

U. S. DEPARTMENT OF LABOR

JAMES J. DAVIS, Secretary

WOMEN'S BUREAU

NINTH ANNUAL REPORT OF THE
DIRECTOR OF THE
WOMEN'S BUREAU



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UNITED STATES DEPARTMENT OF LABOR,
WOMEN'S BUREAU,
Washington, July 25, 1927.

HON. JAMES J. DAVIS,
Secretary of Labor.

SIR: The ninth annual report of the Women's Bureau, for the fiscal year ended June 30, 1927, is submitted herewith.

INTRODUCTION

The Women's Bureau has to report for the year 1926-27 the completion of several extensive and important studies made in the interest of wage-earning women and in accordance with the authority of the bureau to "investigate and report * * * upon all matters pertaining to the welfare of women in industry."

The field investigations of the effects of special legislation on the employment of women were practically completed in December, and the report will shortly be turned over to the editorial division for preparation for printing. In January a preliminary report of the findings of this study as regards 48-hour and 50-hour laws was presented, by request, to the Industrial Survey Commission of New York, appointed by the legislature of that State; and in May an address on the subject of the investigation was delivered before the section on industrial and economic problems of the National Conference of Social Work, in convention at Des Moines. A brief statement of the findings of the survey forms part of this report.¹

The history of minimum-wage laws in the United States, 1912 to 1927, which has occupied the research division of the bureau for a long time, was completed and the report has been sent to the printer since the 1st of July. It is the most thorough analysis of this important subject which has been made and constitutes a record which will have permanent value.²

The study of industrial accidents to women in New Jersey, Ohio, and Wisconsin—made primarily to ascertain the facts about injured women's industrial rehabilitation after a decade under compensation laws and reporting also upon the causes, frequency, and severity of accidents, their prevention, and the legislation and administration of compensation acts—will shortly be delivered from the press.³

¹ See p. 7.

² For further details see p. 10.

³ See p. 12.

Several interesting studies remain to be completed as the larger reports are got out of the way. The ideal of only a few months elapsing between the collection of data and their appearance in bulletin form still is far from attainment in this bureau, as in most bureaus of the Government service, but it is never lost sight of. If it be true, as evidence seems to prove, that women are employed in industry in an increasing proportion, however slow the actual rate of increase, their employers, their fellow workers, and the public as a whole naturally are interested in that fact and in the conditions of their employment. It is the purpose of the bureau to collect, correlate, and make available for reference a mass of information which 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.

NUMBER OF WOMEN GAINFULLY EMPLOYED

Again the only figure for total numbers of women gainfully employed in the United States is the eight and a half million reported by the Census of Occupations of 1920 and quoted by the Women's Bureau in each succeeding year. By now that number may be a considerable underestimate. Unfortunately, not many figures are available which show by sex the trend of employment. Even the United States Census of Manufactures, now taken biennially, has not collected figures on the sex of employees since 1919, the tabulation and publication of the more general figures being as much as the staff can handle in the two-year period. It would seem, however, that an exception might have been made for the year 1925, falling halfway between the decennial censuses.

An example of the evidence referred to in regard to women's advance in industry since the latest Federal census may be mentioned here. The Women's Bureau is in possession of the 1914 to 1924 employment figures for Ohio, the third State in the Union as regards number of wage earners in manufacturing, and these show that women fared better, proportionally, than did men between 1919 and 1924. That period witnessed the very severe depression of 1920-21, during which women lost employment to a less degree than did men, and another bad year for manufacturing, 1924, more serious for men than for women. As a consequence, women, who in 1919 constituted 15.8 per cent of all wage earners, and who recovered somewhat from the depression following, though men did not, were 16.8 per cent of all wage earners in 1924. They lost some thousands in manufacturing, but men lost more heavily in proportion and women advanced from 14.9 per cent of the total in 1919 to 15.9 per cent of the total in 1924. In the various lines grouped as "service" both sexes made large gains, but women advanced in the five years from 39.7 to 40.3 per cent of the total. In clerical occupations, where again both sexes increased in numbers, women slightly more than held their own, being 49.3 per cent of the total in 1919 and 49.4 per cent of the total in 1924. Trade, especially employment as sales persons, tells a different story, women declining during the five years from 52.1 per cent to 45 per cent of all sales persons employed, but among all

employees in all industries—wage earners, clerks, and sales persons—women were 21.2 per cent in 1919 and 22.6 per cent in 1924. At the end of the five years men still were some 1,500 behind their 1919 figure, while women were something over 18,000 in advance of theirs.

Ohio was of tremendous importance industrially during the World War, and yet contributed many thousands of men to military service. Women replaced men in industry in an almost spectacular way, and the pre-war status has not been resumed. Of wage earners in manufacturing, women constituted 13.1 per cent in 1917 and rose to 15 per cent in 1918, the year of the draft; six years later they formed 15.9 per cent of the wage earners in manufacturing. Of all wage earners, women constituted 13.9 per cent in 1917 and rose to 15.7 per cent in 1918; by 1924 they had advanced to 16.8 per cent of all wage earners. Of all persons employed—wage earners, clerks, and sales persons—women comprised 17.9 per cent in 1917 and jumped to 20.5 per cent in 1918; in 1924 they constituted 22.6 per cent of all persons employed.

