single women, so that it was not possible to ascertain the total number of women workers who had been married. For the 1930 census, two groups of matrons were reported: One includes married women living with their husbands, the other comprises those widowed and divorced. Single women formed another group, but in this were thrown all those whose marital status was not reported.

It is significant to consider what occupations married women have entered in the greatest numbers. More than one-third of them are in domestic and personal service, practically one-fifth in manufacturing, over one-tenth each in clerical work and in trade, and nearly one-tenth in the professions and in agriculture, the remainder being scattered.

Since almost two-thirds of the gainfully-occupied married women were found in manufacturing and mechanical industries, domestic and personal service, and agriculture—types of work in which women have almost no opportunity for a career—it would appear that the chief reason they have sought such employment lies in the demands of economic necessity. Indeed, this point cannot be too frequently emphasized, since many studies show how customary it has become for married women to be responsible for the total or partial support of others. This is even more true in a time of widespread unemployment, and in very many cases the married woman has had to go to work because the man wage earner in the family has lost his job and is not able to obtain employment.

Of all women gainfully occupied in the United States, the census of 1930 shows us that only about 29 percent were married, about 17 percent widowed or divorced. A decided majority of all such employed women were single.

Many surveys testify further to the fact that the married woman often bears a heavy share in the support of the family. For example, an unemployment census made in Philadelphia in 1931 showed that over 9,500 families had no earned income whatever except that obtained by the employment of the married woman, whose husband might be an invalid or among the jobless.

¹The following publications of the Women's Bureau will be of interest in connection with this subject: Bul. 75, *What the Wage-Earning Woman Contributes to Family Support, 1929*; No. 155, *Women in the Economy of the United States of America*, pt. I, ch. 4, 1937; and *Effects of Dismissing Married Persons from the Civil Service*, March 1936 (Mimeog.). See also LaPollette, Cecile T. *A Study of the Problems of 652 Employed Married Women Homemakers*. Teachers College, Columbia University, 1934.

III. MARRIED WOMEN WORKERS—Continued

(b) The responsibility of married women for family support.

Readings from Women's Bureau Bulletin 75, What the Wage-Earning Woman Contributes to Family Support.

Read on pages 6-7—Inadequacy of Men's Wages.

Read on pages 10-11—Contributions by Women.

See also Women's Bureau Bulletin No. 155, Women in the Economy of the United States of America, pt. I, ch. 4.

The gainful employment of the married woman is a part of the whole problem of economic change. Dr. Gwendolyn Hughes Berry, author of *Mothers in Industry*, explains this, and gives instances showing the necessity for women to help to support the family, as follows:

With the growth of towns and the development of the factory system, however, production by women and children in the home has been greatly reduced. The husband's contribution to family support, meantime, has changed from commodities ready for immediate consumption to money wages. Whether the money income earned by the father is less or greater than his former contribution in kind is not known. The fact remains that while he did not support the family alone during the period of household production, it is tacitly assumed by those who question the employment of mothers that his money wage should today support both him and his family.

* * * As her duties in the home are cut down, the mother's economic function is becoming specialized outside the home. * * *

The struggle to live on the husband's wage alone, in most industrial families, is a failure. A canvass of nearly 12,000 families in six industrial sections of Philadelphia in 1918 showed that the majority, 55 percent, relied on income from other wage earners or from lodgers. Only 6 percent of this entire group was of the conventional statistical type, husband, wife, and three children under 16 years of age, supported by the husband alone.

Families not supported by the father alone, as a rule, turn first to the wages of children (18.6 percent), next to the wages of the wife (17.7 percent), and third to income from lodgers (15.9 percent). This canvass of almost 12,000 homes showed that in only 7.5 percent of the total number was more than one of these sources of supplementary income utilized.

* * * * *
"Why did you go back to work after you were married?" was one of the questions put to a group of 728 working mothers in Philadelphia. "My husband wasn't making enough," answered the largest group (29 percent); "My husband was dead," came next (22 percent); followed by "My husband was sick" (14 percent); "He left me" (13 percent); "He couldn't support me" (11 percent); and "I'd rather work" (11 percent).

These answers show clearly the measure of success which has met the husband's attempts at supporting his family. The great majority of these wives, under varying degrees of economic pressure, undertook the partial or entire support of their families while the husband was living.²

Further testimony to the economic need of the married woman is shown in a small study published by the Women's Bureau of two groups of married women who applied for jobs in Denver.

In the first group were reported 345 women who had applied to the Young Women's Christian Association. Of those giving reasons,

² *Annals of the American Academy of Political and Social Science*. May 1929, pp. 316, 317.

90 percent were forced to work by economic necessity. Among the causes given were these: The fact that the husband was dead, that he was unemployed or in irregular work, that he was in prison, that he was divorced, separated, or deserting, that his earnings were inadequate, that some financial emergency had occurred in the family. The other group comprised 103 women who had applied for jobs in a large department store in the city. Of these, 86 reported economic necessity as the reason for needing work.

An earlier study of 843 Chicago mothers published by the United States Children's Bureau showed that for nearly 70 percent of them the father's support was withdrawn from the family, through death, desertion, illness, or some other reason, and for another 12 percent his earnings were irregular through seasonal employment or some other cause. Over one-fifth of these families had four or more children.

In 132 families whose total year's income was reported, the budget for the year outran the entire family income in nearly half the cases. In families not sending children to day nurseries, 45 percent of the children were cared for by neighbors or by some relative other than the parents while the mother was at work, but for more than one-fourth of them no provision for care was made, and almost one-fourth of those looked after by other relatives were in the care of older sisters, most of whom were under 18. The family situation was unfortunate no less for mothers than for children. One-third of the women reporting had all their own housework to do in addition to their gainful employment, while a similar number did it with the help of the children, and mother after mother spoke of being worn out or "tired all the time." Over one-third of the children attending school had been absent 30 or more half days, and cases were reported of delinquency arising from the necessary neglect.³

More recent surveys show the family situation still operating as the incentive for married women to work. For example, in a study of gainfully-employed married women homemakers it was found that 19 percent of the husbands were unemployed, 6 percent of them earned less than \$1,000, and 25 percent earned between \$1,000 and \$2,000; furthermore, 62 percent of the women here reported had dependents. A survey made in 1935 in New York City of employed women on relief showed that 86 percent of the domestic workers with dependents were married, widowed, or divorced women. Similarly, among beauty-shop employees reported in New York State in 1936, 33 percent of the women with dependents were married. Married women at work in professional fields frequently are sharing in the support of dependents, as is shown in studies made by the National Federation of Business and Professional Women's Clubs and the American Woman's Association of New York.

³ U. S. Department of Labor. Children's Bureau. Publication No. 102, *Children of Wage-Earning Mothers*, by Helen Russell Wright. 1922. See also LaFollette, Cecile T. *A Study of the Problems of 652 Employed Married Women Homemakers*. Teachers College, Columbia University, 1934.

III. MARRIED WOMEN WORKERS—Continued

(c) The double duties of married women workers.

There are some people who believe that women go into stores, factories, and mills because they prefer that kind of labor to housework. If those theorists could take a peep into the homes of most wage-earning women, they would discover these same women after long hours of industrial work toiling in the home, at the stove, or over the dishpan, washtub, or sewing machine. Housework must be done before and after factory work each day, even though women must get up at a very early morning hour and go to bed at midnight.

In a radio address, Mary Anderson, director of the Women's Bureau, has said:

Because in the neighborhood there may be a family in which both a man and his wife work, perhaps drawing very good salaries, this does not mean that all the married women who are working have husbands drawing good salaries or that they are only working to earn better clothes, a new car, or a radio.

That this is not true, the findings of the Women's Bureau have clearly shown. The majority of the married women who are working are so employed because their wages are actually necessary for the support of the home and family. The figures collected by the Bureau in scientifically conducted investigations show that to support a family even at a level of mere decency requires more than the income obtained by hundreds of thousands of wage-earning fathers and husbands today.

The records of all the employed women in one industrial city as taken in the census of 1920 were studied by the Women's Bureau, and it was found that about half of the women who were breadwinners were married women. There were more than 4,000 married women earning money in this one community. When examined closely, the records of these 4,000 married women disclosed something that seems very important. Nearly two-thirds of them were mothers who had children less than 5 years old. It was found that about half these mothers of young children earned money at home by taking in boarders or doing laundry or some other form of work that did not oblige them to leave home, so that they could care for the children and work at the same time. But the other half went out to work and spent their days in mills making woolen and worsted cloth and in factories making handkerchiefs and other articles.

Agents visited as many of these families as they could and found among every five women one who was working at night and looking out for her children during the daytime and one who just left the children alone at home to look out for each other. Sometimes the father worked at night and cared for the children in the daytime while their mother was away, and sometimes the neighbors or the landlady or relatives kept an eye on the children. Only 1 woman in 20 had someone who was paid especially to care for her young children while she was away at work.

The census of 1930 shows that in one typical industrial city (Fort Wayne, Ind.) nearly a third of the women at work carried the home-

making responsibility for their families, some of these being married women, others single, widowed, or divorced. One in five of these employed women who were homemakers also had children under 10; many of them had at least three small children, and a few had as many as five. Of those homemakers each of whom was the sole support of a small child besides herself, all but one left home each day to earn a living. Information for more recent years shows that this picture remains true for many industrial communities, and during the depression years probably became of great intensity.⁴

Can you see all these mothers leaving home at 6:30 or 7 in the morning after they have washed and dressed the children and prepared their breakfasts and lunches? Can you see these mothers working all day, and can you imagine their thoughts as they wonder whether the children are all right and whether someone has seen to all the many things little children need? And at the end of the day's work in factory or mill, can you picture the homecoming of these mothers and the tasks awaiting them?

Some States for many years have provided "mothers' aid" from public funds, and at the present time practically all States have made provision for funds to aid persons with needy children dependent on them so that families will not be broken up by poverty. Under the Social Security Act, 38 States, the District of Columbia, and Hawaii receive money also from the Federal Government for this purpose. However, the amount furnished is limited, applying only to needy family units where, because of death, continued absence from home, or incapacity (physical or mental) of the parent responsible for the support, poverty might place the children in institutions. Children must be under 16 years of age and living in their own home or that of a near relative. At the beginning of 1938 it was estimated that more than half a million children were receiving aid from Social Security. The large numbers of married women at work belong in the population level above this poverty line, where the economic need in the family for additional cash income is so great that the mother is found assuming the triple role of wage earner, mother, and housewife.

⁴ See also Stouffer, Samuel A., and Paul F. Lazarsfeld. Research Memorandum on the Family in the Depression. Social Science Research Council. Bul. 29, 1937. pp. 24-58.

III. MARRIED WOMEN WORKERS—Continued

(d) Some effects of the employment of married women.⁵

There has been considerable speculation as to the effect of the gainful employment of married women upon the women, upon industry, and upon society in general. To such questions, as to others that arise from social conditions that are in constant flux, there is no complete or final answer.

The effect upon industry of the work of married women has not been measured, and scarcely can be separated from that of single women. Employers or foremen have been known to state a preference for married women as the most regular workers. Some studies show considerable irregularity of women as compared to men workers in industry, their home cares often being assigned as a reason; but such a cause cannot be confined to married women—single women also have many home responsibilities, frequently including the support and care of dependents.

As to the effects upon society, the experience of most persons today testifies to acquaintance with women who are giving fine types of service to professions for which they are admirably suited and by the pursuit of which they are able to add to the family income amounts that spell for their children more expert care than they themselves, perhaps poorly equipped for household tasks, could possibly provide, and far better opportunities of education and training than the salary of one member of the family alone could give.

One writer (Dr. Lorine Pruette) speaks of the need for married women to maintain earning capacity, since there always is the likelihood of being thrown upon their own resources. She says:

Not only does part-time employment of the married woman offer the opportunity for the development of a new home life; it lessens or destroys the appalling economic risk taken by every woman who today marries and devotes herself to the traditional role of wife. There is no security in domesticity. It is heartbreaking to see the middle-aged woman, trained for nothing except the duties of the home, venture out into the industrial world. Divorce, death, or loss of money may put her in this position, where she has so little to offer organized industry and so much to suffer. The married woman who lets herself go upon the easy tide of domesticity is offering herself as a victim in a future tragedy.

The effect of the employment of married women upon the women themselves is considered by a keen student of the situation, Ernest R. Groves. Certain paragraphs of his that bear upon various aspects of this many-sided problem may be quoted as follows:

* * * Not from body structure or biological function, but from a division of labor in which masculine desire had the determining influence, woman was delegated the home responsibilities and the details of parenthood. Aside

⁵ Quotations in this section taken from articles in *The Annals of the American Academy of Political and Social Science*, May 1929.

from the nursing of her child, there is no part of the task of housekeeping or child nurture which man could not have carried on as efficiently as woman if the path of tradition had led him to the domestic vocation.

* * * * *

* * * women * * * are handicapped because of artificial regulations based upon the idea still persistent in much of the thinking of men that the only proper place for the woman is in the home. Excellent teachers of experience lose their positions if they marry, because of the regulations of many school systems. In one institution of higher learning the woman teacher who marries a member of the faculty automatically is removed from the staff and no questions are asked as to whether by entering matrimony she has taken over additional responsibilities of domestic character or has lost through her marriage her desire or ability to teach.

* * * * *

In spite of the prejudice that still persists regarding the married woman's employment, built upon the tradition of masculine dominance, fortunately rapidly passing, there are to be found an increasing number of the younger group of husbands and wives who find a richer domestic experience possible because both of them work outside the home. This thoroughly modern type of man refuses to believe that there is any psychic distinction which marriage originates that can make his wife happy in a household routine that he would find for himself unendurable.

* * * * *

The complications that grow out of the employment of women in business, industry, and the professions are, aside from possible effects upon the choice of motherhood, socially constructed and will be eliminated by merely increasing the number of women who work after marriage. Artificial handicaps and obstructing traditions must give way as woman's economic independence persists and increases. Meanwhile, for the individual wife, the conditions of our transitional period make her choice of wage employment a cause of difficulties that register their effects upon her personality, her philosophy of life, and her social attitudes and relationships.

IV. WOMEN AND UNEMPLOYMENT¹

(a) How unemployment affects women.

The hardships of unemployment fall heavily upon women in many ways. No generalizations on the subject can be made that will cover the cases of all women, since different groups are affected variously.

There are women who must share the effect on the family of their husbands' loss of jobs, women who must assume the burden of support when the male worker is laid off or permanently displaced, and women who are themselves out of work and seeking a job for the support of themselves and sometimes of others also.

In a study of families known to settlement workers in 32 cities in all parts of the country, case after case is given of women who had gone to work because the husband had lost his job. None of these were in families in which unemployment was caused by illness or incompetence, but in all cases the man had been an effective—often a skilled—worker, and he was willing and anxious to take any kind of job he could get. The following were a few of the instances included:

A Boston shoe worker whose wife went into a laundry. (Three children.)

A laborer in a New York wrecking company that failed. Wife went into a restaurant. (Four children.)

A man employed by a Boston ice company. Lost his job with the increase in electric refrigerators. Wife cleaned offices. (Seven children.)

A worker in a broom factory in Louisville was displaced when the company failed because unable to buy improved machinery. Wife became a scrub woman. (Three children.)

A Philadelphia loom fixer's wife went into a shirt factory.

Wife of a Pittsburgh pipe cutter's assistant was a high-school graduate and took up canvassing when he lost his job because of the installation of new machinery. (Three children.)

A Philadelphia truck driver's wife took up office cleaning. (Seven children.)

A Boston printer whose wife is employed in a restaurant. (One child, another baby coming.)

While a larger proportion of men than of women are likely to be placed by employment agencies, there are times when relatively more women than men can get jobs. But where women can get jobs and men cannot, the most frequent reason for this is that women usually are paid less, and if they must assume the family support it means a definitely lowered living standard for the family, already likely to be existing on too low a wage to permit saving for the emergencies of illness or unemployment. Practically one-tenth of the jobless women in the country in 1930 were heads of families, and according to the definition used by the Bureau of the Census in reporting this group, this means these women had dependents. A

¹The following bulletins of the Women's Bureau will be of interest in connection with this subject: No. 92, Wage-Earning Women and the Industrial Depression of 1930—A Survey of South Bend, 1932; and No. 113, Employment Fluctuations and Unemployment of Women, 1928-31, 1933; No. 107, Technological Changes in Relation to Women's Employment, 1935; and No. 155, Women in the Economy of the United States of America, 1937. (See pt. I, ch. 2.)

survey in October 1933 by the Federal Emergency Relief Association reported that 13 percent of the relief households in rural districts were headed by women.

Large numbers of women are among the unemployed because of the introduction of machines that take the place of hand labor. In a study the Women's Bureau made of the tobacco industry, many women were found permanently out of work because machines that required fewer operators than before had been installed and factories had, in consequence, been closed in the smaller places. Depressed periods mean the curtailing of public as well as private funds, and school teachers form a large group thrown out of work.

