

U. S. DEPARTMENT OF LABOR

W. N. DOAK, Secretary

WOMEN'S BUREAU

MARY ANDERSON, Director

BULLETIN OF THE WOMEN'S BUREAU, NO. 84

**FACT FINDING
WITH THE WOMEN'S BUREAU**



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UNITED STATES
DEPARTMENT OF LABOR
WASHINGTON, D. C.

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LETTER OF TRANSMITTAL

UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, December 9, 1930.

SIR: I have the honor to submit herewith a collection of articles on the activities and findings of this bureau to which has been given the title "Fact Finding with the Women's Bureau."

There is considerable demand for informative material of a character somewhat more instructive and up to date than the bureau's "Radio Talks" and "Short Talks," and I believe that the inclusion between covers of the articles here assembled is in the interest of efficiency.

Various members of the bureau's staff have prepared the text matter of this bulletin. The drawings were made from sketches by Carrie Ivie, of the division of public information.

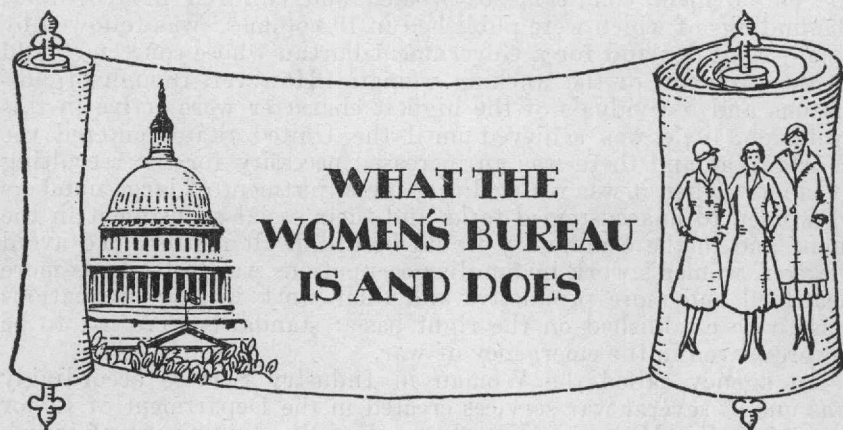
Respectfully submitted.

MARY ANDERSON, *Director.*

HON. W. N. DOAK,
Secretary of Labor.

v

FACT FINDING WITH THE WOMEN'S BUREAU



The work of women has been necessary to the human race in meeting the elemental needs of shelter, food, and clothing since the beginning of time. The development of the factory system caused much of the work done in the home to be taken over by establishments organized for the purpose, and from small neighborhood groups these establishments have evolved to the industrial system as it exists to-day.

When women followed the industries out of the home and into the factory, the real change for them was not the work itself but the way in which the work was done and the change from an unpaid to a paid occupation. Women were transformed from breadwinners taken for granted within the home to paid breadwinners outside the home.

In the United States there has been for well over a century a large and important class of employed women, and to these have been added within comparatively recent years considerable numbers of women from families in which the earnings of father or husband could not keep pace with the rise in the cost of living, and considerable numbers of women who have felt, in this age of changed relations between the sexes and the broadening of narrow convention, the right and the need of independent careers.

This evolution has not meant that woman has changed physically. It is still true that for the future of the race, if not for the sake of the existing generation itself, women must be guarded against overstrain, whether acute or of slow development, and exploitation by the unfair employer who is willing to wear out, instead of to conserve, his labor supply. Because women are in a weaker position economically than are men, being unable to dictate the terms of their employment, and because they still must carry on the maintenance of the home and the care of children, there is in all civilized countries a constant effort to raise the standards of their employment, whether the women themselves take action or not.

As Federal and other censuses in the United States made apparent the rapid increase in the number of women in industrial pursuits, it seemed imperative that the problems of these women should become the concern of the National Government. A wide investigation of the employment conditions of women and children in 1907-1909, the findings of which were published in 19 volumes,¹ was followed by an insistent demand for a Government bureau whose concern should be the problems of the working woman. However, though organizations and individuals of the highest character were active in this agitation, little was achieved until the United States entered the World War and there was an increased necessity for the recruiting of labor. Then it was realized that the adjustment of large numbers of women to unaccustomed tasks and their social adjustment in the home and in the community would be a difficult matter. To avoid disaster, women's work in familiar occupations was to be made more healthful and more productive and their work in new occupations was to be established on the right basis; standards were not to be lowered, even in the emergency of war.

An agency called the Woman in Industry Service accordingly was one of several war services created in the Department of Labor in 1918. Miss Mary van Kleeck, head of the department of industrial studies of the Russell Sage Foundation, was chosen to direct the work, and Miss Mary Anderson, field organizer for the National Women's Trade Union League, was appointed assistant director. During the short war existence of the Woman in Industry Service its most important achievement was the formulating of standards to govern the employment of women. (See pp. 9-11.)

The coming of peace showed no decline in the need for a clear policy and definite information about the conditions under which women should be employed, so the Woman in Industry Service was continued through 1919, its title being changed to Women's Bureau, and in June, 1920, it was made permanent by act of Congress. Upon the resignation of Miss van Kleeck in 1919, Miss Anderson was appointed director and she has been reappointed by each succeeding administration.

Cooperation with State departments of labor always has constituted an important feature in the bureau's activities. In many instances the States are not equipped for work that the bureau's authority and experience enable it to accomplish, and in turn the States can be of the greatest assistance in various bureau projects.

Under the United States form of government, each State makes its own laws—in some cases the best and the most backward legislation is found in adjoining States—and the Federal Government, better than any one State, is in a position to gather comparable material from the different sections of the country and make it available to all. Its action necessarily is less direct than that of the States, but it is broad in scope and has the prestige of national administration.

In harmony with the policy of the Government, the Women's Bureau has no mandatory powers nor any laws to administer. However, its declarations of standards and policies have the force always inherent in facts scientifically secured and presented. The director

¹ U. S. Bureau of Labor. Report on Condition of Woman and Child Wage Earners in the United States. U. S. Government Printing Office, Washington, 1912.

and assistant director are much in demand for addresses and conferences; numerous requests for data on the subject of working women, for educational or legislative purposes, and for assistance of various sorts, are complied with; the reports that publish the findings of surveys have an extensive mailing list, including libraries and universities; and its department of public information prepares articles about the work of the bureau, its standards for women's employment, and the findings of its surveys, and lends to organizations in various parts of the world and displays at important expositions exhibit material illustrative of the bureau's work and the high lights of women's employment.

An important service rendered by the bureau in 1923 and 1926 was its industrial conferences, at which the conditions that affect women, from the point of view of the employer, the consumer, the woman worker, the trade-union, the economist, the church, the physician, the Government, and the general public, were discussed under expert leadership.

In addition to reports of wages, hours, and working conditions in 20 States and a number of specific industries, the bureau publications include studies of occupational distribution, accidents, fluctuation in employment, family responsibilities, legislation, and a variety of other subjects—a total of eighty-odd bulletins and more than 7,100 pages in 12 years. (See list of publications at end of this bulletin.)

In all the studies, it undertakes the bureau has the courteous cooperation of employers, workers, State officials, and other agencies in possession of information essential to the surveys.

No State survey is undertaken except by invitation of the State authorities. On receipt of such invitation, if time and money permit, agents are sent into the State to visit a representative number of factories, stores, laundries, and other establishments employing women, and to interview working women themselves. Permission to copy pay rolls is given by the employers, who assist in the selection of a representative week in which neither undertime nor overtime has occurred in excess. In some cases the corresponding pay roll for the year before is asked for, to show changes in employment and earnings, and generally the year's earnings are taken off for a selected group of steady workers who have been a year or more with the firm and have worked at least 44 weeks.

While the agents of the bureau are copying the pay-roll figures, cards are distributed among the women then at work in the establishment on which the women record name, occupation, experience, age, nativity, whether living at home or boarding, marital condition, and so forth.

The agents also inspect the place of work, noting ventilation, lighting, cleanliness and order, safety, seating arrangements, drinking water, washing facilities, toilet facilities, rest rooms, cloak rooms, and lunch rooms, and other service of this character.

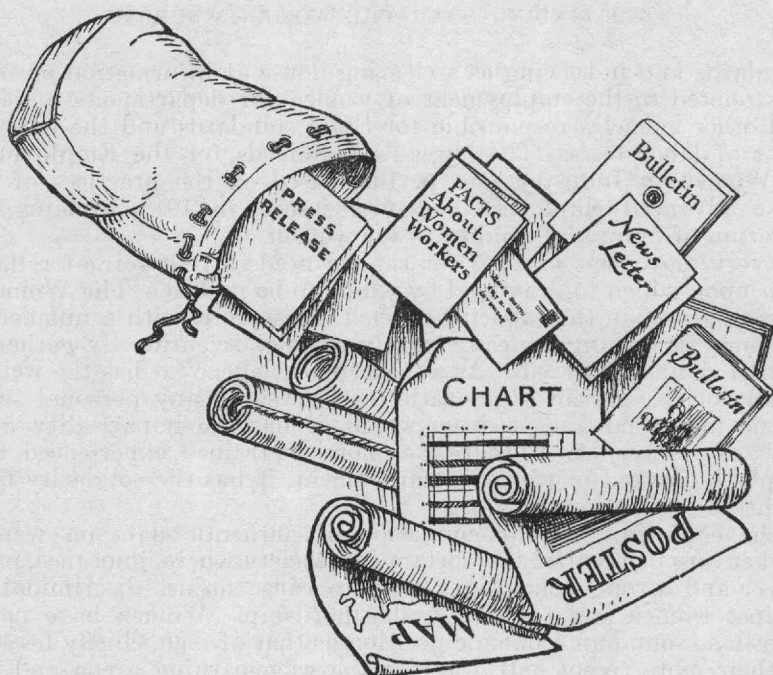
In connection with the survey of the establishments, the agents visit a number of women in their homes to learn their environment and home responsibilities. Further inquiries are made of the State department of labor, the Young Women's Christian Association, and other local organizations familiar with industrial and social conditions.