There would seem to be no reason why Ohio should differ from other industrial States in regard to the trend of employment of women, and if these figures are typical of American industry as a whole they merit respectful attention and analysis.

It may be assumed that the Government will again call for the sex of wage earners in its Census of Manufactures in 1929, following a lapse of 10 years since the last enumeration of these important data and to be used in conjunction with the less exact statistics of the 1930 Census of Occupations. The war-ridden countries of Europe may be excused for gaps in what should be a continuous series of statistics, but there would seem to be no reason why our own prosperous country should allow so regrettable a lapse.

STANDARDS FOR THE EMPLOYMENT OF WOMEN

The bureau continues to recommend its reasonable standards of hours, wages, working conditions, and employment relations, and feels a growing confidence in its ability to furnish guidance and be of genuine assistance in putting such suggestions into practice. These standards, agreed upon for the employment of women on Government contracts during the war, and indorsed by representative employers and working women alike, are briefly as follows:

Hours.

- A day not longer than eight hours.
- A half holiday on Saturday.
- One day's rest in seven.
- At least 30 minutes allowed for a meal.
- A 10-minute rest period in the middle of each half day without lengthening the day.
- No employment of women between midnight and 6 a. m.

Wages.

Rates based on occupation and not on sex nor race, the minimum to cover cost of healthful and decent living and to allow for dependents.

Working conditions.

- Cleanliness.
- Good lighting, ventilation, and heating.
- Machine guards, handrails, safe condition of floors, devices for drawing off dust and fumes.
- Fire protection.
- First-aid equipment.
- A chair for each woman. Change of posture—neither constant standing nor constant sitting.
- Prevention of overstrain and of overexposure to dust, fumes, poisons, extremes of temperature.
- Sanitary drinking and washing facilities.
- Dressing rooms, rest rooms, lunch rooms.
- Adequate toilet arrangements—one toilet to each 15 workers.

General.

- A personnel department, responsible for the selection, assignment, and transfer or discharge of employees.
- Women in supervisory positions and as employment executives where women are employed.
- Provision for workers to share in control of conditions of employment.
- Opportunity for workers to choose occupations for which best adapted.
- No prohibition of women's employment except in occupations proved to be more injurious to women than to men.
- No work to be given out to be done at home.
- Application to and cooperation with Federal and State agencies dealing with labor and conditions of employment.

HOUR LEGISLATION DURING THE PAST YEAR

In two States—Arizona and New York—laws of importance affecting the hours of work of women have been passed during the legislative session of 1927. In Arizona the 8-hour day continues, but the week has been shortened to 6 days and 48 hours. The amended law is all-inclusive, certain customary exemptions only being allowed.

In New York, after attempts covering a period of 14 years to shorten the hours of women workers, the law, as far as it applies to factories and mercantile establishments, has been amended to provide 48 hours a week and 8 hours a day, or 49½ hours a week if not more than 9 hours are worked on five days and 4½ hours on the sixth day. An additional 78 hours in any calendar year will be permitted. These amendments become effective January 1, 1928.

North Dakota's hour law has been reenacted and amended slightly. In Minnesota, since the hour law of 1923 was declared by the attorney general to have been unconstitutionally enacted, the old law of 1913 is again in force. This law the legislature of 1927 has amended to provide exemption for canning factories for a period of 75 days in each year, the previous period of exemption having been 6 weeks.

Unsuccessful efforts have been made in other States to revise existing laws or to secure the passage of new ones. Again in Massachusetts an attempt to modify the 48-hour law, this time to allow 10 hours a day and 54 hours a week in cotton mills during rush seasons, met with defeat.

STATE STUDIES

The Women's Bureau has always made investigations of the conditions of employment of women in individual States an important part of its work, having conducted 18 such surveys in the nine years of its existence. Each of these surveys has been undertaken at the request of some group in the State, either the department of labor or some organization interested in the problems of wage-earning women. In this way the bureau renders a valuable service to the States in which the surveys are made and to the country as a whole in presenting data representative of women in industry that are comparable for various sections of the country.

Owing to the limited appropriation available and the pressure of studies already under way, surveys of this type could not be undertaken during the past year, in spite of certain requests to do so, but the work on two studies—Women in Delaware Industries and Women in Tennessee Industries—was completed. These two reports and one other—Women in Mississippi Industries—came from the press during the year.

Mississippi.

The survey in Mississippi, made early in 1925, covered 2,853 women, practically 2 in 10 being negro and almost none being foreign born. They were employed in 81 establishments, in 25 cities and towns. Something over two-thirds of the women were in factories, one-fifth were in stores, and the remainder were in laundries.

More than 35 per cent of the women had a day of more than 10 hours and 26 per cent had a week of at least 60 hours. Only 3 per

cent had a day of 8 or less than 8 hours and less than 5 per cent had a week as short as 48 hours. One-half the women lost some time during the week scheduled.

For white women the median of the week's earnings—one-half the women earning more and one-half earning less—was \$8.60. For negro women this figure was \$5.75. Pay-roll figures for women who had been a year with the employer showed the median of the year's earnings to be \$464 for white women and \$300 for negro women.

Of both races 22 per cent of the women were married. Of the white women one in six was widowed, separated, or divorced, and more than a third of the negro women were in this classification.