When a self-supporting woman is out of a job, her situation is miserable enough. But when a mother—either the wife of a displaced man or herself the breadwinner—is out of work, her distress over the condition of her children is even more acute than that of the unemployed woman with no dependents. For, as Miss Grace Abbott, formerly Chief of the Children's Bureau, points out, what children lack this year may permanently undermine their health and the loss cannot be repaired next year.

IV. WOMEN AND UNEMPLOYMENT—Continued

(b) The extent of unemployment.

As to the full extent of unemployment, only estimates can be made, based upon such information as has been collected in various places. Of course, the number of unemployed changes from week to week and month to month and is never wholly stationary. It is estimated that even in the most prosperous times there were 2,000,000 persons unemployed, and the recent tendency to displace workers by installing improved machinery may greatly increase the number that always will be found out of work. New industrial workers on the labor market (boys and girls coming to working age and persons moving from farms to cities form the largest groups) also add to the numbers unemployed, the Secretary of Labor estimating that this group amounts to about 2,500,000 each year.

During the worst of the depression there were at least 2,000,000 women out of work (as many as all persons unemployed during 1929 and the years immediately preceding) according to conservative estimates from Government figures and those of various special studies in many localities. Data for later years show women still forming large proportions of the unemployed. The Federal Emergency Relief Administration reported that in 1934 women who normally were employed formed about 30 percent of all persons on relief in towns and cities of over 2,500. Another Government report for the 2 years ending June 1936 (U. S. Employment Service) shows that in that period women who were applying for jobs for the first time formed more than a fourth of all applicants (both men and women). The proportion of "new" women in the labor market was greater than the proportion all women workers formed of the gainfully-employed persons, since according to the United States census of 1930 women formed 22 percent of all persons gainfully occupied.

Of the many unemployment counts or estimates that have been made, that of the United States census in 1930 was one of the most comprehensive. Of course, the figures found at that time soon became out of date. This included women who ordinarily were wage earners,² separately from those ill or unable to work who comprise an additional large group of unemployed, many of whom are especially destitute. Furthermore, in 29 of the 38 States that had cities of 50,000 or more, the proportions unemployed in these urban groups were higher than in the State as a whole. A later count of 19 cities of 100,000 population or over, by the census, reported 18.9 percent of all women wage earners in these cities out of work or on lay-off.

Unemployment studies made in recent years in certain important industrial States present other phases of the unemployment picture of women. In the three large States of Massachusetts, Pennsylvania,

² Including the two census classifications A and B: Persons out of a job, able to work, and looking for a job; persons on lay-off without pay. See also Women's Bureau Bul. 113, just cited in IV (a).

and Michigan, substantial proportions of all employable women were found to be unemployed. (Employable women include the younger persons on the labor market for the first time as well as perhaps older women who found it necessary to seek work due to changed economic conditions.) Such proportions were 21, 31, and 15 percent, respectively, for the States named.

If we consider next those women who usually are gainfully occupied, we find many of them without work. In Massachusetts in 1934, 18 percent of the women formerly with jobs were unemployed; in the same year in Pennsylvania this group formed 22 percent; in 1935 in Michigan almost 10 percent; and in Rhode Island in 1936, 15 percent. As ordinarily proves to be the case, where data are available for comparison, the large industrial cities in a State show higher unemployment of women than does the State as a whole.

Though the difficulties of estimating unemployment are great, this type of information is so important that there is much demand for fuller data. Consequently, Congress authorized a survey of the number of persons unemployed in the entire country, to be undertaken in the late fall of 1937. This census suffered from a shortage of both time and money. It had to be taken on a basis of voluntary registration, and thus completeness was not entirely assured, even though a further test of figures for the entire country was made from a smaller intensive sample. Since there may have been some under-reporting of men and perhaps an over-reporting of women, it is possible that the percent women constituted of the unemployed reported is somewhat high, and that counts made in State censuses more nearly show the true situation.

IV. WOMEN AND UNEMPLOYMENT—Continued

(c) Some causes of unemployment.

Why do workers suffer from unemployment? What factors make for these conditions? One cause lies in the seasonal character of certain industries. Examples of this are in candy, where peak production is required to produce Christmas candy and another smaller peak comes just before Easter, with depressions and loss of jobs for many workers at other periods of the year. The clothing industries, likewise, are subject to seasonal variations, and it is obvious that fruit and vegetable canneries have to operate with full force at certain seasons and offer no work at others.

In a number of industries that suffer from seasonal fluctuations, large groups of women are employed. In consequence, while we have seen that women can sometimes get jobs at low pay when men cannot, this condition for women as an industrial class may be offset by the concentration of much of their labor in seasonal industries that mean frequent unemployment, or slack work with consequent low pay. It is reported by the International Ladies' Garment Workers' Union that many of their members can find work for only about 6 months in the year, and William H. Green, president of the American Federation of Labor, has estimated that in the clothing industry as a whole workers are employed not over 40 weeks in the 52.

Besides the seasonal trades, other industries suffer from recurrent cycles of depression and unemployment. When times are good, buying power is widespread, a hopeful attitude is abroad, manufacturers expand sometimes too much, money values are inflated. Then, often for a variety of reasons, the market for goods begins to fall off; factories find themselves overstocked and begin to cut production and to lay off workers; workers then have less money to buy and those still having jobs spend less freely; some save their money for fear they may be the next laid off, others that were in seasonal industries before find their slack season lengthened; the market contracts still more; heavy depression and unemployment are upon us.

A third general reason for unemployment is called by certain lengthy names, such as "technological unemployment," or that due to "rationalization." This occurs when improved machinery is developed to take the place of workers more rapidly than these can be adjusted to other types of jobs, or when large concerns merge and the resultant curtailed forces can produce under new organization as much or more than the larger groups of workers that were formerly employed.

A few concrete instances of the way in which the too rapid introduction of machines throws people out of work are of interest: In the manufacture of sewing-machine needles, 1 girl can now inspect as many as 9 could before; as bean snippers in canning factories ma-

chines have made it possible for 12 women to do the work formerly done by 200; in textile mills, a machine put in use in 1919 made it possible for 1 woman to do the work formerly done by 17 drawers-in of the warp; a machine for wrapping bread can now do the work of a number of women; the electric typewriter is replacing typists; and the introduction of the dial-telephone system is likely to close many jobs for girls. Such changes are bound to produce serious effects upon great numbers of workers, unless constructive planning prevents these inevitable hardships. President Green, of the American Federation of Labor, has stated that a new machine installed in the glass industry threw out of work 20 to 40 glass blowers for every machine installed, and thirty-one times as many electric-light bulbs can be made by automatic machinery as by the former hand processes. Nor is the problem confined to industrial workers. The merging of business firms or the taking over of small by large concerns—a process that is now going on at a rapid rate—sometimes throws out business executives.

Sometimes the malady of unemployment affects highly trained artists, and the loss of jobs by many skilled musicians in some of our cities because of the introduction of instruments producing music artificially has been a tragedy that has made a profound impression on the public mind.

IV. WOMEN AND UNEMPLOYMENT—Continued

(d) Methods of minimizing unemployment.

There is a theory sometimes current that a sporadic increase in buying may assist in inspiring the public confidence to a belief that recovery is beginning. However, no permanent effect is produced in this manner, and it may even stimulate a seasonal growth that may prove disastrous when succeeded by a slump. Furthermore, the women who are out of jobs, or whose husbands have had lay-offs lasting for many months, have no money for such buying. Very large groups of people can buy only when they have jobs—can contribute to the steadiness of the market only when a condition of stability has been restored.

For this reason it is obvious that some more permanent methods of general economic planning had to be undertaken. Four very important points in a constructive program for minimizing unemployment may be mentioned here: Further attempts at regularization within the industries, the establishment of sound public employment agencies, some type of insurance against such unemployment as cannot be prevented or the establishment of a reserve fund to maintain wages in times of depression, and a permanent shortening of hours of work—with sustained wages—as improvements in machinery make less labor necessary to produce commodities and services.

Many individual firms have undertaken methods of regularization, such as manufacturing for stock or making repairs when orders are slack; combining services that would reach peak demand in different seasons, as, for example, the well-known combination of supplying coal and ice; guaranteeing a certain number of weeks' pay in the year; shortening hours of work in slack seasons while maintaining regular pay—in this connection a system of payment by the year instead of by the hour or week would be a distinct improvement. Manufacturers are finding that it pays them to undertake methods of securing stable conditions, since a large proportion of those who should be able to buy are wage earners and it is only when people have work that they can afford to buy, and it is of vital importance to the development of industry that the buying power of the people be maintained. The particular methods of attaining this end vary with industry, locality, and other conditions.

There is great need for help to the worker in finding a job and a growing sentiment for the carrying on of this work by well-regulated public agencies. Secretary of Labor Frances Perkins, when industrial commissioner of New York State, found abuses arising from private employment agencies that sought to make capital out of a period of widespread unemployment. In some cases agents collected fees and sent men out to jobs that did not exist; in others, jobs were given and then the worker caused to lose the job in order that the agency might collect another fee. Of course, there are private agencies that pursue

honest policies, but a system maintained at public expense is necessary for the relief of the unemployed of the burden of paying a fee in order to secure employment. In certain large industrial States, such as Ohio, California, Massachusetts, New York, or Michigan, public agencies have operated over a period of years with considerable success and with benefit to many workers. In June 1933 the United States Employment Service, completely reorganized as a result of the Wagner-Peyser Act, set up an organization, coordinating existing State employment services, to serve all parts of the country with facilities to register applicants for work and enable them to find jobs in private industry.³

Finally, relief must be provided for periods of unemployment that cannot be prevented, and a broad program along this line has been initiated in the Social Security Act, passed in August 1935, which represents a major advance in the attainment of economic security for the individual and for his family. One provision of the act deals with unemployment compensation, and before the end of 1937 all the States and Territories of the United States had passed unemployment insurance laws.⁴

It is of interest here to note also the successful work of the Federal Emergency Relief Administration (and its successor the Works Progress Administration) in finding jobs for unemployed women during the depression. A special staff, headed by a woman, was organized for this purpose, with regional branch offices throughout the country, and its record shows a wide range of projects on which some hundreds of thousands of destitute women have been engaged.⁵

³ See U. S. Employment Service. *Twelve and One-Half Million Registered for Work. 1934; Filling Nine Million Jobs. 1937; Who Are the Job Seekers. 1937.*

⁴ Consult Social Security Board for material for discussion.

⁵ Upon request, Division of Women's and Professional Projects, Works Progress Administration, Washington, D. C., will provide further information for use of discussion groups. See also *The Woman Worker*, Women's Bureau periodical, for September 1938.

V. HEALTH STANDARDS FOR WOMEN'S WORK— WORKING CONDITIONS ¹

(a) Service facilities and sanitary conditions in the workplace.

The physical condition of the shop or factory in which the woman worker spends a third or more of the 24 hours of each working day has definite effects that make for good or for ill health for the worker and often contribute to the state of health of her family as well.

The health and energies of an individual are bound up with the welfare and prosperity of the community. The crippling and incapacitating of human beings by industry means the undermining of the national life. This is particularly true where women workers are concerned. Sanitary and comfortable work conditions go far toward maintaining the good health and unimpaired morale of the workers, which are national assets that should be fostered.

Standards that are recommended for women's workplaces by the Women's Bureau include provision for pure drinking water, with individual cups or sanitary fountains; accessible washing facilities, with hot and cold water, soap, and individual towels; standard and convenient toilet facilities, with at least one installation for every 15 women; cloakrooms, rest rooms, and lunch rooms.

To the minds of persons accustomed to consider certain conveniences necessary to health and well-being, many of these points need little elaboration. The subject of pure drinking water has been so well studied in connection with the needs of school children that there is a common sentiment—all but one State had crystallized this into law to some extent by 1936—against the use of the common cup and in favor of the sanitary drinking fountain or the individual cup.

That care must be taken to have fountains sanitary was shown in a well-known university several years ago when an epidemic of streptococcus was traced directly to faulty drinking fountains, which had the vertical flow on which germs are not washed away but have been found to remain as long as 25 to 48 hours. To avoid contamination, in the fountain provided, the flow of water should be at an angle, so that it cannot fall back onto the orifice, and it should be equipped with an adequate guard to prevent face or hands coming in contact with the orifice. Certain other specifications that have been found most satisfactory for the construction of fountains are set forth more fully in a special bulletin of the Women's Bureau. Where individual cups are used, care should be taken that the supply is not allowed to become exhausted and that it is kept clean.

¹The following bulletins of the Women's Bureau, which will be of interest in connection with this subject, will be furnished on request: No. 57, Women Workers and Industrial Poisons, 1926; No. 87, Sanitary Drinking Facilities, 1931; No. 129, Industrial Injuries to Women in 1930 and 1931 Compared with Injuries to Men, 1935; No. 136, The Health and Safety of Women in Industry, 1935; No. 147, Summary of State Reports of Occupational Diseases with a Survey of Preventive Legislation, 1932 to 1934 1936. In addition, the Women's Bureau will send free of charge pictorial posters, entitled "The Woman Who Earns: Keeping Her Workplace Safe; Keeping Her Workplace Comfortable" and "Minimum Standards for the Employment of Women in Industry."

As regards washing facilities, where these are added not only is the employee protected but the consumer of the goods as well.

Clean hands make clean work
(That's a truth we cannot shirk).
Soap and hot water and each her own towel
And neither the foreman nor customers growl.

In all industries workers should have facilities for washing before eating lunch and before leaving the plant, and in some occupations, especially, frequent washing of the hands is a necessity; in the handling of food, or when work involves contacting poisonous substances, it should be compulsory.

Toilet requirements should be fully defined by law, and should cover separation of facilities for men and women, privacy, the provision of at least 1 seat to every 15 workers, cleanliness, good lighting, and suitable fixtures.

Among its reports, the Women's Bureau has issued 37 that deal with some phase of working conditions. These cover approximately 5,800 plants and more than 340,000 women; 18 of them are State-wide industrial surveys, made in each case at the request of the State concerned. Conditions of workplaces as revealed by these reports present contrasts; in every State there were plants in which work conditions were excellent, and in many instances employers had gone farther than the requirements of the State law or the standards recommended by the Women's Bureau, but in many of the establishments the surroundings were such that they constituted a menace to the workers.

V. HEALTH STANDARDS FOR WOMEN'S WORK—WORKING CONDITIONS—Continued

(b) Special health needs in the workplace.

The improvement of the health of the workers is a national problem, and also a very personal one, and therefore a matter of interest to every worker and employer. Aside from humanitarian reasons, the employer is vitally interested from the standpoint of the efficiency of his employees. Engineers and other scientific experts are continually at work devising better methods of regulating the lighting, heating, and ventilation of workrooms, minimizing noise and vibrations, and controlling similar matters affecting health.

One of the health problems to which attention was given early was that of comfortable and hygienic seating and correct posture at work. In regard to this point the Women's Bureau has recommended the following:

Continuous standing and continuous sitting are both injurious. A chair should be provided for every woman and its use encouraged. It is possible and desirable to adjust the height of the chairs in relation to the height of machines or worktables, so that the workers may with equal convenience and efficiency stand or sit at their work. The seats should have backs. If the chairs are high, foot rests should be provided.

The necessity for providing workers with chairs that will support the body so that the best working position can be maintained with the expenditure of a minimum of energy is becoming more generally recognized, with the increasing realization of the harmful effects of fatigue.

All States but Mississippi make some legal provision for seats in workplaces, and many provide in addition that workers shall be allowed to use them. However, these laws ordinarily make no specification as to type of seat, and in many cases they do not apply to all kinds of establishments.

It is generally understood that a good work chair must provide support for the back, a seat shaped to the body, and foot support (either the floor or a foot rest), and that the height and back must be adjustable. The measurements vary according to the individual and the type of operation to be performed.

On three other points affecting the worker's health, the Women's Bureau makes the following recommendations:

Lighting should be without glare and so arranged that direct rays do not shine into workers' eyes. Ventilation should be adequate and heat sufficient but not excessive.

It is common knowledge in this day that bad air, rooms that are too cold, too hot, too humid, not well ventilated, are injurious to health. They reduce not alone the worker's vitality but her efficiency as well. It is obvious that sufficient circulation of air and the elimination, as far as possible, of injurious fumes, lint, dust, or

excessive humidity are important to health. Certain occupations involve special problems not easy of solution. For example, careful attention has to be paid to eliminating dust in tobacco factories and lint in certain departments of textile mills, to minimizing the excessive heat and humidity in laundries, and to carrying off poisonous fumes from certain substances and to protect workers from flying particles in buffing and polishing. In many cases methods of disposing of these problems have been worked out effectively, and many firms have recognized the need of employing technical engineers for installing devices for this purpose; however, in some establishments the plant is not equipped with modern devices for handling matters of such importance to the worker's health.

In certain occupations where close work is required, defective lighting is likely to damage eyesight and impair health, to cause accidents, and to limit and spoil production. Studies have shown correct lighting to lessen nervous irritability and increase output and quality of product. From careful experiments in one factory it was found that in several operations production showed a rise of from 8 to 27 percent with improved lighting. Illumination, whether natural or artificial, should be of the proper intensity for the job to be done; facilities should be well arranged and well guarded to protect from glare.