All the information thus secured—working-condition schedules, pay-roll cards, 52-week earnings, personal-information cards, and home-visit schedules—is sent to the office in Washington, where it is edited and tabulated—for example, earnings correlated with age, with experience, with hours, etc.—according to industry. The tables later are analyzed by trained economists and the final report is submitted to the Secretary of Labor for approval and publication.

As constituted at present (autumn of 1930) the bureau has a staff of 50 persons, comprising administrative and clerical, field investigation, research, statistical, public information, and editorial. All its employees but the director are under civil service and have been appointed after competitive examination.

The purpose of the Department of Labor itself, as stated in the organic act, is “to foster, promote, and develop the welfare of the wage earners of the United States, to improve their working conditions, and to advance their opportunities for profitable employment.” Under the department the Women's Bureau is charged with the formulation of “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.”

The Bureau of the Census has estimated from its 1930 returns that the number of employed women in the United States is about 10,000,000. With the number of women workers constantly growing, with the striking increase of married-women wage earners, with the share of women in family support and economic responsibility assuming greater proportions, with acute problems of employment and unemployment piling up as a result of the present machine age, and with the development of more industries and new processes giving rise to new hazards and additional strain for women workers, the task of the Women's Bureau each year becomes more extensive and complicated. It is the purpose of the bureau to collect, correlate, and make available for reference a mass of information that shall be accepted by employers, employees, health authorities, women's organizations—in fact, all interested persons—in their combined efforts to have the working conditions and employment relations of American women the best in the world.



DISTRIBUTING FACTS ABOUT WOMEN WORKERS

The magnitude and complexity of the task with which the Women's Bureau is charged are apparent from the fact that when the census of 1920 was taken there were in the United States over 8,500,000 wage-earning women, represented in all but 35 of the 572 occupations listed. According to preliminary estimates of the census of 1930, made public by the Director of the Census, this number has increased to about 10,000,000.

This vast array of working women, old and young, white and negro, native and foreign born, single and married, who in so many instances are home makers and mothers as well as wage earners, creates by its variety of elements many diversified problems. The great number of occupations in which they are found, the many types of employers, the variations in State labor laws for women, and the wide range of standards of work in places of employment all add to the complexity of the situation and, in consequence, the complexity of the work of the Women's Bureau.

In general there are two chief divisions to the activities of the bureau—fact finding and fact furnishing. On the one hand, it must make scientific studies and technical investigations, so as to obtain first-hand information concerning wage-earning women; on the other, it must arrange, analyze, and publish the material collected for the purpose of informing, interesting, and stimulating the public, especially those forces directly concerned with the employment of women, to effect better working conditions.

The Women's Bureau has no mandatory powers, nor has it any laws to administer. It is, nevertheless, extremely helpful in raising

standards and in serving as a clearing house of information on matters related to the employment of women for departments of labor and other agencies responsible for State standards and the enforcement of labor laws. The bureau's Standards for the Employment of Women in Industry (see p. 10), based on the practices of the most advanced employers and first issued in 1918, remains the criterion of industrial conditions for women.

Every movement making for reform needs a reservoir of reliable data upon which to draw and by which to be guided. The Women's Bureau serves in the capacity of such a reservoir, with a number of channels furnishing a steady supply of facts scientifically gathered, tabulated, and analyzed. As a Government agency it has the weight of authority. As an organization unrelated in any personal sense to the industrial and business world, it has the impartiality of a court of justice. As a group of economists, trained, experienced, and deeply interested in women's employment, it has the solidarity of a scientific foundation.

The collection and dissemination of authentic data on women workers are particularly important in a society where ignorance, prejudice, and wrong conclusions tend to cause unjust discrimination against women and to work undue hardship. Women have never been in so sound an economic position as that of men, chiefly because of their more recent entrance into the wage-earning arena and the widespread but erroneous belief that women as a class are only temporarily in gainful occupation and are not responsible for the support of dependents.

In reality, the number and proportion of women wage earners has increased steadily with each decennial census.² Women in the capacity of paid workers are a permanent and indispensable factor in the multitudinous activities of agriculture, industry, business, and the professions. As civilization is organized to-day, women need remunerative jobs to be assured of a livelihood, in many cases for the support of others, and these jobs need the work of women for their economic progress.

Because women are producers not only of material goods but of future citizens, because they are and must continue to be the mothers and home makers of the race, if it is to be perpetuated, it is imperative to study their problems in respect to wage-earning activities. The welfare of women, not only as individuals but in relation to their importance to the race, requires constant attention. Their safety, like that of men, should be of concern to society as a whole.

Because of their important social and economic aspects, the problems of women workers are recognized by many different groups—by industrialists, business men, and employers, from the point of view of dollars and cents and efficient production; by sociologists, psychologists, educators, physicians, and scientists concerned with human welfare, conduct, and relations; by forward-looking women interested in the advancement of their sex; and by labor groups striving to gain a firmer and higher foothold on the ladder of industrial progress.

² It is true that the proportion showed a decline between the census of 1910 and that of 1920, but this was due to the change in census date and other differences and did not represent actual conditions.

With a clientele characterized by interests of such wide range, the Women's Bureau must be prepared to furnish material on a variety of subjects, to be scrutinized from a number of points of view.

Records of many kinds gathered by bureau investigators on special schedules are kept in the files in their original form for reference. Such information is confidential, particularly that obtained from individual employers, and it is never given out for public use. The collective facts and figures obtained in this way, however, are tabulated, analyzed, written up in report form, and published.

The reports are circulated widely, to a mailing list kept strictly up to date and consisting only of names of persons and organizations that have requested that they be sent all publications issued by the bureau. Research foundations, economists, professors, students, schools, universities, libraries, employers, employers' associations, labor organizations, industrial specialists, women's organizations, periodicals, newspapers, free-lance writers, and State departments make up this list and give it a varied complexion. On the list is represented every State in the Union as well as all its foreign possessions and 38 other countries.

Another means of disseminating information is the News Letter. This publication, inaugurated in 1921 at the request of the Association of Governmental Labor Officials, reports current activities relating to working women in the United States and other countries and serves as a special clearing house of such information.

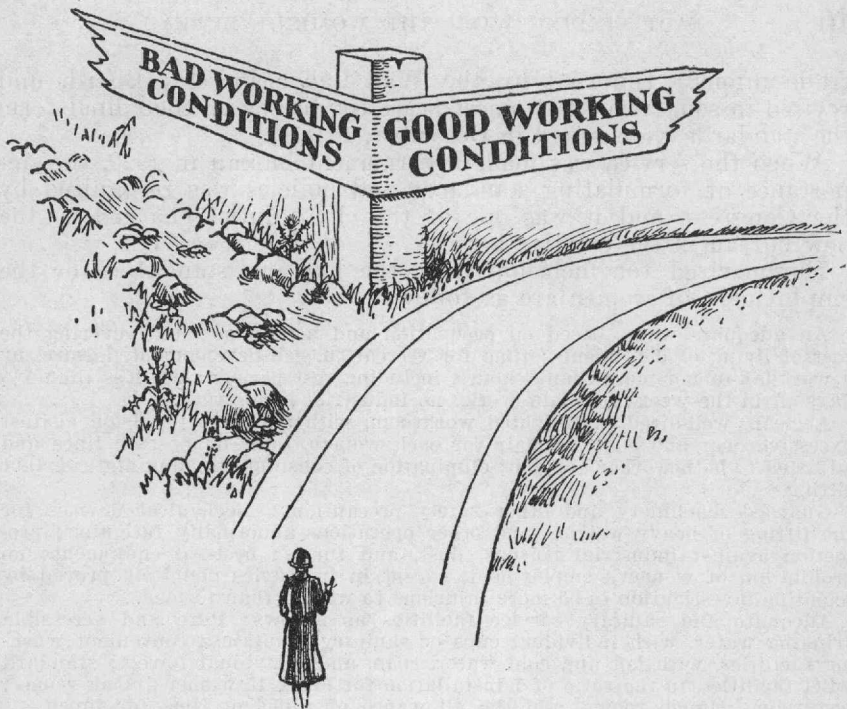
The activities of the Women's Bureau in broadcasting its material do not stop with its published bulletins. Since the material these contain is largely of a scientific, technical, and statistical nature, it must be translated into popular form, with emphasis on its human interest, in order to make an appeal to the general public.

Such popularization of facts and figures constitutes the special task of the division of public information in the bureau. News releases on bulletins and outstanding activities are constantly being sent out, usually to a mailing list of 2,900 editors and correspondents. Many special articles, both of a popular and of a technical nature, are prepared and submitted to varied types of periodicals and organizations, in the most instances upon request and for a particular need. These articles also are kept on file and they constitute a storehouse of information that can be drawn on again and again in response to requests for information on various topics related to wage-earning women.

The preparation and circulation of popular exhibits, such as models, motion pictures, maps, charts, posters, and folders, form an important feature in the bureau's program. Charts, posters, and maps, like the bulletins, are distributed without charge until the bureau's supply is exhausted. The cost of transporting the heavier exhibit material is met by the organizations that borrow it. All exhibit material is used extensively by schools, colleges, churches, employers' associations, and labor, industrial, and women's organizations. In the 12 years since the inauguration of this Government service for working women, exhibit material of one sort or another has been sent into all of the 48 States, Panama, Cuba, Porto Rico, Hawaii, and many foreign countries.

Addresses by the director and members of her staff, participation in conferences and conventions, a ready response to requests for advice or other assistance, and the preparation of exhibits for national and international expositions are other means by which the bureau endeavors to educate the public in regard to important facts about women workers.

It can readily be seen what value inheres in the bureau's studies, dispassionately and scientifically made. To the employer who analyzes their findings and profits by their suggestions the results spell better plants, improved production, and a more contented work force. To the working woman such investigations assure greater consideration of her needs and increased recognition of her ability with consequent rewards in the way of opportunity and advancement. To society these efforts in the interests of women workers promise better relations between capital and labor and guarantee to the race a richer heritage of health, happiness, and efficiency.