Of all the women 38 per cent were 20 and under 30 years of age, but only 14.5 per cent of the white women, compared to 18.5 per cent of the negro women, were 40 years or more.

The great majority of the women were living with their families.

As is true of all States surveyed by the bureau, working conditions were good in some plants and bad in others. In the matter of sanitation they were not wholly adequate, and service facilities were far from satisfactory.

Tennessee.

The survey in Tennessee, also made in the spring of 1925, was much the larger, covering 16,596 women—8.6 per cent of them negro and a negligible proportion foreign born—in 216 establishments in 28 cities and towns. More than four-fifths of the women were in factories, one-tenth were in stores, and the remainder were in laundries.

Forty-five per cent of the women had a day of 10 hours or more and 49 per cent had a week of at least 55 hours. Only about 6 per cent had a day of 8 hours or less, and fewer than 1 in 10 had a week as short as 48 hours. The records show that 44 per cent of the women lost some time during the week scheduled.

For white women the median of the week's earnings—one-half the women earning more and one-half earning less—was \$11.10. For negro women this figure was \$6.95. Pay-roll figures for women who had been a year with the firm showed the median of the year's earnings to be \$629 for white women and \$386 for negro.

Of all women, white and negro, 30 per cent were married, 20 per cent were widowed, separated, or divorced, and just under 50 per cent were single.

Sixty-eight per cent of all women were under 30 years of age, well over one-half being under 25. Only 15 per cent were as much as 40 years of age.

The great majority of the women were reported to be living at home.

Working conditions were not uniformly good, and drinking, washing, and toilet facilities were far below standard.

Delaware.

The survey in Delaware, conducted in the summer of 1924, covered 4,176 women—6.5 per cent being negro and a small proportion foreign born. These women were employed in 146 establishments in 29 cities and towns. Fifty-six per cent of the women were in factories, 26 per cent were in canneries, 11 per cent were in stores, and the remainder were in laundries and hotels and restaurants.

Less than 10 per cent of the women in factories, stores, and laundries had a day of as much as 10 hours and less than 10 per cent had a week of as much as 55 hours. Fifteen per cent had a day of 8 hours or less and 21 per cent a week of 48 hours or less. Sixty-two per cent of the women lost some time during the week scheduled, more than the usual proportion of lost time being due to the depressed business conditions of 1924.

For white women in factories, stores, and laundries, the median of the week's earnings—one-half the women earning more and one-half earning less—was \$11.05. For white women in hotels and restaurants it was \$10.15 and for those in canneries it was \$9.40. For negro women in hotels and restaurants (only 21 women) the median was \$10.75, and for those in canneries it was \$5.55. Pay-roll figures for white women in factories, stores, and laundries who had been a year with the employer showed the median of the year's earnings to be \$675.

One-third of the white women were married and one-eighth were widowed, separated, or divorced. Sixty per cent of the white women and 58 per cent of the negro women were under 30 years of age, 14.5 per cent of the white and 11.7 per cent of the negro being under 18. Most of them were living with their families.

Working conditions, particularly those in canneries, varied from excellent to very bad.

SPECIAL STUDIES

During the past year the Women's Bureau has continued or completed a number of special studies relating to the problems of wage-earning women.

The effects of special legislation on the employment of women.

The investigation of the effects of special legislation on the employment of women, the inception and method of which were outlined in the eighth annual report of the bureau, has been completed and the report on the study is being prepared.

Though the complete findings are not yet ready for circulation, certain aspects of the conclusions have been made public. The first report was made in January before the Industrial Survey Commission of the State of New York. This commission was appointed by the New York State Legislature to study the need for labor legislation in that State. At the request of the commission the Women's Bureau submitted a preliminary statement showing the findings of its investigation in regard to the effect of 48-hour and 50-hour laws on the employment of women. In May a more comprehensive report on the general findings of the investigation was made to the members of the industrial section of the National Conference of Social Work meeting in Des Moines, Iowa.

The scope of the study has been very extensive and many different sections of the country have been covered in the effort to secure information regarding different types of women's employment and any relation which could be found between opportunities for such employment and legislative regulation. The field work was begun in March and completed in December, 1926. During that time the

agents of the Women's Bureau collected information from establishments and women workers in California, Illinois, Indiana, Ohio, Massachusetts, New Hampshire, New York, and Rhode Island.

Information regarding the employment of women in stores in Pennsylvania was supplied to the Women's Bureau by the bureau of women and children of the department of labor of that State, and in New York State the bureau of women and children in industry made a special study of the employment of women in newspaper offices as proof readers, monotypists, and linotypists.

Information was secured also from the Industrial Survey Commission of the State of New York. This commission, appointed—as already stated—to investigate the need for labor legislation in that State, conducted its investigation largely by means of public hearings, at which interested persons reported their experiences and recommendations regarding the various laws under consideration. A considerable part of the testimony presented to the commission was in regard to a proposed 48-hour law for women. After the hearings were over and the recommendations of the commission had been made to the legislature the Women's Bureau was given access to the transcript of the testimony presented to the commission and secured copies of those sections which were pertinent to the investigation of the effects of special legislation. By this means the bureau was able to examine and evaluate data which it might have been obliged to secure by some other method. With the exceptions noted, all the data secured during the course of this investigation have been collected by the agents of the Women's Bureau.