It has long been known that excessive noise produces unfavorable effects on the nervous system. One writer states that noise is often a sign of "wasted energy, of poor design, or of hurried ignorance." Although noise may be responsible for an accident or illness, it is often hard to prove the direct effects. However, recent studies have shown that definite increases in the output of typists resulted when noise was reduced. Where heavy machinery is used, some of the various methods of absorbing sound and vibration should be employed. Unfortunately, the science of preventing noise has not progressed so rapidly as have the improvements in ventilation and lighting.

V. HEALTH STANDARDS FOR WOMEN'S WORK— WORKING CONDITIONS—Continued

(c) Industrial hazards: Injuries.

As new industrial processes develop and new machinery is placed in operation, it becomes necessary to be ever on the alert to make sure that proper safeguards are taken against the risk of injury that could be prevented.

The American Engineering Council has found that the number of machine injuries per worker has increased since 1920, but believes this to be a temporary feature due to lack of sufficiently rapid adjustment to the changes that are coming so fast in the industrial world. Although accidents are relatively fewer to women than to men, the number of women injured is very large. In New York, for example, in each year from 1927 to 1931, inclusive, from 7,000 to 9,600 women were compensated for accidents.

Frequently it is very difficult to get complete reports of the number of accidents that have occurred to women, and it is almost impossible to make adequate comparisons of the various States in this respect. Studies by the Women's Bureau of State reports from 1920 to 1934 found 7 States reporting data separately for men and women in every year of the period.² No more than 18 States made public such data in any one of those years. In the latest year studied only 9 States reported age of injured women and men, only 8 reported cause of injury, and 7 the industry in which they were injured.

The suffering and loss from injury were so evident that early in this century a movement for some form of compensation to the worker began to be crystallized into law. Such action was furthered by farseeing employers as well as by the American Association for Labor Legislation. At present 46 States have some form of workmen's compensation legislation, and the Federal Government has given similar protection to its life-saving and postal services, longshoremen and harbor workers, and civil employees.

Money compensation is an excellent thing, but this alone is not enough. Many of the injuries that occur could be prevented. One large corporation is said to have reduced accidents 86 percent in 13 years; one large railroad company is reported to have a record five times as favorable in this respect as the average for other large railroads.

For women in 4 of 7 States that gave reports by industry, over half the injuries were in manufacturing, and chief among these to cause injuries were the food, clothing, textile, and machinery and vehicle industries.

In two important industrial States—Indiana and Pennsylvania—the Women's Bureau made a detailed study of the reports of nearly

² See Women's Bureau Bulletins 81, 102, 129, and a later bulletin (160) in press.

6,000 accidents that had occurred to women in one year. Of these, nearly two-thirds in Indiana and a little more than one-half in Pennsylvania had affected the upper extremities. Machinery is a major cause of accidents to women. In Georgia, where the textile industry ranks high in number of women's accidents, it was found that in each year from 1932 to 1934 more of these were due to machinery than to any other cause.

A study by the Women's Bureau of injuries occurring to personal service employees in Ohio showed machinery to be the causal agent in over four-fifths of the injuries to women laundry workers.³

Among the machines that frequently injure women's fingers, hands, and arms are punch presses in metal factories and machine shops, power sewing and knitting machines, and cutting machines of any type. For example, girls and women were found to have been injured taking off lumber from a saw, cutting leather in a heel factory, shaving soap in a soap and perfume factory, operating a flat-work ironer or an automatic cigar machine, packing food in bottles, carrying or lifting heavy weights, and in many other ways. It is possible to guard most of these machines so that fingers or other members cannot be so maimed, and proprietors frequently realize that it is greatly to the interest of industry and society that such accidents shall not occur.

Nor is the guarding of machinery all that is necessary.

Well guarded now our big machines
But other dangers lurk;
Cluttered, oily floors and aisles
Add peril to our work.

Many injuries occur from falls on slippery floors, in cluttered aisles, on ill-lighted stairways, or in passageways. In eight States in each of which accidents to women for a year's period were studied, from well over one-fifth to one-third of all injuries to women were due to falls. And falls, it is found, result in longer periods of disability than do other types of accident.

First-aid facilities, in charge of a competent person, should be provided in every place of employment.

* See Women's Bureau Bulletin 151, p. 17.

V. HEALTH STANDARDS FOR WOMEN'S WORK— WORKING CONDITIONS—Continued

(d) Industrial hazards: Disease.

Certain occupations present greater hazards of disease than do others, and, in addition, the excessive speed that attends some industrial processes is likely to produce permanent nerve strain, often accompanied by abnormal muscular reactions.

Dust is an ominous destroyer, and persons employed in the dusty occupations are likely to be affected with pulmonary or bronchial troubles. Flour, starch, soapstone, talc, wood dust, bran, clay, ore, and stone dust are very prevalent in industry. Tuberculosis figures collected by the Metropolitan Life Insurance Co. in 1928 show death rates far above the average for pottery workers, stonecutters, and grinders.

In general it may be said that three chief methods ought to be developed to combat the deleterious physical effects of dust and poisonous substances used in industry: (1) Every effort should be made to reduce the amount of dust, to carry it off, or otherwise to protect the worker; (2) where less dangerous substances can be used, processes should be changed to enable their use; (3) occupational disease should be made reportable and included in workmen's compensation laws; compensation is allowed for such diseases generally or for designated diseases of this class in 20 States and the District of Columbia.⁴

It will be noted that the foregoing methods of minimizing occupational disease apply to men as well as to women, and such should be the case. The prohibition of women's work in occupations exposing them to these dangers will not solve the whole industrial problem if men still are affected. The finding of substitutes for poisonous substances and the inclusion of diseases arising from occupation in the compensable lists constitute more fundamental remedies.

As regards the possibility that women may be more susceptible to certain poisons than are men, in most cases sufficient data have not been gathered in this country to give proof of this fact. However, there are two substances that apparently affect women more seriously than they do men—lead and benzol. The pottery trade carries with it the greatest danger of lead poisoning for women, and American potteries have made less headway in protecting workers from maladies due to this cause than have those in certain European countries. While men also are susceptible to lead poisoning, the effects are especially injurious to women, rendering them more likely to have abortions or stillborn children and reducing the vitality of children born alive. Despite this fact, only two States have laws prohibiting

⁴ California, Connecticut, Delaware, Illinois, Indiana, Kentucky, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, West Virginia, and Wisconsin.

or regulating women's employment in industries where they are in danger of such poisoning.⁵ Benzol poisoning causes anemia and renders a healthy pregnancy almost impossible.

The poisonous trades in the United States employ a very much larger proportion of men than women, and the occupations of the latter usually expose them in a less degree than men; but it is also true that the number of women subject to the danger of industrial poisoning is much greater than it was before the war. In many cases the serious effects of the use of a new substance do not appear for a period of years, and the tracing of illness to the true cause sometimes is difficult. Every effort should be made to protect workers from poisonous substances; so far as possible, the use of other substances should be substituted for those found dangerous; in all cases occupational disease should be made reportable and compensable; and much further study should be made of the effects of various suspected poisons and of the extent to which these effects apply especially to women.

⁵ New Jersey and Pennsylvania.

VI. HEALTH STANDARDS FOR WOMEN'S WORK— WORKING TIME¹

(a) Daily hours of work.

A few years ago a new musical production entitled "The Dance of the Age of Steel" was heard in Philadelphia. Sixty dancers took part in the presentation, and the press made this statement:

* * * This ingenious ballet presents a cynical survey of the grinding wheels of the machine age, ironing out individuality of effort, crowding and pounding human beings down with steam-roller impersonality, and pointing the hopeless and irreconcilable contrast between warring elements in modern life. All types—the bourgeoisie, flappers, Boy Scouts, soldiers—even such impersonal elements as coal, steel, and electricity, playing their parts in the ceaseless treadmill of modern existence.²

This opera illustrated vividly how different are the conditions of modern industry from those obtaining at the time when most articles were made in the home. The invention and development of power-driven machinery, the subdivision of processes, mass production, rapid transportation contributing to mass distribution—these and other factors have helped to mold our present complex economic life.

Such conditions tend to have a very marked effect on the human beings involved in making the goods now in demand. The factory method of manufacture described in earlier papers of this series produces types of strain unknown or infrequent in the time of home production. Some of these are due to speed, complexity of machinery, noise, subdivision of processes, and monotony of job. These things mean that the individual is overtaken by fatigue very rapidly. They make it imperative that every effort should be made to maintain reasonably short hours in factory and other occupations.

In the needle trades, for example, in some cases a girl tends a sewing machine carrying 12 needles making 4,000 stitches a minute, or 2,400,000 in 10 hours—since some work that long—often working in a bright light and with unshaded eyes, and in the midst of noise that can only be described as a deafening roar.

The telephone service also may be cited as an example of work requiring great speed. It is said that hours for the most part are 8, but with overtime, Sunday work, "working through," loss of relief, or "excess loading," as practiced in some exchanges, these are often exceeded. When you consider problems of monotony, speed, and noise in industry, it is well to picture yourself at such work. For instance, you would probably find it most fatiguing to answer 500 telephone calls day in and day out. Yet thousands of telephone operators have answered many times that many calls a day—depending

¹The following bulletins of the Women's Bureau, which will be of interest in connection with this subject, will be furnished on request: No. 64, The Employment of Women at Night. 1928; No. 136, The Health and Safety of Women in Industry. 1935; and No. 156, State Labor Laws for Women, Part I and Part II. 1938.

²Le Pas d'Acier, by Serge Prokofeff. Orchestra conducted by Leopold Stokowski, and dance led by Edwin Strawbridge. Washington Star, Apr. 12, 1931.

upon the location and type of equipment. While many of you would find the mere plugging-in a trying operation, telephone operators have had to receive each of your calls and plug in your connection, follow its completion and sometimes check up to disconnect you; far too frequently they have been held responsible in addition for poor connections over which they have had no control—long hours of work have therefore been particularly arduous. In many cases the automatic equipment has relieved telephone operators from much that was provoking and places much of the responsibility for satisfactory telephone calls upon the person calling.

Scientific study has indicated that what would be classed as light work may become, where continuously repeated, more damaging physiologically than heavier work that affords more opportunity for variety.

Extreme subdivision of industrial processes, with the resulting monotony for the worker, is one of the greatest factors calling for the reduction of the long day. This is a matter to be considered particularly in connection with women, because women are employed very largely in the industries where the subdivision is the greatest, such as the garment, the boot and shoe, the electrical-supply, and the textile industries. For example, many women are engaged in the stitching of long straight seams all day, the tacking of pockets, the pasting of lining stays in shoes, or the running of 30 or more looms in a textile mill. These operations mean the same kind of work from morning to night, from one week to the next. Spinning, weaving, or knitting means continuous walking between machines, watching, watching for stoppage of machines and tying up broken threads. Because of the great monotony attending the work through subdivision, the continuous work must not be too long if health is to be maintained.

There is considerable scientific evidence to show that excessive fatigue, besides having deleterious physical effects, slows up the worker. Dr. H. M. Vernon, of the Industrial Fatigue Research Board in Great Britain, concludes from his studies that when hours of work are very long a reduction of hours may lead to a distinct increase of total output. Others have reached the same conclusion. Moreover, fatigue increases the danger of accident, lowers the resistance of the worker to infections and other diseases, and tends to induce various forms of nervous disorder.

The Women's Bureau recommends that no woman be employed more than 8 hours a day, and that at least 30 minutes should be allowed for lunch. How conservative a minimum this is, is shown by the fact that the late Charles P. Steinmetz, the "electrical wizard," stated that with the possible increase in the use of electricity the time will come when no one need work more than two hundred 4-hour days in the year. In the garment trades, for example, as much clothing as can be sold to advantage, even in good times, can be made in about 40 weeks in the year, and special arrangements have been made between employers and employees in certain of these trades to give workers relatively steady employment for a certain number of weeks at a wage reasonably suited to maintain them for the full year. In most industries, even with expanding markets, much better planning for the use of workers' time on the job could be instituted, better work se-

cured, and much more leisure and a higher living standard assured than now obtain. Thus far, only 19 States, the District of Columbia, and Puerto Rico legally restrict any type of employment to 8 hours,³ and in 6 States there is no restriction whatever in regard to the length of the workday in any industry.⁴ And experience has shown that while many firms voluntarily make their own limitations of hours there are always some firms that will require work for too long a period unless this is prohibited by law for the sake of the workers' health.

The Women's Bureau also recommends that a rest period of 10 minutes be allowed in the middle of each work period without increase in the daily hours. Common sense would indicate the need for such rests, but in addition a considerable body of evidence exists from various scientific tests that have been made.

For example, an experiment conducted in the lifting of weights shows that a worker on "light-heavy muscular work" in an 8-hour day cannot give maximum output unless he rests at least one-sixth of the time. A group of girls folding handkerchiefs produced their best output when resting 21 percent of the total working time. These findings are confirmed by other studies.

Further, it has been found that when one's middle finger lifts a weight over and over until completely exhausted a rest of 2 hours is necessary for complete recovery; while if the finger is worked only half as long as this, recuperation requires only a quarter as much time as in the first case. All such investigations indicate the wisdom of providing reasonably short hours of work and suitable rest periods.

³ Arizona, California, Colorado, Connecticut, Illinois, Kansas, Louisiana, Montana, Nevada, New Mexico, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Utah, Washington, and Wyoming.

⁴ Alabama, Florida, Indiana, Iowa, Minnesota, and West Virginia.

VI. HEALTH STANDARDS FOR WOMEN'S WORK— WORKING TIME—Continued

(b) Hours of work in the week.

An important pioneer work, *Fatigue and Efficiency*, by Josephine Goldmark, indicated quite clearly, as many succeeding studies have done, that the individual handicapped by the physical poisons produced by fatigue cannot work so rapidly or so effectively as can the person who has sufficient time for rest and recreation.

Reasonably short hours of work in the week are even more important than short daily hours, for while a worker might withstand occasional long days, the long week produces cumulative fatigue that cannot be overcome.

That a shorter workweek does not diminish production but rather increases it, because the worker who is not overfatigued is able to do a more effective job, has been indicated in a number of investigations. One of these was made by the Illinois Industrial Survey Commission in 1918 and had to do with a group of girls wrapping and packing soap. It was found that production in a 48-hour week was considerably above that in a 55-hour week.

The minimum weekly standard recommended by the Women's Bureau is that there should be one day of rest in seven and that, in addition, the Saturday half-holiday should be the custom. With an 8-hour day this recommended standard would make a 44-hour week. This minimum standard is a very conservative one in these days when in large numbers of industrial firms as well as in other occupations the 5-day week has been instituted, and especially since the passage of the Federal Fair Labor Standards Act of 1938 places maximum hours of workers in industries engaged in interstate commerce first at 44, to be reduced later to 42, and then to 40. (Write the Women's Bureau for further information on this Act.) Of course, the salutary effect of a reduction in hours would be entirely nullified if it should mean in any case a reduction of the week's wages.

Since there has been a striking trend toward the shortening of working hours within the past few years, the standards earlier striven for now seem most conservative. In the textile industry, for example, in cotton mills in 1928 weekly hours averaged about 53.4, but in 1935 they averaged only about 34.6. This has not been wholly the result of depression, since even at the low point many plants were found doing overtime work while others were shut down or on part time. Influences responsible in part for more reasonably shortened hours of work have been the introduction of labor-saving machinery, the experience of the National Recovery Administration, and more widespread popular understanding of the economy of shortened hours. Despite all this, however, there is danger of relapse toward earlier sweatshop conditions in some quarters unless the maximum hours are fixed by law.

At the 1930 convention of the American Federation of Labor it was conservatively estimated that over 500,000 union members had a regular weekly schedule of 5 days, and in 1938 this number had increased to well over 1,000,000. It is well known that the 5-day week has been the accepted practice for a large proportion of those in the occupation of teaching, frequently for office employees, and sometimes in stores, especially in the summer months.

With an 8-hour standard and a Saturday half holiday, 44 hours a week would be worked. A 5-day week and an 8-hour day would produce 40 hours; while much shorter hours still undoubtedly could make for happier and more efficient living if industrial managers planned effectively and if leisure were wisely used.

Yet in only 21 States, the District of Columbia, and Puerto Rico are women's weekly hours restricted by law for gainful employment in any manufacturing occupations to 48 or less, in 4 of these a 40-, 44-, or 45-hour maximum being fixed; in 22 States the laws affecting women in manufacturing provide for a week of over 48 hours, 8 of these permitting over 54 hours, 4 as much as 60 hours. Five States make no legal restriction of daily or weekly hours and 2 States have a daily but not a weekly provision.