SETTING UP EMPLOYMENT STANDARDS FOR WOMEN

The fact that women have been in a weaker position economically than have men necessitates greater consideration and control of the conditions of their employment, to conserve alike their industrial efficiency and their health and to make it impossible for selfish interests to exploit them as unwilling competitors in lowering those standards of hours, wages, working conditions, and industrial relations that are for the best interests of the workers, industry, and society as a whole.

After the creation of the Woman in Industry Service as a war measure in July, 1918, already described, the service lost no time in adopting a program, and the first sentence of such program was this: "Standards governing the employment of women in industry should be authoritatively issued * * *"

The standards drawn up by the Woman in Industry Service in pursuance of this program were deliberated upon with such care that after 12 years they remain the criteria of conditions of women's employment in the United States. Circulated in small pamphlet form, they are like chart and compass, directing not only the bureau's own activities in regard to all studies and investigations but serving as a guide to other forces interested in promoting the welfare of wage-earning women.

The first draft of the standards, based on State labor laws and on war regulations, was submitted for criticism and suggestion to every State department of labor, to representative employers, and to working women in a position to speak for national and international

trade-unions. Indorsed by the War Labor Policies Board, and revised in some respects to meet peace conditions, in their final form the standards were issued in December, 1918.

When the service was made a permanent bureau in 1920, the importance of formulating standards and policies was recognized by the Congress, and it was one of the chief duties charged to the new bureau in the creative act.

Summarized for inclusion here, the bureau's standards for the employment of women are as follows:

An adequate wage, based on occupation and not on sex and covering the cost of living of dependents; time for recreation, self-development, leisure, by a workday of not more than 8 hours, including rest periods; not less than 1½ days off in the week; no night work; no industrial home work.

A clean, well-aired, well-lighted workroom, with adequate provision against excessive heat and cold; a chair for each woman, built on posture lines and adjusted to both worker and job; elimination of constant standing and constant sitting.

Guarded machinery and other safety precautions; mechanical devices for the lifting of heavy weights and other operations abnormally fatiguing; protection against industrial poisons, dust, and fumes; first-aid equipment; no prohibition of women's employment, except in industries definitely proved by scientific investigation to be more injurious to women than to men.

Adequate and sanitary service facilities as follows: Pure and accessible drinking water, with individual cups or sanitary fountains; convenient washing facilities, with hot and cold water, soap, and individual towels; standard toilet facilities, in the ratio of 1 installation for every 15 women; cloak rooms; rest rooms; lunch rooms, and the allowance of sufficient time for lunch.

A personnel department charged with responsibility for the selection, assignment, transfer, or withdrawal of workers and for the establishment of proper working conditions; a woman employment executive and women in supervisory positions in the departments employing women; employees to share in the control of the conditions of employment by means of chosen representatives, some of them women; cooperation with Federal and State agencies dealing with labor and employment conditions; the opportunity for women workers to choose the occupations for which they are best adapted as a means of insuring success in their work.

It must be apparent that these standards are far from radical. They are not new and untried theories, as many employers of women had adopted such measures, more or less, long before the Women's Bureau came into existence. But they should be guaranteed to all wage-earning women and not only those so fortunate as to be in the employ of the most forward-looking managements, and as there are tens of thousands of women still employed at seriously low wage rates, at unduly long hour schedules, and in working environments detrimental to health and happiness, the Women's Bureau feels the necessity of constantly stressing in a number of ways the standards that it advocates. Like a theme running through practically all its publications is constant reference to one or more of these formulated safeguards for women. In bulletins and news releases, addresses, conferences, correspondence, and exhibit material they are presented over and over again. By means of models, posters, maps, charts, and motion pictures their lesson is taught graphically to that considerable part of the public that prefers educational methods that are entertaining.

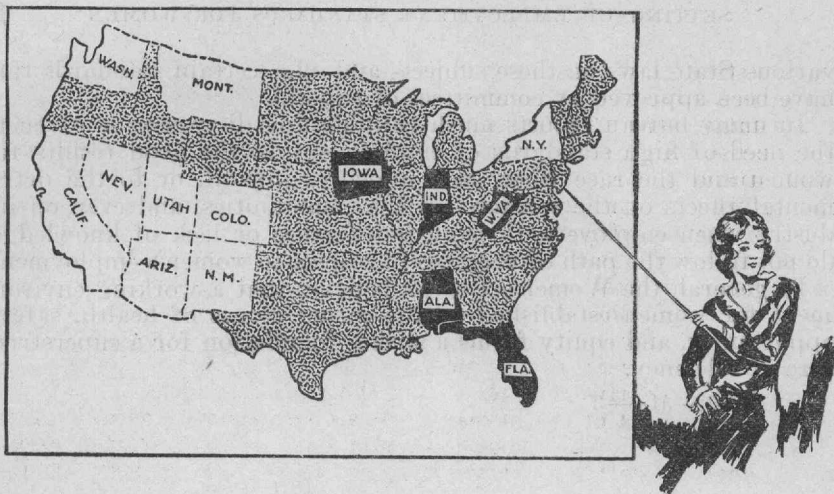
Detailed study of certain of its standards has been possible for the bureau. Its bulletins on the sanitary provision of drinking water, on toilet facilities, on lighting, on seating, summarize the

various State laws on these subjects and offer certain standards that have been approved by committees of experts.

In many bureau reports much enlightening discussion is given to the need of high standards of employment, to the good results for women and the race when such measures prevail, or to the detrimental effects on the workers, on the communities, and even on industry when employers, through indifference or lack of knowledge, do not follow the path of progress in respect to women's employment.

In general, the Women's Bureau believes that a working environment for women established on the corner stones of health, safety, opportunity, and equity forms a strong foundation for a superstructure of efficiency.

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COMPARING LABOR LAWS FOR WOMEN

An important part of the discovery and presentation of facts that affect the employment of women lies in ascertaining the standards set by the various States in the form of statutes relating to this subject. Consequently the Women's Bureau has made, in addition to other types of reports, several studies of special labor legislation for women.

In the past few decades such legislation has become a subject of increasing importance in the United States, and one with many ramifications, due to the various types of labor laws and to the numerous problems involved. Among the aspects inherent in the subject are these: The vast number of women gainfully employed; the great variety of their occupations; the conditions under which they work, varying with locality, industry, and establishment; the changes and developments in their opportunities that have been coincident with the enactment of the different kinds of legislation, applying here to one group of women and there to another; the almost infinite range of the possible effects of such legislation—effects that may be similar to those due to other influences.

In general, special labor laws for women deal chiefly with hours of work, night work, seating, a minimum wage, and the regulation—in some cases the prohibition—of women's work in certain occupations or industries. Home work is an additional subject of legislation that affects great numbers of women, since they form the great majority of home workers. The laws on each of the several topics differ widely in content, requirement, application, and effect.

At an early period in its history the bureau prepared brief summaries of the legislation then in effect in the various States in relation to hours, night work, industrial home work, and a minimum wage. Each of these subjects has been developed more fully in later reports. In 1924 and again in 1927 careful compilations were made of the laws on the statute books relating to working women.

To keep such information up to date, in the possibility of change in the laws from year to year, constant attention must be given to

the question of labor legislation in each of the 48 States. Radical departure from the existing order comes but seldom and in only a few States, here and there, but slight modification of a statute is not uncommon. Through its research division the bureau makes a close study of the activities of legislatures in regard to all bills of the nature of labor regulation affecting women and to any new enactment or any modification of such laws. Through its periodical News Letter it reports on current activities along these lines, and through its division of public information it is constantly distributing free, upon request, colored wall maps showing the laws in the various States restricting daily hours, weekly hours, and night work for women. Each year the annual report of the bureau contains a résumé of legislative changes within the past 12 months.

A recent report of the bureau gives a comprehensive chronological digest, by State, of all labor laws that have affected women except those dealing with a minimum wage, these having been studied separately in a report that constitutes the most complete analysis of minimum wage laws that has been made. The chronological digest includes all statutes from the first hour law in the country, enacted in 1847 in New Hampshire and applying to both sexes, to legislation that went into effect in 1928, and it gives, in addition, all orders of industrial welfare commissions or boards that have had the force of law.

The most outstanding achievements in the struggle for labor legislation for women shown in the study are the 8-hour laws in 10 States and the District of Columbia and the 8½-hour laws in 2 States. The 17 additional States with 9-hour laws, 18 with 10-hour laws, and 5 with 10¼, 10½, 11, and 12 hour laws gives a total—allowing for the States that fall into more than one class—of 43 States that can point to some regulation of the hours of their women workers.

Only 16 States have passed any laws prohibiting night work for women. Twenty States and the District of Columbia have no laws regulating or prohibiting their employment in any specific occupation, even mining.

Such a summary is of especial interest at this time when modern science is stressing the importance of short hours and good working conditions as a means of decreasing the industrial waste arising from fatigue and of contributing to social efficiency.

The bureau has not stopped with the compilation of basic collections of laws but has undertaken certain important and far-reaching studies of the way labor laws work in practice. One of these deals with a matter that had been considerably debated and upon which accurate data had not been available until compiled by the Women's Bureau; namely, the effects of labor legislation on the employment opportunities of women.