The employment of women in many different types of industry was studied, but special emphasis was laid on five manufacturing industries which are typical of the different conditions of women's employment—boots and shoes, hosiery, electrical apparatus and supplies, paper boxes, and clothing. For this group of industries a very detailed study was made of all the factors affecting women's employment in two or more States having different standards of legal regulation. A careful study was made also of women in stores and restaurants.

In addition to the detailed information secured from these industries data were gathered from a very large number of establishments which employed women at night, or which employed men longer hours than were legally permitted for women. From these establishments it was possible to get a general idea of the policies of employers regarding women's employment and the extent to which opportunity for women was affected by hour and night-work legislation.

As much of the special legislation that has been enacted for the regulation of women's employment applies to specific occupations, it seemed desirable to include studies of certain typical occupations for women in addition to the general problems of their employment in industry. The occupations included for study were elevator operating, the work of pharmacists, and a large group of occupations that are prohibited for women in one or more States. In all a total of not far from 1,500 establishments were visited during the course of the

survey and more than 1,000 women workers were interviewed for their personal experiences of the effect of laws on their conditions of employment.

In getting the information desired in each State the Women's Bureau received the fullest cooperation from State departments of labor and other interested groups. In several instances the State departments of labor circularized their inspecting agents to get the data necessary for the successful blocking out of the work of the bureau's agents. Women's organizations and trade-union organizations also cooperated to the fullest extent in supplying names of individuals who could give pertinent information and in advising as to local problems which should be examined.

Before deciding that an adequate amount of material had been secured in the field the bureau submitted an outline of the data collected to its technical committee, consisting of Miss Mary Van Kleeck, director of industrial studies of the Russell Sage Foundation; Mrs. Frank B. Gilbreth, industrial engineer; and Dr. Charles P. Neill, formerly Commissioner of Labor of the United States. Though it was recognized that the material collected was at best only a sampling of the information available, it seemed to this committee and to the Women's Bureau that the information was sufficient to give an adequate basis for drawing deductions.

It is expected that the report will be ready for circulation during the coming winter. In addition to the details of the investigation made, it will include a chronological study of the laws and amendments to laws regulating the employment of women in each State; a history of the labor legislation affecting women in New York, Massachusetts, and California, showing the origin of the various laws and the forces that proposed and opposed them; and a special study of trade-unions in relation to labor legislation for women.

The most important conclusions that can be drawn from this investigation are these:

The regulatory laws as applied to the great bulk of women wage earners, those who are engaged in the manufacturing processes of industry, do not handicap women, but serve to regularize employment and to establish the accepted standards of modern efficient industrial management. When applied to specific occupations not closely akin to the industrial occupations for which the laws were drawn, this regulatory legislation has proved in a few instances to be a handicap to women.

Laws prohibiting night work for women in industry seem generally to be merely a reflection of the usual attitude of employers regarding such work, but occasionally they result in a limitation of women's employment. When applied indiscriminately to certain special occupations that are professional or semiprofessional in type, night-work prohibition or regulation has resulted in restrictions of women's employment which do not seem to be entirely warranted by the conditions of work.

The laws that prohibit women's employment in certain occupations have been found in a number of instances to be an unnecessary restriction.

The most satisfactory future policy for legislation affecting women probably will be a more careful adjustment of laws to the requirements of certain occupations, a more specific stipulation of the type of worker covered by the law, and a replacement of prohibition by regulation except for such occupations as are shown to be more hazardous for women than for men.

History of the development of minimum-wage legislation in the United States.

The research study of the various State minimum-wage laws, based on the text of the laws and the publications and records of the State minimum-wage commissions, has been completed in the past year.

In this report the provisions of the laws are analyzed and methods of carrying out these provisions are summarized. All orders issued under the laws are analyzed in detail. Methods of enforcing these orders are illustrated and results of the orders are studied from the figures on rates and earnings presented by the commissions. In addition, the relation of the courts to these laws, and the influence of the size of the appropriations that have been available for the work, are discussed.

Minimum-wage legislation had been tried in Great Britain, Australia, and New Zealand before any law was passed in the United States, but this type of legislation still was largely an experiment when it began to receive serious attention in the United States. From 1912 to 1923, 15 States—Arizona, Arkansas, California, Colorado, Kansas, Massachusetts, Minnesota, Nebraska, North Dakota, Oregon, South Dakota, Texas, Utah, Washington, and Wisconsin—and the District of Columbia and Porto Rico passed minimum-wage laws. In four cases—Arizona, Porto Rico, South Dakota, and Utah—a minimum rate of pay for women workers was established in the law. All the other States set up the machinery for establishing such a rate through orders issued by the body administering the law. Arkansas provided both a rate in the law and the means of setting other rates.

In two States, Colorado and Nebraska, no orders ever were issued. In the 11 other States, 226 separate orders setting rates of pay were issued over a period of 14 years, 1913 to 1927. In all the States except Massachusetts and Nebraska these orders had the force of law. In Massachusetts and Nebraska the only means of enforcing the rates was public opinion, through the publication of the names of such firms as failed to comply with the orders. The differences in the very fundamentals of these laws show how unformed were the ideas of minimum wage and indicate how largely this law was an experiment.