The findings as to increase in production with the shorter day might be taken to indicate that better planning could inject greater efficiency—as well as happiness—into the life of the home manager. A few years ago the United States Bureau of Home Economics induced more than 2,000 housewives to keep careful daily records of a typical week of 7 days. The average hours worked were 51 in the week, while for 950 farm women they were 62. Although city families usually were smaller and had more help, women in towns of 50,000 and larger worked a little over 48 hours in a week, those in the smaller towns 51. Many more household appliances are available today, but many families cannot afford them and in others the labor savers have tended to reduce the work of the household more definitely to a one-worker job. There is an important difference in the work of the homemaker and the woman in industry: Housewives usually can distribute their own time; not so with the woman who works in a factory all day and has to do her housework after factory hours.

VI. HEALTH STANDARDS FOR WOMEN'S WORK— WORKING TIME—Continued

(c) The night shift.

The fault confessed in Edna St. Vincent Millay's pretty little verse that has been very popular since its appearance and runs as follows—

My candle burns at both ends;
It will not last the night;
But, ah, my foes, and, oh, my friends,
It gives a lovely light—

may be all very well for a few individuals, but it would be a bad practice for most people, and certainly for women who tend rapid and noisy machines.

Most employed women have responsibilities outside their hours at the place of business; almost always they must complete more time-consuming odd jobs than men must—they must launder some or all of their clothing, darn their stockings, and keep themselves presentable. But more than that, often they must cook and clean for a smaller or larger family and very often—whether married or single—they must bear some share, not infrequently the whole responsibility, in the care of children.

The health of the worker is all the more seriously impaired if the employment happens to be on a night shift. Then, indeed, must the candle be burned at both ends, whether the individual would wish it or not.

There is a considerable body of medical testimony to the deleterious physical effects of night work. "Outside of great emergency or absolute industrial necessity, all night work should be abolished, and more so for women than for men," says one eminent medical authority; and another states: "It is unnatural for most forms of life to work at night and attempt to sleep in the day." These opinions are echoed and reechoed by physicians, by life-insurance actuaries, and by many other scientific investigators. Night work sins against nature in the loss of sleep it involves, and this loss of sleep, with its accumulating fatigue poisons, is far more deadly to the body than is starvation. For the night worker, the end is frequently ruined health, and in most cases this comes far more quickly with the woman than with the man, not only because of her different physical make-up but because her work does not end when she leaves the factory, including, as it nearly always does, the manifold household cares that await her return home. Additional physical evils are to be found in deprivation of sunlight, most valuable of natural tonics; in frequent injury to sight; in a higher number of accidents, due to the necessity of working under artificial light.

Investigations made by the Women's Bureau have shown that the strain and hardship of night work was intensified by the fact that hours often were very long and that in many cases provisions were

lacking for certain of the facilities important for the health and comfort of the workers, such as proper rest pauses, lunch periods, and seats. In addition, while wage rates generally were slightly higher than those for day workers, the amounts actually earned often were below the corresponding earnings on the day shift.

Experience in one large industry has shown that the majority of employers, though striving honestly to effect reforms along this line, may find themselves unable to accomplish desired results due to a small group of firms not subscribing to such policies. The Cotton Textile Institute in 1931, recognizing that night work was a basic cause for the instability of employment in the textile industry, announced that 83 percent of the manufacturers in the industry had subscribed to a plan to eliminate night work, over three-fourths of the mills running night shifts being represented by this group. However, when a code for the cotton textile industry was being considered by the National Recovery Administration in 1933, testimony of employers urged the establishment of provisions that would accomplish by the help of the law what their previous efforts had failed to bring about. The National Recovery Administration code for cotton textile manufacturing set a 40-hour week for employees, with an 80-hour week for machinery operation, establishing thereby a two-shift system for the industry. Since the end of the National Recovery Administration, the great majority of the mills are still operating on a one-or-two-shift basis.

At present, there are only 12 States that prohibit night work for women in various manufacturing industries,⁵ although 6 others either prohibit in some occupation or place some restriction on night work. The hours of 10 to 6 are the most commonly affected by such prohibition or restriction. This is an advance over the minimum recommendation of the Women's Bureau, which is that no woman should be employed between the hours of midnight and 6 a. m.

⁵ California, Connecticut, Delaware, Indiana, Kansas, Massachusetts, Nebraska, New Jersey, New York, Oregon, Pennsylvania, and Wisconsin.

VI. HEALTH STANDARDS FOR WOMEN'S WORK— WORKING TIME—Continued

(d) Vacations and sick leave with pay.

Executives and business men, like school children and teachers, look forward to the vacation period, and often the homemaker does also, even though for her it entails much of the labor or preparation for the family outing. The head of a large company has given a concise expression of the basis on which the vacation with pay is likely to be granted—that it is “a good business proposition on the theory that a worker will more than pay for his vacation in better work.” It has been estimated that the typical cost of vacation wages in general is less than 2 percent of the total annual pay roll of a firm. Sometimes this is charged to the overhead of the various departments, or it may be deducted from net profits of the business.

It is quite certain that every individual must have some leisure for health and happiness. “Leisure to be worth the name must be pleasurable, vivid, and tranquil,” says a recent writer. “Leisure is enjoyed when we do something by individual choice and not by coercion, and when the doing brings a sense of timelessness and enrichment * * * ; unoccupied time is not leisure, nor is organized play, nor speeding from point to point.”

Despite the view widely held that vacations with pay are good business, and the medical testimony to the health requirement for such an occasional rest, practices as to the arrangement for vacations vary widely. Since women are more likely than men to have jobs entailing repetition, routine, and monotony, and since their labor rarely ends with the day's work in factory, store, or office, it would seem that women in particular had need for an annual vacation.

Studies made by the American Management Association, the Federal Personnel Classification Board, the Metropolitan Life Insurance Co., the Industrial Relations Counselors, the National Industrial Conference Board, and other agencies confirm the statement that it is a very general custom to grant vacations with pay to clerical workers and to the office force in manufacturing plants.⁶ The time allowed varies, but most commonly it is one or two weeks. Under the laws of the United States and various States and cities, as long ago as 1929, about 2,000,000 public employees were given vacations.

⁶ American Management Association. Office Executive Series No. 30. Office Working Conditions and Extra Compensation Plans, by H. J. Taylor. New York, 1928. Reviewed in Monthly Labor Review, August 1928, pp. 34-36. Industrial Relations Counselors (Inc.). Research Series. Vacations for Industrial Workers, by Charles M. Mills. The Ronald Press Co., New York, 1927. United States Personnel Classification Board. Report on Wages and Other Conditions in Government and in Private Employment, published as House Document No. 602. Reviewed in Monthly Labor Review, August 1929, pp. 133-140. Metropolitan Life Insurance Co. Vacations with Pay. New York. U. S. Bureau of Labor Statistics. Monthly Labor Review, August 1938, p. 269. Vacations with Pay. Princeton University Industrial Relations Section. Recent Trends in Vacation Policies for Wage Earners, by Eleanor Davis. Princeton, 1935. National Industrial Conference Board. Vacations with Pay for Wage Earners. 1935.

Though vacations are extended to only a small proportion of the industrial workers, in spite of the fact that the nature of their work, with its speed, noise, and monotony, would seem to require especial attention to this matter, the practice is growing, especially recently. It is estimated that in 1937 about two-fifths of all wage earners in manufacturing industries were in plants that had wage-earner paid-vacation plans. Further, trade agreements had already begun to show evidence of success in collective bargaining for this right, and since the depression it is noted that one of the requests always made of employers by the unions is that of vacations with pay.

A study of the New York Bureau of Women in Industry made in 1925 and again in 1930 showed that over this period there was a 7-percent increase in the proportion of plants granting vacations with pay to production workers.

Economic conditions subsequent to 1929 induced modifications of this policy, but that the practice was by no means abandoned is indicated by studies made during recent years.

Among these may be mentioned two studies by the National Industrial Conference Board, one made in 1931, one in 1935, which show that since the depression the policy of granting vacations with pay is again being established. The proportion of plants making such practice was greater at the later than at the earlier date, and in 1935 the number of workers affected was nearly 1,000,000.

Information secured in 1934 and 1935 by the industrial relations section of Princeton University indicated definite increase in the number and coverage of such plans. Of the 100 companies scheduled, 38 gave vacations with pay to workers on hourly and piece-work rates, while some of those remaining stated that they expected to resume the practice if business continued to improve. The Bureau of Labor Statistics, from a recent investigation, estimated that in 1937 nearly 40 percent of the employees in manufacturing plants had vacations with pay.

Several of the reports draw attention to the fact that the chief problem in connection with paid vacations for wage earners, aside from the expense, is the maintenance of plant efficiency and service to customers. Obviously there are many types of industries where a general plant shutdown is impossible, while other industries find a definite advantage in suspending plant operations and arranging for all employees to take vacations at the same time. The great majority of manufacturing companies reported give staggered vacations, preference as to time of year being based on seniority.

A further matter of primary importance is the arrangement for sick leave with pay. Sick leave very frequently is granted to office workers, although this is not always the case. However, the production worker usually does not receive payment during sickness. Some firms have a system of allowances for sickness independent of the group-insurance or sick-benefit plans that employees usually have access to.

For teachers the practice is fairly common of granting sick leave, though there is variance in the amount granted and the pay allowed during such periods. A survey made in 1930-31 showed that 90 percent of the cities of over 2,500 in population granted leave

for personal illness, and about 75 percent of them allowed full pay for sick leave; 5 days on full pay was the usual practice for small towns and 10 days the most common allowance among cities over 30,000 inhabitants. Some school systems provided for a combination of a certain number of days on full pay and additional days on less than full pay. A more recent report, made in 1934, for 39 cities of over 200,000 population, showed that all but 1 of such cities made some provision for sick leave with full or part pay.⁷

⁷ National Education Association. Research Bulletin. Administrative Practices Affecting Classroom Teachers, Part II, pp. 56, 57; Educational Research Service, Circular No. 7, September 1934.

VII. LABOR LEGISLATION FOR WOMEN¹

(a) Reasons for legislation and forces furthering it.

Labor legislation for women in the United States has become a matter of increasing importance in the past few decades as women have entered more types of gainful employment and as the development of machinery has been accelerated. The subject is one having many ramifications, due to the various types of labor laws and to the many problems involved, the vast number of women who are employed, the great variety of their occupations, and the conditions under which they work, varying with locality, industry, and individual establishment.

Men and women in industry do not have equal economic power in bargaining for better standards of hours, conditions, and remuneration. Forced into industrial life by increasing economic pressure, women are the late comers in industry and as such are in the position of being the cheapest labor in the market, thus tending to undercut the wages and conditions that have been gained by men in their longer industrial life. The fact is commonly recognized that men have gained their advantage in the industrial world largely by means of organization but have welcomed recent strengthening of this method through the machinery of the State. This method is desirable for women also, but more difficult, since women who are wage earners, with one job in the factory and another in the home, have little time and energy left to carry on a fight to better their economic status.

Entering industry by the easiest and most widely open door—that of the job requiring little or no skill—naturally women workers too often land at the bottom of the economic scale. They cannot improve their condition, because in so many instances they are not organized; and often they cannot organize because their need of employment is so great that they dare not risk the loss of their jobs, no matter how poor, a loss that too often follows the unskilled workers' first attempts at organization. In view of these facts, a definite demand has developed for a method to produce scientifically and as soon as possible conditions and opportunities that more nearly equal those of men. This short cut is legislation, and such laws, even if written for women only, tend surely though indirectly to benefit men as well, as every gain made by labor in any direction whatever is a gain for all labor. These laws, applying as they do to women in industry and ordinarily not to those in the professions,

¹The following bulletins of the Women's Bureau will be of interest in connection with this subject: No. 66-I, *History of Labor Legislation for Women in Three States*, 1932; No. 66-II, *Chronological Development of Labor Legislation for Women in the United States*, Revised 1932; No. 68, *Summary: The Effects of Labor Legislation on the Employment Opportunities of Women*, 1928; No. 79, *Industrial Home Work*, 1930; No. 115, *Women at Work*, pp. 27-32, 1934; No. 135, *The Commercialization of the Home Through Industrial Home Work*, 1935; No. 156, *State Labor Laws for Women*, 1938; No. 155, *Women in the Economy of the United States of America*, 1937. See also *History of Labor in the United States*, Vol. IV, *Labor Legislation*, by Elizabeth Brandeis, 1935.

cannot be said to hamper women in opportunities for a career. The Women's Trade Union League urges the enactment of such legislation because experience has demonstrated its need and value to the rank and file of women wage earners.

The earliest type of labor legislation in our States usually has been the attempt to secure reasonably short hours of work. The two great reasons for this demand have been the need for protection to health and the need for leisure. This was emphasized as early as 1842 in a petition for hour legislation presented to the Massachusetts Legislature, which gave the following reasons for the demand:

It would, in the first place, serve to lengthen the lives of those employed, by giving them a greater opportunity to breathe the pure air of heaven, rather than the heated air of the mills. In the second place, they would have more time for mental and moral cultivation * * *. In the third place, they will have more time to attend to their own personal affairs, thereby saving considerable in their expenditures.

The first hour law passed was one in New Hampshire limiting the day to 10 hours with certain exceptions and applying to both men and women. This was passed in 1847.

Taken as a whole, probably the largest single factor making for the passage of labor legislation for women has been organized labor. Directly or indirectly it was the influence that made most of the legislation possible; it initiated most of the laws limiting the hours of women in factories and mechanical establishments, as well as other statutes; it represented the bulk of the political strength that made legislators fear to run counter to measures designed to benefit the laboring classes; it paved the way for legislation by establishing through trade-union activity conditions of work that later were made standard by law.

Other factors that ordinarily have been the moving force in securing labor legislation have been factory inspectors and other officials charged with the enforcement of labor laws; bureaus of labor statistics; special legislative committees or commissions for the study of labor conditions; governors; pioneering employers; social, civic, philanthropic, and church groups; factual studies of conditions to be remedied by law; and, finally, the spirit of the time.

VII. LABOR LEGISLATION FOR WOMEN—Continued

(b) Hour legislation in various States.

The early months of an odd year are likely to be an "open season" for all sorts of legislation, including that relating to labor problems, because in so many of the States that have biennial sessions the legislatures meet in the odd year.

Since the history of labor legislation for women and children shows that in many States the first subject considered is the fixing of reasonably short hours, it is of interest to see how far the various States have progressed in this direction. It is difficult to summarize hour legislation, since the provisions in the various States differ so widely. In some States maximum hours are fixed at one length for some industries and at a different length for others; in some cases many industries are covered, in others only one or two relatively unimportant ones; sometimes the regulation is written into the statute law, sometimes it is in the form of a rule or order of an industrial commission or other body to which has been delegated the power to issue such regulations.

All but six States have some regulation of women's daily hours,² but two States regulate daily hours in some industries for which they have set no weekly limitations.³ In all, 19 States, the District of Columbia, and Puerto Rico have established an 8-hour day in certain industries or occupations. In 14 of these, the District of Columbia, and Puerto Rico, this applies to manufacturing, stores, laundries, hotels, and restaurants.⁴ Ten States and the District of Columbia apply it also to telephone and telegraph operators. One of them (New Mexico) restricts the day to 8 hours in most establishments except express, transportation, or common carriers, which have 9 hours. Connecticut provides an 8-hour day only for stores. Kansas has an 8-hour day only for telephone operators and women in public housekeeping (a 9-hour day in manufacturing, stores, and laundries). North Dakota has an 8½-hour day in manufacturing, stores, laundries, hotels, restaurants, telephone and telegraph offices, and express or transportation companies.

Twenty States make some provision for a 9-hour day; in 17 of these this applies to manufacturing industries, in 14 to hotels, restaurants, or both, in 15 to stores, and in 13 to laundries. Four of these States have, in addition, 10-hour laws in some industries, and seven of them have 8- or 8½-hour laws for some industries.

The laws in 9 States make no provision in any type of occupation for a day shorter than 10 hours. Two of these (Mississippi and

² Alabama, Florida, Indiana, Iowa, and West Virginia with no hour laws and Minnesota with a weekly limit only.

³ Colorado and Montana.

⁴ Arizona, California, Colorado, Illinois, Louisiana, Montana, Nevada, New Mexico, New York, Ohio, Oregon, Pennsylvania, Washington, and Wyoming. In Utah the 8-hour law covers the same industries, though the industrial commission has recently set a 7-hour day in stores. Enforcement of this provision, however, has been prevented by injunction.

South Dakota) are included with the States having the most inclusive statement found anywhere, the last applying to "any employer or other person having control." In two States in which there is some legal restriction of hours in manufacturing, periods of work longer than 10 hours are allowed in some other industry.

Sixteen States⁵ specifically exempt canneries from their hour regulations, and many others have other exceptions regarding seasonal industries.

Although this summary appears complicated, still it omits many of the variations that exist in the laws and other regulations, and it will serve to indicate how very difficult it is to give any adequate discussion of legal matters in a short period.

⁵ Arizona, California, Delaware, Idaho, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, New Jersey, Ohio, Tennessee, Utah, Virginia, and Washington.

VII. LABOR LEGISLATION FOR WOMEN—Continued

(c) Various types of labor legislation for women.