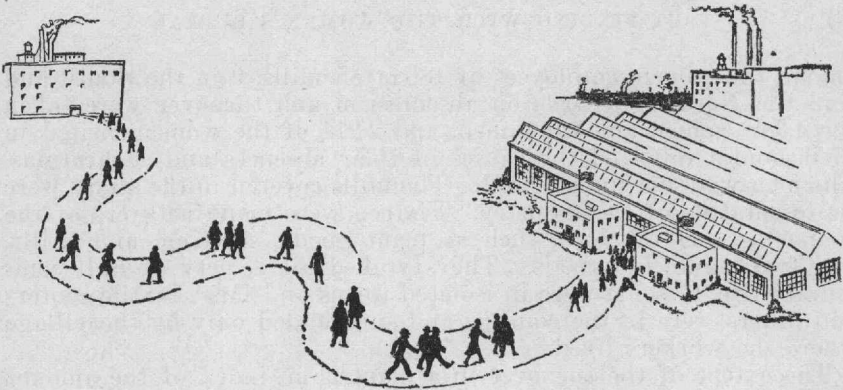
This study is based on a survey of five important woman-employing industries—boots and shoes, clothing, hosiery, paper boxes, and electrical apparatus and supplies—and it includes also stores, restaurants, and certain specific occupations in which the employment of women is more recent. The establishments visited were in nine States and numbered 1,661, and they employed 500,223 men and 165,244 women. Over 1,200 working women were interviewed per-

sonally, and the testimony of many employers was taken. The study gave conclusive proof that, in general, regulatory hour laws do not handicap women engaged in manufacturing processes. In a few special groups laws have resulted in occasional discrimination, but in such cases it is possible to adapt the legislation more specifically to the needs of the women in the particular occupations in question.

The second report dealing with the practical working of labor laws considers the effects of minimum-wage laws in the States in which they have been enacted, the methods of their operation, costs of administration, and changes in the position of women workers brought about by such statutes. The findings of the study show that the purpose of these laws—to benefit the most poorly paid workers—has been accomplished where they have been in force. While these laws have no magic to increase all rates, where such a law has been most effective the typical woman worker is in a decidedly better financial position to-day than before minimum-wage rates were set.

Another bureau study in which legislation has an important place deals with the employment of women at night. This sets forth the evil effects of such employment, describes the United States and foreign experiences, and gives a digest of legislation regulating night work in the United States and in the principal foreign countries.

In connection with its chronological list of labor laws in all States, the bureau has made a study of the complete history of labor legislation for women in three large industrial States—New York, Massachusetts, and California. The object was to show how and with whom such legislation originated, the purpose it was intended to serve, its supporters and opponents, and its legislative history. It was found that the chief factors that had furthered the passage of these statutes—their influence varying widely in degree in different States—were as follows: Organized labor; factory inspectors and other officials charged with enforcement; 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.



STUDYING LOST TIME AND LABOR FLUCTUATION

Among the publications issued by the Women's Bureau are several bulletins that deal with the subjects of lost time, labor turnover, and fluctuation in employment. At a glance the first and second of these terms may appear academic and technical and without direct application to the working women whose welfare is the bureau's particular care, but even a cursory examination of the contents of the bulletins discloses that the subjects of lost time and labor turnover are of interest not alone to the economist but to the workers themselves and most of all to the employer, especially the employer of the modern, alert type. Three bulletins relate to the textile industry; another, *Changing Jobs*, is a brief discussion of the varied industrial experiences of a group of young women; and the remaining two are notable studies of the instability of employment.

Naturally, in any industry functioning under normal conditions there is a certain amount of labor turnover that is unavoidable and even desirable and that must be considered in the estimated cost of the business from year to year. Most employers realize the advantage in having a stable force of workers on the job day after day, month after month, throughout the year. But in many plants an overlarge proportion of workers quit their jobs after a short term of employment, thus necessitating the hiring of others, during which process a loss in production and a subsequent loss of profit for the employer are likely to result. For the worker, such change may mean reduced income and a lowered morale while seeking a new job and learning a new process. Employers recognize that this constant losing and hiring of workers is an indication of inefficiency, but comparatively few of them take the time or trouble to look for remedies, though in most cases these are obvious and easily applied.

Absenteeism on the part of employees is another problem with which plant managements have to reckon and which, if existing to any great extent in an industrial establishment, undermines efficient production. Plant conditions are likely to be responsible for an excessive amount of lost time on the part of the workers, and a change of policies and a raising of employment standards may eliminate the difficulty.

In the study *Lost Time and Labor Turnover in Cotton Mills* an effort was made to ascertain the cause and extent of such conditions

among the women employees of 18 cotton mills, 9 in the South and 9 in the North. Records on absenteeism and turnover were taken for 4,338 women and 6,203 men, and 2,214 of the women visited in their homes reported the causes of their absences and separations. The men were not interviewed. The mills covered in the study were representative of the industry. Sixteen were manufacturers of the coarser grades of cloth, such as print goods, sheeting, and drills, and two made fine goods. They typified all variety of mill community life, as some were in isolated towns and large textile centers and others were in the country and surrounded only by the village where the workers lived.

The extent of the turnover in a plant is an index of the amount of restlessness in the force, as the majority of the separations are not discharges. The turnover rate for all mills combined was practically the same for men and women, 142.1 per cent and 142.5 per cent, respectively. The results for the different mills and the two sections of the country set forth many interesting facts. The rate for all workers varied widely, ranging from 41 per cent in one mill to 377.3 per cent in another. The majority, however, had a rate of between 125 and 300 per cent. From the standpoint of departments, in all mills the spin room showed a very high turnover for men and women combined, the women leading with a rate of 165.5 per cent and the men revealing a rate considerably lower, or 134.4 per cent. In this department southern mills reported a higher rate than did northern mills for both men and women.

In studying the causes of separations it was noted that many more women in the northern than in the southern mills quit their jobs because of home duties, insufficient earnings, or slack work, while the separations due to discontent with conditions of work caused more shifting in the South than in the North. This may be due in part to the longer hours prevailing in the South, as it was found that ordinarily a high rate of turnover accompanied the longer work week. Mills with a 55-hour week had nearly twice as high a turnover rate among women as had the mills working 48 hours, and most southern mills work the longer hours. The fact was noted also that more operatives in the South than in the North left to try other jobs and gave the general reason of "just moving" as a cause for leaving, emphasizing again the greater restlessness of the workers in the southern than in the northern mills. As causes of turnover for men were not ascertained, comparison by sex could not be made.

Lost time as recorded in the 18 mills also showed much variation in amount between the northern and southern parts of the country, during the different seasons of the year, and even among the various departments of the same establishment. Of all the workers studied in mills, North and South, the women lost more time than did men in both sections of the country. In the northern mills women lost 16.4 per cent of their possible working time and in the southern mills 27.4 per cent. In the North the men were absent for 10.7 per cent of their time, in contrast to 20.7 per cent in the South. Comparison of all mills by season of the year revealed the largest number of absences as occurring during the warmer weather, and August as the month with the highest record. The percentage was slightly

higher in the North at this peak season, probably because long, hot summers were expected in the warmer climate and more effort was made in the South than in the North to keep the mills cool and properly ventilated during hot weather. Illness of self exacted the greatest toll of absence, as 23.2 per cent of the days lost by all women were attributed to this cause, home duties coming next with a total of 19.8 per cent of the days out.

In comparing the various departments of the mills it was found that in the spin rooms the proportion of time lost was higher than in the other departments and the turnover rate was next to the highest. As no definite reason could be given for this condition, a later study, *Conditions of Work in Spin Rooms*, was made by the bureau for the purpose of measuring how far certain definite changes in conditions might affect the absence and turnover rates. The first part of this report was compiled from records taken from four mills into which a new method of operation had been introduced, commonly known as the "stretch-out system." At the time the records were taken, three of the mills still were operating one or more spin rooms by the old method. The fourth furnished records for an early summer and a winter period both before and after the new method had been introduced. In general it may be said that the new method in the spin room slightly increased the turnover but tended to lessen the time lost.

For the second part of the spin-room study, temperature readings were obtained from 15 mills—7 in the North and 8 in the South. In most of the mills these were recorded by the management two to four times a day over a period of a year. No attempt was made to correlate the temperature readings with figures on lost time and labor turnover.

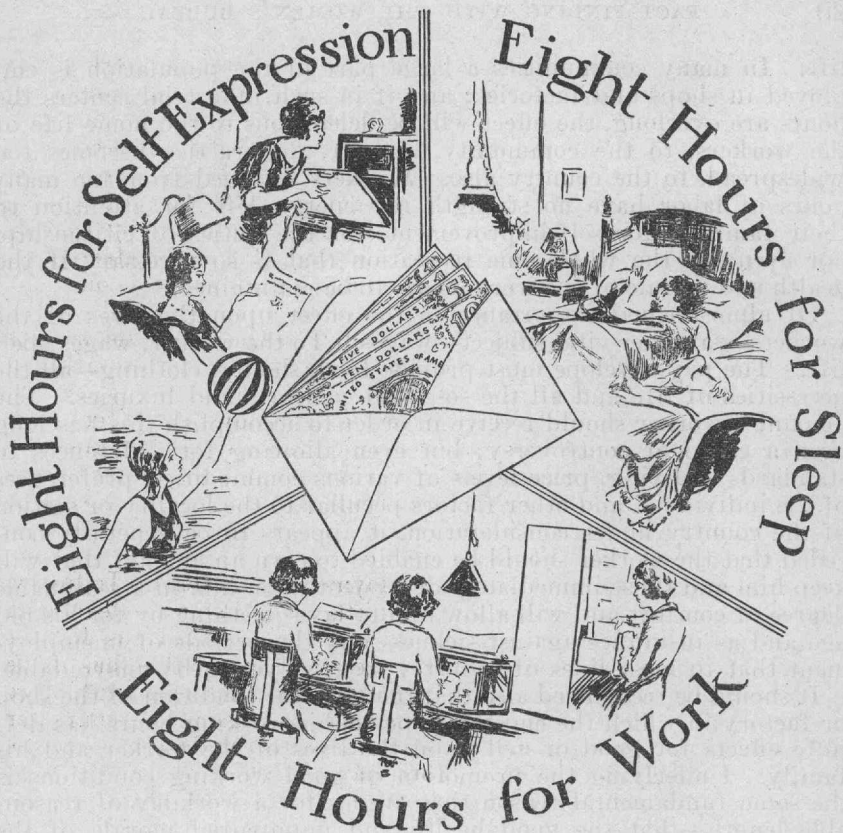
As the causes of absence for men had not been studied in the earlier bulletins, it was thought that it would prove valuable to make such a comparison by sex. Accordingly, a small bulletin, *Causes of Absence for Men and for Women in Four Cotton Mills*, was prepared. Incidentally, this is the only report published by the Women's Bureau in which conditions of employment for men workers are discussed. The figures show that with men as with women the principal cause of lost time was the illness of the worker. The number of days lost through illness was greater for women than for men. Very little of the lost time in any of the mills was due to accidents, but men lost more time through this cause than did women. Lack of work, home duties, and personal reasons are other causes of lost time discussed from the viewpoint of both men and women.