At present, because of three adverse decisions of the United States Supreme Court, when the constitutionality of the laws of the District of Columbia, Arizona, and Arkansas was questioned, the compulsory type among these laws seems likely to disappear before it has been fully developed.

The present bulletin is primarily a report of the ways in which the various States have worked out the machinery for carrying on this new type of law, rather than a report on the results of the law. This legislation has been in effect for such a relatively short time, its administration and enforcement have been developed along such

diverse lines in the different States, the number of women for whom rates have been set is so small in comparison with the total number of gainfully occupied women in the United States, and, most important of all, the war and postwar periods during which the laws have functioned have been influenced by abnormal economic forces so much stronger than they, that any sweeping judgments as to positive effects of the laws must be guarded against. The report shows clearly that statements as to the laws' bad effects can find no general support. It shows also that statements as to their good effects must be careful not to consider the minimum-wage laws much more powerful than is actually the case, nor to attribute to the laws situations brought about by a combination of economic factors.

In the discussion of the laws' administration, the most apparent point is that every act connected with these laws has been in the nature of an experiment. One State will handle a given problem in one way; another State will try a method exactly opposed to the first. Within a State, a situation will be met in one way at one time and in another way at a later date. Moreover, the commissions have had to learn slowly, through actual experience, just what must be done to carry out the law. Even to-day there are many problems, particularly those that relate to applying the decrees to actual industrial conditions, that have never been touched by certain commissions.

Among the interesting points brought out by the report is the fact that the activities of the bodies administering the laws seem to show that a minimum-wage law generally is most carefully and thoroughly applied by a commission organized especially to take care of this law, and particularly when such commission has a woman member. In another chapter of the report a careful study of the cost-of-living figures prepared as an aid to setting rates and of the rates themselves shows that no State has equaled the announced cost of living in all its decrees, and that only one State, California, has ever had all its women workers who were covered by decrees paid at rates which might be said to equal the cost of living for a self-supporting woman. After thus considering how adequately or inadequately the decrees have provided adult experienced women with the necessary cost of proper living, the report considers the treatment accorded to minors, apprentices or learners, and substandard workers. The most striking fact brought out by this part of the study is that the commissions quite generally have allowed learning periods, at rates well below the minimum, long enough to enable a woman to master a skilled trade, though at the end of this time the order required only that she be paid a minimum rate, based not on skill but on the minimum cost of living.

Continuing the analysis of the decrees, the report makes it clear that most decrees have not contained adequate rules for applying the rates to the actual conditions of industrial life. Few decrees have ruled how many hours of work per week were necessary to obtain the minimum rate. Few have given complete rules for applying the special rates for apprentices. The situation of how to handle workers who are paid piece rates has not been met. The report points out that all these problems had to be met in practice and should have had careful consideration by the commissions and uniform treatment.

In all the fields covered by the report it is shown that California outranks the other States having the best practice. Individual good points are found in almost every State, but the highest general level is in the State with an independent commission created for this particular law, with a woman member of this commission, and with appropriations several times as large as those found in the other States. The inference can not fail to be drawn that minimum-wage laws on the whole have not had sufficient support to develop their real possibilities. Their flexibility and adaptability particularly have been lost sight of because in most cases money and in some cases proper interest in utilizing fully the potential values of these laws have been lacking.

Industrial accidents to women in New Jersey, Ohio, and Wisconsin.

In the spring of 1923 the Women's Bureau undertook to make a study of the effects of accidents to wage-earning women. It was the purpose of the study to examine "the relative importance of various factors in accident causation, the regulations passed by legislatures to relieve the victims of industrial accidents, as far as possible, of the burdens inflicted by wage loss and by permanent physical incapacity, and the procedure by which these regulations are being enforced."

The survey was limited to three States—New Jersey, Ohio, and Wisconsin—but in each of these States the industries are diversified and employ a considerable number of women and the accident records are so kept as to make possible their statistical use. In each State the compensation law has been in force long enough to be fairly well worked out.

Material was taken from the records of the three States for the period between July 1, 1919, and June 30, 1920. This time was selected because of the advantage in being able to consider the number of accidents in relation to the Federal census figures on numbers of women working in the various occupations. Also, enough time had elapsed between the accidents recorded and the date of the study for interviews with permanently disabled women to show what adjustments they had been able to make.

The records showed 1,096 compensable accidents to women in New Jersey in the year covered, 1,545 in Ohio, and 644 in Wisconsin, making a total of 3,285 accident records studied. In addition to a study of the detailed records in the files, 385 women who had suffered some degree of permanent disability were interviewed. The majority of the accidents reported (over three-fourths) had occurred in manufacturing industries, and 15 per cent of the women injured had been working in clerical occupations. The others were scattered among transportation, agriculture, public utilities, and trade. Considerably over one-half of the accidents to women in manufacturing establishments were due directly to machinery, while falls and the handling of heavy, sharp, or rough objects together were responsible for more than one-fourth of the factory accidents to women.

The figures of the report give some indication of the relative hazard in the different industries employing women in the States surveyed. The manufacture of metal products had a much higher frequency rate than had any other industry—40 accidents in the year

for every 1,000 women employed. In iron and steel plants there were 27 accidents and in establishments preparing food products there were 22 accidents per 1,000 women employed.