In general, special labor laws for women deal chiefly with the following subjects: Hours of work, a minimum wage, home work, night work, seats for women workers, the prohibition and regulation of women's work in certain occupations or industries. The laws on each of the several topics differ widely in extent, in requirements, and in application.

Hour and night-work legislation already have been discussed and minimum-wage laws will be considered later.⁶ Twenty-nine States and the District of Columbia and Puerto Rico have provided for such breaks in the hours of a woman's employment as a day of rest or one shorter workday in the week or time for meals or rest periods during the workday. Twenty-five States, the District of Columbia, and Puerto Rico have minimum-wage regulations.

The Women's Bureau strongly advocates laws requiring the furnishing of seats. To New York goes the credit for the first law, passed in 1881 and requiring seats for women "in any mercantile or manufacturing business or occupation." Following the passage of this, 14 States enacted similar legislation before 1890. Today 47 States and the District of Columbia—all but Mississippi—have laws requiring the provision of chairs or stools for women employees in stores or factories or both.

In regard to prohibitory legislation the Women's Bureau recommends the following:

Women should not be prohibited from employment in any occupations except those which have been proved to be more injurious to women than to men, such as certain processes in the lead industries.

The first prohibitory legislation for women dates from 1872, when Illinois forbade women to work in any mine. Today 26 States have regulated or prohibited women's employment in some industry or occupation, showing in all a total of 38 such restrictions; the remaining 22 States have no prohibitory or regulatory laws regarding any specific occupation. The most commonly prohibited occupation is mining, from which women are excluded in the 17 most important mining States.

In regard to the lifting or carrying of heavy weights, a provision considered important by the Women's Bureau, little progress has been made in most States, but in five States women are not allowed to carry or lift heavy weights, the standards varying from 15 to 75 pounds where an exact amount is fixed. For example, in Massachusetts in manufacturing or mechanical establishments, boxes, baskets, or other receptacles weighing 75 pounds or more must be equipped with pulleys, casters, or other contrivances so that they may be moved easily. In California a similar statute (as passed in 1921 and amended

⁶ Night-work legislation in No. VI; minimum-wage legislation in No. VIII.

in 1929) requiring provision for pulleys or casters for weights of 50 pounds or more applies to mills, workshops, restaurants, and packing, canning, mercantile, or other establishments employing women.⁷ In Washington women in manufacturing and mercantile establishments are not allowed to lift or carry "an excessive burden." The Industrial Board of Pennsylvania has ruled that women shall not be required or allowed to lift heavy weights in explosive plants and women in welding and cutting operations shall not be required or allowed to lift any material weighing more than 15 pounds, and Ohio prohibits employment requiring the frequent or repeated lifting of weights in excess of 25 pounds. Such laws are wholly reasonable in these days when machinery can relieve human beings of heavy lifting.

Five States—Massachusetts, Minnesota, New York, Ohio, and Pennsylvania—regulate the work of women in core rooms, where the molds are made for the inside of hollow castings in the metal industries. In three States—Louisiana, Minnesota, and Missouri—women are forbidden by law to clean moving machinery.

There are several States—Kansas, Michigan, North Dakota, Oregon, Washington, and Wisconsin—whose laws in general terms prohibit the employment of women under detrimental conditions. Kansas says that women shall not work in any industry or occupation "under conditions of labor detrimental to their health or welfare;" the North Dakota, Oregon, and Washington laws are the same with the substitution of "morals" for "welfare"; Michigan provides that no woman "shall be given any task disproportionate to her strength, nor shall she be employed in any place detrimental to her morals, her health, or her potential capacity for motherhood;" and Wisconsin says that no woman shall be employed in any place or at any employment dangerous or prejudicial to her life, health, safety, or welfare.

Home-work legislation, first passed in 1885 in New York but later declared unconstitutional, is today found in 17 States. The laws either prohibit the making of certain articles or regulate home work, generally requiring cleanliness, adequate lighting and ventilation, and freedom from infectious or contagious disease. Under an interpretation of the Federal Fair Labor Standards Act of 1938, employees working in their homes on articles moving in interstate commerce are to receive the benefits of the act.

Six States—Connecticut, Massachusetts, Missouri, New York, Vermont, and Washington—prohibit the work of women immediately before or after childbirth. Unfortunately, these laws in the United States lack a very advantageous feature that exists in many such laws in other countries—they do not protect the expectant mother against loss of job during her absence. Furthermore, a number of laws in European countries include arrangements for compensation of the mother during this period, though this has not been in line with policy and social attitude in the United States.

⁷ An order of the industrial welfare commission issued in 1928, applying to fruit and vegetable canneries, fixed the maximum weight women are permitted to lift or carry at 25 pounds. An order issued in 1919 made less definite provision, not specifying the maximum weight but merely prohibiting the lifting or carrying of "any excessive burden," and applying only to mercantile establishments and factories (which by definition include laundries and dry-cleaning plants).

VII. LABOR LEGISLATION FOR WOMEN—Continued

(d) Certain effects of labor legislation.⁸

Every year of State legislative sessions sees an increase in the number of women in the United States whose working hours are regulated by law, recent years being notable in extending the coverage of already existing labor legislation to new classes of women workers. It probably is safe to say that such hour legislation now affects well over a third of the women in gainful occupations. In a few cases men also are included, though by and large men's superior bargaining power has enabled them to obtain a similar result through union action and without recourse to legislation. Business and professional women, those in supervisory positions, and, in general, those in the higher ranks of opportunity usually are not covered by labor laws. These laws have been directed toward the control of conditions in industrial, mercantile, and factory occupations. When applied to certain occupations which differ from those for which they were drawn, such as the work of conductors on street cars, pharmacists in drug stores, women in newspaper work, labor laws have proved to be a handicap in a few instances.

With the growth and development of special labor laws resulting from the efforts of various groups convinced of their value in promoting the interests of women workers, opposition also has gradually arisen among other groups, who came to view these laws as a handicap to women's occupational progress. This opposition arises not from the ranks of women in industry, to whom the laws apply, but from certain women in more professional occupations and members of a few highly skilled and well-organized trades.

The Women's Bureau made a special investigation of the effects of labor legislation on the employment opportunities of women. This covered more than 1,600 establishments, employing more than 660,000 workers, 165,244 of them women, and personal interviews were held with more than 1,200 working women who had experienced a change in the law or who were employed under conditions or in occupations prohibited for women in some other State.

Among the industries included were those that were major employers of women: Boots and shoes, clothing, electrical apparatus, knit goods, and paper boxes. In addition, women workers in stores, restaurants, newspaper offices, street-railway transportation, elevator operating, pharmacies, the metal trades, and certain other types of employment were studied. Particular attention was given to the effects of laws prohibiting night work and those barring women from certain specific occupations, such as grinding, polishing, buffing, acetylene and electric welding, taxicab driving, and gas and electric meter reading.

⁸ For minimum wage, see VIII-d.

The general conclusion of the survey, based on the facts as they were found, is that women are necessary to industry and, provided the laws are properly written, they are not barred from industrial work nor do they lose their jobs because of the laws; on the contrary, in practically every case they are benefited by them. Moreover, reasonable legal standards for the employment of women tend toward a marked raising of standards in industry for all workers; a shorter workday for women results in shorter hours for men in the industries affected. The great majority of up-to-date employers realize the value of such standards of work and often exceed them in their own plants. Many of them approve such legislation because it largely does away with the cheap, unfair competition of unscrupulous employers.

The findings seem to show that the instances of handicap, which were diligently sought by the investigators, are only instances and should be dealt with as such, without allowing them to interfere with the development of the main body of legislation. The material demonstrates again and again the impossibility of generalization, the necessity for recognizing differences in different occupations, industries, and localities. The report concludes that regulatory hour laws as applied to women engaged in manufacturing processes do not handicap them but "serve to regulate employment and to establish the accepted standards of modern efficient industrial management."

That certain forces other than legislation do handicap women is recognized in this report as follows:

In almost every kind of employment the real forces that influence women's opportunity are far removed from legislative restriction of their hours or conditions of work. In manufacturing, the type of product, the division and simplification of manufacturing processes, the development of machinery and mechanical aids to production, the labor supply and its costs, and the general psychology of the times, all have played important parts in determining the position of women. * * *

In other occupations other influences have been dominant in determining the extent of women's employment. In stores a more liberal attitude and successful experimentation with women on new jobs; in restaurants the development of public opinion as to the type of service most suitable for women; in pharmacy a gradually increasing confidence in women's ability on the part of the public; in the metal trades a breaking down of the prejudices against women's employment on the part of employers and of male employees, and demonstration of women's ability along certain lines—these are the significant forces that have influenced and will continue to determine women's place among the wage earners. Such forces have not been deflected by the enforcement of legislative standards and they will play the dominant part in assuring to women an equal chance in those occupations for which their abilities and aptitudes fit them.

VIII. WHAT THE WAGE-EARNING WOMAN EARNS¹

(a) Outworn ideas as to women's wages.

Investigations have established the fact that the vast numbers of women who work in schools, offices, stores, factories, mills, laundries, and restaurants, must earn money for the essentials of life. They must work to buy food, to pay rent, to meet doctors' bills, to obtain the other necessities of life, and, in addition, large numbers must support dependents. The old idea known as the "pin-money theory" has been disproven repeatedly under the conditions of life in the world today. It is not an adequate basis for the payment of women's wages.

Another fallacious idea is that for the most part women who need to work live at home and can get along on small earnings. In the first place, to fix wages on this basis leaves out of account the important minority who must be responsible for their own entire support; these constitute more than one-tenth of the women employed in 17 States surveyed by the Women's Bureau. But more important than this is the fact that if an employed woman living at home does not earn enough for her own support, she is a financial burden on her family, and to that extent the family—whether able to do so or not—must subsidize both the girl and the industry in which she works. Take, for example, a place in which it costs a girl \$15 a week to live; her employer requires all her time but pays her only \$12; the other \$3, saved by the employer, must be made up by the girl's family. When expressed in simple terms how clear this is. And if the girl's earnings are too low to permit of saving and she becomes ill or loses her job, this fact may be the final cause of submerging an already overburdened family.²

A third idea that has persisted in the past but is being disproven under modern conditions is that women are transients in their jobs—that they go to work with the intention of remaining there only a few years. Women's Bureau studies show that considerable proportions of women have been in various industrial pursuits for long periods of years. Moreover, women frequently cannot leave their jobs after marriage, as has been supposed. In 18 States studied by the Women's Bureau, from 15 to 38 percent of the employed women were classified as married and from 8 to 25 percent were widowed, separated, or divorced. In one State the proportion of single women was only 37.3 percent.

A survey of 22 studies made by various agencies in various States, cities, and in industrial groups covered more than 60,000 women,

¹ The following bulletins of the Women's Bureau will be of interest in connection with this subject. No. 85, Wages of Women in 13 States. 1931; No. 137, Summary of State Hour Laws for Women and Minimum Wage Rates. 1936; No. 155, Women in the Economy of the United States of America, pt. I, ch. 3, 4. 1937.

² See Women's Bureau Bulletin 85, pp. 1 and 2.

and of these well over half contributed their entire earnings to the family budget.³

The files of the bureau contain countless stories of women, both married and single, whose earnings are the sole income of the family. Among these cases are those of a cigar maker who had supported her husband and two children for six months because of the man's inability to get steady work; a family with three children in which the husband was laid up with an injury for five months; a woman employed in the meat-packing industry who said, "It always takes two to earn enough to keep our family."

Naturally, fewer women than men have total dependents, the more common condition being one of joint responsibility; nevertheless, large numbers of women have such dependents. Of 1,800 women interviewed by the Women's Bureau in 1919, 1 in 3 of the single women had a dependent mother and 1 in 7 of the married women had a dependent husband. In eight studies by various agencies that covered about 17,000 women, almost 1 in 7 said they had total dependents. In a study of women who were or had been married, made in one city by the Bureau of the Census from 1920 figures, the wife or widow was the only breadwinner in about 4,300 families. In a study of 843 working mothers with dependent children made by the Children's Bureau at about the same time, more than two-thirds of the families had no support from the father.⁴ Analysis of 1930 census data covering all the employed women in the country who were homemakers as well as wage earners showed that nearly half a million such women were the sole support of families. Similar data from the 1930 census for 2 representative cities in the United States, Bridgeport, Conn., and Fort Wayne, Ind., indicated further that over 17 percent of the women who were the sole wage earners in their families were supporting three or more persons (in each case in addition to the woman herself).

To sum up: Women who are at work are not merely seeking to make a little extra money; most of them must bear their whole expenses and many must support others besides; on the whole they are steady workers, often highly skillful, and very necessary to industry. Any wage that does not take these factors into account constitutes inadequate payment for the services given and inadequate income for the needs to be met.

³ See p. 12 of Women's Bureau Bulletin 75, which was recommended for use with No. III of the present series. Also see Bulletin 155, Women in the Economy of the United States of America, p. 84.

⁴ See Women's Bureau Bulletin 75, pp. 18-19.

VIII. WHAT THE WAGE-EARNING WOMAN EARNs— Continued

(b) Some factors affecting women's wages.

Women's earnings tend to be very low. In most cases this has resulted from the tradition that certain jobs constitute "women's work," and that the work of women is of little economic value and will be given almost as freely as it was in the home. Nevertheless, many of the industrial occupations of women require great dexterity and skill, and practically all lines of women's work should be better paid.

The method of payment has considerable influence on the amounts earned. If workers are paid by the piece, those who work rapidly often are more highly paid, but the excessive speed sometimes developed is likely to undermine health. Furthermore, piece-work earnings tend to be very irregular. An hourly or a weekly rate would seem to guarantee greater certainty of earnings. But it must be remembered that the amounts actually received often are considerably below the rates fixed.

New methods have brought about practices that often work to the disadvantage of employees. One of these is that used in paying individuals who work in a group formed to complete particular parts of a certain process—familiarily called by the workers a "gang," and a system in vogue in many large plants. If any member of the gang is slow or is a beginner, the work of the whole group is slowed up thereby, and all suffer loss of earnings. Whatever the method of payment, time lost because of industrial reasons—such as a breakdown in machinery or a poor run of material—or because of sickness or other personal reason, reduces the worker's earnings. In a study of women's wages in 13 States, the Women's Bureau found a very large degree of lost time. In every State from about 30 percent to over 70 percent of the women had earned less than their rates of pay, and sometimes earnings were more than 10 percent below rates.⁵

Naturally earnings vary widely in different times, localities, and industries, and information as to wages paid is likely to be scattering. Three States—Illinois, New York, and Ohio—have reported monthly on wages of women for more than 10 years. The Women's Bureau makes various special surveys that report the exact earnings of women, taken from the pay rolls of the firms where they are employed; sometimes these are supplemented by interviews with the same women in their homes. Twice a year, wage data by sex are compiled by the Women's Bureau from pay-roll reports mailed in to the Bureau of Labor Statistics by employees.

That women's earnings are low as compared with men's—often very much below men's—is indicated in all the wage data compiled by the Women's Bureau, either from its own investigations or from

⁵ See Women's Bureau Bulletin 85, p. 67.

agencies such as the United States Bureau of Labor Statistics or State agencies reporting earnings by sex, or from studies made by organizations such as the National Industrial Conference Board, the research agency of the large manufacturing interests.⁶

In comparing the levels of men's and women's wages, attention must be paid to the fact that the occupations or general types of work in which women are engaged usually differ from those of men. In the manufacturing industries women and men ordinarily are employed on different processes.

The largest numbers of employed women are in domestic and personal service and clerical occupations. In the manufacturing industries women are found in greatest numbers in cotton and knit goods and other textiles, shoes, clothing, the tobacco industries, food, and electrical machinery and supply factories. While large numbers of men also are engaged in these factories, in some industries greatly outnumbering the women, their chief employment is in the heavy metal industries, in automobile manufacture, in lumber and furniture, the chemical industries including petroleum refining, the building trades, and so on.

Comparing wage data for November 1936 in these woman-employing and man-employing industries, the average weekly wage for all employees is in most cases below \$20 for the former, while in the man-employing industries it is in all cases above \$20 and runs above \$30.

Analyzing wages for total manufacturing, where such data are available by sex, the level of men's wages always is found to be above the level of women's. For example, in Illinois in 1936 average weekly earnings of men in manufacturing were \$26.61, for women \$15.12; in New York in the same year men's earnings in manufacturing averaged \$28.37 and women's \$15.83; in Ohio in 1935 average weekly earnings for men in manufacturing were \$24.77, for women \$15.33.

Where men and women are employed in the same industries, the levels of women's wages are much below those of men; studies of particular industries made in 1934 or 1935 by the Bureau of Labor Statistics show average weekly earnings of women less than three-fourths of men's. Looking further into special manufacturing occupations engaging both men and women, earnings of the latter are consistently lower than men's.

Despite the fact that women form 37 percent of the semiskilled and only 4 percent of the unskilled employees in manufacturing industries, a comparison of their wages with the wages of unskilled men show them receiving considerably lower wages than the men laborers. Over a period of years the National Industrial Conference Board has reported average weekly earnings of skilled and semiskilled men, unskilled men, and women; for the most part, in the period 1920 to 1935 the average received by women has been only about three-fourths as much as that of unskilled men. It is interesting also to note that women's earnings in factories in States surveyed by the Women's Bureau in 1935 or 1936 were lower than the entrance rates for common labor on new construction in these areas.