Another bulletin referred to, *Changing Jobs*, presents a picture of some of the effects on the worker of the modernizing of industry. It comprises a brief survey, made under the direction of Prof. Amy Hewes, of the combined industrial experiences of 97 women assembled as students of economics at the summer school for women workers in industry at Bryn Mawr College in 1925. The group studied, while small, was widely representative, as the students came directly from jobs in 18 different States and represented more than 10 industries in which women are employed to-day. The facts contained in this report present the problem of labor turnover from a different angle, and may be an indication that other methods of em-

ployment management and industrial relations must be worked out in the future. Workers no longer may look forward to an industrial life devoted to one trade. With the mechanization of industry, processes have been divided until in some cases work has become so monotonous that for an employee to retain the same job overlong may be a detriment instead of an advantage. A study of women thrown out of their employment in the cigar industry by the increased use of machines emphasizes the condition just referred to. Expert cigar makers in many cases found nothing they could do. "Too old" (at 35 or 40) for various lines of work that still offered employment, they had failed to reestablish themselves and serious unemployment was the result. Men as well as women were affected by this condition.

An important bulletin, *Variations in Employment Trends of Women and Men*, issued primarily to throw light on the question whether employment figures should be reported by sex, shows for the 11-year period 1914 to 1924 the ups and downs in employment for women and for men in the 54 industrial or occupational classes into which Ohio's employed population is divided.

Another study, *Fluctuation of Employment in the Radio Industry*, is a comprehensive survey of a manufacture that has developed phenomenally within the past decade and that is notorious for the irregularity of its employment. Figures for a plant that has made an effort to improve conditions by combining with the manufacture of radio sets another product, also somewhat seasonal in character but having peak production that dovetails with the decline in radio, show how worth while such an effort may be.



IMPROVING HOURS, WAGES, AND WORKING CONDITIONS

In the list of publications of the Women's Bureau the terms "hours," "wages," and "working conditions" appear with striking frequency. Of the 80-odd bulletins prepared and issued by the bureau during its 12 years of service to the country, each bearing upon some phase of women's employment, 34 are reports of investigations along the line of one or more of these subjects.

Of these 34 reports, that cover approximately 4,700 plants and more than 325,000 women, 20 are of State-wide surveys, the States being as follows: Alabama, Arkansas, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Mississippi, Missouri, New Jersey, Ohio, Oklahoma, Rhode Island, South Carolina, Tennessee, and Virginia. Because few States are equipped with the means of investigating the conditions of their women workers, the Women's Bureau has considered these surveys—made only at the request of the States themselves—a necessary part of its program.

In any discussion of hours, wages, and working conditions, subjects so vital to the wage earners of the land, that of hours naturally assumes first place, since the time the worker devotes daily to the task of earning a living has its effect on every other activity of his

life. In many communities a large part of the population is employed in shops and factories; and if in such industrial centers the hours are overlong, the effect will be deleterious to the home life of the workers, to the community, and, if the practice becomes too widespread, to the country also. Workers fatigued from too many hours of labor have no strength nor energy left for attention to their families, for self-improvement, for the duties of citizenship, nor even for the wholesome recreation that is so necessary if the health and morale of the workers are to be maintained.

Of almost equal importance in the effect upon the lives of the workers is another vital subject—wages. To the worker, wages spell life. The pay envelope must provide food, shelter, clothing—all the necessities of life and all the so-called comforts and luxuries. The amount a worker should receive in order to accomplish this has long been a cause of controversy; but even allowing for differences in standards of living, price levels of various commodities, preferences of the individual, and other factors peculiar to the locality or section of the country under consideration, it appears to be generally conceded that the worker should be enabled to earn an amount that will keep him and those immediately dependent upon him in a reasonable degree of comfort and will allow him to lay something by for his old age and as insurance against sickness and the periods of unemployment that in most lines of industry seem as yet to be unavoidable.

It should be recognized also that the physical condition of the shop or factory in which the employee spends his working hours has definite effects for good or evil upon the lives of the worker and his family. Underlying the promotion of good working conditions is the same fundamental reason that argues for a workday of reasonable length—that the good health and unimpaired morale of the working population are national assets that should be conserved and developed. For this reason, any careful analysis of the position and outlook of wage-earning groups should rightly include that of working conditions. It should be apparent to all that ill-kept, poorly lighted, and improperly ventilated workrooms and inadequate or unsatisfactory sanitary facilities are likely to create discontent in the minds of the workers with a corresponding lessening of efficiency; or, worse still, to exact a toll in terms of health and energy that spells loss of time and money for the wage earner and for the employer.

If number of hours, amount of wages, and conditions of surroundings are important to all workers, the Women's Bureau of the United States Department of Labor considers them of greatest importance to the women workers of the country, whose welfare is its particular care.

In the group of reports bearing on the subjects of hours, wages, and working conditions, the bureau has confined its studies chiefly to the problems of such women as are employed in industrial lines in factories, stores, laundries, restaurants, and telephone exchanges. The information in its 20 State surveys was secured by the sampling process, the aim being not to study every plant but to visit a number in each industry in various localities, representing a cross section of industry in the State. By means of this method it was found that the hours worked by the 281,491 women for whom hours were reported in such surveys covered the entire range from the accepted standard

of modern labor, 8 hours or less a day and 48 hours or less a week, to the extremely long hours of 10 or more a day and 70 or more a week. The best record for shorter weekly hours was that of Illinois, as 62 per cent of the women included in the survey of that State were scheduled for 48 hours or under. Maryland stood first as regards daily hours, as 31.9 per cent of the women included were reported as having a scheduled workday of 8 hours or less. The record for the longest hours was that of South Carolina, with 85.4 per cent of the women surveyed working 10 hours or more a day and 88.5 per cent 54 hours or more a week.

From a special compilation of hours for all the States for which they were reported in bureau surveys, it is apparent that almost half of the women (48.7 per cent) had a scheduled week of 48 to 50 hours.

A study of hours and production is an important part of the work of the bureau. The object of the study is to show the relation of hours—long or short—to piecework production, giving special emphasis to the effect on output of an increase or decrease in daily hours. Only such plants are included as have made a change in scheduled hours during the year, manufactured an identical product under different hour schedules, or had periods of overtime of six weeks or more. Conditions of work in clerical occupations also are a subject of study.

That low wages usually accompany long hours has been proved by figures on wages gathered by the Women's Bureau during its State surveys. The lowest median wage³ was found to obtain in Mississippi, where 85.1 per cent of the women in the factories, stores, and laundries included were reported to be working 54 hours or more a week. The highest median wage was revealed for Rhode Island, where only 6.5 per cent of the women worked such long hours. With the exception of Florida, in every State where 50 per cent or more of the women had a weekly schedule of 54 hours and over, the median wage was found to be under \$12.

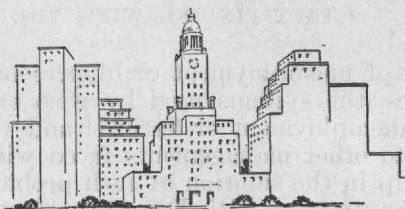
Conditions of work places as revealed by these reports also presented contrasts. In many establishments the surroundings in the workrooms were found to be such that they constituted a menace to the health and well-being of the workers; on the other hand, in every State there were plants where the conditions of work were reported as good or excellent, and in many instances the employers had gone even farther than the requirements of the law of the State or of the standards set up by the Women's Bureau for the guidance of those interested in the conditions surrounding women workers in industry.

Besides the 20 State surveys already described are a number of miscellaneous reports issued by the bureau bearing to a great extent on the subjects of hours, wages, and working conditions for women. Several of these discuss the employment of women in single industries or occupations, such as candy manufacturing, meat packing, cigar making, canneries, 5-and-10-cent stores, laundries, and domestic service, and as street-car conductors and ticket agents. Two deal with the employment of women in cities where there is

³ The median is the figure at which half the earnings reported are above and half below.

but one important industry—Flint and Niagara Falls. Two study the problems of negro women and one the effects of legislation limiting the hours of work for women. One lists the standard and scheduled hours of work as reported for women workers included in the various state-wide surveys, and another combines and analyzes the bureau's wage surveys in 13 States.

A number of bulletins issued by the bureau touch more or less upon these basic questions but are not included in the several reports discussed here because they deal more specifically and extensively with other subjects. For example, one bulletin on the problems of foreign-born women gives some data on their hours and earnings. Several that are compilations of State laws affecting working women contain summaries of hour laws. A number of others include references to, and some information on, hours, wages, and working conditions.



NO INDUSTRIAL HOME WORK
SANITARY SERVICE FACILITIES
CLEAN WELL VENTILATED WORKROOMS
PREVENTION of INDUSTRIAL POISONING
SAFETY REGULATIONS

BUILDING THE STEPS TO INDUSTRIAL HEALTH AND SAFETY

Health and safety for women mean health and safety for the race. Determining what work conditions are necessary for insuring these for the women gainfully employed in the United States, estimated to-day at about 10,000,000, is one of the most significant functions of the Women's Bureau.

Matters of health and safety as related to women workers have called for constant attention and investigation on the part of the bureau. Not only are these problems the subject of several special bulletins, but discussion of such vital questions runs through practically all the bureau's publications as the essential framework on which other discussions are hinged. Studies of the physiological basis for the shorter workday for women, industrial poisons, industrial accidents, the employment of women in hazardous industries, and the effect on women's health of employment at night are some of the most noteworthy contributions by the bureau along the line of industrial hygiene and safety. With changes in industry and the development of new processes other aspects of the health situation are constantly arising and confronting the bureau with the need for more scientific research and analysis.