There were only 15 fatalities among the 3,285 cases reported, but in 536 cases the worker had been left with some permanent disability. Over four-fifths of the cases were recorded as causing only a temporary disability. Well over one-half of the permanent disability cases involved only one finger.

The problem of the person who has suffered a permanent disability is the most difficult of solution, and a satisfactory adjustment of indemnity, medical aid, and rehabilitation in cases of injury resulting in permanent disability has not been evolved. This is why the survey included interviews with women who had suffered permanent disabilities, to discover what adjustments individual women had been able to make. The interviews showed that many of the women had found it difficult or impossible to regain their preaccident status. As stated, 385 women were visited. Almost half of these were responsible for the support of other persons in addition to themselves. Over one-third of the women had been working less than six months at the occupations they were engaged upon when injured. Two-fifths of the women were disabled for their former work; one-tenth were disabled for all available work. Of those who returned to industry 79.6 per cent went back to their former employer, but almost one-fourth of these were laid off soon or found it necessary to quit on account of the disability. Over one-fourth of the women who returned to work had not at any time since the accident earned as much as they had earned before.

Women workers in Flint, Mich.

The study of the women in industry in Flint, Mich., has been completed and will soon be ready to go to press. A preliminary report of the findings was sent in October to the agencies which requested the survey. The study has a general significance in that it presents the problems of a one-industry city. Flint is a city whose population has shown a tremendous increase during the past 30 years, and this unusual growth has been due entirely to one industry—the manufacture of automobiles and their accessories, employing a small proportion of women. Any violent change in production in the automobile industry affects the prosperity of the whole town.

The data of the report were obtained in two ways: First, from visits to industrial establishments and from their records; and second, from a house-to-house canvass in a representative industrial neighborhood.

The plant study included 138 establishments employing 2,814 women. More than one-third of these were mercantile in character, and over one-fourth were restaurants. Nevertheless, not far from two-thirds of the women included in the survey were employed in plants manufacturing automobiles or automobile accessories. A day of 9 hours, or one of more than 8 but less than 9 hours, was the most common for the Flint women who worked in factories, stores, or laundries—55.1 per cent of the women working on the schedule first named and 39.8 per cent working on the second. Very few had a schedule of 8 hours and less or one of more than 9 hours.

Wage records could be obtained for only a little over one-third of the women employed in the establishments visited. The median of the week's earnings of the 899 women for whom wages were reported was \$15.10.

The actual daily hours of restaurant workers in some cases were shorter than those of the other women workers in Flint. Because restaurant workers frequently have very different hours on different days of the week, it is easier to take the individual working day as the unit rather than the individual worker. There were 169 women for whom hour information was obtained and the total number of working-days for these women in the week surveyed was 1,128. Almost three-tenths of these employee-days were shorter than 8 hours, and slightly more than that proportion were 8 hours in length. Days of more than 9 hours were more common in restaurants than in other establishments surveyed. It must be remembered that the restaurant worker often has the inconvenience of scattered hours within a long over-all working period. Furthermore, over two-thirds of these restaurant employees had a seven-day week, while mercantile workers had a six-day week and most factory and laundry workers had one of five and a half days.

The earnings of restaurant employees were tabulated separately from those of the other workers because tips and meals increased their earnings to some extent. The median of their pay-roll earnings was \$12.25.

Attention was given to the working conditions in the establishments visited. Lighting was found to be more satisfactory than ventilation. In laundries and restaurants, particularly, hoods with exhausts over machines and stoves are especially important, and seldom had adequate attention been given to such provision. Sanitary facilities frequently were unsatisfactory, for common drinking cups, common towels, and inadequate toilet equipment were found in a number of instances.

In the neighborhood study 3,648 living units were included, either families or groups of other people living together, and the number of adult women in these groups was 4,844. Of these practically one-fifth were working or had worked during the year. One in 20 of those not working was interested in getting work. Jobs were desired also by most of the women who had worked during the year but were not working at the time of the survey.

Women's employment in vegetable canneries in Delaware.

During the summer and autumn months canning forms an important part of the industrial activity of Delaware. The material in the bureau's report on canneries was obtained as part of the general study of hours, wages, and working conditions of the women employed in that State. Because of the seasonal nature of the canning industry and its special problems it seemed that the material in the report which related to canneries would be of interest outside the State, and it has been presented in a separate bulletin.

Thirty-four canneries were visited. Of these, 3 were equipped for handling corn only, 1 for lima beans only, and 2 for both corn and tomatoes. In 28 of them, however, tomatoes alone were being handled. At the time of the survey these 34 canneries employed approximately 1,700 women workers.

The outstanding features of cannery work are its seasonal character and the irregularity of work, even during the busy season. The crop may not have come on rapidly enough to keep all hands busy a full day or the cannery may run over-long hours to avoid loss from spoilage. Dependence on the ripening of the crop and poor planning in contracting ahead cause slack days and days on which there is excessive overtime. State laws regulating women's working hours generally recognize this irregularity and exempt canneries from the provisions of the law.

Most of the plants visited in Delaware could not be said to have any regular schedule of working hours. During the week for which records were taken almost one-third of the women for whom the number of hours worked was reported had been on duty more than 55 hours, the maximum set by law for other industries. On the other hand, not far from one-half of the women had worked for less than 40 hours or on less than four days of the week.