⁶ See Bul. 155, *Women in the Economy of the United States of America*, pt. I, ch. 3. Also see *Women's Bureau Bulletin* 85, pp. 154-157.

This unfavorable picture of women's wages in comparison with men's arises partly from the fact that women so often are used as a fill-in labor supply for highly seasonal industries; partly from the fact that women's work, formerly concerned so largely with unpaid household tasks, traditionally has been considered of low money value; partly from the fact that women form large proportions of the workers in the great piece-work industries and piece rates for such jobs often are fixed on the old customary basis of considering women's work as of slight money value. It is significant that these discrepancies are found of universal extent, in whatever period of time under consideration, regardless of the type of occupation. It is because women thus have constituted an especially exploited group that efforts have been made to establish minimum wages for women with the sanction of the Government, in order to fix a bottom figure below which women may not be paid.

VIII. WHAT THE WAGE-EARNING WOMAN EARNS— Continued

(c) Women's wages and what they must buy.

The general standard the Women's Bureau recommends for the payment of women's wages is as follows:

Wages should be established on the basis of occupation and not on the basis of sex or race.

We all know from personal experience how the purchasing power of the dollar varies with costs of living—how in 1917, for example, a dollar would go less than three-quarters as far as we had been accustomed to; and then prices advanced still further, and in 1920 the same dollar bought only one-half as much; in June 1937 the dollar bought only 85 percent as much as in the period 1923-25. That is what is meant by the term "real wages"—not the wage itself but the wage taking into consideration the value of the dollar.

In this way wages over a period of years may be compared, and the Women's Bureau has done this according to 1930 values for the earnings of 79,000 women in factories in 13 States. The median of these women's earnings—and the median is the middle point when all earnings are arranged in order of amount—was below \$13 in 10 of the 13 States. Very recent data (Illinois, New York, Ohio, and National Industrial Conference Board) on women's earnings indicate a slight rise, though in practically all cases the earnings seem quite inadequate to meet the many requirements of present-day living. For manufacturing industries, data on women's earnings from these four sources show a range per week of \$15.12 to \$15.83 in 1935 and 1936; but for the same years surveys of manufacturing industries in certain States made by the Women's Bureau show average weekly earnings of women to be lower—\$9.50 to \$12.70.

Special surveys of service industries (1933-35) made by the Women's Bureau have found women in beauty shops in four large cities having average weekly earnings of \$14.25; in laundries in several States with average earnings of \$10.61 to \$13.42; and in hotels and restaurants having a cash wage averaging as low as \$6.55 in some cases. In connection with the last-named, a study by the New York Division of Women in Industry and Minimum Wage shows the fallacy of the popular idea that tips can be relied on, since these form a very uncertain source of income.

Estimates of cost of living can be examined with a view to the general consideration of the adequacy of women's wages. Careful surveys were made in several States in 1937 for the purpose of setting a minimum wage for various woman-employing industries. In New York State a cost-of-living survey, State-wide in scope, conducted by the Division of Women in Industry of the New York State Department of Labor, shows that at least \$22.93 a week is necessary for "adequate maintenance and protection of health" of

the woman worker who lives alone, and \$20.35 if she lives as a member of a family; this is computed on the basis of 52 weeks a year (\$1,192.46 and \$1,058.31, respectively). In Colorado the industrial commission made an investigation which revealed that \$18.77 a week, or \$975 a year, is necessary to maintain a self-supporting woman at an acceptable standard of living in that State. The Works Progress Administration determined that in 1935 the cost of living for a manual worker's family of four persons was \$1,261 a year, or \$24.25 a week; the same agency estimated an emergency level for the bare existence of such a family at \$903 a year or \$17.37 a week.

Further, not only is the low wage frequently paid to women a serious matter for those who must live on the amounts received; it is an unfortunate factor in the economic life of the country, and especially is it significant when it is remembered that two in every nine wage earners are women.

Any industrial group working for less than the standard that prevails will be likely to have the effect of lowering wages for all. Industries in which low wages are paid to women are likely to pay low wages to men as well.

At its convention in Atlantic City in 1925 the American Federation of Labor made the following declaration:

We hold that the best interests of wage earners as well as the whole social group are served by increasing production in quality as well as quantity and by high wage standards which assure sustained purchasing power to the workers, and therefore higher national standards for the environment in which they live and the means to enjoy cultured opportunities.

Figures of the Federal Trade Commission indicate that in 1923 about 60 percent of our national wealth was owned by about 1 percent of the population. A recent estimate of the national income (made by the National Resources Committee) shows that of the total income flowing into the hands of all families, including 1-person families, in the year 1935-36, the poorest third of the families received but 10 percent of the total income, about the same amount as was received by the richest one-half of 1 percent of the families. Business men, employers, economists, and workers have now realized that since from two-thirds to three-fourths of the buying public is made up of wage earners, if a market is to be found for the increased goods that can be produced the millions of workers must have more money to enable them to buy their share of these products and more leisure to give opportunity for their use. For example, Dr. William M. Leiserson, now a member of the National Mediation Board, has said:

Is it not time for economists to point the way to sound methods of controlling income distribution to stabilize wage payments in spite of fluctuating employment, as accounting scientists and management scientists pointed the way to stabilization of the incomes of the investment and management classes?⁷

The argument for a wage for women that enables them to live decently is reinforced by the economic thought of the day that recognizes the advantages to industrial society as a whole of a high wage for all workers.

⁷ Address published in full in *American Labor Legislation*, March 1931, pp. 65 ff.

VIII. WHAT THE WAGE-EARNING WOMAN EARNS— Continued

(d) The minimum wage and its effects.

In 15 States prior to 1933 an attempt was made to establish by law a figure below which wage payments to women should not fall. This was done usually by a commission authorized to study the living costs of women and to determine the least amount that women might be paid that would enable them to live decently. Sometimes the amounts fixed varied for different industries; sometimes they had to be changed to meet the changing value of money in different years.

In 1923 the United States Supreme Court declared this type of law unconstitutional in a case involving the District of Columbia law (the Adkins case). This decision threw out similar laws in certain States, and there were only seven States⁸ with minimum-wage laws in force at the beginning of 1933.

New impetus to minimum-wage laws was given in 1933 when, spurred by the acute conditions of a period of business depression, with the hardships it imposed upon both industry and workers, seven States⁹ passed legislation, six of them establishing a new basis for the fixing of minimum wages under a type of law framed to conform to the constitutional interpretations that had been given by the Court in 1923.

In 1936 the progress of minimum-wage legislation received a setback when the United States Supreme Court affirmed the decision of New York's highest court in ruling its minimum-wage law of 1933 unconstitutional. This was only temporary in effect, however, as in 1937 the Supreme Court upheld the constitutionality of the Washington State minimum-wage law of 1913, at the same time specifically overruling its opinion of 1923 in the District of Columbia case. Since that time, old legislation invalidated by the courts because of the precedent set by the 1923 decision has been revived and new laws have been passed, so that in the summer of 1938 the number of minimum-wage laws totaled 27—25 States,¹⁰ the District of Columbia, and Puerto Rico.

A summary of the various types of laws in effect in 1938 follows, classified according to the three categories in which they fall:

1. Value of service rendered.

The fair value of the service rendered is the principle on which are based the minimum-wage laws of Connecticut, Illinois, New Hampshire, New Jersey, Ohio, and Rhode Island. The laws of the following States provide that the cost of living as well as the fair value of

⁸ California, Massachusetts, North Dakota, Oregon, South Dakota, Washington, and Wisconsin; in Minnesota, by a ruling of the attorney general, the law was applied only to minors; in Colorado, the law had not functioned because of lack of appropriation.

⁹ Connecticut, Illinois, New Hampshire, New Jersey, New York, Ohio, and Utah.

¹⁰ Arizona, Arkansas, California, Colorado, Connecticut, Illinois, Kansas, Kentucky, Louisiana, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Washington, and Wisconsin.

the service rendered be taken into account: Arizona, Kentucky, Massachusetts, New York, and Pennsylvania. A further provision—that in determining minimum rate wage boards take into account the wages paid for work of like or comparable character by employers voluntarily maintaining minimum fair wage standards—is contained in all these laws.

2. Cost of living.

The cost of living is the sole basis of the laws in the 11 States of California, Colorado, Kansas, Louisiana, Minnesota, North Dakota, Oklahoma, Oregon, Utah, Washington, and Wisconsin, and the District of Columbia. Though a wage is written into the Arkansas law, it may be adjusted by the commission to equal the cost of living.

3. Flat-rate laws.

The minimum that may be paid is written into the law in Arkansas, Nevada, South Dakota, and Puerto Rico.

Considerable testimony is available as to the definite effects of minimum-wage legislation, both from the States where such laws have been in existence over a period of years and from the States having more recent legislation.

Women's wages in California, where the law has been in effect more than 20 years, have risen each time the minimum has been increased. Laundries in Illinois, Massachusetts, New Hampshire, New York, and Ohio show very considerable wage increases after the orders for that industry, compared to earnings before. In New York, increases were far greater in laundries than in industry as a whole.

Where data can be compared on earnings in States having and States not having minimum-wage laws, the benefit of such legislation is clear. The Women's Bureau made a comparison of earnings in laundries in 1933 and 1935 in New York, where an order was issued in 1933, and in Pennsylvania, at that time not a minimum-wage State. The figures show that the increase from 1933 to 1935 in the proportion of women with hourly earnings of 31 cents or more (31 cents being the minimum set by New York for the metropolitan area) was 520 percent in the New York City area but only 160 percent in Philadelphia. In the State outside of the chief city, for which the New York order set a minimum of 27½ cents, the increase in the proportion of women earning 27½ cents or more was 345 percent in New York State in contrast to 87 percent in Pennsylvania.

Women in canneries in California and Wisconsin in 1932 received almost twice as much per hour as women in New York canneries, at that time not covered by a wage law.

Available data show almost universally that women whose earnings are above the minimum rate do not suffer as a result of wage legislation, that is, the minimum does not become the maximum. In California the proportion of women receiving more than the minimum increased steadily from 1920 to 1930. In Massachusetts, after a 5-year period in which the laundry order had been in effect, almost twice as many women as before received above the minimum; and in three other industries significant increases were found. In New York laundries 81 percent of the women surveyed had higher earnings after the order. In laundries in three other minimum-wage States

larger proportions than before had earnings above the minimum set, as follows:

	Percent of women receiving above minimum—	
	Before order	After order
Illinois (includes minors)-----	18.2	20.9
New Hampshire-----	37.0	42.0
Ohio-----	23.3	40.7

That the minimum wage is recognized as a benefit to industry is shown by the attitude of employers. California for some years has had the support of the Cannery League of the State, and endorsement by other industries. The New York laundry owners assisted in the sponsorship of the minimum-wage law in that State. The National Association of Hosiery Manufacturers and retail trade groups also have placed themselves on record as favoring such legislation.

There is no evidence that minimum-wage laws have any general effect on employment of women, since the usual experience is that women's employment continues its normal increase where these laws are in effect. The continual shift occurring at all times and in all places is caused by many factors other than the establishment of a minimum wage. Further, the claim that such legislation has any general or controlling effect toward inducing the replacement of women by men is disproven when it is noted that even after allowing for the increases in wages brought about by minimum-wage laws women's wages tend to be considerably lower than men's. It should be remembered also that women and men seldom compete for the same jobs, and that because of their particular fitness for certain types of work women's employment is likely to increase regardless of whether or not a minimum wage is fixed.

A Nation-wide minimum wage became effective on October 24, 1938, with the coming into force of the Federal Fair Labor Standards Act of 1938. Workers employed in interstate commerce or in the production of goods shipped in such commerce are covered, with certain classes exempted from both wage and hour provisions and other classes exempted totally or partially from the hour provisions. For the first year the minimum wage is fixed at 25 cents an hour, and the maximum hours are to be 44 a week. As rapidly as is economically feasible without substantially curtailing employment, the minimum wage will be raised to 40 cents an hour and weekly hours will be reduced to 40, the latter goal to be reached within 3 years. The Administrator appoints an industry committee for each industry, consisting of an equal number of representatives of employers, workers, and the public, which recommends the highest minimum wage possible with due regard to employment conditions in the industry. Within 7 years, 40 cents an hour is to be the minimum rate for all industrial employees covered under the act.

NOTE.—Write the Women's Bureau for other current material on the minimum wage and for further information on the Federal Fair Labor Standards Act of 1938.

FRASER

IX. VARIOUS CONNECTIONS OF WOMEN WITH THE INDUSTRIAL AND LABOR WORLD

(a) Women in unusual occupations.

It is illuminating merely to run through the census list of the occupations in which women were engaged in 1930. In addition to all those in which women ordinarily are expected to be found, and the long lists of factory employments in which people now have become accustomed to finding women, there are many that may seem more unusual. In connection with women who are factory workers and laborers at various occupations, there should be mentioned perhaps women in the related field of invention. At the National Inventors' Congress in New York in June 1937, more than 10 percent of the articles were listed as having been invented by women, many of them designed to lighten and make efficient old-time housekeeping tasks.

Perhaps it is not surprising to know that according to the census of 1930 thousands of women were painters, glaziers, and varnishers; "postmasters;" or "floorwalkers, and foremen in stores." But it may seem somewhat more strange that over 1,000 were "mail carriers" and "undertakers," "paper hangers," "chauffeurs."

In addition, hundreds were classified as "engravers," as "detectives," and "policemen." More than 100 were "lithographers," "sheriffs," "shoemakers and cobblers (not in factory)"; "builders and building contractors."

One of the oldest employments open to women, outside those in the home, was the keeping of taverns and "ordinaries," and women did this in America in the seventeenth century. Occasionally a woman of that day ran a mill or even worked in a sawmill. In the early eighteenth century there were many women printers, both as compositors and at the press, and some worked in the early paper mills. Most of those in industry were in some form of textile manufacture.

In 1840 there were reported to be only 7 manufacturing occupations open to women; but in 1930 there were women engaged in all but 30 of the entire 534 occupations listed in the census. There were even a few women reported as "blacksmiths," "loom fixers," "plasterers," "brick and stone masons," "machinists," "millwrights and toolmakers," and "iron molders, founders, and casters."

An illustrated newspaper article of recent date (1937) describes a woman at work in one of these unusual occupations:

"Under a spreading chestnut tree the village smithy stands," wrote Longfellow. In New York's Greenwich Village the smith labors at the traditional task of shoeing horses, the Ninth Avenue "L" playing the role of the chestnut tree.

"The smith, a mighty man is he, with large and sinewy hands." He, did Longfellow say? What a shock he would get if introduced to Mrs. Martha Drew Smith, 33, daughter of a Dexter, Michigan, blacksmith. She is New York's only woman smith.

"And the muscles of his brawny arms are strong as iron bands." Change the pronoun to her, and Longfellow's is an apt description of the sturdy arms of Mrs. Smith, who is her husband's full-fledged partner in the smithy. In Longfellow's time vacuum-cleaning a horse was unheard of, so there are no lines of his poem to fit this picture (illustrated in the paper). Mrs. Smith, however, proves herself as adept at the more feminine task of grooming Dobbin as at the muscular one of shoeing him.

Other occupations in which women are not frequently thought of, but in which some were reported in 1930, were "tinsmith and copper-smith," "piano and organ tuner," "mechanic," "cemetery keeper," "bootblack," "porter, steam railroads," and there even were reported four auctioneers, four railway mail clerks, and one plumber.

Probably the most unique occupation for a woman is circus clown. The magazine article noting this information stated that a woman, whose husband was a member of a clown group, "pinch-hitted" for a clown who became ill, and she had been filling the big tent with laughs ever since. The comment was further made that she probably was the only woman clown in the business.

IX. VARIOUS CONNECTIONS OF WOMEN WITH THE INDUSTRIAL AND LABOR WORLD—Continued

(b) Women as "officials and managers."

The census figures for 1930 indicated that large numbers of women were in the field of management, or officials, or in independent business. For example, from over 5,000 to more than 10,000 were reported under each of the headings of "manufacturers," "managers and officials" in manufacturing, and "bankers and bank officials." Over 1,000 were "owners, managers, and officials" of theaters; "wholesale dealers, importers, and exporters;" "stock brokers;" "proprietors, officials, and managers" of telephone and telegraph companies; and "managers and officials of insurance companies;" smaller numbers were "loan brokers and pawnbrokers;" "commercial brokers and commission men;" "officials and superintendents" of steam railroads; and "operators, officials, and managers" in the extraction of minerals.

With regard to the railroads, among the newer occupations in which women are showing themselves valuable employees in train systems are, in addition to the well-known hostesses and stewardesses, jobs as passenger agents and as inspectors of dining cars and restaurants; other positions noted are a woman immigration agent, assistant general freight agent, supervisor of passenger service, traveling passenger agent, passenger car distributor. The railroad's oldest profession for women, station agent, is found mentioned in the office records of practically all the large railroad systems of the country, life stories of those women who have been railroad station agents and telegraphers, some of their service years beginning as far back as the eighties.