The bureau is engaged in an important study of human waste in industry, to be wide in scope, of great significance, and in line with its function of formulating policies and standards and conducting investigations to safeguard the interests of women workers and to make their services most effective for the national good. The main purposes of the survey are (1) to study from the viewpoint of women workers the effects of changed methods in industry, the

extent of unemployment or of personal hazard resulting from such changes, the systems used by wise managements to guard against such unemployment or hazard; and (2) to compile information of value to other managements faced with similar problems and seeking help in the solution of such problems.

In conjunction with Dr. Alice Hamilton and as part of its study of human waste, the bureau has been investigating the situation of women engaged in the spray painting of stoves, with special attention to the effects of this vitreous-enamel work on the health of the women. Information has been obtained on occupations, days lost, and separations for all workers over a 12-month period. Through home visits an effort has been made to get in touch with all women who are or have been vitreous-enamel workers and to ascertain from them causes of absence and separation as well as any symptoms manifested as a result of their occupation.

It is important for the bureau to make detailed and scientific studies of drinking and toilet facilities, seating, ventilation, lighting, heating, and service facilities, including wash rooms, cloak rooms, lunch rooms, rest rooms, and first-aid equipment in places of employment; to analyze State laws relating to such problems; and to present as guides to State departments, industrial and business establishments, and all other groups seeking aid along these lines, the most advanced and scientifically worked out standards possible.

That men as well as women should be assured the health and safety that the bureau's standards help to provide goes without saying, but the vital importance of such measures for women workers because of their closer relation to healthy childbearing and happy home making is apparent.

Because of the existence in certain quarters of conditions harmful to women, the bureau conducts investigations to learn the facts. The findings of these investigations stand as guideposts to direct the many organizations throughout the country that are working for the better protection of wage-earning women. They present standards also for the States in whose hands lies the enactment of labor legislation.

The establishment of definite health standards on a scientific basis becomes of utmost significance when it is realized that all labor legislation in the country is based on the right of the police power of the State to protect the health of its citizens.

During the past half century, with the amazingly rapid growth of a machine civilization, women have followed their work from the home into the factory. They have found their place in industry side by side with men. But as they have become industrial workers women have not ceased to be home makers, housekeepers, mothers. With the blowing of the factory whistle at night the majority of women go home to an evening of cooking, washing, or scrubbing, to the varied duties of household and family care that beset the average woman.

For a long time the full economic and social significance of this change in woman's position was not appreciated, and no steps were taken to safeguard her. In recent years, however, the courts and legislatures, realizing the relation of the health of the woman worker to the general welfare of the country and race, have recognized

that long hours, low wages, and unhealthful working conditions may have a more serious effect on women than on men, and protecting the health of women workers and of posterity has become the basis for labor legislation in the United States.

To-day some labor legislation especially for women is found on the statute books of practically every State in the Union, but the number and content of the laws passed vary from a careful regulation of hours and wages and a very definite control of working conditions in States such as Oregon, California, Wisconsin, and Massachusetts, to the simple requirement of seats in Georgia and Iowa. A complete summary of the present status of such legislation is contained in an important study by the Women's Bureau, *Chronological Development of Labor Legislation for Women in the United States*.

Despite these laws, the great bulk of women wage earners work overlong hours and receive inadequate pay. Perhaps no other factors are so vital in insuring the health of the woman worker as hours that allow her sufficient rest and leisure and a wage that makes possible a standard of living at least on a level of health and decency. The importance of these two is stressed in every bureau study.

In the health program of the Women's Bureau, accident prevention also assumes an important place. The fact that very few accident reports show figures for men and women separately serves to keep the public in ignorance of the considerable numbers of working women who receive injuries in the course of their employment. A study by the bureau of all available material in State reports for 1920 to 1927 discloses that only 21 States at any time in the eight years published accident data for women separate from those for men; that in no year did more than 14 States report such data; and that in the entire period some of the 21 States made only 1 report, though others published figures for each of the eight years. In one State, that requires the reporting of all injuries, more than 11,000 women were injured in 1927; in the same year another State, that requires reports only of accidents causing a loss of time of more than a week, had 7,400 women injured to that extent. Such numbers are too large to be a matter of indifference. The bureau is convinced that complete and comparable accident figures, classified by sex, age, industry and occupation, cause, nature and location of injury, and extent of disability, would aid materially in the prevention of accidents, and it recommends a standardized system of reporting so that the various industries and States may compare their experience and profit by such comparison.

An outstanding bulletin that makes clear the need of precautions and standards in this field is an exhaustive study of industrial accidents to women in New Jersey, Ohio, and Wisconsin in the 12 months from July 1, 1919, to June 30, 1920. Cause and nature of accident, time loss and wage loss, compensation and medical aid, extent and effects of permanent injuries—these and many more subjects were studied. Almost one-half of the permanently injured women interviewed in their homes were responsible for the support of others.

The theory is accepted to-day that hazard is so inherent a part of industry that various occupations have each a predictable risk, and the cost to the injured employee of the accidents that occur—

the wage loss, medical cost, and expense of restoration of earning capacity—is as logically a direct expense of production as is spoiled material or damaged equipment.

The acceptance of this responsibility by employers and the spread of workmen's compensation laws will make the thorough study of industrial hazards and the scientific analysis of causes of accidents result in a reduction of casualties valuable to the employer by the measure of dollars and cents as it is valuable to the worker in terms of the abolition of mental and physical suffering. Well-lighted work places and corridors, guarded machinery, clean, dry floors, and aisles that are kept clear make for accident reduction. These conditions the bureau standards seek to encourage.

As a health issue, the Women's Bureau is opposed to night work for women. Doctors have shown conclusively that women can not make the physiological readjustments that working by night and sleeping by day require, and night work inevitably is accompanied by loss of sleep and consequent harm to the nervous system, by the loss of the tonic and stimulating effects of the sun's rays, and by dangerous fatigue. Moreover, many women on night jobs overtax their strength by trying to look after home and family by day. That the United States is behind other great industrial nations in regard to night work for women is shown in a bureau bulletin on the subject. At the present time, as a result of the Berne and Washington conventions, 35 countries have abolished night work for women or taken steps, legislative or governmental, looking toward its prohibition. Only 16 States in this country, on the other hand, have any legislation prohibiting night work, and these laws are far from complete.

The Women's Bureau does not favor laws prohibiting women's employment in occupations that have not been proven conclusively to be more harmful to women than to men. Except for the lead industry, very little research has been made in this country on the special harmful effects on women of the various industrial processes. For this reason, the bureau feels that extensive investigations should be made before women are prohibited from any industries or processes. This fact is brought out in a bureau publication entitled "The Employment of Women in Hazardous Industries in the United States."

As early as 1897 lead was known to have poisonous effects upon women. It has been shown not only to be detrimental to a larger proportion of women than of men handling it in manufacturing processes but to have a very serious effect on women's generative organs. Women suffering from lead poisoning are more likely to have abortions or stillborn children, and of the children who are born living more than the average are likely to die within the first year of life. This is pointed out by Dr. Alice Hamilton in a study made for the Women's Bureau on women workers and industrial poisons. Despite these facts, a bulletin summarizing State labor laws shows that only three States in the Union have laws prohibiting or regulating women's employment in industries where they are in danger of lead poisoning.

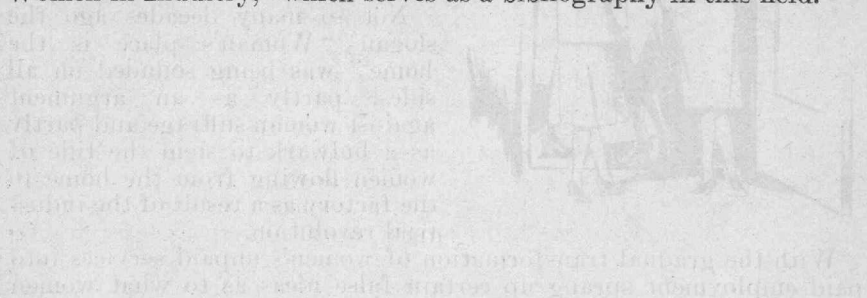
No figures exist with regard to the effects of poisons other than lead, but it is known that both monoxide gas and benzol may pro-

duce abortion, and that benzol, by causing anemia, renders a healthy pregnancy almost impossible.

The inclusion of occupational diseases in workmen's compensation laws, which thus far has made but little progress, is a highly desirable recognition of hazards not so apparent as unguarded machinery but quite as likely to do serious harm.

Several of the bureau studies specializing on the textile industry are of interest in connection with an industrial health program because they show that illness of the worker is responsible for a larger proportion of time lost from the job than is any other one cause.

The general statements of the health program of the Women's Bureau are set forth in various articles in three booklets of a more popular nature: *What Industry Means to Women Workers*, *Short Talks About Working Women*, and *Radio Talks on Women in Industry*. As a supplement to the various reports on health and safety is a bulletin entitled "Selected References on the Health of Women in Industry," which serves as a bibliography in this field.



OPENING THE DOORS OF OPPORTUNITY TO WOMEN

To advance women's opportunities for profitable employment is a part of the important task assigned to the Women's Bureau. As a consequence, considerable research and investigation has been undertaken with a view to uprooting prejudices against women's progress in various fields, breaking down barriers, and opening doors of opportunity. It is the aim of the bureau to give women the chance for advancement and development to which as individuals they are entitled, and thus to make their services most effective for their own and the national good.



Not so many decades ago the slogan "Woman's place is the home" was being sounded on all sides, partly as an argument against woman suffrage and partly as a bulwark to stem the tide of women flowing from the home to the factory as a result of the industrial revolution.

With the gradual transformation of women's unpaid services into paid employment sprang up certain false ideas as to what women as wage earners could and should do. The theories that women work only for pin money, that all women are transients and so do not need vocational training, that women have no dependents and therefore should not expect equal pay for equal work with men, that young girls living at home may be paid a lower wage than others, and that women can do well only a few types of work—these are some of the lingering fallacies that bar the natural progress of women workers.