Individual pay-roll records were available for 844 white women and 252 negro women. The median of the week's earnings of the former was \$9.40 and of the latter it was \$5.55. In 12 canneries individual earnings were not reported for tomato peelers and only figures on average earnings can be given for these women. In one cannery the women had averaged only \$4.16 during the week recorded, while in another the average earnings were \$14.04. These two represent the extremes and the averages for the other 10 canneries fall between.

The buildings in which the work was done ordinarily were low frame buildings, only semiinclosed. In many cases only haphazard attention had been given to seating, and in the majority of the establishments the workers had not even platforms to stand upon which would keep them off the wet floor. Few of the canneries made any satisfactory provision of drinking water and only nine canneries provided a special place for the workers' convenience in washing. Thirteen supplied soap and 15 supplied individual towels of some type. Practically all the canneries had outside toilets, and many of these were in bad condition; only nine were fly-proof.

In many cases canneries are so located that there is no labor supply near at hand and some provision must be made for housing migrant workers. Fourteen of the 34 canneries visited had housing accommodations for all or part of their employees. The people in over one-half of these camps came from Baltimore; in several they were negroes from near Norfolk or from the eastern shore of Maryland. There was one group of Italians from Philadelphia. The camps ordinarily were very near to the cannery buildings themselves, and with few exceptions hardly met even the simplest standards of housing.

Less than one-fifth of the white women in the canneries who reported their ages were under 20, more than two-fifths were between 20 and 40, while almost as many were 40 or over. The negro women were somewhat younger on the whole. The majority of the white women (85.7 per cent) were native born. Exactly three-fourths were or had been married.

Fatigue and lost time in cotton mills.

The bureau is continuing the collection of figures on time lost by men and women employed in certain textile mills covered in the study on that subject published in 1926. The original study showed an excessively high rate of absence in the spinning rooms of the cotton mills, and for that reason special attention is being given to the problems of temperature and fatigue in that department. Certain mills have introduced new methods in their spin rooms which may have some effect on fatigue, and a study of absence and turn-over figures in relation to such changes is under consideration.

Foreign-born women in industry.

This study, based on interviews with foreign-born women in and near Philadelphia and in the Lehigh Valley, is nearing completion. Information was obtained concerning the ages of the women, their residence in the United States, marital status, size of the family, number of wage earners in the family, and their industrial experience in their native countries and in the United States.

Trend of employment for women.

This is an analysis of the employment statistics for men and women collected by the State of Ohio during a period of 11 years, 1914 to 1924, but not published by that State since 1915. It will constitute an important contribution to the subject of employment fluctuation.

Wages in 13 States.

A compilation of the material already collected by the bureau on earnings of women workers in 13 States is being pushed to completion as other work permits.

LIBRARY RESEARCH

As in previous years research activities have constituted an important part of the work of the bureau. Functioning as the bureau does, as a source of information, the research division has supplied data on the subject of wage-earning women to many individuals and organizations for educational or legislative purposes. Extensive library work has been necessary to fill such requests and to meet the demands of the bureau in connection with its publicity and exhibit work, its surveys and reports.

The study of the operation of minimum-wage laws has been completed; much research in different fields has been necessary for the study of the effects of special legislation on the employment of women, including a history of such legislation, by States; a brief summary of the laws affecting women in a selected group of European countries has been prepared; and for the International Labor Office a summary has been made of existing legislation for women in the United States, covering chiefly hour and night-work laws, minimum-wage laws, and laws prohibiting or regulating the employment of women in certain occupations or under specified conditions. Work has continued on the bibliography of women in industry, the minimum-wage section of which has already been published. That part

of the bibliography now in progress deals with central European literature.

Publication of the News-Letter was resumed during the year. This publication, inaugurated in 1921 at the request of the Association of Governmental Labor Officials, reports current activities relating to working women in this and other countries, and serves as a clearing house of such information. It is a source of copy for newspapers and periodicals. Effort is made to report through this channel the progress of legislation in the various States and countries, the findings of investigations relative to women at work, here and abroad, notes on conferences and meetings of interest, changes in personnel among State labor officials, and all matters of importance and general interest which come to the attention of the bureau through constant research and observation.

EDUCATIONAL WORK

Practically all the activities of the bureau might properly be considered as educational work—the bulletins and the news releases on their findings, the News-Letter compiled by the research division, the addresses and conferences by the director and members of the staff, special articles on the work of the bureau and on the problems of women workers, and the information supplied by letter to correspondents each constituting an essential feature of the work for which the bureau was created.

Short talks about working women.

For general educational purposes the bureau has published in pamphlet form a group of short talks relating to women's progress in industry, their wages and hours, and the conditions under which they work.

Women workers and industrial poisons.

The address to the Women's Industrial Conference in January, 1926, by Dr. Alice Hamilton, professor of industrial medicine at Harvard, on the subject of the employment of women in poisonous trades, has been made available for distribution because of the importance of its subject and the authority of the speaker.

Exhibits.