Attention should be called, of course, to that newer field of transportation which numbers women among its employees—aviation, in which, for example, there are the familiar airplane hostesses and women pilots, one woman being a licensed United States mail pilot.

Then there are other occupations that obviously require specialized skill or very good judgment if they are to be effectively carried on, as, for example, hunter, trapper, and guide; or marshal and constable.

And when all this is said, the great body of professional women remains still to be considered—over a million of them—authors, editors, clergymen, teachers, trained nurses, dentists, draftsmen, lawyers, physicians, civil and electrical engineers, architects, and others.

No general résumé has been made of the women in executive and managerial positions, and to do so obviously would be a gigantic task. However, the numbers reported in the census give a background for discovering in some measure which are the more usual, which the more unusual, of managerial, official, professional, and semiprofessional positions, and frequent stories of the activities of individual women are to be found in various periodicals.

It may be of interest to mention two women widely variant in talents and interests who are among those who have pioneered in

quite different lines of management; one of these is of special interest to labor and to management for her unusual handling of a difficult business, while the other is of importance because of her original work in the field of efficiency engineering.

At the death of her father, Miss Josephine Roche became the proprietor of the Rocky Mountain Fuel Co. in Colorado, and she determined to control its management herself and direct it along lines of cooperation with the mine operatives.

The company issued in 1928 an agreement reading in part:

* * * Our purposes are: To promote and establish industrial justice, to substitute reason for violence, confidence for misunderstanding, integrity and good faith for dishonest practices, and a union of effort for the chaos of the present economic warfare; to avoid needless and wasteful strikes and lockouts through the investigation and correction of their underlying causes; to establish genuine collective bargaining between mine workers and operators through free and independent organization; to stabilize employment, production, and markets through cooperative endeavor and the aid of science; to assure mine workers and operators continuing mutual benefit and consumers a dependable supply of coal at reasonable and uniform prices; to defend our joint undertaking against every conspiracy or vicious practice which seeks to destroy it; and in all other respects to enlist public confidence and support by safeguarding the public interest.

At the close of 1929, when other companies were suffering, this one reported an increase in production of 29 percent, with a decrease of 19 cents per ton in mine costs; an increase of seven-tenths of a ton in daily production per man; and an increase of over one-fourth in average of annual earnings per worker. In addition, the company had the advantage of staunch union support and no strikes.

Miss Roche was appointed assistant secretary of the Treasury in 1934.¹ Her activities included supervision of the United States Public Health Service, chairmanship of the Interdepartmental Committee on Health and Welfare, and chairmanship of the National Youth Administration.

The other woman, Dr. Lillian M. Gilbreth, is a consulting engineer, and her prominence in the field of scientific management has been unique. Having taken a doctor's degree at Brown University, she has been active in the Taylor Society, and is an honorary member of the Society of Industrial Engineers. She collaborated in certain of her husband's publications and has herself done some writing in this field; for example, the article on scientific management in the New International Encyclopedia is from her pen.

¹ In 1937 she resigned to return to directing the affairs of her coal company. More recently she has had a large share in directing health activities on a national scale.

IX. VARIOUS CONNECTIONS OF WOMEN WITH THE INDUSTRIAL AND LABOR WORLD—Continued

(c) Women's labor organizations and some of their leaders.²

It is a natural human trait for persons having like interests to form associations. Those who pursued various occupations in medieval times had their craft guilds, and today it is considered a helpful thing for those practicing any type of profession to come in contact through organization with others similarly engaged—be it doctors, lawyers, financiers, undertakers, press representatives, road builders, dentists, or any of those in a host of other types of work.

When women began to enter factory occupations they did likewise. The earliest information we have of the organization of employed women for better work conditions goes back to about 1825, although the names of a few women workers stand out before that period. For example, Hannah Borden, whose expert weaving even when she was quite a little girl led her father to find a place for her in a mill in Fall River, Mass., of which he was a stockholder.

The girls of that day were quite spirited in demanding improvement in their work conditions. When a cotton mill in Paterson, N. J., changed the dinner hour from 12 to 1 o'clock, the women and child workers left at noon; this was in 1828, and was the first recorded strike among women in this industry for better conditions. About 6 years later a female protective association was formed in Lowell, Mass., and 2,500 girls marched through the streets singing:

Oh, isn't it a pity such a pretty girl as I
Should be sent into the factory to pine away and die.

These girls refused overtures from their employers in any way except through their union officers, and declared, "As our fathers resisted * * * the lordly avarice of the British ministry, so we, their daughters, never will bear the yoke which has been prepared for us." At this time some of the mill owners had constructed boarding houses, which often were very crowded and badly aired. Tuberculosis was prevalent. The boarding-house keepers had an arrangement with certain mill owners that half the girls' board would be paid them directly by the factory out of the girls' wages.

Although working women formed organizations in other localities there was no concerted movement at that time. In 1833 seamstresses and tailoresses in Baltimore organized; in 1835 the Female Improvement Society was formed in Philadelphia by members of the sewing

²The following books would be of interest in connection with this subject: U. S. Bureau of Labor. Report on Condition of Woman and Child Wage Earnings in the United States, Vol. X, History of Women in Trade Unions, by John B. Andrews and W. D. P. Bliss, 1911. Henry, Alice. Women and the Labor Movement. George H. Doran Co., New York, 1923. Wolfson, Theresa. The Woman Worker and the Trade Unions. International Publishers, New York, 1926. Wolman, Leo. The Growth of American Trade Unions, 1880-1923, ch. V. National Bureau of Economic Research, New York, 1924. Lorwin, Lewis L. and Jean A. Flexner. The American Federation of Labor. The Brookings Institution, 1933.

trades; the shoe binders formed The Female Society of Lynn and Vicinity for the Protection and Promotion of Female Industry; in 1851 a shirt-sewers' cooperative union was formed in New York, and the women who were members of it quoted a poem, Hood's Song of the Shirt, as applying to themselves:

Sewing at oncé with a double thread,
A shroud as well as a shirt.

The labor-reform associations sometimes worked for legislation establishing better conditions for women workers. In 1845 Miss Sarah G. Bagley, then president of the Lowell Female Labor Reform Association, testified before the Massachusetts legislative committee as to conditions in the textile mills. This is said to have been the first official investigation of the condition of adult laborers, and was a move largely inspired by the activities of women.

In 1869 the first convention was held by the Daughters of St. Crispin, a shoe-workers' organization, which appears to be the earliest recorded national trade-union of women. In this year, also, women first became members of one of the 8-hour leagues that had grown up—that of Boston.

In 1881 women were allowed to become regular members in the early men's union organized on a national scale and known as the Knights of Labor; 4 years later a department of women's work was created which employed an investigator, Mrs. Leonora M. Barry. In the first year she visited 30 cities and spoke over 100 times; in 3 years the women members numbered 12,000, with a great variety of trades represented. Records of the Knights of Labor were printed and afford the basis of a consistent organization history. It has been estimated that by 1923 about 250,000 women were organized; another estimate is that in 1920 there were 396,000 women members of various trade-unions (women's, and men's and women's).³

In 1903 the National Women's Trade Union League was formed, its first convention attended by seven persons, and its first president being Mrs. Mary Morton Kehew, of Boston. Perhaps the woman most responsible for its formation and growth was Mrs. Raymond Robins, who for many years gave untiring service and financial aid to the development of the organization. She was its president until 1922, when she became honorary president, the active office then being held in succession by Maud Swartz, of the International Typographical Union, and Rose Schneiderman, of the United Hatters, Cap, and Millinery Workers, reelected in 1936. The National Women's Trade Union League of America has 2 State leagues and is organized in 19 cities. The proceedings of its 1936 convention, held in Washington, D. C., at which 21 trades were represented, list as affiliated with the league 35 national and international unions, 11 State labor bodies, and The Trades and Labor Congress of Canada. The league now has more than a million members with direct or affiliated membership in 35 trades.

Nearly all trade unions having any women members are affiliated with the National Women's Trade Union League of America—both locally and nationally. The Glove Workers' International Union has had as its president Agnes Nestor; she had formerly served as its

³ Wolfson, Theresa, and Wolman, Leo. See footnote on preceding page.

secretary-treasurer, an office later held for many years by Elisabeth Christman (now secretary-treasurer of the National Women's Trade Union League). Another woman—Sarah Conboy—was for several years following 1915 secretary-treasurer of the United Textile Workers of America; and since 1923 Julia O'Connor has been president of the Telephone Operators' Department of the International Brotherhood of Electrical Workers. At all times since its formation a woman has been on the board of the Boot and Shoe Workers' International Union; the International Ladies' Garment Workers, the Amalgamated Clothing Workers, the American Federation of Teachers, and unions of Federal employes are other organizations of national scope that have had women in national offices. The American Federation of Labor and the newly formed Committee for Industrial Organization have women organizers. Many more organizations and very many interesting women who have been active in labor organizations could be listed, but the space of a large volume would be required to make such information complete.

IX. VARIOUS CONNECTIONS OF WOMEN WITH THE INDUSTRIAL AND LABOR WORLD—Continued

(d) Women in official administrative labor positions and women who have furthered movements for workers.

That women are taking their part as officials and inspectors is evident from the figures of the 1930 census, which report 980 women as State, 5,855 as county, and 3,109 as city officials and inspectors. Naturally their duties and the fields they cover are varied.

Some of these women inspect factories under the State labor laws or regulations to insure safe and healthful conditions of work for women and children. The whole budget of a State for factory inspection—for both men and women—ordinarily constitutes a small proportion of all that is spent by the State under the head of safety; of the expenditures for protection of persons and property reported by the United States Department of Commerce in 1931, only 2.6 percent was for factory inspection, a very small amount when the large groups of men and women workers are considered.⁴

Today there is an increasing number of women executives in State labor departments. The first woman to hold such an executive position was Mrs. Florence Kelley, appointed by the Governor of Illinois in 1893 as chief of factory inspectors in the State. A graduate of Cornell University and a member of the Illinois bar at a time when women university graduates were few and women lawyers very unusual, she did a thorough job for 4 years. After that time her originality, keen mind, and forceful personality were active for more than 30 years in the local, State, and Federal campaigns for labor laws and various other types of social legislation.

Present or past directors of the Women's Bureau and the earlier organizations that preceded it in the United States Department of Labor will be given somewhat more detailed consideration in chapter X;⁵ they include Marie L. Obenauer, Mary van Kleeck, and Mary Anderson; those of the Children's Bureau include Julia Lathrop, Grace Abbott, and Katharine Lenroot.

One great industrial State had a woman as commissioner of labor, Frances Perkins, of New York. In the same State, Nelle Swartz has been a member of the industrial commission and Frieda Miller director of the division of women in industry and minimum wage.⁶

Obviously, it is not possible even to list here the women who are in labor departments and factory inspection in all the States. The Bureau of Labor Statistics lists such women in at least 33 States and the District of Columbia, though of course their duties vary widely and their official status is scarcely ever the same in any two cases.⁷

⁴ U. S. Bureau of the Census. *Financial Statistics of States, 1931*. Table 11, pp. 72, 74.

⁵ See p. 83.

⁶ Miss Miller was appointed industrial commissioner of the State of New York while this bulletin was in press.

⁷ U. S. Bureau of Labor Statistics. *Bul. No. 621, Labor Offices in the United States and in Canada*. 1936.

In addition to these officials, and to those active in the organizations of their own trades, there have been other socially-minded persons who have worked or have formed organizations for the improvement of women's working conditions. As early as 1828 Matthew Carey, "an independent and public-spirited citizen," called attention to the low wages paid women in Philadelphia, and was a moving spirit in the organization of the women there. At about the same time or a little later Frances Wright was writing in the interest of such movements, and after the Civil War Grace Dodge was instrumental in organizing working women's clubs. In 1866 the Working Women's Protective Union was formed to aid working women in the collection of their wages. In the present time Margaret Dreier Robins and her sister, Mary E. Dreier, have given long and devoted personal energy as well as wealth in furthering the purposes of the Women's Trade Union League.

In 1886 the Working Women's Society of New York was formed with the help of Josephine Shaw Lowell and others; it aimed to further working women's organization, and to educate the public to the need of better conditions. From this grew the National Consumers' League, first arising in local branches in New York, Boston, Philadelphia, and elsewhere, and formed on the principle of interesting consumers to use only goods made under satisfactory conditions; this standard was determined after careful investigation, and approved firms were placed on a "white list" and allowed to put the distinguishing label of the society on their goods so that buyers would be sure of it. Among the persons active in forming the New York branch, in addition to Mrs. Lowell, were Maud Nathan, later its president, and Dr. Mary Putnam Jacobi, daughter of the publisher, George P. Putnam, and the first woman to become a member of the New York Academy of Medicine.

The group in New York was first formed after an investigation reported by Alice Woodbridge in the winter of 1889-90. Ten years later the league became national in scope, with Mrs. Florence Kelley as its executive secretary. Among the outstanding white lists there were prepared those for candy and hosiery manufacturers. The league was aided by two prominent lawyers, Felix Frankfurter and Louis D. Brandeis; Josephine Goldmark prepared briefs for its cases and published the results of her brilliant researches on the effects of fatigue; Carola Woerishoffer gave up a summer trip abroad to work in laundries to ascertain for the league the conditions prevailing there, and Louise Lockwood did similar work in the silk industry.

Many others could be mentioned, but one woman who is a pioneer in a scientific field must be included at all events—Dr. Alice Hamilton, who as a professor in the Harvard Medical School has devoted years of investigation and research to the problem of occupational diseases, publishing from time to time the results of her findings.

X. WORK OF THE WOMEN'S BUREAU

(a) Antecedents of the Women's Bureau, and formation and personnel of the bureau.

In the decade from 1900 to 1910 there was a growing recognition that women were increasing rapidly in industrial pursuits and that many problems confronting working women should be the concern of the Federal Government itself.

Almost the first official utterance of the National Women's Trade Union League, which had been created at the Boston convention of the American Federation of Labor in 1903, was the passing of a resolution requesting the Federal Government to make an investigation of women in industry. In 1906 three Chicago women—Mrs. Raymond Robins, Miss Jane Addams, and Miss Mary McDowell—went to Washington and appeared before a congressional committee to ask for an appropriation to make a special investigation of women in industry. The appropriation finally was granted by Congress, and the investigation was conducted by Charles P. Neill, then Commissioner of Labor in the Department of Commerce and Labor. The investigation extended over a period of 3 years, from 1907 through 1909, and covered many of the industries in which women were employed. The report was published in 19 volumes and laid the basis for an insistent demand for a bureau in the Government whose concern should be the working woman. In 1913 the Department of Labor was separated from the Department of Commerce.

A women's division was established as a subdivision of the Bureau of Labor Statistics. It was first headed by Marie L. Obenauer,¹ and the reports issued by her division in this early period give evidence of a thorough and scientific approach to the work. However, her efforts for women were placed under a heavy handicap by the form of organization, for she was but one of five executives in the bureau, the other four being men. Under these circumstances it was natural that the groups interested in employment conditions affecting women should continue their work for the establishment of a separate women's bureau.

The American Federation of Labor at its conventions passed resolutions asking for the creation of a women's bureau, and the president, Samuel Gompers, and the legislative committee were active in the agitation for such a bureau. In 1916 Representative Casey, of Pennsylvania, introduced in Congress a bill to create a women's division in the Department of Labor, but this bill did not pass.

In 1918 the increased employment of women and the Nation's great need of their work led to the institution of a Woman in Industry Service, headed by Mary van Kleeck. Having been director of the committee on women's work and of industrial studies under the Russell Sage Foundation, Miss van Kleeck brought experience in

¹ Mary Conyngton succeeded Miss Obenauer in this office.

investigation as well as a brilliant mind to her task, and when the war was over she urged upon the attention of the country's leaders the permanency of women's entrance into various occupations and the consequent need for a Federal body that should make continual study of the situation of employed women.

In this she was supported by organizations of those who saw the importance of such a move. The joint committee of the Senate and House heard representatives of the following organizations in the interest of forming the Women's Bureau:

- American Federation of Labor.
- National Women's Trade Union League.
- National Federation of Federal Employees.
- National Consumers' League.
- National League of Women Voters.
- National Young Women's Christian Association.
- United States Department of Labor.
- Children's Bureau, United States Department of Labor.
- Division of Industrial Studies of the Russell Sage Foundation.
- University of Chicago Settlement.
- Women's Executive Committees of the National Republican Committee and National Democratic Committee.
- National Republican Congressional Committee.

Accordingly, in 1920, the Women's Bureau was established in its present form, created to—

* * * formulate standards and policies which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency, and advance their opportunities for profitable employment.

In harmony with the policy of the Government, the Women's Bureau has no mandatory powers nor any laws to administer. However, it is the duty of the Federal Government to make sure that in our eagerness for expansion of industries and the ever-growing demand for more production we do not neglect the important human resources of our country, and do not exploit women. The declaration of standards and policies by the Women's Bureau has the force inherent in facts scientifically secured and presented and tends to influence the industrial standards of the several States.