Because they have been so largely unorganized, as well as untrained and unskilled in regard to machine labor, women have been in a weaker economic position than have men. In countless instances they have been unable to bargain concerning their services and have been forced to accept the job available, irrespective of undesirable conditions of employment.



In spite of their handicaps, however, women have succeeded amazingly in whatever lines of work they have undertaken. They have not been restricted to the transplanted industries but have entered any avenues of employment opening up. In fact, there has been a steady infiltration of women into so many fields of work that now it may be said that woman's place is everywhere.

Women doctors and lawyers have become a common story, and more arresting now are the women who are managers and superintendents of factories, bankers and bank officials, chemists, clergymen, judges, inventors, engineers, and architects. There are women chauffeurs, draymen, teamsters, garage laborers, switchmen and flagmen on steam railroads, ticket agents, telegraph messengers and operators, steam and street railway laborers. In fact, the 1920 census revealed that of the 572 occupations listed, women were found in all but 35. The new census may show that women have invaded even these last few strongholds.

To the Women's Bureau the census reports are like directories showing important facts about women's employment and pointing the need of certain types of investigations. Two valuable publications of the bureau consist almost entirely of analyses of census data about women wage earners. The one is a compilation of tables, illustrated graphically by charts, comprising a veritable treasure trove of facts concerning age, nativity, and marital status of women as correlated with their occupations. The second, of which intensive use has been made during the past few years, reflects the upward trend of women's occupational march in the decade from 1910 to 1920. Striking increases in the numbers of women in clerical occupations and the professions, increases also in the groups in manufacturing, trade, and transportation, but decreases among the women in agriculture and domestic service are reported for this period.

In 1920 there were over 2,000,000 women in domestic and personal service, not far from 2,000,000 in manufacturing and mechanical industries, about 1,500,000 in clerical occupations, over 1,000,000 each in the professions and in agricultural pursuits, and more than 650,000 and 200,000 in trade and transportation, respectively.

In preliminary reports of the 1930 census, the Director of the Census estimates that the number of wage-earning women has increased to about 10,000,000. In addition, there are recorded for the first time some 23,000,000 housewives engaged in keeping their own homes.

The popular belief that women workers rendered real service to the Nation during the World War is upheld by facts and figures contained in a bulletin published by the bureau in 1920—*The New Position of Women in American Industry*—the purpose of which was to determine not only what women in industry in the United States did for the war but what the war did for women in industry. The success attending the emergency employment of women in occupations that required a high degree of skill and for which the women had been trained by their employers resulted in the retention of some women in most of these crafts.

As an outgrowth of this study was another dealing specifically with opportunities for industrial training for women and girls. As a result of war experiences it appeared that a promising indus-

trial future for women lay in machine shops manufacturing light parts, wood-product factories with assembling and finishing processes, optical and instrument plants, and sheet-metal shops. Available training facilities for such jobs, for the most part, were found closed to women. The report stresses the need and value of admitting women to training classes for these more unusual processes in which they have demonstrated their ability, as well as to courses in such time-honored women's work as millinery and dressmaking.

Among forces affecting employment opportunities of women in the fields of industry and commerce, that of scientific research is playing a conspicuous and helpful rôle. A bureau bulletin devoted to analysis of this situation reveals many new channels of employment opened up to women as the result of laboratory achievements that are responsible for new inventions, new industries growing out of the utilization of hitherto dormant resources, the development of new raw materials, increase of transportation facilities, new commercial methods, etc.

The effects of special labor legislation for women on their employment opportunities is another phase carefully investigated and written up by the bureau. Though admitting some restrictions due to laws that prohibit women from night work and certain other occupations considered hazardous, the report shows clearly that, in general, labor laws for women do not handicap them but aid in raising the standards for all workers, and that the real forces influencing women's opportunity are far removed from legislative regulation of their hours or working conditions.

In the interests of the clerical and professional groups of women two surveys have been conducted of services rendered by, and opportunities open to, women working for the largest single employer in the country—the Federal Government. The first of these, made in 1919, may be cited as the lever that opened up all civil-service jobs to women, who until then had been excluded from certain examinations and thus from many desirable positions. In 1925, just after the reclassification of civilian positions had gone into effect, a second survey showed that though women appointed to positions formerly held only by men were receiving the same salaries as were men, there still existed in regard to appointments to higher positions considerable discrimination against women, the majority of whom were massed in the lower-paid jobs.

Special groups of women, such as the negro, foreign-born, and married women workers, whose handicaps in respect to employment usually are heavier than those of the average woman, have received separate treatment in reports.

Two bulletins on negro women show that, in general, they receive unusually low wages, but that certain types of work in which they are now found represent for these workers distinct, if somewhat slow, industrial progress.

Immigrant women handicapped by inability to speak English and lack of knowledge concerning American customs naturally are limited in opportunity, being restricted mainly to the industrial field, a special study of their problems reveals. Nevertheless, because of determination to earn a livelihood and to raise their standards of living, these foreign-born wage earners make reliable and efficient

workers and show, on the whole, earnings that compare favorably with those of native white women in industry.

The problems of married women workers are accentuated by the prejudice existing in so many quarters against their employment and by the lack of understanding of their needs, according to the bureau's investigations. The facts show that the vast majority of these workers become breadwinners because of economic necessity and not from desire for careers; that about three-fourths of them are concentrated in manufacturing and mechanical industries, agriculture, and domestic service; and that the average married woman worker performs her household tasks in addition to her remunerative job.

Another special group being studied is women physicians, who have replied to a questionnaire covering their professional and personal responsibilities and the experiences that have assisted or retarded their advancement.



RECOGNIZING THE WOMAN WORKER'S FAMILY RESPONSIBILITY

The invention of machines, bringing about great developments in industry, reorganizing production, and transferring much of women's participation in manufacture from home to factory, has so changed the customs and standards of existence and so increased the cost of living that it has revolutionized both the home life and the work



life of individuals and has brought new problems in the wake of the many benefits derived.

Large numbers of women have been caught, as it were, in the suction of the high-powered wheels of industry. To some have come opportunities of development, to others heavy economic responsibilities. Because of certain unsound economic practices that have developed as

concomitants of the machine age, such as unregulated production, hit-or-miss marketing, disproportionate expansion of overhead, the curtailed employment of men with resultant reduction of their incomes, more and more have women been forced to become wage earners, assuming financial responsibilities in the home in addition to their tasks as home makers and mothers.

Authentic data indicate that large numbers of homes are entirely dependent upon the earnings of women and large numbers of other homes must rely upon women's earnings to supplement those of the male breadwinner. Many mothers must leave small children at home alone or in the care of older brothers and sisters because they have no choice, even though the children suffer, but to go out to earn the family living.



Many single women, through no choice of their own, must support parents or young brothers or sisters, or must share their earnings with other relatives dependent upon them. These women find it necessary to make far greater sacrifices than should be demanded of them. Society suffers in the long run. Practically all these women—young or old—must contribute in labor in addition to the money contributions to the home, and the double burden of home making and breadwinning is a heavy tax upon their strength.

Social and economic conditions obligate the Women's Bureau to concern itself with the problems of wage-earning women arising because of family responsibilities. The homes of the Nation are the foundation of its social structure, and work conditions and other problems affecting the economic status of wage-earning women involve not only the well-being of individual women and their children of to-day but the welfare of future generations.

Due to insufficient appropriation, the bureau has been unable to undertake special field research of the subject of responsibilities commensurate with either the number of women involved or the interrelated complexities of the subject. However, the bureau has constantly sought for information on the subject and as a consequence has been able to make some definite contributions. In connection with practically all its field studies it has made some original research on the subject by means of personal interviews with women workers in their homes. In most of the State studies, personal data for large numbers of women have been obtained by the questionnaire method, the women filling out cards left in their industrial plants by bureau agents. Facts secured in this way show that of more than 105,000 women workers in 17 State investigations who reported on marital status, nearly 25 per cent were married and about 16 per cent were widowed, separated, or divorced, together comprising more than 40 per cent likely to have the responsibilities of wives or mothers or both.

In a survey of women workers in Kansas, one of several first-hand investigations by the bureau of the share of wage-earning women in family support, personal interviews were held with 5,620 employed women. Almost three-fourths of these women stated that they made some financial contribution to their families, over one-third giving all their earnings.

A similar investigatory method was used in a comparative study in Manchester, N. H., of the contributions to their families of 884 men and 583 women wage earners in shoe factories. The interviews revealed that practically every married woman reporting on the subject turned over all her wages to the family, as did practically every married man, and that 60 per cent of the daughters living at home, in contrast to 35 per cent of the sons, did the same. A fact well established by this study is that sons do not forego marriage and careers to anything like the extent that daughters remain at home because of the needs of parents or younger brothers and sisters. This bulletin contains a summary and analysis of all data on the subject of women's responsibilities collected by other agencies and available at the time of the preparation of the report.

In a more recent publication by the Women's Bureau, entitled "What the Wage-Earning Woman Contributes to Family Support," have been assembled and summarized in popular form and with emphasis on the human aspects not only the material contained in the Manchester bulletin but all subsequent data on the subject collected by the bureau and some important figures on men's earnings and the cost of living.

Some of the facts of interest contained in this bulletin have been drawn from a study representative of original research of another type. The bureau sought and was extended the cooperation of the

United States Bureau of the Census in securing from the original 1920 census schedules information concerning the 38,377 adult women wage earners in four selected cities. This made it possible for the Women's Bureau to compile and present more detailed information and more extensive analysis than were published by the census in regard to the age, marital status, and occupation of these women, and the composition of their families, including ages of children. Facts were made available, also, concerning the numbers of women whose wage-earning activities were within the home and outside of the home, and for one city, Passaic, a first-hand investigation was carried on to secure information in regard to the mothers who left young children at home while they themselves were at work. Moreover, it was possible to show what proportions the women workers constituted of the woman population in each of the four cities and the ratio of employed married women to all married women. This study points the need of more detailed data pertaining to women workers in the published volumes of the Bureau of the Census. An important example is the present custom of classifying women by marital status in two groups only, (1) married women, living with their husbands, and (2) all others, whether single, widowed, divorced, separated, or deserted—thus making it impossible to ascertain how many breadwinners there are of each of these quite different classes.