The exhibit at the National Sesquicentennial Exposition at Philadelphia was dismantled in December. A number of the factory chairs and certain other things which had been lent to the bureau for display were presented to the bureau and now form part of its permanent exhibit in Washington for inspection by anyone who cares to see them. As in other years, the bureau's portable exhibit material—comprising paintings, models, motion pictures, slide films, an automatic book, charts, posters, and maps, including machines for showing the motion pictures and the slide films—was lent to organizations making application therefor and meeting the costs of transportation. The material is sent by freight, express, or post, according to size and weight.

PUBLICATIONS

During the year the following bulletins have come from the press:

- No. 52. Lost Time and Labor Turnover in Cotton Mills.
- No. 53. The Status of Women in the Government Service in 1925.
- No. 54. Changing Jobs.
- No. 55. Women in Mississippi Industries.
- No. 56. Women in Tennessee Industries.
- No. 57. Women Workers and Industrial Poisons.
- No. 58. Women in Delaware Industries.
- No. 59. Short Talks about Working Women.

The following bulletins are in the printing office:

- No. 60. Industrial Accidents to Women in New Jersey, Ohio, and Wisconsin.
- No. 61. The Development of Minimum-Wage Laws in the United States, 1912 to 1927.
- No. 62. Women's Employment in Vegetable Canneries in Delaware.

The following bulletins are in process of preparation for the printer:

- Women Workers in Flint, Mich.
- State Laws Affecting Working Women. (Revision.)
- Oregon Legislation for Women in Industry.

COMMENT AND RECOMMENDATIONS

The decreases in the bureau's appropriation in recent years and the expenses due to reclassification and a higher per diem for agents are seriously retarding the progress of the bureau and closing the door on opportunities for great service to women. Each year the bureau must postpone important studies and decline requests for assistance in problems connected with wage-earning women asked for by employers and employees, public and private organizations, and other persons interested in women's employment. The present appropriation means an expenditure of slightly over one penny for each of the eight and a half million women gainfully employed at the time of the 1920 Census of Occupations. In contrast to the number and the variety of the problems related to the employment of women and the need to safeguard these workers, the mothers of the citizens of to-morrow, this appropriation is small indeed. The women now at work in America's factories, stores, and laundries are home makers, mothers, and potential mothers, and what is their concern necessarily is the concern of the Nation.

For years the bureau has made recommendations for study of certain aspects of women's employment. These recommendations still stand, and projects which call for immediate attention are these:

Industrial poisons.

A subject requiring careful and scientific investigation is that of industrial poisons as related to women workers. A great many new and unfamiliar industrial poisons have come into use since the war. That women are more susceptible to certain poisons than are men has been proved scientifically. Moreover, when pregnant women are exposed to such conditions there is danger not only that the mothers will be poisoned but that the offspring will suffer bad effects. That the Women's Bureau is the national organization

which should make investigations of this sort is logical, but to make such a study it would require the services of experts trained to handle more efficiently this type of scientific investigation.

The piecework system.

Another matter that should be carefully considered is the piecework system, by which wages are based on output rather than on time at work. The question is so clearly related to matters of health and efficiency and is of such paramount importance to the worker and to the employer that a careful and scientific analysis of the advantages and disadvantages of the system and a comparison of this method of work with that of timework should be made.

Married women in industry.

In the United States at the present time there exists in many quarters a strong feeling against the married woman worker, a prejudice due largely to a lack of understanding of the problems surrounding this type of wage earner, to the belief that married women workers take jobs from single women or from men, and to the fear that the employment of married women will tend to break up the home. Consequently there is pressing need to present to the public authentic information and facts entirely divorced from prejudice.

Additional information on the subject of married women in industry would seem to be called for by the great increase in their numbers. The census of 1920 reported almost 2,000,000 married women in gainful occupations, and women occupy a larger place in industry to-day than they did in 1920. [The subject of married women workers is extremely complex, linked so closely, as it is, with the welfare of the home and the family, and related so definitely in the long run to the health of the race and the progress of the Nation. In order that injustices may not be worked in any direction it is imperative to make a comprehensive study of this subject. Information gathered by the Women's Bureau shows that most women are at work to supplement the family income, and there is need for definite data, gathered at first hand, giving current information on this and other phases of the problem. Such a study would require considerable field work and would be extensive in scope, but it would prove of infinite value to the country by presenting truths of much vital importance and settling a much-disputed question.

In addition to the projects recommended there is an aspect of women's employment which the bureau has had neither time nor funds to inquire into—that of the employment of women in semi-professional and professional pursuits. The bureau is continually being asked for information along such lines, and it is serving to the best of its ability. If the bureau is to function successfully in this direction it should have an addition to its staff conversant with the aspects of this type of employment for women.

In the editorial division there should be an increased force to expedite the writing and editing of the reports and the preparation of reports for the press. It is imperative that bulletins on current matters be published as quickly as possible in order that they may be of greatest value to interested forces, and the delays in connection with the preparation and publication of reports that the bureau is com-

elled to put up with at the present time, because of its small staff, should be eliminated.

Another type of activity in which there should be considerable expansion is the educational work, especially in the number of news releases about the purpose and activities of the bureau and of popular articles on all subjects pertaining to women workers. An increase in the exhibit material is highly desirable, since by such popular educational methods a certain part of the public to whom technical material makes little appeal can be reached.

Respectfully submitted.

MARY ANDERSON,
Director.

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