Since its formation, the bureau has been headed by Mary Anderson, who had been assistant director when Miss van Kleeck was director of the then Woman in Industry Service, and had had years of experience with the Boot and Shoe Workers' Union and the Women's Trade Union League. The assistant director appointed was Agnes L. Peterson, who had served as industrial supervisor with Miss van Kleeck, and formerly had been a superintendent of the first bureau of women and children organized in any State.²

The Children's Bureau was organized in the United States Department of Labor much earlier than the Women's Bureau, and during its history has been headed by three outstanding women—first, Julia Lathrop, later Grace Abbott, and at present Katharine Lenroot. The work of these three directors is known wherever the expert care of the child is sought, be it the dependent or delinquent ward of the State, the child in industry, or the child in the home.

² The State of Minnesota. Bertha M. Nienburg succeeded Miss Peterson in the Women's Bureau of the United States Department of Labor in 1934.

X. WORK OF THE WOMEN'S BUREAU—Continued

(b), (c), and (d).

For use in this connection, make your own selections from Women's Bureau Bulletin 84, Fact Finding with the Women's Bureau. If you have not a copy of this bulletin, it can be obtained by request. Sections especially suggested are those beginning on pages 1, 9, 28, and 32. See also the Women's Bureau periodical, *The Woman Worker*, published every two months.

APPENDIX

PUBLICATIONS OF THE WOMEN'S BUREAU

Bulletins may be ordered from the Superintendent of Public Documents, Washington, D. C., at prices listed. A discount of 25 percent on orders of 100 or more copies is allowed. Single copies of the bulletins or several copies for special educational purposes may be secured through the Women's Bureau without charge as long as the free supply lasts. Mimeographed reports are obtainable only from the Women's Bureau.

RECOMMENDED STANDARDS

Bul. No.

- 87. Sanitary Drinking Facilities. 1931. 10c.
 - 94. State Requirements for Industrial Lighting. 1932. 10c.
 - 99. The Installation and Maintenance of Toilet Facilities in Places of Employment. 1933. 25c.
 - 112. Standards of Placement Agencies for Household Employees. 1934. 20c.
- See also Health and Safety, bul. 136; Hours, Wages, and Working Conditions, bul. 142.

HOURS, WAGES, AND WORKING CONDITIONS

- 43. Standard and Scheduled Hours of Work for Women in Industry. 1925. 15c.
- 47. Women in the Fruit-Growing and Canning Industries in the State of Washington. 1926. 40c.
- 67. Women Workers in Flint, Mich. 1929. 15c.
- 70. Negro Women in Industry in 15 States. 1929. 15c.
- 72. Conditions of Work in Spin Rooms. 1929. 10c.
- 76. Women in 5-and-10-Cent Stores and Limited-Price Chain Department Stores. 1930. 10c.
- 78. A Survey of Laundries and Their Women Workers in 23 Cities. 1930. 30c.
- 80. Women in Florida Industries. 1930. 20c.
- 82. The Employment of Women in the Pineapple Canneries of Hawaii. 1930. 15c.
- 85. Wages of Women in 13 States (1920-1925). 1931. 35c.
- 88. The Employment of Women in Slaughtering and Meat Packing. 1932. 40c.
- 93. Household Employment in Philadelphia. 1932. 10c.
- 96. Women Office Workers in Philadelphia. 1932. 10c.
- 106. Household Employment in Chicago. 1933. 10c.
- 109. The Employment of Women in the Sewing Trades of Connecticut. (Final report.) 1935. 5c.
- 111. Hours, Earnings, and Employment in Cotton Mills. 1933. 10c.
- 118. The Employment of Women in Puerto Rico. 1934. 5c.
- 119. Hours and Earnings in the Leather-Glove Industry. 1934. 5c.
- 120. The Employment of Women in Offices. 1934. 15c.
- 121. A Survey of the Shoe Industry in New Hampshire. 1935. 10c.
- 122. Variations in Wage Rates Under Corresponding Conditions. 1935. 10c.
- 123. Employment in Hotels and Restaurants. 1936. 15c.
- 124. Women in Arkansas Industries. 1935. 5c.
- 125. The Employment of Women in Department Stores. 1936. 10c.
- 126. Women in Texas Industries. 1936. 15c.
- 127. Hours and Earnings in Tobacco Stemmeries. 1934. 5c.
- 130. Employed Women Under N. R. A. Codes. 1935. 20c.
- 132. Women Who Work in Offices. 1935. 5c.
- 133. Employment Conditions in Beauty Shops. 1935. 10c.
- 142. The Economic Problems of the Women of the Virgin Islands of the United States. 1936. 10c.
- 143. Factors Affecting Wages in Power Laundries. 1936. 10c.
- 149. Employment of Women in Tennessee Industries. 1937. 10c.
- 150. Women's Employment in West Virginia. 1937. 10c.
- 152. Differences in Earnings of Women and Men. 1938. 10c.

153. Women's Hours and Wages in the District of Columbia in 1937. 1937. 10c.
162. Women in Kentucky Industries, 1937. 1938. 10c.
163. Hours and Earnings in Certain Men's-Wear Industries. 1. Work Clothing; Work Shirts; Dress Shirts, 10c. 2. Knit Underwear; Woven Underwear. 5c. 3. Seamless Hosiery. 5c. 4. Welt Shoes. 5c. 5. Raincoats; Sports Jackets. (In press.) 6. Caps and Cloth Hats; Neckwear; Work and Knit Gloves; Handkerchiefs. (In press.) 1938.
- Short Hours Pay. 1937. (Leaflet.)
- Women's Wages in Michigan Industries. 1935. (Mimeog.)
- Employment of Women in Delaware. 1936. (Mimeog.)
- See also Occupations and Opportunities, bul. 117; Lost Time and Labor Turnover, bul. 52; Legislation, buls. 130, 145; Employment Fluctuation, buls. 92, 95, 103, 108; Variations in Hours and Methods of Production, buls. 100, 105, 107, 116, 141; Industrial Home Work, buls. 128, 131; Miscellaneous, buls. 115, 155, 165.

LOST TIME AND LABOR TURNOVER

52. Lost Time and Labor Turnover in Cotton Mills. 1926. 35c.
69. Causes of Absence for Men and for Women in Four Cotton Mills. 1929. 5c.
- See also Hours, Wages, and Working Conditions, bul. 72.

OCCUPATIONS AND OPPORTUNITIES

50. Effects of Applied Research Upon the Employment Opportunities of American Women. 1926. 10c.
53. The Status of Women in Government Service in 1925. 1926. 15c.
68. Summary: The Effects of Labor Legislation on the Employment Opportunities of Women. 1928. 10c.
74. The Immigrant Woman and Her Job. 1930. 30c.
104. The Occupational Progress of Women, 1910 to 1930. 1933. 10c.
117. The Age Factor as it Relates to Women in Business and the Professions. 1934. 10c.
140. Reemployment of New England Women in Private Industry. 1936. 15c. Labor Supply and Demand in the Service Industries. (Leaflet.)
- See also Recommended Standards, bul. 112; Hours, Wages, and Working Conditions, buls. 47, 70, 76, 78, 82, 88, 93, 96, 106, 109, 111, 118, 119, 120, 121, 125, 127, 132, 133, 142, 143; Family Status and Home Responsibilities, bul. 77; Health and Safety, bul. 101; Employment Fluctuation, buls. 95, 103; Changes in Hours and Methods of Production, buls. 100, 107, 110; Industrial Home Work, buls. 128, 131, 135; Miscellaneous, buls. 115, 146, 155; Bibliographies, buls. 134, 154.

FAMILY STATUS AND HOME RESPONSIBILITIES

75. What the Wage-Earning Woman Contributes to Family Support. 1929. 5c.
77. A Study of Two Groups of Denver Married Women Applying for Jobs. 1929. 5c.
148. The Employed Woman Homemaker in the United States. 1936. 10c.
- Gainful Employment of Married Women. 1936. Revised August 1936. (Mimeog.)
- Effects of Dismissing Married Persons from the Civil Service, March 1936. (Mimeog.)
- See also Hours, Wages, and Working Conditions, buls. 47, 88, 124; Occupations and Opportunities, bul. 74; Employment Fluctuation, buls. 92, 108; Miscellaneous, bul. 155.

HEALTH AND SAFETY

60. Industrial Accidents to Women in New Jersey, Ohio, and Wisconsin. 1927. 45c.
81. Industrial Accidents to Men and Women. 1930. 15c.
101. The Employment of Women in Vitreous Enameling. 1932. 10c.
102. Industrial Injuries to Women in 1928 and 1929 Compared with Injuries to Men. 1933. 10c.

114. State Reporting of Occupational Disease, Including a Survey of Legislation Applying to Women. 1934. 10c.
129. Industrial Injuries to Women in 1930 and 1931 Compared with Injuries to Men. 1935. 10c.
136. The Health and Safety of Women in Industry. 1935. 5c.
147. Summary of State Reports of Occupational Diseases with a Survey of Preventive Legislation, 1932 to 1934. 1936. 10c.
151. Injuries to Women in Personal Service Occupations in Ohio. 1937. 10c.
160. Industrial Injuries to Women and Men in 1932, 1933, and 1934. 10c.
- See also Recommended Standards, buls. 87, 94, 99; Hours, Wages, and Working Conditions, bul. 121; Miscellaneous, bul. 79; Bibliographies, bul. 71; Employment Fluctuation and Unemployment, bul. 158.

LEGISLATION

61. The Development of Minimum-Wage Laws in the United States, 1912 to 1927. 1928. 90c.
- 66-I.*History of Labor Legislation for Women in Three States. 1929. 15c.
- 66-II. Chronological Development of Labor Legislation for Women in the United States. 1929. 15c.
137. Summary of State Hour Laws for Women and Minimum-Wage Rates. 1936. 10c.
145. Women's Wages Prior and Subsequent to the Ohio Minimum-Wage Law. 1936. 10c.
156. State Labor Laws for Women, December 31, 1937. I. Summary. 5c. II. Hours. 10c.
157. Legal Status of Women in the United States of America. Issued State by State, in no special order, to be assembled later. Separates, 5c.
- Why Legislate Living Wages for Women Workers? March 1935. (Leaflet.)
- The High Cost of Low Wages. 1938. (Leaflet.)
- Mimeographed Material on History of Court Cases of the Minimum-Wage Laws of New York, Ohio, and Washington. Bulletin pending.
- The Benefits of Minimum-Wage Legislation for Women. March 1937. (Mimeog.)
- Factors to be Considered in Preparing Minimum-Wage Budgets for Women. 1937. (Mimeog.)
- See also Recommended Standards, buls. 87, 94, 99, 112; Hours, Wages, and Working Conditions, bul. 130; Occupations and Opportunities, bul. 68; Health and Safety, buls. 64, 114, 147; Miscellaneous, bul. 155.

EMPLOYMENT FLUCTUATION AND UNEMPLOYMENT

73. Variations in Employment Trends of Women and Men. 1930. 50c.
83. Fluctuation of Employment in the Radio Industry. 1931. 15c.
92. Wage-Earning Women and the Industrial Conditions of 1930. A Survey of South Bend. 1932. 15c.
95. Bookkeepers, Stenographers, and Office Clerks in Ohio, 1914 to 1929. 1932. 10c.
103. Women Workers in the Third Year of the Depression. 1933. 5c.
108. The Effects of the Depression on Wage Earners' Families. 1936. 5c.
113. Employment Fluctuations and Unemployment of Women, 1928 to 1931. 1933. 30c.
139. Women Unemployed Seeking Relief in 1933. 1936. 5c.
158. Unattached Women on Relief in Chicago, 1937. 1938. 15c.
159. Trends in the Employment of Women, 1918-1936. 1938. 10c.
- See also Hours, Wages, and Working Conditions, buls. 88, 121; Occupations and Opportunities, bul. 140; Changes in Hours and Methods of Production, buls. 100, 141; Miscellaneous, bul. 155.

CHANGES IN HOURS AND METHODS OF PRODUCTION

100. The Effects on Women of Changing Conditions in the Cigar and Cigarette Industries. 1932. 15c.
105. A Study of a Change from 8 to 6 Hours of Work. 1933. 5c.

(III)

107. Technological Changes in Relation to Women's Employment. 1935. 10c.
 110. The Change from Manual to Dial Operation in the Telephone Industry. 1933. 5c.
 116. A Study of a Change from One Shift of 9 hours to Two Shifts of 6 Hours Each. 1934. 5c.
 141. Piece Work in the Silk Dress Industry. 1936. 10c.
 Memorandum on the Practicability of Setting Maximum Standards of Work in Cotton Mills Operating Under the Stretch-Out System. 1933. (Leaflet.)
 See also Hours, Wages, and Working Conditions, buls. 96, 120, 125; Miscellaneous, bul. 155.

INDUSTRIAL HOME WORK

128. Potential Earning Power of Southern Mountaineer Handicraft. 1935. 10c.
 131. Industrial Home Work in Rhode Island. 1935. 5c.
 135. The Commercialization of the Home Through Industrial Home Work. 1935. 5c.
 The Price of Industrial Home Work. 1936. (Leaflet.)
 See also Hours, Wages, and Working Conditions, buls. 109, 118, 119, 126; Occupations and Opportunities, bul. 74.

MISCELLANEOUS

84. Fact Finding with the Women's Bureau. 1931. 10c.
 86. Activities of the Women's Bureau of the United States. 1931. 5c.
 89. The Industrial Experience of Women Workers at the Summer Schools, 1928 to 1930. 1931. 20c.
 115. Women at Work. 1933. 10c.
 146. A Policy Insuring Value to the Woman Buyer and a Livelihood to Apparel Makers. 1936. 10c.
 155. Women in the Economy of the United States. 1937. 15c.
 164. Women in Industry. A Series of Papers to Aid Study Groups. 1938. (Revision of Bulletin 91.) 1938.
 165. The Negro Woman Worker. (In press.)
 The Woman Worker, published every 2 months. 25c a year.

BIBLIOGRAPHIES

71. Selected References on the Health of Women in Industry. 1929. 5c.
 134. Summaries of Studies on the Economic Status of Women. 1935. 5c.
 154. Reading List of References on Household Employment. 1937. 10c.

EXHIBITS

Material starred (*) is sent free for permanent use. Charts for sale may be secured from the Superintendent of Documents, Washington, D. C. Other exhibits, including motion pictures, are lent free, but borrowers must pay any transportation charges.

Motion Pictures.

(Silent, both 16-mm and 35-mm width of film.)

1. What's in a Dress. Deals with old problems in the dress industry and new ways of solving them. One and one-half reels.
2. Behind the Scenes in the Machine Age. Stresses certain technological changes affecting women workers and some conditions preventive of human waste in industry. Three reels.
8. Within the Gates. Illustrates through the story of "Dad's Shirt" women's part in mass production and business and shows the need to improve standards for their employment. Two reels.

Model.

Steps to Safety and Efficiency for Wage-Earning Women. Consists of 3 panels with 7 scenes. Shows that good standards for employed women are beneficial and widespread in effect, contributing to the well-being of industry, the workers, the home, the family, the race, and the Nation. Particularly suitable for large conventions. Size, 6½ feet high, 10 feet wide, 4 feet deep. Weight, 486 lbs.

***Maps.**

Four colored maps show hour and minimum-wage laws for women workers in the various States. In two sizes. For wall use, 39 by 24 inches; for desk use, 8 by 10½ inches.

Charts.

(Each 24 by 32 in.)

1. Women With Gainful Occupations. Bar chart showing the occupational distribution and progress of women, 1910 to 1930, with definite numbers and percentages. 30c.
2. Proportion of Men and Women With Gainful Occupations, 1870-1930. Pictorial chart. 10c.
3. Number of Men and Women With Gainful Occupations, 1870-1930. Pictorial chart. 10c.
4. Occupations of Women, 1930. Pictorial chart. 10c.
5. Pictorial charts on office workers—six on women in several cities and one on men and women in Chicago. Full set, seven charts, \$1.05 or individual charts as follows:

Women Office Workers:

- Monthly Salary Rate, by Occupation. 15c.
- Monthly Salary Rate, by Type of Office. 15c.
- Median of Monthly Salary Rates, by Occupation. 15c.
- Median of Monthly Salary Rates, by City. 15c.
- Median of Monthly Salary Rates, by Age and Experience. 15c.
- Most Common Hour Schedule. 15c.
- Office Workers in Chicago—Median of Monthly Salary Rates. 15c.

Posters.

- *1. America Will Be as Strong as Her Women. 17 by 24 inches.
2. Minimum Standards for Employment of Women in Industry. 28 by 38 inches. 10c.
- *3. The Woman Who Earns—Keeping Her Work Place Safe and Comfortable. Two posters, each 30 by 44 inches.

***Display of Bulletins.**

On request sample bulletins will be arranged for use on special occasions, according to appropriate subjects.

(v)