Two other publications deserve particular mention in this connection. The one, *Women Workers and Family Support*, was prepared by the students of the Bryn Mawr summer school for women in industry and contains an analysis of their own experiences as regards home responsibilities. The second, a study of the applications of married women over a period of three or four months in 1928 at two Denver employment agencies—the Young Women's Christian Association and a department store—is an illustration of a type of investigation that can be made with profit by similar agencies in other communities, often with comparatively little change in the kind of record ordinarily kept for handling their own business. That nine-tenths of these married women were seeking work outside the home because of economic necessity is one of the significant facts revealed.

A study of conditions among employees in meat-packing plants includes the analysis of information on family responsibilities supplied by about 900 women visited in their homes. The earnings of several hundred men also were recorded as contributing to an understanding of the economic condition of families.

Of such vital importance is the question of women's economic responsibilities to the family that it forms an integral part of almost all outstanding problems pertaining to wage-earning women, as the warp or woof of a fabric. In studies by the bureau along specialized lines, such as women in cotton mills, laundries, canneries, domestic employment, home work, or in studies of special groups of women such as the negro and foreign-born wage earners, or in the report on the breadwinning activities of women in coal-miners' families, a constant feature of the discussion is the analysis of the home responsibilities of the women workers.

Another phase of this subject that is constantly stressed throughout most of the bureau bulletins is the double rôle enacted by so

many women who must serve as wage earners as well as home makers, or, with the addition of motherhood, the triple burden that weighs on many. All who read the bureau literature can not fail to be impressed with the constantly recurring fact that it is the women wage earners who perform the household duties, with the care of the home and of the children and the ministrations to the sick, activities that perforce are engaged in before and after the hours devoted to breadwinning enterprises. Another point definitely stressed by the bureau is that since women find themselves in this difficult situation in the present industrial order, it is imperative to safeguard their interests, and the interests of the Nation, by certain measures in the form of a fair wage, a short workday, and healthful conditions of work.

PUBLICATIONS OF THE WOMEN'S BUREAU

[Any of these bulletins still available will be sent free of charge upon request]

- *No. 1. Proposed Employment of Women During the War in the Industries of Niagara Falls, N. Y. 16 pp. 1918.
- No. 2. Labor Laws for Women in Industry in Indiana. 29 pp. 1919.
- No. 3. Standards for the Employment of Women in Industry. 8 pp. Fourth ed., 1928.
- No. 4. Wages of Candy Makers in Philadelphia in 1919. 46 pp. 1919.
- *No. 5. The Eight-Hour Day in Federal and State Legislation. 19 pp. 1919.
- No. 6. The Employment of Women in Hazardous Industries in the United States. 8 pp. 1921.
- No. 7. Night-Work Laws in the United States. (1919.) 4 pp. 1920.
- *No. 8. Women in the Government Service. 37 pp. 1920.
- *No. 9. Home Work in Bridgeport, Conn. 35 pp. 1920.
- *No. 10. Hours and Conditions of Work for Women in Industry in Virginia. 32 pp. 1920.
- No. 11. Women Street Car Conductors and Ticket Agents. 90 pp. 1921.
- *No. 12. The New Position of Women in American Industry. 158 pp. 1920.
- No. 13. Industrial Opportunities and Training for Women and Girls. 48 pp. 1921.
- *No. 14. A Physiological Basis for the Shorter Working Day for Women. 20 pp. 1921.
- No. 15. Some Effects of Legislation Limiting Hours of Work for Women. 26 pp. 1921.
- No. 16. (See Bulletin 63.)
- No. 17. Women's Wages in Kansas. 104 pp. 1921.
- No. 18. Health Problems of Women in Industry. 8 pp. Revised, 1931.
- No. 19. Iowa Women in Industry. 73 pp. 1922.
- *No. 20. Negro Women in Industry. 65 pp. 1922.
- No. 21. Women in Rhode Island Industries. 73 pp. 1922.
- *No. 22. Women in Georgia Industries. 89 pp. 1922.
- No. 23. The Family Status of Breadwinning Women. 43 pp. 1922.
- No. 24. Women in Maryland Industries. 96 pp. 1922.
- No. 25. Women in the Candy Industry in Chicago and St. Louis. 72 pp. 1923.
- No. 26. Women in Arkansas Industries. 86 pp. 1923.
- No. 27. The Occupational Progress of Women. 37 pp. 1922.
- No. 28. Women's Contributions in the Field of Invention. 51 pp. 1923.
- No. 29. Women in Kentucky Industries. 114 pp. 1923.
- No. 30. The Share of Wage-Earning Women in Family Support. 170 pp. 1923.
- No. 31. What Industry Means to Women Workers. 10 pp. 1923.
- No. 32. Women in South Carolina Industries. 128 pp. 1923.
- No. 33. Proceedings of the Women's Industrial Conference. 190 pp. 1923.
- No. 34. Women in Alabama Industries. 86 pp. 1924.
- No. 35. Women in Missouri Industries. 127 pp. 1924.
- No. 36. Radio Talks on Women in Industry. 34 pp. 1924.
- No. 37. Women in New Jersey Industries. 99 pp. 1924.
- No. 38. Married Women in Industry. 8 pp. 1924.
- No. 39. Domestic Workers and Their Employment Relations. 87 pp. 1924.
- No. 40. (See Bulletin 63.)
- No. 41. Family Status of Breadwinning Women in Four Selected Cities. 145 pp. 1925.
- No. 42. List of References on Minimum Wage for Women in the United States and Canada. 42 pp. 1925.
- No. 43. Standard and Scheduled Hours of Work for Women in Industry. 68 pp. 1925.
- No. 44. Women in Ohio Industries. 137 pp. 1925.

* Supply exhausted.

- No. 45. Home Environment and Employment Opportunities of Women in Coal-Mine Workers' Families. 61 pp. 1925.
- No. 46. Facts about Working Women—A Graphic Presentation Based on Census Statistics. 64 pp. 1925.
- No. 47. Women in the Fruit-Growing and Canning Industries in the State of Washington. 223 pp. 1926.
- *No. 48. Women in Oklahoma Industries. 118 pp. 1926.
- No. 49. Women Workers and Family Support. 10 pp. 1925.
- No. 50. Effects of Applied Research Upon the Employment Opportunities of American Women. 54 pp. 1926.
- No. 51. Women in Illinois Industries. 108 pp. 1926.
- No. 52. Lost Time and Labor Turnover in Cotton Mills. 203 pp. 1926.
- No. 53. The Status of Women in the Government Service in 1925. 103 pp. 1926.
- No. 54. Changing Jobs. 12 pp. 1926.
- No. 55. Women in Mississippi Industries. 89 pp. 1926.
- No. 56. Women in Tennessee Industries. 120 pp. 1927.
- No. 57. Women Workers and Industrial Poisons. 5 pp. 1926.
- No. 58. Women in Delaware Industries. 156 pp. 1927.
- No. 59. Short Talks About Working Women. 24 pp. 1927.
- No. 60. Industrial Accidents to Women in New Jersey, Ohio, and Wisconsin. 316 pp. 1927.
- No. 61. The Development of Minimum-Wage Laws in the United States, 1912 to 1927. 635 pp. 1928.
- No. 62. Women's Employment in Vegetable Canneries in Delaware. 47 pp. 1927.
- No. 63. State Laws Affecting Working Women. 51 pp. 1927. (Revision of Bulletins 16 and 40.)
- No. 64. The Employment of Women at Night. 86 pp. 1928.
- *No. 65. The Effects of Labor Legislation on the Employment Opportunities of Women. 498 pp. 1928.
- No. 66. History of Labor Legislation for Women in Three States; Chronological Development of Labor Legislation for Women in the United States. 288 pp. 1929.
- No. 67. Women Workers in Flint, Mich. 80 pp. 1929.
- No. 68. Summary: The Effects of Labor Legislation on the Employment Opportunities of Women. (Reprint of Chapter 2 of Bulletin 65.) 22 pp. 1928.
- No. 69. Causes of Absence for Men and for Women in Four Cotton Mills. 24 pp. 1929.
- No. 70. Negro Women in Industry in 15 States. 74 pp. 1929.
- No. 71. Selected References on the Health of Women in Industry. 8 pp. 1929.
- No. 72. Conditions of Work in Spin Rooms. 41 pp. 1929.
- No. 73. Variations in Employment Trends of Women and Men. 143 pp. 1930.
- No. 74. The Immigrant Woman and Her Job. 179 pp. 1930.
- No. 75. What the Wage-Earning Woman Contributes to Family Support. 20 pp. 1929.
- No. 76. Women in 5-and-10-Cent Stores and Limited-Price Chain Department Stores. 58 pp. 1930.
- No. 77. A Study of Two Groups of Denver Married Women Applying for Jobs. 11 pp. 1929.
- No. 78. A Survey of Laundries and Their Women Workers in 23 Cities. 166 pp. 1930.
- No. 79. Industrial Home Work. 20 pp. 1930.
- No. 80. Women in Florida Industries. 115 pp. 1930.
- No. 81. Industrial Accidents to Men and Women. 48 pp. 1930.
- No. 82. The Employment of Women in the Pineapple Canneries of Hawaii. 30 pp. 1930.
- No. 83. Fluctuation in Employment in the Radio Industry. 66 pp. 1931.
- No. 84. Fact Finding With the Women's Bureau. 37 pp. 1931.
- No. 85. Wages of Women in 13 States. (In press.)
- * Annual reports of the director, 1919*, 1920*, 1921*, 1922, 1923, 1924*, 1925, 1926, 1927*, 1928*, 1929, 1930.

* Supply exhausted.